TANDEM DIABETES CARE INC Form S-1 March 08, 2017 Table of Contents

As filed with the Securities and Exchange Commission on March 8, 2017

Registration No. 333-

### **UNITED STATES**

### SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

# **Tandem Diabetes Care, Inc.**

(Exact name of registrant as specified in its charter)

Delaware 3841 20-4327508

(State or other jurisdiction of (Primary Standard Industrial (I.R.S. Employer incorporation or organization) Classification Code Number) Identification Number)

11045 Roselle Street

San Diego, California 92121

(858) 366-6900

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Kim D. Blickenstaff

**President and Chief Executive Officer** 

11045 Roselle Street

San Diego, California 92121

(858) 366-6900

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, a accelerated filer and smaller reporting company libbRut the Exchange Act. (Check one):

Large accelerated filer Non-accelerated filer

(Do not check if a smaller reporting company)

Accelerated filer Smaller reporting company

#### **CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered

Common Stock, \$0.001 par value per share

Proposed Maximum Aggregate Offering Price<sup>(1)</sup> \$57,500,000

Amount of Registration Fee<sup>(2)</sup> \$6,664.25

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

<sup>(1)</sup> Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended, and includes shares of our common stock that the underwriters have an option to purchase.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated March 8, 2017

PRELIMINARY PROSPECTUS

## **Shares**

# TANDEM DIABETES CARE, INC.

## **Common Stock**

We are offering \$ of shares of our common stock, par value \$0.001 per share.

The offering price is \$ per share of common stock. The last reported sales price of our common stock on March 7, 2017 was \$2.35 per share.

Our common stock is listed on the NASDAQ Global Market ( NASDAQ ) under the symbol TNDM.

We are an emerging growth company as defined under the federal securities laws and, as such, may continue to elect to comply with certain reduced public company reporting requirements in future reports.

Investing in our common stock involves a high degree of risk. Please read the section entitled <a href="Risk Factors">Risk Factors</a> beginning on page 13 of this prospectus.

	Per Share	Total
Public offering price	\$	\$
Underwriting discount <sup>(1)</sup>	\$	\$
Proceeds, before expenses, to us	\$	\$

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the shares of common stock is expected to be made on or about , 2017. We have granted the underwriters an option for a period of 30 days to purchase an additional \$ of shares of our common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ , and the total proceeds to us, before expenses, will be \$ .

Sole Book-Running Manager

## **Piper Jaffray**

Co-Manager

## **Wedbush PacGrow**

The date of this prospectus is , 2017.

<sup>(1)</sup> We refer you to the section entitled Underwriting beginning on page 155 of this prospectus for additional information regarding total compensation payable to the underwriter.

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In considering whether to purchase shares of common stock in this offering, you should rely only on the information contained in this prospectus and any free writing prospectus we file with the Securities and Exchange Commission, or SEC. We and the underwriters have not authorized

anyone to provide any information different from that contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the

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shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock.

#### **TRADEMARKS**

Our trademark portfolio includes 23 trademark registrations, including 10 U.S. trademark registrations and 13 foreign trademark registrations. All other trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the <sup>®</sup> and symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

#### INVESTORS OUTSIDE THE UNITED STATES

Neither we nor the underwriters have done anything that would permit this offering or the possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of shares of our common stock and the distribution of this prospectus outside of the United States.

### MARKET AND INDUSTRY DATA AND FORECASTS

Certain market and industry data and forecasts included in this prospectus were obtained from independent market research, industry publications and surveys, governmental agencies and publicly available information. Industry surveys, publications and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. We have not independently verified any of the data from third-party sources, nor have we ascertained the underlying assumptions relied upon therein. Similarly, independent market research and industry forecasts, which we believe to be reliable based upon our management s knowledge of the industry, have not been independently verified. While we are not aware of any misstatements regarding the market or industry data presented herein, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section entitled Risk Factors beginning on page 13 of this prospectus.

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#### PROSPECTUS SUMMARY

This prospectus summary highlights certain information appearing elsewhere in this prospectus. As this is a summary, it does not contain all of the information that you should consider before making a decision to invest in our common stock. You are encouraged to carefully read this entire prospectus, including the information provided under the headings Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the related notes, before investing in our common stock.

Unless otherwise stated in this prospectus, references to Tandem, we, us, our or the Company refer to Tandem Diabetes Care, Inc.

#### Overview

We are a medical device company with an innovative approach to the design, development and commercialization of products for people with insulin-dependent diabetes. We believe that our competitive advantage is rooted in our unique consumer-focused approach and proprietary technology platform. This allows us to deliver innovative hardware and software solutions to meet the various needs and preferences of people with diabetes and their healthcare providers. We manufacture and sell insulin pump products in the United States that are designed to address large and differentiated segments of the insulin-dependent diabetes market. Our insulin pump products include:

the t:slim X2 Insulin Delivery System, or t:slim X2, our next-generation flagship product,

the t:flex Insulin Delivery System, or t:flex, for people with greater insulin needs, and

the t:slim G4 Insulin Delivery System, or t:slim G4, the first continuous glucose monitoring, or CGM, enabled pump with touchscreen simplicity.

From the launch of our first product in August 2012, through December 2016, we have shipped more than 50,000 pumps. For the past three consecutive years, our company and our products have been ranked #1 by insulin pump users in the United States for customer support, product features and ease of training in an independent survey by dQ&A, a leading diabetes research firm.

According to the Centers for Disease Control and Prevention, or CDC, in 2016, approximately 22 million people in the United States had diagnosed diabetes. Close Concerns, Inc., an independent consulting and publishing company that provides diabetes advisory services, or Close Concerns, estimated in 2015 that there are approximately 1.6 million people with type 1 diabetes in the United States and 1.7 million people with type 2 diabetes in the United States who require daily administration of rapid acting insulin. Our target market consists of the approximately 3.3 million people in the United States who require daily rapid acting insulin.

Our innovative approach to product design and development is consumer-focused and based on our extensive market research, as we believe the user is the primary decision maker when purchasing an insulin pump. Our market research consists of interviews, focus groups and online surveys to understand what people with diabetes, their caregivers and healthcare providers are seeking in order to improve diabetes therapy management. We also apply the science of human factors to our design and development process, which seeks to optimize our devices, allowing users to successfully operate our devices in their intended environment.

We developed our products to provide the specific features that people with insulin-dependent diabetes seek in a next-generation insulin pump. Our proprietary pumping technology allows us to design the

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slimmest and smallest durable insulin pumps on the market, without sacrificing insulin capacity. Our insulin pump platform features our patented Micro-Delivery technology, and a miniaturized pumping mechanism that draws insulin from a flexible bag within the pump s cartridge, rather than relying on a syringe and plunger mechanism. It also features an easy-to-navigate software architecture, a vivid color touchscreen and a micro-USB connection that supports a rechargeable battery, software updates through the Tandem Device Updater, and uploads to t:connect Diabetes Management Application, or t:connect. The Tandem Device Updater is a new tool that allows pump users to update their pumps software quickly and easily from a personal computer, and has the capability of providing our customers access to new and enhanced features faster than the industry has been able to in the past. t:connect is our custom cloud-based data management application that provides customers and healthcare providers a fast, easy and visual way to display therapy management data from the pump and supported blood glucose meters.

We began commercial sales of our first insulin pump product, the t:slim Insulin Delivery System, or t:slim, in August 2012. During 2015, we commenced commercial sales of two additional insulin pumps: t:flex in May 2015 and t:slim G4 in September 2015. In October 2016, we commenced commercial sales of t:slim X2, and discontinued new sales of t:slim.

Since our initial commercial launch, we have leveraged our innovative technology platform and consumer-focused approach to expedite the product development cycle and drive our sales growth. This approach has allowed us to commercialize three additional insulin pumps that provide insulin therapy features for different segments of the diabetes market. In addition, we have expanded our sales, clinical and marketing infrastructure, which allows us to continue to provide strong service and support to our customers. We believe that by demonstrating our product benefits and the shortcomings of existing insulin therapies, as well as a consistently high level of customer support, more people will choose our insulin pumps for their therapy needs, allowing us to further penetrate and expand the market. We also believe we are well positioned to address consumers needs and preferences with our current products and products under development, as well as by offering customers a pathway to our future innovations through the Tandem Device Updater as they are approved by the U.S Food and Drug Administration, or FDA.

In the third quarter of 2016, we launched a Technology Upgrade Program that provides eligible t:slim and t:slim G4 customers a path towards ownership of a t:slim X2 by providing customers the right to exchange their t:slim or t:slim G4 for a t:slim X2, under a variable pricing structure. The Technology Upgrade Program expires on September 30, 2017.

For the years ended December 31, 2016, 2015 and 2014, our sales were \$84.2 million, \$72.9 million and \$49.7 million, respectively. For the years ended December 31, 2016, 2015 and 2014, our net loss was \$83.4 million, \$72.4 million, and \$79.5 million, respectively. For the year ended December 31, 2016, we recorded net sales deferrals of \$4.3 million and recognized an additional net cost of sales of \$0.3 million as a result of our Technology Upgrade Program. Our accumulated deficit as of December 31, 2016 was \$404.6 million.

Our headquarters and our manufacturing facility are located in San Diego, California and we employed 591 full-time employees as of December 31, 2016.

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#### The Market

Diabetes is a chronic, life-threatening disease for which there is no known cure. The disease is categorized by improper function of the pancreas when it either does not produce enough insulin or the body cannot effectively use the insulin it produces. Insulin is a life-sustaining hormone that allows cells in the body to absorb glucose from blood and convert it to energy. As a result, a person with diabetes cannot utilize the glucose properly and it continues to accumulate in the blood. If not closely monitored and properly treated, diabetes can lead to serious medical complications, including damage to various tissues and organs, seizures, coma and death.

The International Diabetes Federation estimates that in 2015 approximately 415 million people had diabetes worldwide and that by 2040, this number will increase to 642 million people worldwide. According to the Center for Disease Control and Prevention, or CDC, in 2016 approximately 22 million people in the United States had diagnosed diabetes.

Our target market consists of approximately 3.3 million people in the United States who require daily administration of insulin, which includes approximately 1.6 million people with type 1 diabetes and approximately 1.7 million people with type 2 diabetes who require daily rapid acting insulin. Throughout this prospectus, we refer to people with type 1 diabetes and people with type 2 diabetes who require daily rapid acting insulin as people with insulin-dependent diabetes.

There are two primary therapies practiced by people with insulin-dependent diabetes, insulin injections and insulin pumps, each of which is designed to supplement or replace the insulin-producing function of the pancreas. Insulin injections are often referred to as multiple daily injection, or MDI, and involve the use of syringes or insulin pens to inject insulin into the person s body. Insulin pumps are used to perform what is often referred to as continuous subcutaneous insulin infusion, or insulin pump therapy, and typically use a programmable device and an infusion set to administer insulin into the person s body. Insulin pump therapy has been shown to provide people with insulin-dependent diabetes with numerous advantages relative to MDI therapy.

According to Close Concerns estimates in 2015, approximately 425,000 people with type 1 diabetes in the United States use an insulin pump, or approximately 27% of the type 1 diabetes population. In addition, approximately 125,000 people with type 2 diabetes in the United States use an insulin pump, or approximately 7% of the type 2 diabetes population who are insulin-dependent.

Insulin pump therapy can provide a person with insulin-dependent diabetes with benefits when used independently or in conjunction with CGM. A pump featuring integrated CGM is known as a sensor augmented pump, or SAP, which allows the pump to receive CGM data directly from a wearable sensor. SAPs may feature an automated insulin delivery, or AID, algorithm that is designed to automatically adjust a person s insulin delivery based on their CGM trends to help minimize the frequency and/or duration of hypoglycemia and/or hyperglycemic events.

We believe that the distinct advantages and increased awareness of insulin pump therapy as compared to other available insulin therapies will continue to generate demand for insulin pump devices and pump-related supplies. We also believe that the adoption of insulin pump therapy would have been even greater if not for the significant and fundamental perceived shortcomings of durable syringe-and-plunger insulin pumps currently available, which we refer to as traditional pumps.

#### The Opportunity

Based on our research, we believe that the limited adoption of insulin pump therapy by people with insulin-dependent diabetes has been largely due to the shortcomings of traditional pumps currently available. These shortcomings include:

Antiquated style. While consumer electronic devices have rapidly evolved in form and function over the past decade, traditional pumps have not achieved similar advances. Our market research has shown that consumers believe traditional pumps resemble dated consumer technology, such as a pager, as they generally still feature small display screens, push-button interfaces, plastic cases and disposable batteries.

*Not adaptable.* Traditional pumps are typically sold as a single-product offering that are then iterated to add features, rather than being designed as a technology platform that is easily updatable to support new features and functionality as they are developed and approved by the FDA. We believe the lack of adaptability of traditional pump platforms has been a restricting factor in offering people with diabetes differentiated product features to best meet their therapy needs.

**Bulky size.** Our market research has shown that consumers view traditional pumps as large, bulky and inconvenient to carry or wear, especially when compared to modern consumer electronic devices, such as smartphones. The size of the pump further contributes to users being embarrassed by the pump.

*Difficult to learn and teach.* Traditional pumps often rely on complicated and outdated technology and are not intuitive to operate. Our research has shown that it can take several days to competently learn how to use traditional pumps, leading to frustration, frequent mistakes and additional training, each of which may discourage adoption.

Complicated to use. Traditional pumps are designed with linear software menus, which require the user to follow display screens sequentially, limiting their ability to access information within workflows or easily return to the starting point. Our research has shown that the complicated nature of the process can lead to confusion, frustration and fear of making mistakes with the pump, which in turn can limit the user s willingness to take advantage of advanced therapy features, or even discourage use entirely.

**Pump mechanism limitations.** Traditional pumps utilize a syringe and plunger mechanism to deliver insulin. This design limits the ability to reduce the size of the pump, and also potentially exposes the user to the unintended delivery of the full volume of insulin within the pump, which can cause hypoglycemia or death. Our research has shown that the fear of adverse health events due to technical malfunctions related to traditional pump mechanism limitations deters the adoption of insulin pump therapy.

We believe that these shortcomings of traditional pumps have limited the adoption of pump therapy. By addressing these issues, there is a meaningful opportunity to not only motivate MDI users to adopt pump therapy, but also to respond to the concerns and unmet needs of traditional insulin pump users.

#### **Our Solution**

We developed our proprietary technology platform using a consumer-focused approach by first utilizing extensive market research to ascertain what people with insulin-dependent diabetes require and prefer from their diabetes therapy. We then look to modern consumer technology for inspiration, and design our hardware and software solutions to meet those specific demands. Our development process then applies the science of human factors, which optimizes a device or system to the intended user through iterative usability and design refinement. This multi-step approach has resulted in products that provide users with the distinct product features they seek and in a manner that makes the features usable. We

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believe this approach is fundamentally different from the approach applied to the traditional medical device development process.

Our insulin pump products, which we believe address the shortcomings of traditional pumps, include:

Contemporary style. Our current products, as well as our products under development, have the look and feel of a modern consumer electronic device, such as a smartphone. Relying on significant consumer input and feedback during the development process, we believe the aesthetically-pleasing, modern design of our products addresses the embarrassing appearance-related concerns of insulin pump users. Key product features such as a high-resolution, color touchscreen with shatter-resistant glass, aluminum casing and rechargeable battery, make our products unique in the insulin pump market.

Adaptable platform. Our products share a pump form factor, as well as an updatable, easy-to-navigate software architecture combined with a touchscreen user interface. This enables us to offer differentiated features and functionality while on a shared technology platform, which allows us to leverage a single sales, marketing and clinical organization, as well as a shared manufacturing and supply chain infrastructure. Our insulin pumps are also compatible with the Tandem Device Updater, a new tool that allows pump users to update their pumps software quickly and easily from a personal computer. We believe the adaptability of our pump platform uniquely positions us to address the needs and preferences of people with insulin-dependent diabetes, and to do so quickly as those needs and preferences change and the functionality of our products evolves.

Compact size. With a narrow profile, similar to many smartphones, our products can easily and discreetly fit into a pocket. t:slim X2 and t:slim G4 are the slimmest and smallest durable insulin pumps on the market. The size and shape of our products are designed to provide increased flexibility with respect to how and where a pump can be worn. Based on extensive consumer input during development, we believe our products address both the embarrassment and functionality concerns related to the size and inconvenience of carrying a traditional pump.

Easy to learn and teach. Our technology platform allows for the use of a color touchscreen and easy-to-navigate software architecture, providing users intuitive access to the key functions of their pump directly from the Home Screen. Insulin pump users can quickly learn how to efficiently navigate their pumps software, thereby enabling healthcare providers to spend less time teaching a person how to use the pump and more time improving management of their diabetes. We believe the ease with which our pump can be learned and taught will help attract consumers who may have been frustrated or intimidated by traditional pumps.

Intuitive to use. Similar to what is found in modern consumer electronic devices, the embedded software displayed on our color touchscreen features intuitive and commonly interpreted colors, language, icons and feedback. Our software also features numerous shortcuts, including a simple way to return to the Home Screen and view critical information for therapy management. We believe these features also allow users to more efficiently manage their diabetes without fear or frustration.

*Next generation technology platform.* Our Micro-Delivery technology is unique compared to traditional pumps. Our technology is specifically designed to help prevent the unintentional delivery of insulin from the reservoir by limiting the volume of insulin that can be delivered to a person at any one time and to reduce fear associated with using a pump. Our technology allows us to reduce the size of the device as compared to traditional pumps, and is capable of delivering the smallest increment of insulin to users of any pump currently available.

We believe our technology platform will allow our products to further penetrate and expand the insulin pump therapy market by addressing the specific product and technology limitations associated with traditional pumps that were raised by people with diabetes, their caregivers and healthcare providers. We also believe our technology platform provides us with the opportunity to address unmet needs in the insulin-dependent diabetes market, including the potential for further device miniaturization and advancements in AID.

#### **Our Strategy**

Our goal is to significantly expand and further penetrate the insulin-dependent diabetes market and become the leading provider of insulin pump therapy by focusing on both consumer and clinical needs. By continually conducting market research to determine what people with insulin-dependent diabetes desire from their insulin therapy, and by offering insulin pump products with different features and functionality, we believe we are uniquely positioned to provide a broad range of insulin pump products that allow us to address multiple segments of the diabetes market.

To achieve our goal, we intend to pursue the following business strategies:

Drive adoption of our products through our expanded sales, marketing and clinical infrastructure and multiple product offerings. We have achieved commercial success since the launch of our first commercial product by investing in the development of our sales, marketing and clinical infrastructure. We believe we are now in a position to leverage this infrastructure to increase our access to people with insulin-dependent diabetes, their caregivers and healthcare providers. We believe that our investment in this infrastructure, combined with the launch of additional product offerings through the same infrastructure and the marketing of new products to our existing customers, will drive continued adoption of our products.

Promote awareness of our differentiated products to consumers, their caregivers and healthcare providers. Our products were specifically designed to address the shortcomings of currently available technologies that we believe have limited the adoption of insulin pump therapy. We intend to broaden our direct-to-consumer marketing to promote the insulin therapy features and functionality offered by our products, as well as to leverage our sales, marketing and clinical infrastructure to cultivate relationships with diabetes clinics, insulin-prescribing healthcare professionals and other key opinion leaders. By promoting awareness of our products, we believe that we will attract users of other pump therapies and MDI to our products.

Advance our clinical activities to further demonstrate that use of our pump products may contribute to improved clinical outcomes. Recent studies suggest that use of our pump products may provide users with improved clinical outcomes, including improved overall glycemic control and reduced risk of hypoglycemia. We plan to continue to invest in clinical activities intended to demonstrate that the use of our pump products contributes to improved clinical outcomes.

Advance our platform of innovative, consumer-focused products to address the unmet needs of people in the insulin-dependent diabetes market. We believe that our proprietary technology platform allows us to provide the most sophisticated and intuitive insulin pump therapy products on the market. The Tandem Device Updater allows pump users to update their pumps—software quickly and easily from a personal computer. We intend to leverage our technology platform to allow t:slim X2 users to update their pumps—software to include CGM integration and AID algorithms. We intend to continue to explore further advancements in our technology platform to expand the features and functionality associated with our products in order to address different segments of the large and growing insulin-dependent diabetes market.

*Invest in our consumer-focused approach.* We believe that our consumer-focused approach to product design, marketing and customer care is a key differentiator. This approach allows us to add the product features most requested by people with insulin-dependent diabetes. We will continue to apply the science of human factors throughout the design, development and continuous improvement of our products to optimize our products for intended users. We will also continue to invest in our consumer-focused approach throughout our business.

Broaden direct access to third-party payor reimbursement for our products in the United States. We believe that third-party reimbursement is an important determinant in driving consumer adoption of insulin pump therapy. We intend to intensify our efforts to encourage third-party payors to establish direct reimbursement for our products as we expand our market presence and product offerings. We also plan to participate in clinical studies to demonstrate the benefits of our products relative to other pump products and therapies as a way to gain support from third-party payors.

Leverage our manufacturing operations to achieve cost and production efficiencies. We manufacture our products at our headquarters in San Diego, California. We utilize a semi-automated manufacturing process for our pump products and disposable cartridges. During 2017, we intend to relocate our manufacturing operations to a new larger facility, which will allow us to expand our production capacity further by replicating our production lines and gaining efficiencies from the operation of a facility designed to maximize our manufacturing processes and workflows.

#### **Selected Risk Factors**

Our business is subject to numerous risks and uncertainties of which you should be aware before you decide to invest in our common stock. These risks may prevent us from achieving our business objectives, and may adversely affect our business, financial condition, results of operations and prospects. These risks are discussed in greater detail in the section entitled Risk Factors beginning on page 13 of this prospectus. Some of these risks include:

We have incurred significant operating losses since inception and cannot assure you that we will achieve profitability;

We currently rely on sales of insulin pumps to generate a significant portion of our revenue, and any factors that negatively impact sales of our insulin pump products may adversely affect our business, financial condition and operating results;

We operate in a very competitive industry and if we fail to compete successfully against our existing or potential competitors, many of whom have greater resources than us, our sales and operating results may be negatively affected;

The administration of the Technology Upgrade Program may result in unanticipated difficulties or costs, which may harm our financial condition or operating results;

The Technology Upgrade Program has resulted in accounting complexities that may be difficult for investors to understand and may lead to confusion when comparing our historical and future financial results;

Our ability to achieve profitability will depend, in part, on our ability to reduce the per unit cost of our products by increasing production volume and manufacturing efficiency, including by reducing raw material, labor, product-training, expected warranty and manufacturing overhead costs per unit;

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The failure of our products to achieve and maintain market acceptance could result in us achieving sales below our expectations, which would cause our business, financial condition and operating results to be materially and adversely affected;

Failure to secure or retain adequate coverage or reimbursement for our current products and our potential future products by third-party payors could adversely affect our business, financial condition and operating results;

We will need to raise additional funds in the future. If these funds are not available to us, we will not have sufficient cash to fund our operations through December 31, 2017;

Our ability to protect our intellectual property and proprietary technology is uncertain; and

Our products and operations are subject to extensive governmental regulation, and failure to comply with applicable requirements could cause our business to suffer.

#### Implications of Being an Emerging Growth Company

We qualify as an emerging growth company as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company:

we are exempt from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002;

we are permitted to provide less extensive disclosure about our executive compensation arrangements; and

we are not required to give our stockholders non-binding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of these provisions until such time that we no longer qualify as an emerging growth company. We will cease to be an emerging growth company upon the earliest of: (i) December 31, 2018, (ii) the last day of the first fiscal year in which our annual gross revenues exceed \$1.0 billion, (iii) December 31 of the fiscal year that we become a large accelerated filer as defined Rule 12b-2 under the Securities Exchange Act of 1934, or the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter, or (iv) the date on which we have issued more than \$1.0 billion in non-convertible debt during the preceding three-year period.

We may choose to take advantage of some but not all of these reduced burdens. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from our competitors that are public companies, or other public companies in which you have made an investment.

### **Recent Developments**

## Short-Term Liquidity

The audited financial statements included elsewhere in this prospectus were prepared assuming we would continue as a going concern. In the notes to these financial statements, we disclosed that: (i) we had incurred operating losses since our inception; (ii) we had an accumulated deficit of \$404.6 million as of

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December 31, 2016, which included a net loss of \$83.4 million for the year ended December 31, 2016; and (iii) we used \$61.2 million in cash for operations in the year ended December 31, 2016, which exceeded cash and cash equivalents and short term investments of \$53.5 million at December 31, 2016. Unless we successfully raise additional capital, whether in this offering or otherwise, these and other factors raise substantial doubt about our ability to continue as a going concern.

#### **Corporate Information**

We were incorporated in Colorado in January 2006 and reincorporated in Delaware in January 2008. Our principal executive offices are located at 11045 Roselle Street, San Diego, California 92121. The telephone number of our principal executive office is (858) 366-6900. Our website is www.tandemdiabetes.com. The information contained on or accessed through our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be a part of this prospectus or in deciding whether to purchase our common stock. References in this prospectus to our website are to inactive textual references only.

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#### The Offering

Issuer: Tandem Diabetes Care, Inc. Common stock offered by us: shares Common stock to be outstanding immediately after this offering: shares Option to purchase additional shares: The underwriters have an option to purchase a maximum of additional shares of common stock from us. The underwriters can exercise this option at any time within 30 days from the date of this prospectus. Use of proceeds: We estimate that we will receive net proceeds from this offering of approximately \$ million, or \$ million if the underwriters fully exercise their option to purchase additional shares, assuming an offering price of \$\\$, the last reported sale price of our common stock on NASDAQ on , 2017 and after deducting the underwriting discount and estimated offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and other general corporate purposes. See the section entitled Use of Proceeds beginning on page 52 of this prospectus for additional information. Risk factors: Investing in our common stock involves risks. See the section entitled Risk Factors beginning on page 13 of this prospectus for a discussion of factors you should carefully consider before deciding to invest in our common stock. **TNDM** NASDAQ Global Market symbol

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The number of shares of our common stock to be outstanding after this offering is based upon 31,095,598 shares of common stock outstanding as of December 31, 2016, and excludes:

990,031 shares of common stock issuable upon exercise of outstanding warrants as of December 31, 2016, at a weighted average exercise price of \$7.37 per share;

1,825,300 shares of common stock issuable upon exercise of outstanding options to purchase shares of common stock under our 2006 Stock Incentive Plan, or the 2006 Plan, as of December 31, 2016, at a weighted average exercise price of \$2.48 per share (of which options to acquire 1,780,885 shares of common stock are vested as of December 31, 2016);

6,403,087 shares of common stock issuable upon exercise of outstanding options to purchase shares of common stock under our 2013 Stock Incentive Plan, or the 2013 Plan, as of December 31, 2016, at a weighted average exercise price of \$10.09 per share (of which options to acquire 2,457,220 shares of common stock are vested as of December 31, 2016) and 562,282 shares that are reserved for future issuance under the 2013 Plan as of December 31, 2016;

78,459 shares of common stock reserved for future grant or issuance under our 2013 Employee Stock Purchase Plan, or the ESPP, as of December 31, 2016; and

1,937,890 shares of common stock issuable upon exercise of warrants issued to Capital Royalty Partners on March 7, 2017 at an exercise price of \$2.35 per share, the closing price of our common stock on the NASDAQ Global Market on the issuance date. On January 1, 2017, the number of shares of common stock reserved for issuance under the 2013 Plan automatically increased by 1,243,823 additional shares pursuant to the terms of the 2013 Plan, and the number of shares of common stock reserved for issuance under the ESPP automatically increased by 310,955 additional shares pursuant to the terms of the ESPP. These shares are also not included in the number of shares of common stock to be outstanding after this offering.

Unless otherwise indicated, this prospectus reflects and assumes the following:

no exercise of the outstanding options and warrants described above; and

no exercise by the underwriters of their option to purchase additional shares of our common stock.

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#### **Summary Financial Data**

The summary financial data presented below under the heading Statements of Operations Data for the years ended December 31, 2016, 2015 and 2014 and the selected financial data presented below under the heading Balance Sheet Data as of December 31, 2016 and 2015 have been derived from our audited financial statements included elsewhere in this prospectus. The selected statement of operations data for the years ended December 31, 2013 and 2012 and the balance sheet data as of December 31, 2014, 2013 and 2012 are derived from our audited financial statements not included in this prospectus.

The summary financial data presented below should be read in conjunction with, and is qualified in its entirety by reference to, the information included in the sections entitled Selected Financial Data and Management's Discussion and Analysis of Financial Condition and Results of Operations of this prospectus and our financial statements and the related notes included elsewhere in this prospectus. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period.

#### **Statement of Operations Data:**

	Year Ended December 31,				
(in thousands, except per share data)	2016	2015	2014	2013	2012
Sales	\$ 84,248	\$ 72,850	\$ 49,722	\$ 29,007	\$ 2,475
Cost of sales	60,656	46,270	34,474	22,840	3,823
Gross profit (loss)	23,592	26,580	15,248	6,167	(1,348)
Operating expenses:					
Selling, general and administrative	82,834	78,621	75,121	44,522	22,691
Research and development	18,809	16,963	15,791	11,079	9,009
Total operating expenses	101,643	95,584	90,912	55,601	31,700
Operating loss	(78,051)	(69,004)	(75,664)	(49,434)	(33,048)
Total other income (expense), net:	(5,411)	(3,404)	(3,789)	(13,705)	33
Net loss before taxes	\$ (83,462)	\$ (72,408)	\$ (79,453)	\$ (63,139)	\$ (33,015)
Provision for income tax (benefit) expense	(15)	10	71		
Net loss	\$ (83,447)	\$ (72,418)	\$ (79,524)	\$ (63,139)	\$ (33,015)
Net loss per share, basic and diluted:	\$ (2.73)	\$ (2.50)	\$ (3.42)	\$ (21.46)	\$ (175.88)
Weighted average shares used to compute basic and diluted net loss per share:	30,570	28,923	23,272	2,942	188

### **Balance Sheet Data:**

	As of December 31,				
(in thousands)	2016	2015	2014	2013	2012
Cash and cash equivalents	\$ 44,678	\$ 43,088	\$ 31,176	\$ 124,385	\$ 17,163
Short-term investments	\$ 8,860	\$ 28,018	\$ 36,106	\$ 5,095	\$

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Working capital	\$ 60,616	\$ 80,464	\$ 72,657	\$ 134,390	\$ 10,762
Property and equipment, net	\$ 18,409	\$ 15,526	\$ 12,581	\$ 9,886	\$ 8,989
Total assets	\$ 112,392	\$ 124,725	\$ 106,464	\$ 162,215	\$ 39,817
Notes payable	\$ 78,960	\$ 29,275	\$ 29,440	\$ 29,397	\$ 4,203
Convertible preferred stock	\$	\$	\$	\$	\$ 124,638
Total stockholders equity (deficit)	\$ (5,927)	\$ 63,468	\$ 54,572	\$ 115,537	\$ (106,052)

#### RISK FACTORS

An investment in our common stock involves risks. You should carefully consider the risks described below, together with all of the other information included in this prospectus, as well as in our other filings with the SEC, in evaluating our business. If any of the following risks actually occur, our business, financial condition, operating results and future prospects could be materially and adversely affected. In that case, the trading price of our common stock may decline and you might lose all or part of your investment. The risks described below are not the only ones we face. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business, financial condition, operating results and prospects. Certain statements below are forward-looking statements. For additional information, see the section entitled Cautionary Note Regarding Forward-Looking Statements of this prospectus.

#### Risks Relating to our Business and our Industry

We have incurred significant operating losses since inception and cannot assure you that we will achieve profitability.

Since our inception in January 2006, we have incurred a significant net loss. As of December 31, 2016, we had an accumulated deficit of \$404.6 million. To date, we have financed our operations primarily through public and private sales of our equity securities, debt financing with Capital Royalty Partners II L.P. and its affiliated funds, or Capital Royalty Partners, and sales of our products. We have devoted substantially all of our resources to the commercialization of our products, the scaling of our manufacturing operations and commercial organization, the research and development of our current products and products under development, and the assembly of a management team to manage our business.

We began commercial sales of our first commercial product, t:slim, in the third quarter of 2012. We began commercial sales of t:flex in the second quarter of 2015 and t:slim G4 in the third quarter of 2015. In October 2016, we discontinued new shipments of t:slim and launched t:slim X2, our next-generation flagship pump. Since the first quarter of 2013, we have been able to manufacture and sell our insulin pump products at a cost and in volumes sufficient to allow us to achieve a positive overall gross margin. For the years ended December 31, 2016 and 2015, our gross profit was \$23.6 million and \$26.6 million, respectively. Although we have achieved a positive overall gross margin, we still operate at a significant net loss and expect that we will continue to do so for the next several years.

To implement our business strategy we need to, among other things, increase sales and gross profits of our products, maintain an appropriate customer service and support infrastructure, fund ongoing research and development activities, improve and expand our manufacturing capabilities, and obtain regulatory clearance or approval to commercialize our products currently under development. Our expenses may to continue to increase as we pursue these objectives and make investments in our business. Additional increases in our expenses without commensurate increases in sales could significantly increase our operating losses.

The extent of our future operating losses and the timing of profitability are highly uncertain in light of a number of factors, including the timing of the launch of new products and product features by us and our competitors, market acceptance of our products and competitive products by people with insulin-dependent diabetes, their caregivers and healthcare providers, and the timing of regulatory approval of new products. In addition, our implementation of the Technology Upgrade Program makes forecasting our operating results more difficult, because such forecasts depend on customer behavioral assumptions, such as the likelihood that the trade-in rights will actually be exercised and the timing of any such decisions. Any additional operating losses will have an adverse effect on our stockholders—equity, and we cannot assure you that we will ever be able to achieve or sustain profitability.

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We currently rely on sales of insulin pumps to generate a significant portion of our revenue, and any factors that negatively impact sales of our insulin pump products may adversely affect our business, financial condition and operating results.

We generate a significant majority of our revenue from the sale of our insulin pump products, which currently include our t:slim X2, t:flex and t:slim G4 products. Sales of our insulin pumps may be negatively impacted by many factors, including:

the potential that other technological breakthroughs for the monitoring, treatment or prevention of diabetes may render our insulin pump products obsolete or less desirable;

adverse regulatory or legal actions relating to our insulin pump products or similar products or technologies;

failure of our Tandem Device Updater to accurately and timely provide customers with remote access to new product features and functionality as anticipated, or our failure to obtain regulatory approval for any such updates;

changes in reimbursement rates or policies relating to insulin pumps or similar products or technologies by third-party payors, such as the decision by UnitedHealthcare during 2016 that restricted a majority of their members from accessing our pumps;

our inability to enter into contracts with third-party payors on a timely basis and on acceptable terms;

problems arising from the expansion of our manufacturing capabilities, or destruction, loss, or temporary shutdown of our manufacturing facility; and

claims that any of our insulin pump products, or any component thereof or related supplies, infringes on patent rights or other intellectual property rights of third parties.

In addition, sales of any of our current or future insulin pump products with CGM integration are subject to the continuation of our applicable agreements with DexCom, which under some circumstances are subject to termination by DexCom, with or without cause, on relatively short notice.

Furthermore, sales of our products may be adversely impacted by negative perceptions regarding our financial stability relative to that of our competitors, and our ability to sustain our business operations on a long-term basis. These perceptions may cause people with insulin-dependent diabetes, their caregivers and healthcare providers, as well as independent distributors and third-party payors, to question our ability to continue to sell our products, provide customer service, support our commercial organization, and fulfill our strategic objectives. These concerns may arise from a number of factors, including our recent financial results, recent changes in our stock price, our current level of indebtedness, recent or anticipated competitive product launches, the impact of the Technology Upgrade Program, and uncertainties regarding the regulatory environment. Any such concerns, whether actual or perceived, could cause consumers to delay the purchase of our products or to purchase competitive products.

Because we currently rely on sales of our insulin pump products to generate a significant majority of our revenue, any factors that negatively impact sales of these products, or result in sales of these products increasing at a lower rate than expected, could adversely affect our business, financial condition and operating results, and negatively impact our ability to successfully launch future products currently under development.

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We operate in a very competitive industry and if we fail to compete successfully against our existing or potential competitors, many of whom have greater resources than us, our sales and operating results may be negatively affected.

The medical device industry is intensely competitive, subject to rapid change and highly sensitive to the introduction of new products, treatment techniques or technologies, or other activities of industry participants. We believe our products compete, and will continue to compete, directly with a number of traditional insulin pumps as well as other methods for the treatment of diabetes, including MDI therapy.

Our primary competitors are major medical device companies that are either publicly traded companies or divisions or subsidiaries of publicly traded companies. For instance, Medtronic MiniMed, a division of Medtronic, Inc., has been the market leader for many years and has the majority share of the traditional insulin pump market in the United States. Other significant insulin pump suppliers in the United States include Animas Corporation, a division of Johnson & Johnson, and Insulet Corporation. However, the market for insulin pumps is currently undergoing significant changes. For instance, in late 2016, Roche Diabetes Care, a division of F. Hoffman-La Roche discontinued sales of new insulin pumps in the United States, and in early 2017, Johnson & Johnson announced that it is evaluating strategic options for its diabetes business unit, including Animas. It is too early to evaluate the potential impact of these changes on our competitive landscape. There are also newer companies entering the field.

Some of our competitors enjoy several competitive advantages over us, including:

greater financial and human resources for sales and marketing, product development, customer service and clinical resources;
greater financial resources to respond to competitive pressures and regulatory uncertainty;
established relationships with healthcare providers and third-party payors;
established reputation and name recognition among healthcare providers and other key opinion leaders in the diabetes industry;
in some cases, greater market share and established base of customers;

products supported by long-term clinical data;
larger and more established distribution networks;
greater ability to cross-sell products or provide incentives to healthcare providers to use their products; and

more experience in conducting research and development, manufacturing, clinical trials, and obtaining regulatory approval or clearance.

In some instances, our competitors offer products that include features that we do not currently offer. For instance, Medtronic currently offers a traditional insulin pump that is integrated with a CGM system with a threshold suspend feature. In addition, Medtronic recently announced that it received FDA approval of a new insulin pump product with additional functionality and a new CGM system that it intends to launch during 2017. Furthermore, Insulet offers an insulin pump with a tubeless delivery system that does not utilize an infusion set. For these and other reasons, we may not be able to compete successfully against our current or potential future competitors. As a result, we may fail to meet our forecasted budget, and our sales and operating results may be negatively affected.

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The administration of the Technology Upgrade Program may result in unanticipated difficulties or costs, which may harm our financial condition or operating results.

In July 2016, we announced the implementation of the Technology Upgrade Program that allows eligible t:slim and t:slim G4 customers the ability to trade in their existing pump for t:slim X2, subject to the conditions specified in the program. The Technology Upgrade Program is being offered to provide our existing customers the ability to upgrade to the features and capabilities of t:slim X2. However, we do not have experience implementing and administering trade-in programs of this type and we may encounter unexpected difficulties, costs or uncertainties in administering or fulfilling our obligations under the Technology Upgrade Program. For example, it is difficult to predict the impact of the adoption of the Technology Upgrade Program on the willingness of consumers to purchase our products compared to competitive products, or the timing of any purchase decisions. If we incur unexpected difficulties, costs or uncertainties in administering the Technology Upgrade Program, or if we do not derive the anticipated benefits to our business from offering the program to our customers, the program could have a material adverse effect on our financial condition and operating results.

The Technology Upgrade Program has resulted in accounting complexities that may be difficult for investors to understand and may lead to confusion when comparing our historical and future financial results.

The Technology Upgrade Program has resulted in a number of accounting complexities that will make comparisons of our historical and future financial results more difficult. In particular, United States generally accepted accounting principles, or GAAP, prevent us from recognizing, at the time of sale, up to 100% of the sales and cost of sales associated with the sale of t:slim and t:slim G4 made to eligible customers during the term of the Technology Upgrade Program. Instead, depending on the type of pump sold, we are required to defer some or all of the sales and cost of sales until a later date, which will generally be the earlier of when our obligations under the Technology Upgrade Program are satisfied or when the program expires. The amount and timing of the deferred revenue and cost of goods sold will depend on multiple factors that are based on future events that are difficult to estimate or predict, especially because we have not offered a similar trade-in program in the past. For example, we do not currently have sufficient history to reasonably estimate the likelihood that the trade-in rights will be exercised, or the timing of any trade-in decisions. Accordingly, it is very difficult for us to estimate the amount of the deferrals with any level of certainty, which makes it very difficult for us to predict our GAAP results, including revenues and operating margins.

Despite our efforts to explain the required accounting treatment for the Technology Upgrade Program, it is possible that investors or analysts will view the accounting treatment or the resulting impact on our GAAP financial results negatively, and there may be confusion when comparing our historical and future financial results, which may cause our stock price to decline. In addition, the complexities associated with the accounting treatment, or with the Technology Upgrade Program generally, may cause investors to avoid purchasing our common stock until the impact of the program is better understood or our financial results and trends are more predictable, which also may adversely impact our stock price.

Our ability to achieve profitability will depend, in part, on our ability to reduce the per unit cost of our products by increasing production volume and manufacturing efficiency, including by reducing raw material, labor, product-training, expected warranty and manufacturing overhead costs per unit.

We believe that our ability to reduce the per-unit cost of our insulin pump products and related cartridges will have a significant impact on our ability to achieve profitability. Our cost of sales includes raw material procurement costs, labor costs, product-training expenses and expected warranty expenses. It also includes manufacturing overhead costs, including expenses relating to quality assurance, inventory control, facilities, equipment, information technology, and operations management. If we are unable to sustain or reduce our overall cost of sales, including through arrangements such as volume

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purchase discounts, negotiation of improved pricing, more efficient training programs for customers, and improved warranty performance, it will be difficult to reduce our per unit costs and our ability to achieve profitability will be constrained. The per unit cost of our products is significantly impacted by our overall production volumes, and any factors that cause our production volumes to decline, or to grow at a slower rate than we expect, would significantly impact our expected per unit costs. In addition, we may experience disruption in our manufacturing productivity or incur duplicative or incremental costs as we manage the planned relocation of our manufacturing facility over the next 12 months. Furthermore, while we currently believe our proprietary technology platform will allow us to gain efficiencies in the design and development of new products, changes in the market that require us to modify or replace our existing platform will reduce the amount of efficiency gained through our platform and increase our per unit costs. If we are unable to effectively manage our overall costs, while increasing our production volumes, we may not be able to achieve or sustain profitability, which would have an adverse impact on our business, financial condition and operating results.

The failure of our products to achieve and maintain market acceptance could result in us achieving sales below our expectations, which would cause our business, financial condition and operating results to be materially and adversely affected.

Our current business strategy is highly dependent on our insulin pump products, which currently include t:slim X2, t:flex and t:slim G4, achieving and maintaining market acceptance. In order for us to sell our products to people with insulin-dependent diabetes, we must convince them, their caregivers and healthcare providers that it is an attractive alternative to competitive products for the treatment of diabetes, including traditional insulin pump products and MDI therapies, as well as alternative insulin treatment methodologies. Market acceptance and adoption of our products depends on educating people with diabetes, as well as their caregivers and healthcare providers, about the distinct features, ease-of-use, positive lifestyle impact, and other perceived benefits of our products as compared to competitive products. If we are not successful in convincing existing and potential customers of the benefits of our products, or if we are not able to achieve the support of caregivers and healthcare providers for our insulin pump products, our sales may decline or we may fail to increase our sales in line with our forecasts.

Achieving and maintaining market acceptance of our products could be negatively impacted by many factors, including:

the failure of our products to achieve wide acceptance among people with insulin-dependent diabetes, their caregivers, healthcare providers, third-party payors and key opinion leaders in the diabetes treatment community;

the failure of our products to provide the features and functionality that people with insulin-dependent diabetes, their caregivers and healthcare providers are seeking in an insulin pump, and to incorporate those features into our products in a timely, cost-effective and user-friendly manner;

lack of evidence supporting the safety, ease-of-use or other perceived benefits of our products over competitive products or other currently-available insulin treatment methodologies;

perceived risks or uncertainties associated with the use of our insulin pump products or similar products or technologies generally;

the introduction of competitive products, technologies or treatment techniques and the rate of their acceptance as compared to our insulin pump products;

discounts, rebates and other financial incentives that our competitors may offer for competitive products that make them more attractive than our products; and

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results of clinical studies relating to our existing products or products under development or similar competitive products. In addition, even if we are able to convince people with insulin-dependent diabetes, their caregivers or healthcare providers that our products compare favorably to the products and treatment alternatives offered by our competitors, negative perceptions regarding our financial stability relative to that of our competitors, and our ability to sustain our business operations on a long-term basis, especially in light of our recent financial results and the recent decline in the market price of our common stock, could cause consumers to delay the purchase of our products or to purchase competitive products.

Furthermore, the rapid evolution of technology and treatment options within our industry may cause consumers to delay the purchase of our products in anticipation of advancements, or the perception that advancements could occur, in our products or the products offered by our competitors. For example, we believe that during the second half of 2016, consumers interested in purchasing our insulin pump products may have delayed or changed their purchasing decisions in anticipation of the release of a new product by one of our competitors. It is also possible that consumers interested in purchasing any of our future products currently under development may delay the purchase of one of our current products.

If our insulin pump products do not achieve and maintain widespread market acceptance, we may fail to achieve sales at or above our projected amounts. If our sales do not meet our sales projections, our business, financial condition and operating results could be materially and adversely affected, and we may fail to meet our strategic objectives.

Failure to secure or retain adequate coverage or reimbursement for our current products and our potential future products by third-party payors could adversely affect our business, financial condition and operating results.

We have derived nearly all of our revenue from sales of insulin pumps and associated supplies and expect to continue to do so. A substantial portion of the purchase price of an insulin pump is typically paid for by third-party payors, including private insurance companies, preferred provider organizations and other managed care providers. Future sales of our current and future products will be limited unless our customers can rely on third-party payors to pay for all or part of the associated purchase cost. Access to adequate coverage and reimbursement for our current and future products by third-party payors is essential to the acceptance of our products by customers.

As guidelines in setting their coverage and reimbursement policies, many third-party payors use coverage decisions and payment amounts determined by the Centers for Medicare and Medicaid Services, or CMS, which administers the U.S. Medicare program. Medicare periodically reviews its reimbursement practices for diabetes-related products. Medicare previously implemented a competitive bidding process for blood glucose strip reimbursement, which resulted in a significant reduction in the reimbursement rate for those products. More recently, in 2017, Medicare announced, and then shortly thereafter suspended, a competitive bidding process for insulin pumps. As a result, there is uncertainty as to the future Medicare reimbursement rate for our products. In addition, those third-party payors that do not follow the CMS guidelines may adopt different coverage and reimbursement policies for our current and future products. It is possible that some third-party payors will not offer any coverage for our current or future products. For instance, effective July 1, 2016, UnitedHealthcare designated one of our competitors as their preferred, in-network durable medical equipment provider of insulin pumps for most customers over the age of 18. We expect this decision will prevent a majority of UnitedHealthcare members from purchasing an insulin pump from us for the foreseeable future. It is possible that other third-party payors may adopt similar policies in the future, which would adversely impact our ability to sell our products.

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We currently have contracts establishing reimbursement for our insulin pump products with approximately 150 national and regional third-party payors in the United States. While we anticipate entering into additional contracts with third-party payors and adding coverage for future products under our current agreements, we cannot guarantee that we will succeed in doing so or that the reimbursement contracts that we are able to negotiate will enable us to sell our products on a profitable basis. In particular, any negative perceptions among third-party payors regarding our financial stability and our ability to continue to sell and service our products, may make it more difficult to enter into contracts for reimbursement with additional third-party payors. This may be especially true in light of our conclusion that, if we do not successfully raise additional capital, whether in this offering or otherwise, there is substantial doubt about our ability to continue as a going concern and the inclusion of an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern included in the report of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016. In addition, existing contracts with third-party payors generally can be modified or terminated by the third-party payor without cause and with little or no notice to us. Moreover, compliance with the administrative procedures or requirements of third-party payors may result in delays in processing approvals by those third-party payors for customers to obtain coverage for our products. Failure to secure or retain adequate coverage or reimbursement for our current and future products by third-party payors, or delays in processing approvals by those payors, could result in the loss of sales, which could have a material adverse effect on our business, financial condition and operating results.

Further, the healthcare industry in the United States is increasingly focused on cost containment as government and private insurers seek to control healthcare costs by imposing lower payment rates and negotiating reduced contract rates with third-party payors. If third-party payors deny coverage or reduce their current levels of payment, or if our production costs increase faster than increases in reimbursement levels, we may be unable to sell our products on a profitable basis.

Competitive products or other technological developments and breakthroughs for the monitoring, treatment or prevention of diabetes may render our products obsolete or less desirable.

Our ability to achieve our strategic objectives will depend, among other things, on our ability to develop and commercialize products for the treatment of diabetes that offer distinct features and functionality, are easy-to-use, receive adequate coverage and reimbursement from third-party payors, and are more appealing than available alternatives. Our primary competitors, as well as a number of other companies, medical researchers and pharmaceutical companies are pursuing new delivery devices, delivery technologies, sensing technologies, procedures, drugs and other therapies for the monitoring, treatment and prevention of diabetes. Any technological breakthroughs in diabetes monitoring, treatment or prevention could reduce the potential market for our products or render our products obsolete altogether, which would significantly reduce our sales or cause our sales to grow at a slower rate than we currently expect. In addition, even the perception that new products may be introduced, or that technological or treatment advancements could occur, could cause consumers to delay the purchase of our products.

Because the insulin-dependent diabetes market is large and growing, we anticipate that companies will continue to dedicate significant resources to developing competitive products. The frequent introduction by competitors of products that are or claim to be superior to our products may create market confusion that may make it difficult to differentiate the benefits of our products over competitive products. In addition, some of our competitors employ aggressive pricing strategies, including the use of discounts, rebates, low cost product upgrades or other financial incentives that could adversely affect sales of our products. If a competitor develops a product that competes with or is perceived to be superior to our products, or if competitors continue to utilize strategies that place downward pressure on pricing within our industry, our sales may decline, our operating margins could be reduced and we may fail to meet our projections, which would materially and adversely affect our business, financial condition and operating results.

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Moreover, we have designed our products to resemble modern consumer electronic devices to address certain embarrassment and functionality concerns consumers have raised with respect to traditional pumps. The consumer electronics industry is itself highly competitive, and characterized by continuous new product introductions, rapid developments in technology, and subjective and changing consumer preferences. If, in the future, consumers cease to view our products as contemporary or convenient as compared to then-existing consumer electronics technology, our products may become less desirable.

We may face unexpected challenges in marketing, selling and training new customers on the use of our products, which could harm our ability to achieve our sales and service objectives.

We have only limited experience marketing and selling our products as well as training new customers on their use. In addition, the vast majority of our existing customers are individuals with type 1 diabetes, and we have only limited experience marketing and selling our products to customers with type 2 diabetes. As a result, we may face unexpected challenges marketing and selling t:flex, which is designed to meet the needs of customers with type 2 diabetes and/or higher insulin requirements.

We expect to derive nearly all of our revenue from the sale of t:slim X2, t:flex, and t:slim G4 Pumps and pump-related supplies unless and until we receive regulatory clearance or approval for other products currently under development. As a result, our financial condition and operating results are and will continue to be highly dependent on the ability of our sales and marketing organization to adequately promote, market and sell our insulin pumps and related products, and the ability of our diabetes educators to train new customers on the use of our products. If our sales and marketing representatives or diabetes educators fail to achieve their objectives, our sales could decrease or may not increase at levels that are in line with our forecasts.

If we are unable to maintain our existing sales, marketing, clinical and customer service infrastructure, we may fail to increase our sales to meet our forecasts.

A key element of our business strategy is the ability of our sales, clinical, marketing and customer service infrastructure to drive adoption of our products, which includes independent diabetes educators that train new customers on the use of our products. We have rapidly increased the number of sales, marketing, clinical and customer service personnel employed by us since the initial commercial launch of t:slim in 2012. However, we have faced considerable challenges in growing and managing these resources, including with respect to recruiting, training and assimilation of new territories and accounts. We expect to continue to face significant challenges as we manage and grow our infrastructure in the future and work to motivate and retain the individuals who make up our existing infrastructure. These challenges may be even greater in light of negative perceptions regarding our financial stability, and the recent decline in our stock price, which may make it more difficult to motivate and retain key personnel. Unexpected turnover among our sales, marketing, clinical and customer service personnel would have a negative impact on our ability to achieve our sales projections. Further, if a sales, marketing or clinical representative was to depart and be retained by one of our competitors, we may fail to prevent him or her from helping competitors solicit business from our existing customers, which could adversely affect our sales. Similarly, if we are not able to recruit and retain a network of diabetes educators and customer service personnel, we may not be able to successfully train and service new customers, which could delay new sales and harm our reputation.

We expect that the management of our sales, marketing, clinical and customer service personnel will continue to place significant burdens on our management team. If we are unable to retain our personnel in line with our strategic plans, we may not be able to effectively commercialize our existing products or products under development, or enhance the strength of our brand, either of which could result in the failure of our sales to increase in line with our projections or could even cause sales to decline.

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Our sales and marketing efforts are dependent on independent distributors who are free to market products that compete with our products. If we are unable to maintain or expand our network of independent distributors, our sales may be negatively affected.

For the year ended December 31, 2016, sales to approximately 40 independent distributors represented approximately 74% of our sales. While our goal is to ultimately reduce the percentage of our sales to independent distributors over time as we enter into contracts with additional third-party payors, we believe that a meaningful percentage of our sales will continue to be to independent distributors for the foreseeable future, and it is possible that the percentage of our sales to independent distributors could even increase in the near term. For example, our dependence upon independent distributors could increase if third-party payors decide to contract with independent distributors directly in lieu of contracting with us to supply our products to their members directly. Our dependence upon independent distributors is also expected to increase following our launch of the t:lock Connector for our insulin cartridge, which we expect will result in greater sales of our infusion sets to distributors. Our dependence upon independent distributors could also increase if customers prefer to purchase all of their diabetes supplies through a single source, instead of purchasing pump-related products through us and other diabetes supplies through other suppliers. However, our conclusion that, unless we successfully raise additional capital, whether in this offering or otherwise, there is substantial doubt about our ability to continue as a going concern, together with the inclusion of an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern in our independent registered public accounting firm s report contained in our financial statements for the year ended December 31, 2016, may negatively impact one or more of our distributors interest in continuing to do business with us. None of our independent distributors has been required to sell our products exclusively and each of them may freely sell the products of our competitors. Our distributor agreements generally have one-year initial terms with automatic one-year renewal terms, and are terminable in connection with a party s material breach. If we are unable to maintain or expand our network of independent distributors, our sales may be negatively affected.

For the year ended December 31, 2016, our two largest independent distributors collectively comprised approximately 33% of our sales. If any of our key independent distributors were to cease to distribute our products or reduce their promotion of our products as compared to the products of our competitors, our sales could be adversely affected. In such a situation, we may need to seek alternative independent distributors or increase our reliance on our other independent distributors or our direct sales representatives, which may not prevent our sales from being adversely affected. Additionally, to the extent that we enter into additional arrangements with independent distributors to perform sales, marketing or distribution services, or other arrangements pursuant to which independent distributors may purchase product from us, the terms of the arrangements could cause our product margins to be lower than if we directly marketed and sold our products.

If the third parties on which we increasingly rely to assist us with our current and anticipated pre-clinical development or clinical trials do not perform as expected, we may not be able to obtain regulatory clearance or approval or commercialize our products.

As our clinical infrastructure expands, we expect to increasingly rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct some of our current and anticipated pre-clinical investigations and clinical trials. If we are not able to contract with or reach other mutually acceptable agreements with these third parties on a timely basis or on mutually acceptable terms, or these third parties do not successfully carry out their commitments or regulatory obligations or meet expected deadlines, or the quality or accuracy of the data they obtain is compromised due to the failure to adhere to agreed upon clinical protocols or regulatory requirements or for other reasons, our pre-clinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize, our products on a timely basis, if at all, and our business, operating results and prospects

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may be adversely affected. In particular, we currently expect to rely on data from the International Diabetes Closed Loop Trial, or IDCL Trial, to support our development of t:slim X2 with TypeZero inControl AID algorithms. The IDCL Trial is being conducted entirely by third parties over which we have little or no control or influence. In the event that the IDCL Trial is not performed on a timely basis, or if the quality or accuracy of the data obtained from the IDCL Trial is compromised due to the failure to adhere to clinical protocols or regulatory requirements or for other reasons, our development activities for t:slim X2 with TypeZero may be negatively impacted.

We are increasingly dependent on clinical investigators and clinical sites to enroll patients in our current and anticipated clinical trials, and the failure to successfully complete the clinical trials could prevent us from obtaining regulatory approvals for or commercializing our products.

As part of our product development efforts, we expect to increasingly rely on clinical investigators and clinical sites to enroll patients in our clinical trials and other third parties to manage such trials and to perform related data collection and analysis. However, we may not be able to control the amount and timing of resources that clinical sites may devote to our clinical trials, especially with respect to the IDCL Trial that we intend to rely upon for the development of t:slim X2 with TypeZero. If these clinical investigators and clinical sites fail to enroll a sufficient number of patients, fail to ensure compliance by patients with clinical protocols, or fail to comply with regulatory requirements, we may be unable to successfully complete our clinical trials, which could prevent us from obtaining regulatory approvals for our products and commercializing our products, which would have an adverse impact on our business.

Our ability to maintain and grow our revenue depends in part on retaining a high percentage of our customer base.

A key to maintaining and growing our revenue is the retention of a high percentage of our customers due to the potentially significant revenue generated from ongoing purchases of disposable insulin cartridges and other supplies. In addition, our pumps are designed and tested to remain effective for at least four years and a satisfied customer may consider purchasing another product from us when the time comes to replace the pump. We have developed retention programs aimed at customers, their caregivers and healthcare providers, which include training specific to our products, ongoing support by sales and clinical employees, and 24/7 technical support and customer service. If demand for our products fluctuates, including as a result of the introduction of competitive products, changes in reimbursement policies, manufacturing problems, perceived safety or reliability issues with our or our competitors products, the failure to secure regulatory clearance or approvals, or for other reasons, our ability to attract and retain customers could be harmed. In addition, the retention of current customers may be impacted by negative perceptions regarding our financial stability relative to that of our competitors, and our ability to sustain our business operations on a long-term basis. The failure to retain a high percentage of our customers would negatively impact our revenue growth and may have a material adverse effect on our business, financial condition and operating results.

If important assumptions about the potential market for our products are inaccurate, or if we have failed to understand what people with insulin-dependent diabetes are seeking in an insulin pump, our business and operating results may be adversely affected.

Our business strategy was developed based on a number of important assumptions about the diabetes industry in general, and the insulin-dependent diabetes market in particular, any one or more of which may prove to be inaccurate or may change over time. For example, we believe that the benefits of insulin pump therapy as compared to other common insulin treatment alternatives will continue to drive growth in the market for insulin pump therapy. In addition, we believe the incidence of diabetes in the United States and worldwide is increasing. However, each of these assumptions may prove to be inaccurate and limited sources exist to compare treatment alternatives and obtain reliable market data. The actual incidence of diabetes, and the actual demand for our products or competitive products, could differ

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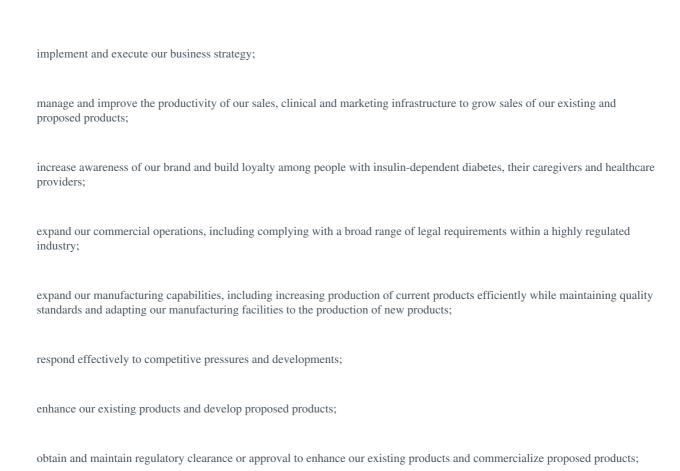
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materially from our projections if our assumptions are incorrect. In addition, our strategy of focusing exclusively on the insulin-dependent diabetes market may limit our ability to increase sales or achieve profitability.

Another key element of our business strategy is utilizing market research to understand what people with diabetes are seeking to improve their diabetes therapy management. This strategy underlies our entire product design, marketing and customer support approach and is the basis on which we developed our current products and are pursuing the development of new products. However, our market research is based on interviews, focus groups and online surveys involving people with insulin-dependent diabetes, their caregivers and healthcare providers that represent only a small percentage of the overall insulin-dependent diabetes market. As a result, the responses we received may not be reflective of the broader market and may not provide us accurate insight into the desires of people with insulin-dependent diabetes. In addition, understanding the meaning and significance of the responses received during our market research necessarily requires that analysis be conducted and conclusions be drawn. We may not be able perform an analysis that yields meaningful results, or the conclusions we draw from the analysis could be misleading or incorrect. Moreover, even if our market research has allowed us to better understand the features and functionality consumers are seeking in an insulin pump to improve management of their diabetes therapy, there can be no assurance that consumers will actually purchase our products or that our competitors will not develop products with similar features.

We have a limited operating history upon which to evaluate our business and forecast our future sales and operating results and may face difficulties frequently encountered by companies early in their commercialization in competitive and rapidly-evolving markets.

We commenced operations in 2006, and began commercial sales of t:slim in the third quarter of 2012, of t:flex in the second quarter of 2015 and of t:slim G4 in the third quarter of 2015. Accordingly, we have a limited operating history upon which to evaluate our business and forecast our future sales and operating results. More recently, our launch of t:slim X2, our adoption of the Technology Upgrade Program, the FDA approval and launch of new products by one of our competitors, and the use of aggressive pricing strategies by our competitors combine to make forecasting our future sales and operating results even more challenging. In assessing our business prospects, you should consider the various risks and difficulties frequently encountered by companies early in their commercialization history in competitive and rapidly evolving markets, particularly companies that develop and sell medical devices. These risks include our ability to:



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perform clinical trials with respect to our existing products and proposed products; and

attract, retain and motivate qualified personnel in various areas of our business.

Due to our limited operating history, we may not have the institutional knowledge or experience to be able to effectively address these and other risks that may face our business. In addition, we may not be able to develop insights into trends that could emerge and negatively affect our business and may fail to respond effectively to those trends. As a result of these or other risks, we may not be able to execute key components of our business strategy, and our business, financial condition and operating results may suffer.

Manufacturing risks may adversely affect our ability to manufacture products, which could negatively impact our sales and operating margins.

Our business strategy depends on our ability to manufacture our current and proposed products in sufficient quantities and on a timely basis so as to meet consumer demand, while adhering to product quality standards, complying with regulatory requirements and managing manufacturing costs. We are subject to numerous risks relating to our manufacturing capabilities, including:

quality or reliability defects in product components that we source from third-party suppliers;

our inability to secure product components in a timely manner, in sufficient quantities and on commercially reasonable terms;

difficulty identifying and qualifying alternative suppliers for components in a timely manner;

the challenge of implementing and maintaining acceptable quality systems while experiencing rapid growth;

our failure to increase production of products to meet demand;

our inability to modify production lines to enable us to efficiently produce future products or implement changes in current products in response to consumer demand or regulatory requirements;

our inability to manufacture multiple products simultaneously while utilizing common manufacturing equipment; and

potential damage to or destruction of our manufacturing equipment or manufacturing facility. These risks are likely to be exacerbated by our limited experience with our current products and manufacturing processes.

As demand for our products increases, and as the number of our commercial products expands, we will have to invest additional resources to purchase components, hire and train employees, and enhance our manufacturing processes and quality systems. Over the past year we have implemented several new pieces of equipment that are intended to improve our manufacturing capacity and efficiency and we expect to implement additional equipment and procedures over the next 12-18 months. However, it is possible that we may not achieve the anticipated improvements from these investments. In addition, we recently entered into a new lease agreement for an additional facility to consolidate substantially all of our manufacturing, warehousing and other operational needs, and any transition of our current manufacturing, warehousing and other operations to a new facility is subject to additional risk and uncertainty, and may expose us to duplicative or incremental costs. Furthermore, although we expect some of our products under development to share product features and components with our current products, manufacturing of these products may require the modification of our production lines, the

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hiring of specialized employees, the identification of new suppliers for specific components, the implementation of additional equipment and procedures, or the development of new manufacturing technologies. Ultimately, it may not be possible for us to manufacture these products at a cost or in quantities sufficient to make these products commercially viable.

If we fail to increase our production capacity to meet consumer demand, while also maintaining product quality standards, complying with regulatory requirements and efficiently managing costs, our sales and operating margins could be negatively impacted.

We depend on a limited number of third-party suppliers for certain product components, and the loss of any of these suppliers, or their inability to provide us with an adequate supply of components, could harm our business.

We currently rely, and expect to continue to rely, on third-party suppliers to supply components of our current products and of our potential future products, including our disposable cartridges. For example, we rely on plastic injection molding companies to provide plastic molded components, electronic manufacturing suppliers to provide electronic assemblies, and machining companies to provide machined mechanical components. We also purchase all of our infusion sets and pump accessories from third-party suppliers. For our business strategy to be successful, our suppliers must be able to provide us with components in sufficient quantities, in compliance with regulatory requirements and quality control standards, in accordance with agreed-upon specifications, at acceptable costs and on a timely basis. Recently, we have implemented several business strategies intended to increase our future sales of infusion sets. Increases in any of our product sales, whether forecasted or unanticipated, could strain the ability of our suppliers to deliver an increasingly large supply of components in a manner that meets these various requirements.

We do not have long-term supply agreements with many of our suppliers and, in many cases, we make our purchases on a purchase order basis. Under most of our supply agreements, we have no obligation to buy any given quantity of components or products until we place written orders, and our suppliers have no obligation to manufacture for us or sell to us any given quantity of components or products until they accept an order. As a result, our ability to purchase adequate quantities of our components or products may be limited. Additionally, our suppliers may encounter problems that limit their ability to manufacture components or products for us, including financial difficulties or damage to their manufacturing equipment or facilities. If we fail to obtain sufficient quantities of high quality components to meet demand on a timely basis, we could lose customer orders, our reputation may be harmed and our business could suffer. Our conclusion that, unless we successfully raise additional capital, whether in this offering or otherwise, there is substantial doubt about our ability to continue as a going concern, together with the inclusion of an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern in our independent registered public accounting firm—s report contained in our financial statements for the year ended December 31, 2016, may cause one or more of our suppliers to terminate their relationship with us, or claim that our financial condition causes them to demand different payment terms.

We generally use a small number of suppliers for our components or products. Depending on a limited number of suppliers exposes us to risks, including limited control over pricing, availability, quality and delivery schedules. Moreover, in some cases, we do not have long-standing relationships with our manufacturers and may not be able to convince suppliers to continue to make components available to us unless there is demand for such components from their other customers. As a result, there is a risk that certain components could be discontinued and no longer available to us. We have in the past been, and we may in the future be, required to make significant—last time—purchases of component inventory that is being discontinued by the manufacturer to ensure supply continuity. If any one or more of our suppliers cease to provide us with sufficient quantities of components in a timely manner or on terms acceptable to us, we would have to seek alternative sources of supply. Because of factors such as the

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proprietary nature of our products, our quality control standards and applicable regulatory requirements, we cannot quickly engage additional or replacement suppliers for some of our critical components. Failure of any of our suppliers to deliver products at the level our business requires would limit our ability to meet our sales commitments, which could harm our reputation and could have a material adverse effect on our business.

We may also have difficulty obtaining similar components from other suppliers that are acceptable to the FDA, or other regulatory agencies, and the failure of our suppliers to comply with strictly-enforced regulatory requirements could expose us to regulatory action including warning letters, product recalls, termination of distribution, product seizures or civil penalties. Such a failure by our suppliers could also require us to cease using the components, seek alternative components or technologies, and modify our products to incorporate alternative components or technologies, which could necessitate additional regulatory approvals. Any disruption of this nature, or any increased expenses associated with any such disruptions, could negatively impact our ability to manufacture our products on a timely basis, in sufficient quantities, or at all, which could harm our commercialization efforts and adversely affect our operating results.

If we cannot manufacture and sell our new infusion set connector when anticipated, or if it does not achieve market acceptance, we may not achieve our financial projections.

We intend to transition from the use of a standard Luer-lok connector on our proprietary disposable insulin cartridges to our new t:lock Connector. Concurrently, we intend to begin selling infusion sets that will be compatible with our t:lock Connector. We have filed for but not yet received regulatory approval to manufacture our insulin cartridges with the necessary modifications to change our infusion set connector from a standard Luer-lok to our t:lock Connector. In addition, our infusion set supplier intends to seek 510(k) clearance for its infusion sets with the companion to our t:lock Connector.

Our anticipated 2017 sales assume that our current and future customers will begin using our new cartridges and infusion sets with our t:lock Connector in significant quantities by the end of 2017. Any delay in obtaining regulatory approvals for our new insulin cartridge with the t:lock Connector or the compatible infusion sets would negatively impact our operating results and may harm our ability to meet our financial projections or those of our financial analysts. In order to manufacture our cartridges with the t:lock Connector, we must order and validate new molding equipment. Furthermore, our supplier of infusion sets must begin manufacturing a variety of lengths and styles of infusion sets with the t:lock Connector that matches our cartridges. Failure to do so, or to do so at the necessary production volumes, may result in our inability to launch our t:lock Connector or convert customers to our t:lock Connector when anticipated.

In addition, our independent distributors will need to agree to purchase the compatible infusion sets from us to provide to their customers. We anticipate the transition period for our direct customers and distributors to utilize their inventory on hand before transitioning to the t:lock Connector will be 90 to 120 days following its initial launch. During this period we anticipate offering both styles of cartridges and infusion sets to facilitate the transition of customer supplies. However, due to the variability in purchasing patterns, standard Luer-lok inventory may not be consumed at the predicted rates and we may be required to offer both styles of insulin cartridges and infusion sets for a longer period than anticipated or we may be left with excess quantities of Luer-lok style insulin cartridges that we cannot sell at standard prices or at all.

While the t:lock Connector was designed based on customer feedback, and while all standard Luer-lok infusion sets that we currently offer will initially be made available with the t:lock Connector, it is possible the t:lock Connector may not gain market acceptance by current or potential customers, their caregivers, or healthcare providers. Any negative market response to the t:lock Connector may impact a current customer s decision to purchase a new pump from us at the time of renewal. In addition, new

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potential customers may decide not to purchase our insulin pumps if they do not prefer our t:lock Connector, which may impede our ability to achieve our financial projections.

We currently operate primarily at a single location comprised of five buildings, and any disruption at this location could adversely affect our business and operating results.

Our principal offices are presently located in five buildings in San Diego, California. Substantially all of our operations are presently conducted at this location, including our manufacturing processes, research and development activities, customer and technical support, and management and administrative functions. In addition, substantially all of our inventory of component supplies and finished goods is held at this location. We take precautions to safeguard our facilities, including acquiring insurance, employing back-up generators, adopting health and safety protocols and utilizing off-site storage of computer data. However, vandalism, terrorism or a natural or other disaster, such as an earthquake, fire or flood, could damage or destroy our manufacturing equipment or our inventory of component supplies and finished goods, cause substantial delays in our operations, result in the loss of key information, and cause us to incur additional expenses. Our insurance may not cover our losses in any particular case. Regardless of the level of insurance coverage, damage to our facilities may have a material adverse effect on our business, financial condition and operating results.

The transition of our manufacturing operations to a new facility may result in unanticipated expenses or inefficiencies, which may increase our manufacturing and operating costs, and will require us to spend additional capital.

We manufacture our products at our headquarters in San Diego, California, but will be transitioning our manufacturing operations to a nearby facility that will allow for future capacity expansion. The transition to the new manufacturing facility is expected to begin during the second quarter of 2017 and be completed by the end of 2017. During the transition period we expect to experience some temporary duplication of operations to support ongoing product manufacturing, which will result in incremental costs. The transition remains subject to completion of ongoing construction, validation of newly installed equipment and our ability to receive numerous governmental approvals associated with the new facility. We may face significant challenges as we manage our proposed facility transition, such as unanticipated delays or expenses, and we will be required to make capital expenditures relating to the new facility. We also may experience unanticipated inefficiencies as we commence manufacturing operations at the new facility, particularly during the transition period. If we fail to achieve the operating efficiencies that we anticipate from the new facility, or if we incur substantial incremental costs during the transition, our manufacturing and operating costs may be greater than we anticipate.

We expect that the management and support of our transition to the new facility will place significant burdens on our management team, particularly in areas relating to operations, facilities and information technology. If we experience unanticipated employee turnover in any of these areas, we may not be able to effectively manage the completion of construction of the new facility or our transition and commencement of manufacturing operations when planned and we may not achieve the operating efficiencies that we anticipate from the new facility.

If we do not enhance our product offerings through our research and development efforts, we may fail to effectively compete or become profitable.

In order to increase our sales and market share in the insulin-dependent diabetes market, we must enhance and broaden our product offerings in response to the evolving demands of people with insulin-dependent diabetes, their caregivers and healthcare providers, as well as competitive pressures and technologies. We may not be successful in developing, obtaining regulatory approval for, or marketing our proposed products when anticipated, or at all. In addition, notwithstanding our market research efforts, our future products may not be accepted by people with insulin-dependent diabetes, their

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caregivers, healthcare providers or third-party payors. The success of any proposed product offerings will depend on numerous factors, including our ability to:

identify the product features and functionality that people with insulin-dependent diabetes, their caregivers and healthcare providers are seeking in an insulin pump, and successfully incorporate those features into our products;

develop and introduce products in sufficient quantities and in a timely manner;

offer products at a price that is competitive with other products then available;

work with third-party payors to obtain reimbursement for our products;

adequately protect our intellectual property and avoid infringing upon the intellectual property rights of third parties;

demonstrate the safety and efficacy of proposed products; and

obtain the necessary regulatory approvals for proposed products.

If we fail to generate demand by continuing to develop products that incorporate features and functionality requested by people with insulin-dependent diabetes, their caregivers or healthcare providers, or if we do not obtain regulatory clearance or approval for proposed products in time to meet market demand, we may be unable to compete and may fail to generate sales sufficient to achieve or maintain profitability. We have in the past experienced, and we may in the future experience, delays in various phases of product development and commercialization, including during research and development, manufacturing, limited release testing, marketing and customer education efforts. Any delays in our anticipated regulatory submissions or approvals, or subsequent product launches, may significantly impede our ability to successfully compete in our markets. In particular, such delays could cause customers to delay or forego purchases of our products, or to purchase our competitors products. Even if we are able to successfully develop proposed products when anticipated, these products may not produce sales in excess of the costs of development, and they may be quickly rendered obsolete by changing consumer preferences or the introduction by our competitors of products embodying new technologies or features, or alternative methods for the treatment of diabetes.

The safety and efficacy of our products is not supported by long-term clinical data, which could limit sales, and our products could cause unforeseen negative effects.

t:slim X2 and t:flex received pre-market clearance under Section 510(k) of the U.S. Federal Food, Drug, and Cosmetic Act, or FDCA. The 510(k) clearance process is shorter and typically requires the submission of less supporting documentation than other FDA approval processes and does not always require long-term clinical studies. t:slim G4 received FDA approval under a PMA. However, there are no published studies to evaluate the safety or effectiveness of t:slim G4 in a controlled setting.

As a result, we currently lack the breadth of published long-term clinical data supporting the safety and efficacy of our products and the benefits they offer, that might have been generated in connection with other approval processes. For these reasons, people with insulin-dependent diabetes and healthcare providers may be slower to adopt or recommend our products, we may not have comparative data that our competitors have or are generating, third-party payors may not be willing to provide coverage or reimbursement for our products and we may be subject to greater regulatory and product liability risks. These and other factors could slow the adoption of our products and result in our sales being lower than anticipated. In addition, future studies or clinical experience may indicate that treatment with our products is not superior to treatment with competitive products. Such results could slow the adoption of our products and significantly reduce our sales, which could prevent us from achieving our forecasted sales targets or achieving or sustaining profitability.

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If the results of clinical studies or other experience, such as our monitoring or investigation of customer complaints, indicate that our products may cause or create an unacceptable risk of unexpected or serious complications or other unforeseen negative effects, we could be subject to mandatory product recalls, suspension or withdrawal of FDA clearance or approval, significant legal liability, and harm to our business reputation.

Any alleged illness or injury associated with any of our products or product recall may negatively impact our financial results and business prospects depending on the scope, degree of publicity, reaction of our customers, healthcare professionals, and collaborators, competitive reaction, and consumer attitudes overall. Even if such an allegation or product liability claim lacks merit, cannot be substantiated, is unsuccessful or is not fully pursued, the negative publicity surrounding any assertion that our products caused illness, injury or death could adversely affect our reputation with customers, healthcare professionals, third-party payors, and existing and potential collaborators, and could adversely affect our operating results and cause a decline in our stock price.

We may enter into collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships with third parties that may not result in the development of commercially viable products or the generation of significant future revenues.

In the ordinary course of our business, we may enter into collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships to develop proposed products and to pursue new markets, or we may amend or modify similar agreements that we already have in place. Proposing, negotiating and implementing collaborations, in-licensing arrangements, joint ventures, strategic alliances or partnerships may be a lengthy and complex process. Other companies, including those with substantially greater financial, marketing, sales, technology or other business resources, may compete with us for these opportunities or arrangements. We may not identify, secure, or complete any such transactions or arrangements in a timely manner, on a cost-effective basis, on acceptable terms or at all. We have limited institutional knowledge and experience with respect to these business development activities, and we may also not realize the anticipated benefits of any such transaction or arrangement. In particular, these collaborations may not result in the development of products that achieve commercial success or result in significant revenues and could be terminated prior to developing any products.

Additionally, we may not be in a position to exercise sole decision-making authority regarding the transaction or arrangement, which could create the potential risk of creating impasses on decisions, and our collaborators may have economic or business interests or goals that are, or that may become, inconsistent with our business interests or goals. It is possible that conflicts may arise with our collaborators, such as conflicts concerning the achievement of performance milestones, or the interpretation of significant terms under any agreement, such as those related to financial obligations, termination rights or the ownership or control of intellectual property developed during the collaboration. If any conflicts arise with our current or future collaborators, they may act in their self-interest, which may be adverse to our best interest, and they may breach their obligations to us. In addition, we have limited control over the amount and timing of resources that our current collaborators, such as DexCom and TypeZero, or any future collaborators devote to our arrangement with them or our future products. Disputes between us and our collaborators may result in litigation or arbitration which would increase our expenses and divert the attention of our management. Further, these transactions and arrangements are contractual in nature and may be terminated or dissolved under the terms of the applicable agreements and, in such event, we may not continue to have rights to the products relating to such transaction or arrangement or may need to purchase such rights at a premium.

For example, we entered into three separate development agreements with DexCom which provide us non-exclusive licenses to integrate various generations of DexCom CGM technology with our insulin pump products. We currently offer t:slim G4 under an agreement that runs until January 4,

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2018, with automatic one-year renewals. Under certain circumstances, our agreements with DexCom may be terminated by either party without cause or on short notice. Termination of any of our agreements with DexCom could require us to redesign certain current products and products under development, and attempt to integrate an alternative CGM system into our insulin pump systems, which would require significant development and regulatory activities that could result in an interruption or substantial delay in the availability of the product to our customers.

Any significant disruptions to our information technology systems, or failures of our pumps software to perform as we anticipate, could have an adverse effect on our business, financial condition and operating results.

The efficient operation of our business depends on our information technology systems. We rely on our information technology systems to effectively manage sales and marketing data, accounting and financial functions, manufacturing and quality records, inventory management, product development tasks, research and development data, customer service and technical support functions. Our information technology systems, including those that support t:connect, as well as those involved in the operation of our Tandem Device Updater, are vulnerable to damage or interruption from earthquakes, fires, floods and other natural disasters, terrorist attacks, attacks by computer viruses or hackers, power losses, and computer system or data network failures. In addition, our currently-marketed insulin pumps, and our products currently under development contain software which could be subject to computer virus, hacker attacks or other failures. As a result of the recent FDA clearance of our Tandem Device Updater, which enables customers to remotely update software on their insulin pumps, these risks are significantly increased.

The failure of our or our service providers information technology systems or our pumps software to perform as we anticipate or our failure to effectively implement new information technology systems could disrupt our entire operation or adversely affect our software products. For example, we market our Tandem Device Updater as having the unique capability to deploy software updates to our pumps, which we anticipate may allow customers remote access to new and enhanced features. The failure of our Tandem Device Updater to provide software updates as we anticipate, including as a result of our inability to secure and maintain necessary regulatory approvals, the inability of our pumps to properly receive software updates, errors or viruses embedded within the software being transmitted, or the failure of our customers to properly utilize the system to complete the update, could result in decreased sales, increased warranty costs, and harm to our reputation, all of which could have a material adverse effect on our business, financial condition and operating results.

#### If we fail to properly manage our anticipated growth, our business could suffer.

Our rapid growth has placed, and we expect that it will continue to place, a significant strain on our management team and financial resources. For example, between December 31, 2015 and December 31, 2016 our employee base increased by approximately 23%. In addition, during 2015 and 2016 we experienced turnover among key employees in our sales, marketing, clinical, and research and development functions, including the hiring of a new Chief Commercial Officer and a new Vice President of Engineering. Our failure to manage growth effectively could cause us to misallocate management or financial resources, negatively impact our ability to attract and retain key employees, and result in losses or weaknesses in our infrastructure, which could materially adversely affect our business. Additionally, our anticipated growth and the projected evolution of our product portfolio will increase the demands placed on our suppliers, resulting in an increased need for us to manage our suppliers and monitor for quality assurance. Any failure by us to manage our growth effectively could have an adverse effect on our ability to achieve our business objectives.

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We depend on the knowledge and skills of our senior management and other key employees, and if we are unable to retain and motivate them or recruit additional qualified personnel, our business may suffer.

We have benefited substantially from the leadership and performance of our senior management, as well as certain key employees. For example, our Chief Executive Officer, as well as other key members of management, have experience successfully scaling an early stage medical device company to achieve profitability. Our success will depend on our ability to retain our current management and key employees, and to attract and retain qualified personnel in the future. Competition for senior management and key employees in our industry is intense and we cannot guarantee that we will be able to retain our personnel or attract new, qualified personnel. This may be especially true during periods in which we face challenges such as financial difficulty or a reduced stock price. The loss of the services of certain members of our senior management or key employees could prevent or delay the implementation and completion of our strategic objectives, or divert management s attention to seeking qualified replacements. Each member of senior management as well as our key employees may terminate employment without notice and without cause or good reason. The members of our senior management are not subject to non-competition agreements. Accordingly, the adverse effect resulting from the loss of certain members of senior management could be compounded by our inability to prevent them from competing with us.

If we are found to have violated laws protecting the confidentiality of patient health information, we could be subject to civil or criminal penalties, which could increase our liabilities and harm our reputation or our business.

There are a number of federal and state laws protecting the confidentiality of certain patient health information, including patient records, and restricting the use and disclosure of that protected information. In particular, the U.S. Department of Health and Human Services, or HHS, promulgated patient privacy rules under HIPAA. These privacy rules protect medical records and other personal health information by limiting their use and disclosure, giving individuals the right to access, amend and seek accounting of their own health information and limiting most use and disclosures of health information to the minimum amount reasonably necessary to accomplish the intended purpose. If we, or any of our service providers, are found to be in violation of the promulgated patient privacy rules under HIPAA, we could be subject to civil or criminal penalties, which could increase our liabilities, harm our reputation and have a material adverse effect on our business, financial condition and operating results.

We may seek to grow our business through acquisitions of complementary products or technologies, and the failure to successfully manage acquisitions, or the failure to integrate them with our existing business, could have a material adverse effect on our business, financial condition and operating results.

From time to time, we may consider opportunities to acquire other products or technologies that may enhance our product platform or technology, expand the breadth of our markets or customer base, or advance our business strategies. Potential acquisitions involve numerous risks, including:

problems assimilating the acquired products or technologies;	
issues maintaining uniform standards, procedures, controls and policies;	
unanticipated costs associated with acquisitions;	
diversion of management s attention from our existing business;	
risks associated with entering new markets in which we have limited or no experience; and	
increased legal and accounting costs relating to the acquisitions or to compliance with regulatory matter	rs.

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We have no current commitments with respect to any acquisition. We do not know if we will be able to identify acquisitions we deem suitable, whether we will be able to successfully complete any such acquisitions on favorable terms or at all, or whether we will be able to successfully integrate any acquired products or technologies into our business. Our potential inability to integrate any acquired products or technologies effectively may adversely affect our business, operating results and financial condition.

#### Risks Related to our Financial Results and Need for Financing

We will need to raise additional funds in the future. If these funds are not available to us, we will not have sufficient cash to fund our operations through December 31, 2017.

At December 31, 2016, we had \$55.5 million in cash, cash equivalents and short-term investments, which included \$2.0 million of restricted cash. At the date our financial statements for the year ended December 31, 2016 were issued, we did not have sufficient cash to fund our operations through December 31, 2017 without additional financing and therefore, we concluded there was substantial doubt about our ability to continue as a going concern within one year after the date the financial statements were issued. As a result, the audit report and opinion of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016 includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern. Moreover, the continued growth of our business, including the expansion of our customer care infrastructure to support our growing base of customers, additional research and development activities, and the transition to our new manufacturing facility, will continue to increase our expenses and capital needs. In addition, the amount of our future product sales is difficult to predict and actual sales may not be in line with our forecasts. Our future capital requirements will depend on many factors, including:

the revenue generated by sales of our insulin pump products and pump-related supplies, and any other future products that we may develop and commercialize;

the costs associated with maintaining an appropriate sales, clinical and marketing infrastructure;

the gross profits we realize from the sales we generate and the expenses we incur in maintaining and expanding our manufacturing infrastructure, including opening our new manufacturing location and adding additional manufacturing equipment and capacity;

the cost associated with developing and commercializing our proposed products or technologies, including any costs to administer the Technology Upgrade Program;

the costs associated with maintaining and expanding our customer care infrastructure;

the cost of obtaining and maintaining regulatory clearance or approval for our current or future products;

the cost of ongoing compliance with legal and regulatory requirements;

expenses we incur in connection with potential litigation or governmental investigations;

our compliance with the covenants in our Amended and Restated Term Loan Agreement with Capital Royalty Partners II, L.P. and its affiliate funds, or Capital Royalty Partners, as amended, which we refer to as the Term Loan Agreement;

anticipated or unanticipated capital expenditures; and

unanticipated general and administrative expenses.

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As a result of these and other factors, management currently believes that it will be necessary for us to raise additional funding in the form of an equity financing from the sale of common stock. This offering is being conducted to obtain such funding, although there can be no guarantee that we will successfully raise all the funding we require in this offering. Depending on the amount of funding we receive in this offering as well as other factors, we may in the future seek additional capital from public or private offerings of our capital stock or we may elect to borrow additional amounts under new credit lines or from other sources. If we issue equity or debt securities to raise additional funds, our existing stockholders may experience dilution, we may incur significant financing costs, and the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. In addition, if we raise additional funds through collaborations, licensing, joint ventures, strategic alliances, partnership arrangements or other similar arrangements, it may be necessary to relinquish valuable rights to our potential future products or proprietary technologies, or grant licenses on terms that are not favorable to us.

If we are unable to raise additional capital, whether in this offering or otherwise, we may not be able to maintain our existing sales, marketing, clinical and customer care infrastructure, enhance our current products or develop new products, take advantage of future opportunities, respond to competitive pressures, changes in supplier relationships, or unanticipated changes in customer demand, or satisfy covenants in our existing indebtedness. Any of these events could adversely affect our ability to achieve our strategic objectives, which could have a material adverse effect on our business, financial condition and operating results.

Our operating results may fluctuate significantly from quarter to quarter.

There has been and may continue to be meaningful variability in our operating results from quarter to quarter, as well as within each quarter, especially around the time of anticipated new product introductions. Our operating results, and the variability of these operating results, will be affected by numerous factors, including:

our ability to increase sales and gross profit of our insulin pump products and pump-related supplies, and to commercialize and sell our future products, and the number of our products sold in each quarter;

acceptance of our products by people with insulin-dependent diabetes, their caregivers, healthcare providers and third-party payors;

the financial and accounting impacts of the Technology Upgrade Program;

the pricing of our products and competitive products, including the use of discounts, rebates or other financial incentives by us or our competitors;

the effect of third-party coverage and reimbursement policies;

our ability to maintain our existing infrastructure;

interruption in the manufacturing or distribution of our products;

customers under their existing insurance plans;

our ability to simultaneously manufacture multiple products that meet quality and reliability requirements;

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the amount of, and the timing of the payment for, insurance deductibles required to be paid by our customers and potential

seasonality and other factors affecting the timing of purchases of our products;

timing of new product offerings, acquisitions, licenses or other significant events by us or our competitors;

results of clinical research and trials on our existing and future products;

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the ability of our suppliers to timely provide us with an adequate supply of components that meet our requirements;

regulatory clearance or approvals affecting our products or those of our competitors; and

the timing of revenue and expense recognition associated with our product sales pursuant to applicable accounting standards. As a result of our recent product launches, and due to the complexities of the industry in which we operate, it will continue to be difficult for us to forecast demand for our products with any degree of certainty, which means it will be difficult for us to forecast our sales. For example, in the period leading up to the commercial launch of t:slim X2, we believe there were an increasing number of customers anticipating its availability who delayed their purchasing decisions until they could include t:slim X2 in their decision-making process.

In addition, our operating expenses will continue to increase as we expand our business. Accordingly, we may experience substantial variability in our operating results from quarter to quarter. If our quarterly or annual operating results fall below the expectation of investors or securities analysts, the price of our common stock could decline substantially as has occurred over the past several months. Further, any quarterly or annual fluctuations in our operating results may, in turn, cause the price of our common stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

We have concluded that we do not have sufficient cash to fund our operations through December 31, 2017 and, as a result, the audit report and opinion of our independent registered public accounting firm includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern, which could have a material adverse impact on our business.

The audit report and opinion of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016 includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern. This explanatory paragraph arises from management s conclusion that our cash on hand and cash expected to be generated from operations will not be sufficient to fund our operations through December 31, 2017 without additional financing. Our financial statements included in this prospectus have been prepared on a basis that assumes that we will continue as a going concern, and does not include any adjustments that may result from the outcome of this uncertainty.

Our ability to continue as a going concern is dependent upon a number of factors, including our ability to increase our sales and gross profits, our ability to generate positive cash flow from operations, and our ability to obtain the necessary financing to meet our obligations and repay our liabilities arising from obligations that become due in the ordinary course of business. Management currently believes that it will be necessary for us to raise additional funding in the form of an equity financing from the sale of common stock. This offering is being conducted to obtain such funding, although there can be no guarantee that we will successfully raise all the funding we require in this offering. However, reports issued by independent registered public accounting firm s expressing substantial doubt about a company s ability to continue as a going concern are generally viewed unfavorably by current and prospective investors, as well as by analysts and creditors. As a result, this report may make it more difficult for us to raise the additional financing necessary to continue to operate our business. In addition, this report may make it more difficult for us to sell our products and meet our sales forecasts, which may further impede our ability to raise additional financing.

If we cannot generate sufficient revenues from the sale of our products or secure additional financing on acceptable terms, we may be forced to significantly alter our business strategy, substantially curtail our current operations, or cease operations altogether. We may also be unable to satisfy covenants in our existing indebtedness if we are unable to secure additional equity financing.

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We may not be able to generate sufficient cash to service our indebtedness, which currently consists of our Term Loan Agreement with Capital Royalty Partners.

At December 31, 2016, we had \$81.1 million aggregate borrowings outstanding under the Term Loan Agreement with Capital Royalty Partners. Our ability to make scheduled payments or to refinance our debt obligations depends on numerous factors, including the amount of our cash reserves at the time a scheduled payment becomes due and our actual and projected financial and operating performance. The amount of our cash reserves and our financial and operating performance are subject to certain financial and business factors, as well as prevailing economic and competitive conditions, some of which may be beyond our control. We cannot assure you that we will maintain a level of cash reserves or cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, or interest on our existing or future indebtedness.

If our cash balances or cash flows from operations are insufficient to fund our debt service obligations, we may be forced to reduce or delay capital expenditures, sell or license our assets, sell or reduce our operations, seek additional capital on unfavorable terms, or restructure or refinance our indebtedness. We cannot assure you that we would be able to take any of these actions, or that these actions would permit us to meet our scheduled debt service obligations. Our recent and projected financial results, the explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern qualification contained in the report of our independent registered public accounting firm, and general concerns among potential investors and creditors about our financial well-being may make taking such actions on commercially reasonable terms especially difficult. If we are unable to generate sufficient cash flow or are otherwise unable to obtain the funds necessary to meet required payments of principal, premium, if any, and interest on our indebtedness, we could be in default under the terms of the Term Loan Agreement.

The Term Loan Agreement contains restrictive and financial covenants that may limit our operating flexibility, and our potential inability to comply with such covenants puts us at risk of triggering an event of default under the Term Loan Agreement.

The Term Loan Agreement contains certain restrictive covenants that limit our ability to incur additional indebtedness and liens, merge with other companies or consummate certain changes of control, acquire other companies, engage in new lines of business, make certain investments, pay dividends, transfer or dispose of assets, amend certain material agreements or enter into various specified transactions. We may not be able to engage in any of the foregoing transactions unless we obtain the consent of Capital Royalty Partners or terminate the Term Loan Agreement.

The Term Loan Agreement also contains certain financial covenants, including minimum revenue and cash balance requirements, and financial reporting requirements. There is no guarantee that we will be able to generate sufficient cash flow or sales to meet the financial covenants or pay the principal and interest under the Term Loan Agreement. Further, there is no guarantee that future working capital, borrowings or equity financing will be available to repay or refinance the amounts outstanding under the Term Loan Agreement.

The terms of the Term Loan Agreement also require that we deliver audited financial statements that include an unqualified audit report to Capital Royalty Partners. The audit report and opinion of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016 includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern. This explanatory paragraph in our auditor s report constitutes a potential event of default under the Term Loan Agreement. As a result, on March 7, 2017, we entered into Waiver and Amendment No. 4 to Term Loan Agreement, or the Fourth Amendment, which includes a limited waiver of a potential event of default that could have resulted from the inclusion of the explanatory paragraph in our auditor s report. The Fourth Amendment also imposes

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additional restrictive and financial covenants on us, which may increase our risk of triggering defaults under the Term Loan Agreement. In particular, the Fourth Amendment provides that we must complete a financing in which our gross proceeds from the sale of equity securities is at least \$30.0 million no later than January 15, 2018.

In the event of a future default triggered by any violations of the covenants in the Term Loan Agreement, including the new covenants in the Fourth Amendment, we will need to obtain additional waivers from Capital Royalty Partners to avoid being in default. If we are unable to obtain additional waivers of those events of default or amendments to the Term Loan Agreement that would allow us to be in compliance with the terms of the agreement, an event of default would result. In the event of our default under of the Term Loan Agreement, we may be required to repay any outstanding amounts earlier than anticipated and our capital resources may not be sufficient to meet those obligations. Further, if we are unable to repay our indebtedness and Capital Royalty Partners institutes foreclosure proceedings against our assets, we could be forced into bankruptcy or liquidation, and in such a scenario, the values that we receive for our assets could be significantly lower than the values reflected in our financial statements.

#### Risks Related to our Intellectual Property and Potential Litigation

Our ability to protect our intellectual property and proprietary technology is uncertain.

We rely primarily on patent, trademark and trade secret laws, as well as confidentiality and non-disclosure agreements, to protect our proprietary technologies. As of December 31, 2016, our patent portfolio consisted of approximately 50 issued U.S. patents and 50 pending U.S. patent applications. Of these, our issued U.S. patents expire between approximately 2021 and 2035. We also have and are seeking patent protection for our proprietary technologies in other countries throughout the world. In addition, we have one pending U.S. trademark application as well as 23 trademark registrations, including 10 U.S. trademark registrations and 13 foreign trademark registrations.

We have applied for patent protection relating to certain existing and proposed products and processes. If we fail to file a patent application timely in any jurisdiction, we may be precluded from doing so at a later date. Further, we cannot assure you that any of our patent applications will be approved in a timely manner or at all. The rights granted to us under our patents, and the rights we are seeking to have granted in our pending patent applications, may not be meaningful or provide us with any commercial advantage. In addition, those rights could be opposed, contested or circumvented by our competitors, or be declared invalid or unenforceable in judicial or administrative proceedings. The failure of our patents to adequately protect our technology might make it easier for our competitors to offer the same or similar products or technologies. Even if we are successful in receiving patent protection for certain products and processes, our competitors may be able to design around our patents or develop products that provide outcomes which are comparable to ours without infringing on our intellectual property rights. Due to differences between foreign and U.S. patent laws, our patented intellectual property rights may not receive the same degree of protection in foreign countries as they would in the United States. Even if patents are granted outside of the United States, effective enforcement in those countries may not be available.

We rely on our trademarks and trade names to distinguish our products from the products of our competitors, and have registered or applied to register many of these trademarks. We cannot assure you that our current or future trademark applications will be approved in a timely manner or at all. Third parties also may oppose our trademark applications, or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition, and could require us to devote additional resources to marketing new brands. Further, we cannot assure you that competitors will not infringe upon our trademarks, or that we will have adequate resources to enforce our trademarks.

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We have entered into confidentiality agreements and intellectual property assignment agreements with our officers, employees, temporary employees and consultants regarding our intellectual property and proprietary technology. In the event of unauthorized use or disclosure or other breaches of those agreements, we may not be provided with meaningful protection for our trade secrets or other proprietary information.

If a competitor infringes upon one of our patents, trademarks or other intellectual property rights, enforcing those patents, trademarks and other rights may be difficult and time consuming. Patent law relating to the scope of claims in the industry in which we operate is subject to rapid change and constant evolution and, consequently, patent positions in our industry can be uncertain. Even if successful, litigation to defend our patents and trademarks against challenges or to enforce our intellectual property rights could be expensive and time consuming and could divert management s attention from managing our business. Moreover, we may not have sufficient resources or incentive to defend our patents or trademarks against challenges or to enforce our intellectual property rights. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. Additionally, pursuing litigation may provoke third parties to assert counterclaims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially valuable. The occurrence of any of these events may have a material adverse effect on our business, financial condition and operating results.

The medical device industry is characterized by patent litigation, and from time to time, we may be subject to litigation that could be costly, result in the diversion of management s time and efforts, or require us to pay damages.

Our success will depend in part on not infringing the patents or violating the other proprietary rights of third parties. Significant litigation regarding patent rights exists in our industry. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in competing technologies, may have applied for or obtained or may in the future apply for and obtain, patents that will prevent, limit or otherwise interfere with our ability to make and sell our products. The large number of patents, the rapid rate of new patent issuances, and the complexities of the technology involved increase the risk of patent litigation.

From time to time, we may receive communications from third parties alleging our infringement of their intellectual property rights. Any intellectual property dispute or litigation could force us to do one or more of the following:

stop selling our products or using technology that contains the allegedly infringing intellectual property; incur significant legal expenses;

pay substantial damages to the party whose intellectual property rights we are allegedly infringing;

redesign those products that contain the allegedly infringing intellectual property; or

attempt to obtain a license to the relevant intellectual property from third parties, which may not be available on reasonable terms or at all.

Any litigation or claim against us, even those without merit, may cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation. Further, as the number of participants in the diabetes market increases, the possibility of intellectual property infringement claims against us increases.

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We may be subject to damages resulting from claims that we, or our employees, have wrongfully used or disclosed alleged trade secrets of our competitors or are in breach of non-competition or non-solicitation agreements with our competitors.

Many of our employees were previously employed at other medical device companies, including those that are our direct competitors or could potentially become our direct competitors. In some cases, those employees joined our company recently. We may be subject to claims that we, or our employees, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of these former employers or competitors. In addition, we have been and may in the future be subject to allegations that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement. Litigation may be necessary to defend against these claims. Even if we successfully defend against these claims, litigation could cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business and harm our reputation. If our defense to those claims fails, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. We cannot guarantee that this type of litigation will not continue, and any future litigation or the threat thereof may adversely affect our ability to hire additional direct sales representatives. A loss of key personnel or their work product could hamper or prevent our ability to commercialize proposed products, which could have an adverse effect on our business, financial condition and operating results.

We may incur product liability losses, and insurance coverage may be inadequate or unavailable to cover these losses.

Our business exposes us to potential product liability claims that are inherent in the design, manufacture, testing and sale of medical devices. We could become the subject of product liability lawsuits alleging that component failures, manufacturing flaws, design defects or inadequate disclosure of product-related risks or product-related information resulted in an unsafe condition, injury or death to customers. The risk of one or more product liability claims or lawsuits may be even greater following our January 2014 voluntary recall of cartridges used with t:slim. In addition, the misuse of our products or the failure of customers to adhere to operating guidelines could cause significant harm to customers, including death, which could result in product liability claims. Product liability lawsuits and claims, safety alerts or product recalls, with or without merit, could cause us to incur substantial costs, and could place a significant strain on our financial resources, divert the attention of management from our core business, harm our reputation and adversely affect our ability to attract and retain customers, any of which could have a material adverse effect on our business, financial condition and operating results.

Although we maintain third-party product liability insurance coverage, it is possible that claims against us may exceed the coverage limits of our insurance policies. Even if any product liability loss is covered by an insurance policy, these policies typically have substantial deductibles for which we are responsible. Product liability claims in excess of applicable insurance coverage could have a material adverse effect on our business, financial condition and operating results. In addition, any product liability claim brought against us, with or without merit, could result in an increase of our product liability insurance premiums. Insurance coverage varies in cost and can be difficult to obtain, and we cannot guarantee that we will be able to obtain insurance coverage in the future on terms acceptable to us or at all. Our inability to obtain sufficient insurance coverage to protect again potential product liability claims could prevent or limit our commercialization of current products or products currently under development.

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Risks Related to our Legal and Regulatory Environment

Our products and operations are subject to extensive governmental regulation, and failure to comply with applicable requirements could cause our business to suffer.

The medical device industry is regulated extensively by governmental authorities, principally the FDA and corresponding state regulatory agencies. The regulations are very complex and are subject to rapid change and varying interpretations. Regulatory restrictions or changes could limit our ability to carry on or expand our operations or result in higher than anticipated costs or lower than anticipated sales. The FDA and other U.S. governmental agencies regulate numerous elements of our business, including:

product design and development;
pre-clinical and clinical testing and trials;
product safety;
establishment registration and product listing;
labeling and storage;
marketing, manufacturing, sales and distribution;
pre-market clearance or approval;
servicing and post-market surveillance;
advertising and promotion; and

recalls and field safety corrective actions.

Before we can market or sell a new regulated product or a significant modification to an existing product in the United States, we must obtain either clearance under Section 510(k) of the FDCA or approval of a PMA application from the FDA, unless an exemption from pre-market review applies. In the 510(k) clearance process, the FDA must determine that a proposed device is substantially equivalent to a device legally on the market, known as a predicate device, with respect to intended use, technology and safety and effectiveness, in order to clear the proposed device for marketing. Clinical data is sometimes required to support substantial equivalence. The PMA pathway requires an applicant to demonstrate the safety and effectiveness of the device based on extensive data. The PMA process is typically required for devices that are deemed to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices. We received approval of our PMA for t:slim G4 in September 2015. Products that are approved through a PMA application generally need FDA approval before they can be modified. Similarly, some modifications made to products cleared through a 510(k) may require a new 510(k). The process of obtaining regulatory clearances or approvals to market a medical device can be costly and time-consuming, and we may not be able to obtain these clearances or approvals on a timely basis or at all for our proposed products.

We initially received pre-market clearance for t:slim under Section 510(k) of the FDCA in November 2011. We obtained 510(k) clearances for t:connect and t:flex in February 2013 and January 2015, respectively. From time to time, we may make modifications to these products that may require a new 510(k). We have received 510(k) clearance for various modifications to t:slim and its associated cartridge. For instance, in July 2016, we received 510(k) clearance to reduce the age in our indications for use of t:slim to age six. We may pursue 510(k) clearance for additional modifications to t:slim X2 and t:flex in the future. In addition, in July 2016, we received 510(k) clearance for the first use of our Tandem Device Updater. If the FDA requires us to go through a more rigorous examination for future products or modifications to existing products than we had expected, our product introductions or modifications could be delayed or canceled, which could cause our sales to decline or to not increase in

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line with our forecasts. We anticipate that our products currently under development will require the more costly, lengthy and uncertain PMA approval process.

The FDA can delay, limit or deny clearance or approval of one of our devices for many reasons, including:

our inability to demonstrate that our products are safe and effective for their intended users;

the data from our clinical trials may be insufficient to support clearance or approval; and

failure of the manufacturing process or facilities we use to meet applicable requirements.

In addition, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our products under development or impact our ability to modify our currently cleared or approved products on a timely basis.

Any delay in, or failure to receive or maintain, clearance or approval for our products under development could prevent us from generating revenue from these products or achieving profitability. Additionally, the FDA and other regulatory authorities have broad enforcement powers. Regulatory enforcement or inquiries, or other increased scrutiny on us, could dissuade some customers from using our products and adversely affect our reputation and the perceived safety and efficacy of our products.

Failure to comply with applicable regulations could jeopardize our ability to sell our products and result in enforcement actions such as fines, civil penalties, injunctions, warning letters, recalls of products, delays in the introduction of products into the market, refusal of the FDA or other regulators to grant future clearances or approvals, and the suspension or withdrawal of existing approvals by the FDA or other regulators. Any of these sanctions could result in higher than anticipated costs or lower than anticipated sales and have a material adverse effect on our reputation, business, financial condition and operating results.

Further, we may evaluate international expansion opportunities in the future. If we expand our operations outside of the United States, we will become subject to various additional regulatory and legal requirements under the applicable laws and regulations of the international markets we enter. These additional regulatory requirements may involve significant costs and expenditures and, if we are not able to comply with any such requirements, our international expansion and business could be significantly harmed.

Modifications to our products may require new 510(k) clearances or PMAs, or may require us to cease marketing or recall the modified products until clearances are obtained.

Any modification to a 510(k)-cleared device that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, design, or manufacture, requires a new 510(k) clearance or, possibly, a PMA. The FDA requires every manufacturer to make this determination in the first instance, but the FDA may review any manufacturer s decision. The FDA may not agree with our decisions regarding whether new clearances or approvals are necessary for changes that we have made to our products. If the FDA disagrees with our determination and requires us to submit new 510(k) notifications or PMAs for modifications to our previously cleared or approved products, for which we concluded that new clearances or approvals were not necessary, we may be required to cease marketing or to recall the modified product until we obtain clearance or approval, and we may be subject to significant regulatory fines or penalties.

Further, the FDA s ongoing review of and potential changes to the 510(k) program may make it more difficult for us to modify our previously cleared products, either by imposing stricter requirements on

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when a new 510(k) for a modification to a previously cleared product must be submitted, or by applying more onerous review criteria to such submissions.

If we or our third-party suppliers fail to comply with the FDA s good manufacturing practice regulations, this could impair our ability to market our products in a cost-effective and timely manner.

We and our third-party suppliers are required to comply with the FDA s Quality System Regulation, or QSR, which covers the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, sterilization, storage and shipping of our products. The FDA audits compliance with the QSR through periodic announced and unannounced inspections of manufacturing and other facilities. The FDA may impose inspections or audits at any time. If we or our suppliers have significant non-compliance issues or if any corrective action plan that we or our suppliers propose in response to observed deficiencies is not sufficient, the FDA could take enforcement action against us. Any of the foregoing actions could have a material adverse effect on our reputation, business, financial condition and operating results.

A recall of our products, or the discovery of serious safety issues with our products, could have a significant negative impact on us.

The FDA has the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture or in the event that a product poses an unacceptable risk to health. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found. A government-mandated or voluntary recall by us, one of our distributors or any of our other third-party suppliers could occur as a result of an unacceptable risk to health, component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls of any products that we distribute would divert managerial and financial resources, which could impair our ability to produce our products in a cost-effective and timely manner, and have an adverse effect on our reputation, financial condition and operating results.

Further, under the FDA s Medical Device Reporting, or MDR, regulations, we are required to report to the FDA any incident in which our product may have caused or contributed to a death or serious injury or in which our product malfunctioned and, if the malfunction were to recur, would likely cause or contribute to death or serious injury. Repeated product malfunctions may result in a voluntary or involuntary product recall, which could divert managerial and financial resources, impair our ability to manufacture our products in a cost-effective and timely manner and have an adverse effect on our reputation, financial condition and operating results.

Any adverse event involving any products that we distribute could result in future voluntary corrective actions, such as recalls or customer notifications, or regulatory agency action, which could include inspection, mandatory recall or other enforcement action. Any corrective action, whether voluntary or involuntary, will require the dedication of our time and capital, distract management from operating our business and may harm our reputation and financial results.

Our failure to comply with U.S. federal and state fraud and abuse laws, including anti-kickback laws and other U.S. federal and state anti-referral laws, could have a material, adverse impact on our business.

There are numerous U.S. federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback laws and physician self-referral laws. Our relationships with healthcare providers and other third parties are subject to scrutiny under these laws. Violations of these laws are punishable by criminal and civil sanctions, including, in some instances, imprisonment and exclusion from participation in federal and state healthcare programs, including the Medicare, Medicaid and Veterans Administration health programs.

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Healthcare fraud and abuse regulations are complex, and even minor irregularities can potentially give rise to claims that a statute or prohibition has been violated. The laws that may affect our ability to operate include:

the federal healthcare programs Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;

federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payors that are false or fraudulent;

federal and state physician referral laws, such as the federal Stark Law, that prohibit a physician from referring Medicare or Medicaid patients to an entity providing designated health services, including a company that furnishes durable medical equipment, in which the physician has an ownership or investment interest or with which the physician has entered into a compensation arrangement;

federal criminal laws enacted as part of HIPAA that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

the Federal Trade Commission Act and similar laws regulating advertisement and consumer protections; and

foreign and U.S. state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Further, the Patient Protection and Affordable Care Act, as amended by the Healthcare and Education Affordability Reconciliation Act, or, collectively, the PPACA, among other things, amends the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. An individual or entity can now be found guilty under the PPACA without actual knowledge of the statute or specific intent to violate it. In addition, the PPACA provides that claims submitted in violation of the Anti-Kickback Statute automatically constitute false claims for purposes of the False Claims Act. Possible sanctions for violation of these laws include monetary fines, civil and criminal penalties, exclusion from Medicare, Medicaid and other federal healthcare programs, and forfeiture of amounts collected in violation of those prohibitions. Any violation of these laws, or any action against us for violation of these laws, even if we successfully defend against it, could result in a material adverse effect on our reputation, business, financial condition and operating results.

To enforce compliance with the federal laws, the U.S. Department of Justice, or DOJ, has recently increased its scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Dealing with investigations can be time- and resource-consuming and can divert management s attention from our core business. Additionally, if a healthcare company settles an investigation with the DOJ or other law enforcement agencies, we may be forced to agree to additional onerous compliance and reporting requirements as part of a consent decree or corporate integrity agreement. Any such investigation or settlement could increase our costs or otherwise have an adverse effect on our business.

The scope and enforcement of these laws is uncertain and subject to rapid change in the current environment of healthcare reform. Federal or state regulatory authorities might challenge our current or future activities under these laws. Any of these challenges could have a material adverse effect on our

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reputation, business, financial condition and operating results. Any state or federal regulatory review of us, regardless of the outcome, would be costly and time-consuming. Additionally, we cannot predict the impact of any changes in these laws, whether or not retroactive.

We may be liable if we engage in the promotion of the off-label use of our products.

Our promotional materials and training methods must comply with FDA and other applicable laws and regulations, including the prohibition against the promotion of the off-label use of our products. Healthcare providers may use our products off-label, as the FDA does not restrict or regulate a physician schoice of treatment within the practice of medicine. However, if the FDA determines that our promotional materials or training constitutes promotion of an off-label use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance of an untitled letter, a warning letter, injunction, seizure, civil fine and criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider our promotional or training materials to constitute promotion of an unapproved use, which could result in significant fines or penalties. Although our policy is to refrain from statements that could be considered off-label promotion of our products, the FDA or another regulatory agency could disagree and conclude that we have engaged in off-label promotion. In addition, the off-label use of our products may increase the risk of product liability claims, which are expensive to defend and could result in substantial damage awards against us and harm our reputation.

Legislative or regulatory healthcare reforms may result in downward pressure on the price of and decrease reimbursement for medical devices, and make it more difficult and costly for us to obtain regulatory clearance or approval of our products.

Recent political, economic and regulatory influences are subjecting the healthcare industry to fundamental changes. The sales of our products depend in part on the availability of coverage and reimbursement from third-party payors such as government health administration authorities, private health insurers, health maintenance organizations and other healthcare-related organizations. Both the federal and state governments in the United States continue to propose and pass new legislation and regulations designed to contain or reduce the cost of healthcare. This legislation and regulation may result in decreased reimbursement for medical devices, which may further exacerbate industry-wide pressure to reduce the prices charged for medical devices. This could harm our ability to market our products and generate sales.

In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of our products. Delays in receipt of or failure to receive regulatory clearances or approvals for our proposed products would have a material adverse effect on our business, financial condition and operating results.

Federal and state governments in the United States have enacted legislation to overhaul the nation shealthcare system. While the goal of healthcare reform is to expand coverage to more individuals, it also involves increased government price controls, additional regulatory mandates and other measures designed to constrain medical costs. The PPACA substantially changes the way healthcare is financed by both governmental and private insurers, encourages improvements in the quality of healthcare items and services and significantly impacts the medical device industry. Among other things, the PPACA:

establishes a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research;

implements payment system reforms including a national pilot program on payment bundling to encourage hospitals, physicians and other providers to improve the

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coordination, quality and efficiency of certain healthcare services through bundled payment models; and

creates an independent payment advisory board that will submit recommendations to reduce Medicare spending if projected Medicare spending exceeds a specified growth rate.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. Most recently, on August 2, 2011, President Barack Obama signed into law the Budget Control Act of 2011, which, among other things, creates the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee did not achieve a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation—s automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, which commenced in 2013. The uncertainties regarding the ultimate features of the PPACA and other healthcare reform initiatives and their enactment and implementation may have an adverse effect on our customers—purchasing decisions regarding our products. In the coming years, additional changes could be made to governmental healthcare programs that could significantly impact the success of our products. Cost control initiatives could decrease the price that we receive for our products. At this time, we cannot predict which, if any, additional healthcare reform proposals will be adopted, when they may be adopted or what impact they, or the PPACA, may have on our business and operations, and any of these impacts may have an adverse effect on our operating results and financial condition.

Our financial performance may be adversely affected by medical device tax provisions in the healthcare reform laws.

Beginning in 2013 through the end of 2015, the PPACA imposed, among other things, an annual excise tax of 2.3% on any entity that manufactures or imports medical devices offered for sale in the United States. Congress suspended this tax on December 18, 2015 for two years, for sales of devices during the period January 1, 2016 through December 31, 2017. We do not believe that our products were subject to this tax (prior to its suspension) based on the retail exemption under applicable Treasury Regulations. However, the availability of this exemption is subject to interpretation by the IRS, and the IRS may disagree with our analysis. The future of the medical device tax (and the PPACA generally) is uncertain. If the tax is not repealed and the two-year suspension of the tax is not extended beyond 2017, future products that we manufacture, produce or import may be subject to this tax (unless the retail exemption or other applicable exemption applies). The financial impact this tax may have on our business is unclear and there can be no assurance that our business will not be materially adversely affected by it.

### Risks Related to our Common Stock and this Offering

Because of their significant stock ownership, certain of our executive officers, directors and principal stockholders will be able to exert control over our company and our significant corporate decisions.

Based on an aggregate of 31,095,598 shares of our common stock outstanding as of December 31, 2016, our executive officers and directors, and their affiliates owned, in the aggregate, approximately 39% of the voting power of our outstanding common stock. These persons, acting together, will have the ability to significantly influence the outcome of all matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation, or sale of all or substantially all of our assets.

The interests of the aforementioned stockholders might not coincide with the interests of the other holders of our capital stock. This concentration of ownership may reduce the value of our common stock by, among other things:

delaying, deferring or preventing a change of control of our company;

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impeding a merger, consolidation, takeover or other business combination involving our company; or

causing us to enter into transactions or agreements that are not in the best interests of all stockholders.

Anti-takeover provisions in our organizational documents and Delaware law may discourage or prevent a change of control, even if an acquisition would be beneficial to our stockholders, which could reduce our stock price and prevent our stockholders from replacing or removing our current management.

Our amended and restated certificate of incorporation and bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions:

authorize the issuance of preferred stock with powers, preferences and rights that may be senior to our common stock, which can be created and issued by the board of directors without prior stockholder approval;

provide for the adoption of a staggered board of directors whereby the board is divided into three classes each of which has a different three-year term;

provide that the number of directors shall be fixed by the board;

prohibit our stockholders from filling board vacancies;

provide for the removal of a director only with cause and then by the affirmative vote of the holders of a majority of the outstanding shares;

prohibit stockholders from calling special stockholder meetings;

prohibit stockholders from acting by written consent without holding a meeting of stockholders;

require the vote of at least two-thirds of the outstanding shares to approve amendments to the certificate of incorporation or bylaws; and

require advance written notice of stockholder proposals and director nominations.

We are subject to the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our amended and restated certificate of incorporation, bylaws and Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including a merger, tender offer or proxy contest involving our company. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Our board of directors is authorized to issue and designate shares of our preferred stock in additional series without stockholder approval.

Our amended and restated certificate of incorporation authorizes our board of directors, without the approval of our stockholders, to issue 5,000,000 shares of our preferred stock, subject to limitations prescribed by applicable law, rules and regulations and the provisions of our

amended and restated certificate of incorporation, as shares of preferred stock in series, and to establish from time to time the number of shares to be included in each such series, and to fix the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations or restrictions thereof. The

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powers, preferences and rights of these additional series of preferred stock may be senior to or on parity with our common stock, and the issuance of such shares in the future may reduce the value of our common stock.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2016, we had federal net operating loss, or NOL, carryforwards of approximately \$283.5 million, not considering the limitation discussed below. The federal tax loss carryforwards begin to expire in 2026, unless previously utilized. In general, if there is an ownership change—with respect to our company, as defined under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, the utilization of our NOL carryforwards may be subject to substantial limitations imposed by the Code, and similar state provisions. In general, an ownership change occurs whenever there is a shift in ownership of our company by more than 50% by one or more 5% stockholders over a specified time period.

Although we have not completed an update of our Section 382 analysis subsequent to December 31, 2013, the offering of common stock that we conducted in March of 2015, either separately or together with this offering and any future offering, may have caused, shall cause, or could cause an ownership change or could increase the likelihood that we undergo an ownership change for purposes of Section 382 of the Code in the future. Limitations imposed on our ability to utilize NOL carryforwards could cause U.S. federal income taxes to be paid earlier than would be paid if such limitations were not in effect and could cause such NOL carryforwards to expire unused, in each case reducing or eliminating the benefit of such NOL carryforwards.

#### We do not intend to pay cash dividends.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. In addition, pursuant to the Term Loan Agreement, we are precluded from paying any cash dividends. Accordingly, you may have to sell some or all of your shares of our common stock in order to generate cash flow from your investment. You may not receive a gain on your investment when you sell your shares of our common stock and may lose the entire amount of your investment.

The requirements of being a public company have increased our costs and will continue to strain our resources and divert management s attention.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, the listing requirements of The NASDAQ Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations has increased our legal and financial compliance costs, made some activities more difficult, time-consuming or costly, and increased demand on our systems and resources.

The Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. Recent legislation permits emerging growth companies to implement many of these requirements over a period of up to five years after becoming subject to the requirements. We intend to take advantage of this new legislation but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses.

In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management s attention may be diverted from other business concerns, which could harm our business and operating results. Although we have hired additional employees to

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help us comply with these requirements, in the future we may need to hire more employees or utilize external consultants in order to further support our efforts, which will increase our expenses.

Regulations related to conflict minerals may cause us to incur additional expenses and could limit the supply and increase the cost of certain metals used in manufacturing our products.

The SEC adopted a rule requiring disclosures by public companies of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured. The rule requires companies to perform due diligence, disclose and annually report to the SEC whether or not such minerals originate from the Democratic Republic of Congo or an adjoining country. The rule could affect sourcing at competitive prices and availability in sufficient quantities of certain minerals used in the manufacture of our products, including tantalum, tin, gold and tungsten. The number of suppliers who provide conflict-free minerals may be limited. In addition, there may be material costs associated with complying with the disclosure requirements, such as costs related to determining the source of certain minerals used in our products, as well as costs of possible changes to products, processes, or sources of supply as a consequence of such verification activities. Within our supply chain, we may not be able to sufficiently verify the origins of the relevant minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. We continue to investigate the use of conflict materials, if any, within our supply chain.

We are an emerging growth company and we do not know whether the reduced disclosure requirements and relief from certain other significant obligations that are applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart our Business Startups Act of 2012, or the JOBS Act, and we intend to take advantage of certain exemptions from various reporting and compliance requirements that apply to other public companies that are not emerging growth companies. These exemptions include the following:

not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act;

less extensive disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and

exemptions from the requirements to hold a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We intend to take advantage of these exemptions but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. We cannot predict if investors will find our common stock less attractive because of our reliance on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, which could result in a reduction in the price of our common stock.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us

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conducted in connection with Section 404(a) of the Sarbanes-Oxley Act, or the subsequent testing by our independent registered public accounting firm conducted in connection with Section 404(b) of the Sarbanes-Oxley Act after we no longer qualify as an emerging growth company, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

We are required to disclose changes made to our internal control procedures on a quarterly basis and our management is required to assess the effectiveness of these controls annually. However, for as long as we are an emerging growth company under the JOBS Act, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404. We could be an emerging growth company for up to five years from our November 2013 initial public offering. An independent assessment of the effectiveness of our internal controls could detect problems that our management s assessment might not. Undetected material weaknesses in our internal controls could lead to financial statement restatements and require us to incur the expense of remediation.

### The price of our common stock might fluctuate significantly.

Our common stock is listed on the NASDAQ Global Market under the symbol TNDM. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

actual or anticipated fluctuations in our quarterly financial and operating results, including the financial and accounting impacts of the Technology Upgrade Program;

our actual or perceived need for additional capital to fund our operations;

perceptions about the market acceptance of our products and the recognition of our brand;

perceptions about our financial stability relative to our competitors and our ability to sustain our business operations long term;

the reaction of investors to our conclusion that if we do not successfully raise additional capital, whether in this offering or otherwise, there is substantial doubt about our ability to continue as a going concern;

overall performance of the equity markets;

introduction of proposed products, or announcements of significant contracts, licenses or acquisitions, by us or our competitors;

legislative, political or regulatory developments;

issuance of securities analysts reports or recommendations;

additions or departures of key personnel;

threatened or actual litigation and government investigations;

sale of shares of our common stock by us or members of our management; and

general economic conditions.

These and other factors might cause the market price of our common stock to fluctuate substantially, which may negatively affect the liquidity of our common stock. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies across many industries. The changes

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frequently appear to occur without regard to the operating performance of the affected companies. Accordingly, the price of our common stock could fluctuate based upon factors that have little or nothing to do with our company, and these fluctuations could materially reduce the market price of our common stock.

Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company securities. This litigation, if instituted against us, could result in substantial costs, divert our management settention and resources, and harm our business, operating results and financial condition.

Future sales, or the perception of future sales, of shares of our common stock could materially reduce the market price of our common stock.

Sales of our common stock, or the perception in the market that the holders of a large number of our shares intend to sell such shares, could reduce the market price of our common stock, which would impair our ability to raise future capital through the sale of additional equity securities. A substantial number of the outstanding shares of our common stock are, and the shares of common stock sold in this offering upon issuance will be, freely tradable without restriction or further registration under the Securities Act. We had outstanding 31,095,598 shares of common stock as of December 31, 2016, of which approximately 11,985,636 shares are restricted securities that may be sold only in accordance with the resale restrictions under Rule 144 of the Securities Act. In addition, as of December 31, 2016, we had outstanding options to purchase 8,228,387 shares of common stock and warrants to purchase 990,031 shares of common stock that, if exercised, will result in these additional shares becoming available for sale. As of December 31, 2016, there was also 562,282 shares and 78,459 shares of our common stock reserved for future grant or issuance under our 2013 Stock Incentive Plan, and our 2013 Employee Stock Purchase Plan, or our ESPP, respectively.

Upon the completion of this offering, approximately shares of our outstanding common stock beneficially owned by our executive officers, directors and certain of our other existing stockholders will be subject to lock-up agreements with the underwriters of this offering that restrict the sale of shares of our common stock by those parties for a period of 90 days after the date of this prospectus. However, all of the shares sold in this offering and the remaining shares of our common stock outstanding prior to this offering (which include certain shares that are held by our affiliates) will not be subject to lock-up agreements with the underwriters and, except to the extent such shares are held by our affiliates, will be freely tradable without restriction under the Securities Act. In addition, following the expiration of the 90-day lock up period referenced above, the holders holding approximately shares of our common stock will have the right, subject to various conditions and limitations, to include their shares in registration statements relating to our securities. In addition, these holders are entitled to piggyback registration rights with respect to the registration under the Securities Act of shares of our common stock. Shares of common stock registered under these registration statements can be freely sold in the public market. In the event registration rights are exercised and a large number of shares of common stock are sold in the public market, those sales could reduce the trading price of our common stock.

In the future, we may issue additional securities if we need to raise more capital. In particular, management currently believes that it will be necessary for us to raise additional funding in the form of an equity financing from the sale of common stock. This offering is being conducted to obtain such funding, although there can be no guarantee that we will successfully raise all the funding we require in this offering. The number of new shares of our common stock issued in connection with raising additional capital could constitute a material portion of the then-outstanding shares of our common stock.

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We have broad discretion in the use of our existing cash, including the net proceeds we receive from this offering, and may not use them effectively or may use them in a way in which you do not approve.

Although we currently intend to use the net proceeds from this offering in the manner described in the section entitled. Use of Proceeds of this prospectus, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of shares of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the market price of shares of our common stock to decline and delay the development of new products. We may invest the net proceeds from this offering in a manner that does not produce income or that loses value. If we do not invest the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause the price of shares of our common stock to decline.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The assumed offering price of shares of our common stock is substantially higher than the pro forma net tangible book value per outstanding share of our common stock. You will incur immediate and substantial dilution of \$ per share, representing the difference between the assumed public offering price and our pro forma net tangible book value per share as of December 31, 2016, based on the sale of shares of common stock at an assumed public offering price per share of common stock of , the last reported sale price of our common stock on NASDAQ on , 2017, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of liquidation. Further, investors purchasing shares of our common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own, as a result of such investment, only % of shares of our common stock outstanding immediately following this offering. In addition, if the underwriters exercise their over-allotment option, or outstanding options or warrants are exercised, you could experience further dilution. For more information on the dilution you may suffer as a result of investing in this offering, see the section entitled Dilution of this prospectus.

### We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because medical device companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management s attention and resources, which could harm our business, financial condition and results of operations.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.

The trading market for our common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. In addition, if our operating results fail to meet the forecasts of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our stock price and trading volume to decline.

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#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the federal securities laws, which statements are subject to considerable risks and uncertainties. These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. All statements included or incorporated by reference in this prospectus, other than statements of historical fact, are forward-looking statements. You can identify forward-looking statements by the use of words such as may, will, could, anticipate, expect, intend, believe, continue or the negative of such terms, or other comparable terminology. Forward-looking statements oinclude the assumptions underlying or relating to such statements. In particular, forward-looking statements contained in this prospectus relate to, among other things, our future or assumed financial condition, including our ability to continue as a going concern, results of operations, liquidity, business forecasts and plans, research and product development plans, strategic plans and objectives, capital needs and financing plans, product launches, regulatory approvals, competitive environment, and the application of accounting guidance. We caution you that the foregoing list may not include all of the forward-looking statements made in this prospectus.

Our forward-looking statements are based on our management s current assumptions and expectations about future events and trends, which affect or may affect our business, strategy, operations or financial performance. Although we believe that these forward-looking statements are based upon reasonable assumptions, they are subject to numerous known and unknown risks and uncertainties and are made in light of information currently available to us. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below in the sections entitled Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations and elsewhere in this prospectus, as well as in the other reports we file with the SEC. You should read this prospectus with the understanding that our actual future results may be materially different from and worse than what we expect.

Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Forward-looking statements speak only as of the date they were made, and, except to the extent required by law or the NASDAQ Listing Rules, we undertake no obligation to update or review any forward-looking statement because of new information, future events or other factors.

We qualify all of our forward-looking statements by these cautionary statements.

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#### USE OF PROCEEDS

We estimate that our net proceeds from the sale of underwriters fully exercise their option to purchase sales price of our common stock on , 2017.

shares of our common stock in this offering will be approximately  $\$  , or  $\$  if the additional shares, based on  $\$  per share of common stock, the last reported

A \$0.25 increase (decrease) in the assumed offering price of \$ per share would increase (decrease) our expected net proceeds from this offering by approximately \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. We also may increase or decrease the number of shares we are offering. An increase of 1,000,000 shares in the number of shares offered by us would increase the net proceeds to us from this offering by approximately \$ million after deducting the underwriting discount and estimated offering expenses payable by us, assuming the assumed offering price of \$ per share remains the same. Conversely, a decrease of 1,000,000 shares in the number of shares offered by us would decrease the net proceeds to us from this offering by approximately \$ million after deducting the underwriting discount and estimated offering expenses payable by us, assuming the assumed offering price of \$ per share remains the same.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes.

Our expected use of the net proceeds from this offering is based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. The amounts and timing of our actual use of proceeds will vary depending on numerous factors, including the factors described in the section entitled Risk Factors beginning on page 13 of this prospectus. As a result, management will retain broad discretion over the allocation of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds.

Pending the use of the net proceeds of this offering, we intend to invest the net proceeds in high-quality, short-term interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

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#### PRICE RANGE OF OUR COMMON STOCK

### **Market Information**

Our common stock began trading on The NASDAQ Global Market on November 14, 2013 under the symbol TNDM. Prior to such time, there was no public market for our common stock. The following table sets forth the high and low sales prices per share of our common stock as reported on The NASDAQ Global Market for the periods indicated.

	Price Range		
	High	Low	
Year Ended December 31, 2016:			
First Quarter	\$ 11.80	\$ 6.59	
Second Quarter	\$ 11.30	\$ 6.48	
Third Quarter	\$ 8.81	\$ 6.04	
Fourth Quarter	\$ 8.10	\$ 1.60	
Year Ended December 31, 2015:			
First Quarter	\$ 14.27	\$ 11.50	
Second Quarter	\$ 14.19	\$ 10.54	
Third Quarter	\$ 13.48	\$ 8.52	
Fourth Quarter	\$ 12.48	\$ 7.26	

The last sale price for our common stock as reported by NASDAQ on March 7, 2017 was \$2.35 per share.

### Holders

As of March 7, 2017, there were approximately 72 holders of record of our common stock. The actual number of common stockholders is greater than the number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

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### DIVIDEND POLICY

We have never declared or paid any cash dividends on our common stock. We have no current plans to declare or pay any dividends and intend to retain all of our future earnings, if any, generated by our operations for the development and growth of our business. Any future decision to pay dividends will be made by our board of directors in its sole discretion and will depend upon our results of operations, financial condition, capital requirements and other factors that our board of directors deems relevant in its informed business judgment. In addition, the terms of the Term Loan Agreement restrict our ability to pay cash dividends.

#### **CAPITALIZATION**

The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2016:

on an actual basis: and

on a pro forma basis to give effect to the sale of shares of common stock by us at an assumed offering price of \$ per share, the last reported sale price of our common stock on the NASDAQ Global Market on , 2017 after deducting the underwriting discount and estimated offering expenses payable by us.

The pro forma information below is illustrative only and our capitalization following the closing of this offering will be adjusted based on the actual offering price and other terms of this offering determined at the time of pricing. You should read this table in conjunction with the sections entitled Use of Proceeds, Selected Financial Data, and Management's Discussion and Analysis of Financial Condition and Results of Operations of this prospectus and our financial statements and the related notes included elsewhere in this prospectus.

As of Docombon 21, 2016

Since December 31, 2016, there has been no material change to our capitalization.

		As of December 31,	2016
		Actual	Pro Forma (unaudited)
	(dollar	amounts in thousands, e	except par value)
Cash and cash equivalents	\$	44,678	
Debt, net of current portion		78,960	
Preferred stock, par value \$0.001; 5,000,000 shares authorized and no shares issued and			
outstanding; 5,000,000 shares authorized and no shares issued and outstanding pro forma			
Common stock, par value \$0.001; 100,000,000 shares authorized, 31,095,598 shares issued			
and outstanding; 100,000,000 shares authorized, shares issued and outstanding pro			
forma		31	
Additional paid-in capital		398,623	
Accumulated other comprehensive loss		(1)	
Retained earnings		(404,580)	
Total stockholders equity		(5,927)	
Tour stockholders equity		(3,721)	
Total capitalization	\$	73,033	
^			

A \$0.25 increase (decrease) in the assumed offering price of \$ per share would increase (decrease) our pro forma cash and cash equivalents, additional paid-in capital, total stockholders equity and total capitalization by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discount and estimated offering expenses payable by us. An increase of 1,000,000 shares in the number of shares offered by us would increase our pro forma cash and cash equivalents, additional paid-in capital, total stockholders equity and total capitalization by approximately \$ million, assuming the assumed offering price of \$ per share remains the same. Conversely, a decrease of 1,000,000 shares in the number of shares offered by us would decrease our pro forma cash and cash equivalents, additional paid-in capital, total stockholders equity and total capitalization by approximately \$ million, assuming the assumed offering price of \$ per share remains the same.

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The number of shares of common stock outstanding in the table above excludes:

990,031 shares of common stock issuable upon exercise of outstanding warrants as of December 31, 2016, at a weighted average exercise price of \$7.37 per share;

1,825,300 shares of common stock issuable upon exercise of outstanding options to purchase shares of common stock under the 2006 Plan as of December 31, 2016, at a weighted average exercise price of \$2.48 per share (of which options to acquire 1,780,885 shares of common stock are vested as of December 31, 2016);

6,403,087 shares of common stock issuable upon exercise of outstanding options to purchase shares of common stock under the 2013 Plan as of December 31, 2016, at a weighted average exercise price of \$10.09 per share (of which options to acquire 2,457,220 shares of common stock are vested as of December 31, 2016) and 562,282 shares that are reserved for future issuance under the 2013 Plan as of December 31, 2016;

78,459 shares of common stock reserved for future grant or issuance under the ESPP as of December 31, 2016; and

1,937,890 shares of common stock issuable upon exercise of warrants issued to Capital Royalty Partners on March 7, 2017 at an exercise price equal to \$2.35 per share, the closing price of our common stock on the NASDAQ Global Market on the issuance date.

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#### DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the offering price per share of our common stock and the pro forma net tangible book value per share of our common stock upon completion of this offering. Our historical net tangible book value (deficit) as of December 31, 2016 was \$(8.0) million, or \$(0.25) per share of our common stock. Historical net tangible book value (deficit) per share is determined by dividing the number of our outstanding shares of common stock by our total tangible assets (total assets less intangible assets) less total liabilities.

Investors purchasing in this offering will incur immediate and substantial dilution. After giving effect to the sale of shares of common stock offered in this offering assuming an offering price of \$ per share, the last reported sale price of our common stock on the NASDAQ Global Market on , 2017, and after deducting the underwriting discount and estimated offering expenses payable by us, our pro forma net tangible book value as of December 31, 2016 would have been \$ million, or \$ per share of our common stock. This represents an immediate increase in net tangible book value of \$ per share to existing stockholders, and an immediate dilution of \$ per share to investors purchasing in this offering.

The following table illustrates this per share dilution:

### Assumed offering price per share

Historical net tangible book value (deficit) per share as of December 31, 2016

\$ (0.25)

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Increase in net tangible book value per share attributable to investors purchasing in this offering

Pro forma net tangible book value per share after this offering

### Dilution per share to investors purchasing in this offering

The following table summarizes, on the pro forma basis described above as of December 31, 2016, the differences between the number of shares of common stock purchased from us, the total consideration paid and the average price per share paid by existing stockholders and by investors purchasing in this offering at an assumed offering price of \$ per share, before deducting the underwriting discount and estimated offering expenses payable by us.

	Shares Purchased		Total Conside	eration	Average Price Per
	Number	Percent	Amount	Percent	Share
Existing stockholders before this offering	31,095,598	%	\$ 355,381,389	%	\$ 11.43
Investors nurchasing in this offering					

Investors purchasing in this offering

Total 100.0% 100.0%

A \$0.25 increase or decrease in the offering price of \$ per share would increase or decrease our pro forma net tangible book value per share by \$ and the dilution per share to new investors in this offering by \$ , assuming the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same. An increase or decrease of 1,000,000 shares in the number of shares of common stock offered by us at the assumed public offering price would increase or decrease our pro forma net tangible book value per share after this offering by \$ per share and the dilution per share to new investors in this offering by \$ .

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Except as otherwise indicated, the discussion and tables above assume no exercise of the underwriters option to purchase additional shares and no exercise of any outstanding options or warrants. If the underwriters exercise their option to purchase additional shares in full, the number of shares of common stock held by existing stockholders will be reduced to % of the total number of shares of common stock to be outstanding upon consummation of this offering, and the number of shares of common stock held by investors purchasing in this offering will be increased to shares or % of the total number of shares of common stock to be outstanding upon consummation of this offering.

The number of shares of common stock outstanding in the table excludes:

990,031 shares of common stock issuable upon exercise of outstanding warrants as of December 31, 2016, at a weighted average exercise price of \$7.37 per share;

1,825,300 shares of common stock issuable upon exercise of outstanding options to purchase shares of common stock under the 2006 Plan as of December 31, 2016, at a weighted average exercise price of \$2.48 per share (of which options to acquire 1,780,885 shares of common stock are vested as of December 31, 2016);

6,403,087 shares of common stock issuable upon exercise of outstanding options to purchase shares of common stock under the 2013 Plan as of December 31, 2016, at a weighted average exercise price of \$10.09 per share (of which options to acquire 2,457,220 shares of common stock are vested as of December 31, 2016) and 562,282 shares that are reserved for future issuance under the 2013 Plan as of December 31, 2016;

78,459 shares of common stock reserved for future grant or issuance under the ESPP as of December 31, 2016; and

1,937,890 shares of common stock issuable upon exercise of warrants issued to Capital Royalty Partners on March 7, 2017 at an exercise price of \$2.35, the closing price of our common stock on the NASDAQ Global Market on the issuance date.

Our option holders and warrant holders may exercise the above-referenced options and warrants in the future or we may make future grants under the above-referenced plans. In addition, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that any of these options or warrants are exercised, new options or shares of common stock are issued under the 2013 Plan or the ESPP, or we issue additional shares of common stock or other equity securities in the future, there will be further dilution to investors purchasing in this offering.

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#### SELECTED FINANCIAL DATA

You should read the selected financial data presented below in conjunction with the information included in the section entitled Management s Discussion and Analysis of Financial Condition and Results of Operations of this prospectus and our financial statements and the related notes included elsewhere in this prospectus. The summary financial data presented below under the heading Statements of Operations Data for the years ended December 31, 2016, 2015 and 2014 and the selected financial data presented below under the heading Balance Sheet Data as of December 31, 2016 and 2015 have been derived from our audited financial statements included elsewhere in this prospectus. The selected statement of operations data for the years ended December 31, 2013 and 2012 and the balance sheet data as of December 31, 2014, 2013 and 2012 are derived from our audited financial statements not included in this prospectus. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period.

### **Statement of Operations Data:**

	Year Ended December 31,				
(in thousands, except per share data)	2016	2015	2014	2013	2012
Sales	\$ 84,248	\$ 72,850	\$ 49,722	\$ 29,007	\$ 2,475
Cost of sales	60,656	46,270	34,474	22,840	3,823
Gross profit (loss)	23,592	26,580	15,248	6,167	(1,348)
Operating expenses:					
Selling, general and administrative	82,834	78,621	75,121	44,522	22,691
Research and development	18,809	16,963	15,791	11,079	9,009
Total operating expenses	101,643	95,584	90,912	55,601	31,700
Operating loss	(78,051)	(69,004)	(75,664)	(49,434)	(33,048)
Total other income (expense), net	(5,411)	(3,404)	(3,789)	(13,705)	33
Net loss before taxes	\$ (83,462)	\$ (72,408)	\$ (79,453)	\$ (63,139)	\$ (33,015)
Provision for income tax (benefit) expense	(15)	10	71		
Net loss	\$ (83,447)	\$ (72,418)	\$ (79,524)	\$ (63,139)	\$ (33,015)
Net loss per share, basic and diluted	\$ (2.73)	\$ (2.50)	\$ (3.42)	\$ (21.46)	\$ (175.88)
Weighted average shares used to compute basic and diluted net loss per share	30,570	28,923	23,272	2,942	188

### **Balance Sheet Data:**

	As of December 31,				
(in thousands)	2016	2015	2014	2013	2012
Cash and cash equivalents	\$ 44,678	\$ 43,088	\$ 31,176	\$ 124,385	\$ 17,163
Short-term investments	\$ 8,860	\$ 28,018	\$ 36,106	\$ 5,095	\$
Working capital	\$ 60,616	\$ 80,464	\$ 72,657	\$ 134,390	\$ 10,762
Property and equipment, net	\$ 18,409	\$ 15,526	\$ 12,581	\$ 9,886	\$ 8,989
Total assets	\$ 112,392	\$ 124,725	\$ 106,464	\$ 162,215	\$ 39,817
Notes payable	\$ 78,960	\$ 29,275	\$ 29,440	\$ 29,397	\$ 4,203
Convertible preferred stock	\$	\$	\$	\$	\$ 124,638
Total stockholders equity (deficit)	\$ (5,927)	\$ 63,468	\$ 54,572	\$ 115,537	\$ (106,052)

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#### MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and related notes included elsewhere in this prospectus. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. You should review the section entitled Risk Factors beginning on page 13 of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements.

#### Overview

We are a medical device company with an innovative approach to the design, development and commercialization of products for people with insulin-dependent diabetes. We believe that our competitive advantage is rooted in our unique consumer-focused approach and proprietary technology platform. This allows us to deliver innovative hardware and software solutions to meet the various needs and preferences of people with diabetes and their healthcare providers. We manufacture and sell insulin pump products in the United States that are designed to address large and differentiated segments of the insulin-dependent diabetes market. Our insulin pump products include:

the t:slim X2 Insulin Delivery System, or t:slim X2, our next-generation flagship product,

the t:flex Insulin Delivery System, or t:flex, for people with greater insulin needs, and

the t:slim G4 Insulin Delivery System, or t:slim G4, the first continuous glucose monitoring, or CGM, enabled pump with touchscreen simplicity.

From the launch of our first product in August 2012, through December 2016, we have shipped more than 50,000 pumps. For the past three consecutive years, our company and our products have been ranked #1 by insulin pump users in the United States for customer support, product features and ease of training in an independent survey by dQ&A, a leading diabetes research firm.

We began commercial sales of our first insulin pump product, the t:slim Insulin Delivery System, or t:slim, in August 2012. During 2015, we commenced commercial sales of two additional insulin pumps: t:flex in May 2015 and t:slim G4 in September 2015. In October 2016, we commenced commercial sales of t:slim X2, and discontinued new sales of t:slim. t:slim, t:slim X2 and t:flex are compatible with the Tandem Device Updater, a revolutionary new tool that allows pump users to update their pumps—software quickly and easily from a personal computer. The Tandem Device Updater provides our customers access to new and enhanced features faster than the industry has been able to in the past. Its first cleared use by the U.S. Food and Drug Administration, or FDA, was to update t:slim Pumps purchased before April 2015 to the latest software. In the first quarter of 2017, we filed a regulatory submission with the FDA to permit t:slim X2 customers to update their pumps software using the Tandem Device Updater to allow integration with the DexCom G5 Mobile CGM system. Subject to FDA approval, we intend to offer this update to t:slim X2 customers free of charge. In the future, this tool has the potential to enable users to add other new features and functionality to their pumps, such as automated insulin delivery, or AID, algorithms, independent of the typical four-year insurance pump replacement cycle.

Our innovative approach to product design and development is consumer-focused and based on our extensive market research, as we believe the user is the primary decision maker when purchasing an insulin pump. Our market research consists of interviews, focus groups and online surveys to understand what people with diabetes, their caregivers and healthcare providers are seeking in order to improve diabetes therapy management. We also apply the science of human factors to our design and development process, which seeks to optimize our devices, allowing users to successfully operate our devices in their intended environment.

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We developed our products to provide the specific features that people with insulin-dependent diabetes seek in a next-generation insulin pump. Our proprietary pumping technology allows us to design the slimmest and smallest durable insulin pumps on the market, without sacrificing insulin capacity. Our insulin pump platform features our patented Micro-Delivery technology, and a miniaturized pumping mechanism that draws insulin from a flexible bag within the pump s cartridge, rather than relying on a syringe and plunger mechanism. It also features an easy-to-navigate software architecture, a vivid color touchscreen and a micro-USB connection that supports a rechargeable battery, software updates through the Tandem Device Updater, and uploads to t:connect Diabetes Management Application, or t:connect. t:connect is our custom cloud-based data management application that provides customers and healthcare providers a fast, easy and visual way to display therapy management data from the pump and supported blood glucose meters. Our next generation pump, t:slim X2, also features an advanced Bluetooth radio capable of communicating with multiple compatible devices.

We have rapidly increased sales since our commercial launch by expanding our sales, clinical and marketing infrastructure, by developing, commercializing and marketing multiple differentiated products that utilize our technology platform and consumer-focused approach, and by providing strong customer support. We believe that by demonstrating our product benefits and the shortcomings of existing insulin therapies, more people will choose our insulin pumps for their therapy needs, allowing us to further penetrate and expand the market. We also believe we are well positioned to address consumers needs and preferences with our current products and products under development and by offering customers a pathway to our future innovations through the Tandem Device Updater as they are approved by the FDA.

### Products under Development

Our products under development support our strategy to focus on both consumer and clinical needs. We intend to leverage our consumer-focused approach and proprietary technology platform to continue to develop products that have the features and functionality that will allow us to target people in different segments of the insulin-dependent diabetes market. Our current products under development include:

t:slim X2 with G5 integration, which will feature the display of DexCom G5 CGM sensor information directly on the pump Home Screen;

t:slim X2 with PLGS, our first generation AID system is expected to include a predictive low glucose suspend, or PLGS, algorithm;

t:slim X2 with TypeZero, our second generation AID system is expected to integrate t:slim X2 with technology that we licensed from TypeZero; and

t:sport Insulin Delivery System will be half the size of t:slim and is being designed for people who seek even greater discretion and flexibility with the use of their insulin pump.

For additional information, see the section of this prospectus under the caption Business.

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### **Pump Shipments**

Since inception, we have derived nearly all of our sales from the shipment of insulin pumps and associated supplies in the United States. We consider the number of units shipped per quarter to be an important metric for managing our business. We have shipped over 50,000 insulin pumps since the initiation of our commercial efforts in 2012. Pump shipments are broken down by product and by fiscal quarter as follows:

### Pump Units Shipped for Each of the Three Months Ended in Respective Years<sup>(1)</sup>

			Total		
	March 31	June 30	September 30	December 31	Total
2012	N/A	9	204	844	1,057
2013	852	1,363	1,851	2,406	6,472
2014	1,723	2,235	2,935	3,929	10,822
2015	2,487	3,331	3,431	6,234	15,483
2016 <sup>(2)</sup>	4,042	4,582	3,896	4,418	16,938
	,	·	·	·	,
			t:slim		
	March 31	June 30	September 30	December 31	Total
2012	N/A	9	204	844	1,057
2013	852	1,363	1,851	2,406	6,472
2014	1,723	2,235	2,935	3,929	10,822
2015	2,487	2,957	2,390	1,658	9,492
2016	1,255	1,498	1,965	76	4,794
			t:slim X2		
	March 31	June 30	September 30	December 31	Total
2016	N/A	N/A	N/A	3,699	3,699
			t:flex		
	March 31	June 30	September 30	December 31	Total
2015	N/A	374	555	569	1,498
2016	371	493	389	354	1,607
			t:slim G4		
	March 31	June 30	September 30	December 31	Total
2015	N/A	N/A	486	4,007	4,493
2016	2,416	2,591	1,542	289 (3)	6,838

<sup>(1)</sup> This table does not reflect returns or exchanges of pump products that occur in the ordinary course of business.

### Technology Upgrade Program

In the third quarter of 2016, we launched a Technology Upgrade Program that provides eligible t:slim and t:slim G4 customers a path towards ownership of a t:slim X2 by providing customers the right to exchange their t:slim or t:slim G4 for a t:slim X2 under a variable pricing structure. The Technology Upgrade Program expires on September 30, 2017.

Due to the high degree of accounting complexity, the Technology Upgrade Program has created, and will continue to create, unpredictable financial results under United States generally accepted accounting

<sup>(2)</sup> This table does not reflect the impact of 1,413 trade-ins made under the Technology Upgrade Program (discussed below) related to our commercial launch of train X2

<sup>(3)</sup> The decrease in t:slim G4 pump shipments coincided with our commercial launch of t:slim X2.

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principles, or GAAP, for the duration of the program. The accounting treatment for this program requires the deferral of up to 100% of sales and cost of sales for shipments of eligible pumps beginning in the third quarter of 2016. We have determined that, from an accounting perspective, the opportunity for a customer to trade a t:slim or t:slim G4 in exchange for a t:slim X2 represents either a right of return or a guarantee at the time of the initial product purchase. Because we have not offered an upgrade program in the past, we do not have sufficient history with similar upgrade programs to estimate the number of customers that will participate. As a result, sales and cost of sales for all eligible t:slim and t:slim G4 shipments are subject to deferral. The amount of sales and cost of sales deferred varies based on a number of factors, including the model of pump involved and the timing of the initial sales relative to the availability of certain future products. We expect to recognize the deferred amount of sales and cost of sales at the earlier of when the obligations under the Technology Upgrade Program are satisfied or when the program expires. If a customer elects to participate in the Technology Upgrade Program, we will recognize upgrade fees that we receive, if any, and the associated costs at the time of fulfilling the given obligation. At this time, we are not able to estimate when we will recognize deferred sales or cost of sales as a result of the Technology Upgrade Program, nor are we able to estimate the amount of upgrade fees or associated costs for a customer s election to participate in the Technology Upgrade Program. In general, the deferrals required by the Technology Upgrade Program may have the effect of initially decreasing our GAAP sales even where the number of our pump shipments increases.

#### Historical Financial Results

For the years ended December 31, 2016, 2015 and 2014, our sales were \$84.2 million, \$72.9 million and \$49.7 million, respectively. For the year ended December 31, 2016, we recorded net sales deferrals of \$4.3 million and recognized net additional \$0.3 million in cost of sales as a result of the Technology Upgrade Program. For the years ended December 31, 2016, 2015 and 2014, our net loss was \$83.4 million, \$72.4 million and \$79.5 million, respectively. Our accumulated deficit as of December 31, 2016 was \$404.6 million.

#### Trends Impacting Financial Results

Overall, we have experienced considerable sales growth since the commercial launch of t:slim in the third quarter of 2012, while incurring operating losses since our inception. Our operating results fluctuate on a quarterly or annual basis, particularly in the periods surrounding anticipated and actual regulatory approvals, and initial stages of commercialization of our new products and those of our competitors. These fluctuations have been, and may continue to be, more pronounced since the commencement of the Technology Upgrade Program.

Prior to 2016, we experienced sequential growth of sales in each quarter from the first quarter to the fourth quarter, and sequential sales from the fourth quarter to the following first quarter decreased. In 2016, we did not experience our historical sales growth in the second half of the year compared to the first half of the year. We believe that the timing of the commercial launch of t:slim X2, as well as the launch and regulatory approval of competitive products, impacted our quarterly pump shipments during the six months ended December 31, 2016. In particular, in the period leading up to the commercial launch of t:slim X2, we believe there was an increasing number of potential customers who delayed their purchasing decision until they could include t:slim X2 in their decision-making process. In addition, pump shipments were impacted by a decision by UnitedHealthcare that restricted a majority of their members from accessing our pumps.

We expect our financial results will fluctuate on a quarterly or annual basis in the future due to a variety of factors, including the impact of:

market acceptance of our products, and the timing of the sale of our products;

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seasonality associated with summer vacations, annual deductibles and coinsurance requirements associated with most medical insurance plans utilized by our individual customers and the individual customers of our distributors;

the buying patterns of our distributors and other customers;

the timing of the commercialization of new products by us or our competitors;

reimbursement decisions by third-party payors;

the size and timing of any changes to our infrastructure;

anticipated and actual regulatory approvals of new products; and

our Technology Upgrade Program and its related financial and accounting impact.

In particular, in 2017, we expect the combined effect of the timing of our launch of DexCom G5 sensor integration with t:slim X2, the increasing productivity of our existing sales force, and our expectation that customers will largely return to their historical decision making patterns will once again result in our sales being heavily weighted towards the second half of the year.

On the date our financial statements for the year ended December 31, 2016 were issued, we did not have sufficient cash to fund our operations through December 31, 2017 without additional financing, and therefore, we concluded there was substantial doubt about our ability to continue as a going concern within one year after the date the financial statements were issued. As a result, the audit report and opinion of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016 includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern.

### Third Party Reimbursement

A substantial portion of the purchase price of an insulin pump is typically paid for by third-party payors, including private insurance companies, preferred provider organizations and other managed care providers. Access to adequate coverage and reimbursement for our current and future products by third-party payors is essential to the acceptance of our products by customers. Future sales of our current and future products will be limited unless our customers can rely on third-party payors to pay for all or part of the associated purchase cost. For example, effective July 1, 2016, UnitedHealthcare designated one of our competitors as their preferred, in-network durable medical equipment provider of insulin pumps for most customers over the age of 18. We believe this decision has and will continue to prevent a majority of UnitedHealthcare members from purchasing an insulin pump from us for the foreseeable future. However, in most other circumstances in which we do not have contracts established with third-party payors, we utilize our network of national and regional distributors to service our customers.

### Leverage from Technology Platform

We believe we can ultimately achieve profitability because our proprietary technology platform will allow us to maximize efficiencies in the development, production, sale and marketing of multiple differentiated products. By offering products that are all based on our proprietary technology platform, in combination with the flexibility provided by our recently-approved Tandem Device Updater, we believe we can develop and bring to market products and functionality more rapidly, while significantly reducing our per-unit design and development costs. Due to shared product design features, our production system is adaptable to new products and we intend to leverage our shared manufacturing infrastructure to drive operational efficiencies. Further, we expect to continue to increase production volume and to reduce the per-unit production overhead cost for our pump products and their associated disposable cartridges over time. By expanding our product offerings to address people in different segments of the large and growing insulin-dependent diabetes market, we believe we can increase the

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productivity of our sales, clinical and marketing organization, as well as our customer, support infrastructure, thereby improving our operating margin over the long term.

### **Additional Financing**

From inception through December 31, 2016, we have primarily financed our operations through sales of equity securities, and, to a lesser extent, debt financings. The continued growth of our business, including the expansion of our customer care infrastructure to support our growing base of customers, additional research and development activities, and the transition to our new manufacturing facility, will continue to increase our expenses and capital needs. We expect we will be required to raise additional capital through equity and debt financings in order to satisfy covenants in our existing indebtedness and fund our operations until we achieve a level of sales and gross profits adequate to support our cost structure. In particular, management currently believes that it will be necessary for us to raise additional funding from the sale of common stock. This offering is being conducted to obtain such funding, although there can be no guarantee that we will successfully raise all of the funding we require in this offering. We expect our ability to raise additional financing may be negatively impacted by a number of factors, including our recent financial results, recent changes in our stock price, our conclusion that there is substantial doubt about our ability to continue as a going concern, the competitive environment in our industry, and accounting complexities brought about by our Technology Upgrade Program.

### Term Loan Agreement

We previously entered into an Amended and Restated Term Loan Agreement with Capital Royalty Partners II, L.P. and its affiliate funds, or Capital Royalty Partners, which was subsequently amended by Consent and Amendment Agreement, dated June 20, 2014, Omnibus Amendment Agreement No. 2, dated February 23, 2015, and two additional amendments as further discussed below, which we refer to as the Term Loan Agreement. In the first quarter of 2016, we entered into Amendment No. 3 to Term Loan Agreement, or the Third Amendment, which granted us the right to borrow up to an additional \$50.0 million. We borrowed \$15.0 million of this amount in January 2016, and the remaining \$35.0 million in December 2016. At December 31, 2016, we had \$81.1 million aggregate borrowings outstanding under the Term Loan Agreement.

For additional information about the Term Loan Agreement, see the section entitled Indebtedness below.

### **Subsequent Event**

On March 7, 2017, we entered into Waiver and Amendment No. 4 to Term Loan Agreement, or the Fourth Amendment. The Fourth Amendment includes a limited waiver of a potential event of default that could have resulted from the inclusion of an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern in the audit report of our independent registered public accounting firm included in our financial statements for the year ended December 31, 2016.

For additional information about the Fourth Amendment, see the section entitled Indebtedness below.

### **Components of Results of Operations**

### Sales

We offer products for people with insulin-dependent diabetes. We commenced commercial sales of t:slim in the United States in the third quarter of 2012. We launched our second insulin pump product, t:flex, in the second quarter of 2015, and launched our third insulin pump product, t:slim G4, in the third quarter of 2015. In October 2016, we began shipping t:slim X2, our next generation flagship product, at which time we discontinued sales of t:slim. Our products currently include these insulin pumps, as well

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as disposable cartridges and infusion sets. We also offer accessories including protective cases, belt clips, and power adapters. Sales of accessories since commercial launch have not been significant.

We primarily sell our products through national and regional distributors on a non-exclusive basis. These distributors are generally providers of medical equipment and supplies to individuals with diabetes. Our primary end customers are people with insulin-dependent diabetes. Similar to other durable medical equipment, the primary payor is generally a third-party insurance carrier and the customer is usually responsible for any medical insurance plan copay or coinsurance requirements. We believe our existing sales, clinical and marketing infrastructure will allow us to continue to increase sales by allowing us to promote our products to a greater number of potential customers, caregivers and healthcare providers.

We expect our sales will fluctuate on a quarterly basis in the future due to a variety of factors, including the impact of:

market acceptance of our products, and the timing of the sale of our products;

annual deductibles and coinsurance requirements associated with most medical insurance plans utilized by our individual customers and the individual customers of our distributors, as well as some limited seasonality associated with summer vacations;

the buying patterns of our distributors and other customers;

the timing of the commercialization of new products by us or our competitors;

reimbursement decisions by third-party payors;

the size and timing of any changes to our infrastructure;

anticipated and actual regulatory approvals of new products; and

our Technology Upgrade Program and its related financial and accounting impact.

In general, as a result of these and other factors, we have experienced, and expect to continue to experience, product shipments being weighted heavily towards the second half of the year, with the highest percentage of product shipments expected in the fourth quarter of the year. Consistent with prior results, we also expect product shipments from the fourth quarter to the following first quarter to decrease significantly.

In addition, our quarterly sales have fluctuated, and may continue to fluctuate, substantially in the periods surrounding anticipated and actual regulatory approvals and commercial launches of new products by us or our competitors. For instance, customers may defer a purchasing decision if they believe that a new product may be launched in the future. Additionally, upon the announcement of the FDA approval or commercial launch of a new product, whether our own or of our competitors, potential new customers may reconsider their purchasing decision or take additional time to consider the anticipated or new approval or product launch in their purchasing decision. For example, in 2015, we believe that the timing of the regulatory approval and commercial launch of t:slim G4 contributed to our product shipments being weighted heavily towards the fourth quarter of the year. Similarly, in 2016, we believe that our pump shipments were negatively impacted during the second half of 2016, as we announced the launches of t:slim X2 and the Technology Upgrade Program in the third quarter, and one of our competitors announced the future availability of two new products with financial incentives for adoption. However, we are not able to quantify the extent of the impact of these or similar events on future purchasing decisions.

Cost of Sales

We manufacture our pumps and disposable cartridges at our manufacturing facility in San Diego, California. Infusion sets and pump accessories are manufactured by third-party suppliers. Cost of sales includes raw materials, labor costs, manufacturing overhead expenses, product training costs, reserves

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for expected warranty costs, and scrap and inventory excess and obsolescence. Manufacturing overhead expenses include expenses relating to quality assurance, manufacturing engineering, material procurement, inventory control, facilities, equipment, information technology and operations supervision and management. We anticipate that our cost of sales will continue to increase as our products continue to gain broader market acceptance and our product sales increase.

We expect our overall gross margin percentage, which for any given period is calculated as sales less cost of sales divided by sales, to improve over the long term, as our sales increase and we have more opportunities to spread our overhead costs over larger production volumes. We expect that we will be able to leverage our manufacturing cost structure across our products that utilize the same proprietary technology platform and manufacturing infrastructure, and will be able to further reduce costs with increased automation, process improvements and raw materials cost reductions. We also expect our warranty costs to decrease as we release product features and functionality utilizing the Tandem Device Updater. However, we do expect our overall gross margin to fluctuate in future quarterly periods as a result of numerous factors besides those associated with production volumes. Specifically, in 2017, we are increasing our manufacturing capacity by relocating our manufacturing operations and related functions to a new facility over a period of several quarters, which may add duplicative and incremental cost in the short-term and pressure our overall gross margin for the duration of the transition. Additionally, we will continue to be impacted by the financial and accounting impact of the Technology Upgrade Program, which requires us to defer a portion of our sales and cost of sales. In general, we expect the gross margin on insulin pumps to be higher than the gross margin on pump-related supplies, which would be consistent with our historical experience. Other factors impacting our overall gross margin include the changing mix of products sold with different gross margins, the changing percentage of products sold to distributors versus directly to individual customers, varying levels of reimbursement among third-party payors, the timing and success of new regulatory approvals and product launches, warranty and training costs, and changes in our manufacturing processes, capacity, costs or output.

### Selling, General and Administrative

Our selling, general and administrative, or SG&A, expenses primarily consist of salary, cash-based incentive compensation, fringe benefits and non-cash stock-based compensation for our executive, financial, marketing, sales, clinical, customer care, technical services, insurance verification, regulatory affairs and administrative functions. In particular, our sales and clinical organization consisted of 72 territories as of December 31, 2016. Territories are maintained by sales representatives and field clinical specialists, and supported by managed care liaisons, additional sales management and other customer support personnel. Other significant SG&A expenses include those incurred for product demonstration samples, commercialization activities associated with new product launches, travel, trade shows, outside legal fees, independent auditor fees, outside consultant fees, insurance premiums, facilities costs and information technology costs. Although we do not contemplate an increase in the number of sales territories in the near term, we expect our SG&A expenses, including the cost of our customer care infrastructure, to increase as our customer base grows. Our SG&A expenses may also increase due to costs associated with additional compliance and regulatory reporting requirements.

### Research and Development

Our research and development, or R&D, activities primarily consist of engineering and research programs associated with our products under development, as well as activities associated with our core technologies and processes. R&D expenses are primarily related to employee compensation, including salary, fringe benefits, non-cash stock-based compensation and temporary employee expenses. We also incur R&D expenses for supplies, development prototypes, outside design and testing services, depreciation, allocated facilities and information services, clinical trial costs, payments under our licensing, development and commercialization agreements and other indirect costs. We expect our R&D expenses, including clinical trial costs, to increase as we advance our products under development.

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### Other Income and Expense

Our other income and expense primarily consists of interest expense and amortization of debt discount and issuance costs associated with the Term Loan Agreement. At December 31, 2016, there was \$81.1 million of outstanding principal under the Term Loan Agreement, which accrues interest at a rate of 11.5% per annum. We expect interest expense to increase in 2017 as a result of additional borrowings under the Term Loan Agreement as compared to 2016 (see the section below entitled Indebtedness).

### **Results of Operations**

	Year Ended December 31,			
(in thousands, except percentages)	2016	2015	2014	
Sales	\$ 84,248	\$ 72,850	\$ 49,722	
Cost of sales	60,656	46,270	34,474	
Gross profit	23,592	26,580	15,248	
Gross margin	28%	36%	31%	
Operating expenses:				
Selling, general and administrative	82,834	78,621	75,121	
Research and development	18,809	16,963	15,791	
Total operating expenses	101,643	95,584	90,912	
Operating loss	(78,051)	(69,004)	(75,664)	
Other income (expense), net:				
Interest and other income	(5,351)	337	112	
Interest and other expense	(60)	(3,741)	(3,901)	
Total other expense, net	(5,411)	(3,404)	(3,789)	
•				
Net loss before taxes	\$ (83,462)	\$ (72,408)	\$ (79,453)	
Provision for income taxes (benefit)	(15)	10	71	
, ,				
Net loss	\$ (83,447)	\$ (72,418)	\$ (79,524)	

### Comparison of Years Ended December 31, 2016 and 2015

*Sales*. For the year ended December 31, 2016, sales were \$84.2 million, net of \$4.3 million of deferred pump sales as a result of our Technology Upgrade Program, compared to \$72.9 million for the year ended December 31, 2015.

Sales of insulin pumps were \$62.4 million and \$60.8 million, respectively, for the years ended December 31, 2016 and 2015. Sales of pump-related supplies were \$21.4 million and \$11.9 million, respectively, for the years ended December 31, 2016 and 2015. Sales of accessories were not significant in either of the reported periods.

The growth in sales was driven by a 9% increase in pump shipments from 15,483 in 2015 to 16,938 in 2016, offset in part by our deferral of sales of eligible insulin pumps due to the Technology Upgrade Program. We also experienced an increase in sales of pump-related supplies from our growing customer base.

Our percentage of sales to distributors versus individual customers is principally determined by the mix of customers ordering our products within the period and whether or not we have a contractual arrangement with their underlying third-party insurance payor. Sales to distributors accounted for 74% and 77% of our total sales for the years ended December 31, 2016 and 2015, respectively. The percentage of sales to distributors decreased mainly due to UnitedHealthcare s decision to designate one

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of our competitors as their preferred, in-network durable medical equipment provider of insulin pumps for most customers over the age of 18, effective July 1, 2016. Previously, UnitedHealthcare s members accessed our products through one of our distributors.

Cost of Sales and Gross Profit. Our cost of sales in 2016 was \$60.7 million, resulting in gross profit of \$23.6 million, compared to \$46.3 million cost of sales and gross profit of \$26.6 million in 2015. The gross margin in 2016 was 28%, compared to 36% in 2015. The decrease in gross profit was primarily due to a net \$4.6 million reduction in gross profit as a result of the deferral of sales due to the Technology Upgrade Program.

During 2016, in conjunction with the Technology Upgrade Program, we recorded net sales deferrals of \$4.3 million, net deferrals of \$0.8 million in cost of sales and recognized \$1.1 million of incremental cost of sales for the upgrade of 1,413 pumps to t:slim X2. The net reduction of gross profit associated with the Technology Upgrade Program negatively affected our gross margin for 2016 by four percentage points. In addition, we recorded a \$2.8 million charge for inventory excess and obsolescence as the result of the commercialization of t:slim X2, the launch of the Technology Upgrade Program and the larger than anticipated decrease in t:slim G4 sales in the second half of the year. For the first and second quarters in the year ended December 31, 2016, t:slim G4 shipments as a percentage of total pump shipments were 60% and 57%, respectively. By comparison, in the third and fourth quarters of the same year t:slim G4 shipments as a percentage of total pump shipments decreased to 40% and 7%, respectively. This inventory excess and obsolescence charge negatively affected our gross margin for 2016 by three percentage points.

The remaining decrease in gross margin was primarily due to an increase in warranty and other non-manufacturing costs, such as freight, training, and royalty costs, as a percentage of sales. The gross margin was further impacted by an increase in sales of pump-related supplies, which generally have lower gross margins than our insulin pumps. However, we continue to experience improvement in the gross margin associated with our pump-related supplies, achieving a positive gross margin for the first time in the second half of 2016. This improvement was primarily the result of significantly lower per-unit manufacturing costs for cartridges, driven by increased production volumes and manufacturing efficiencies, as well as increases in the volume of infusion sets sold to distributors.

Selling, General and Administrative Expenses. SG&A expenses increased 5% to \$82.8 million in 2016 from \$78.6 million in 2015. The increase was primarily the result of the expansion of our commercial operations during 2016. In particular, we expanded the number of our sales territories from 60 to 72 in early 2016, and also increased our customer and technical support personnel throughout the year to service our growing customer base.

Employee-related expenses for our SG&A functions comprise the majority of the SG&A expenses. These expenses increased \$4.4 million during 2016 compared to 2015, including an increase of \$7.6 million in salaries and fringe benefits, offset by a decrease in cash-based incentive compensation of \$2.1 million and stock-based compensation of \$1.2 million. We also experienced reduced costs for outside services, marketing and promotional activities, tradeshows and travel of \$0.1 million.

Research and Development Expenses. R&D expenses increased 11% to \$18.8 million in 2016 from \$17.0 million in 2015. This increase was primarily the result of an increase of \$2.3 million in clinical trial expenses, licensing fees, supplies and outside services, as well as an increase in employee-related expenses of \$0.5 million. The increase was offset in part by a \$1.0 million milestone payment made to DexCom in 2015 that did not recur in 2016.

Other Income (Expense). Other expense in 2016 was \$5.4 million, compared to \$3.4 million in 2015. Other expense in 2016 and 2015 primarily consisted of interest expense associated with the Term Loan

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Agreement. We borrowed \$30.0 million under the agreement in January 2013, an additional \$15 million in January 2016, and the remaining \$35.0 million in December 2016. Other income for both periods presented was not significant.

### Comparison of Years Ended December 31, 2015 and 2014

*Sales*. For the years ended December 31, 2015 and 2014, sales were \$72.9 million and \$49.7 million, respectively. Sales of insulin pumps were \$60.8 million and \$42.7 million, respectively, for the years ended December 31, 2015 and 2014. Pump sales accounted for 83% and 86% of sales, respectively, for the years ended December 31, 2015 and 2014, while pump-related supplies primarily accounted for the remainder in each year. Sales of accessories were not material in either year.

The growth in sales was primarily driven by a 43% increase in pump shipments from 10,822 in 2014 to 15,483 in 2015. This included shipments of 1,498 t:flex Pumps and 4,493 t:slim G4 Pumps during 2015 compared to none in 2014. Sales of t:flex Pumps and t:slim G4 Pumps began in May 2015 and September 2015, respectively.

Sales to distributors accounted for 77% and 75% of our total sales for the years ended December 31, 2015 and 2014, respectively.

Cost of Sales and Gross Profit. Our cost of sales in 2015 was \$46.3 million, resulting in gross profit of \$26.6 million, compared to \$34.5 million cost of sales and gross profit of \$15.2 million in 2014. The gross margin in 2015 was 36%, compared to 31% in 2014. The improvement in the gross margin was primarily a result of manufacturing efficiencies associated with an increase in production volume and improvement in our manufacturing processes. Our pump manufacturing overhead spending decreased 8% while our pump units produced increased 22% in 2015 compared to 2014, and our cartridge manufacturing overhead spending increased 28% while our cartridge units produced increased 78% in 2015 compared to 2014.

Selling, General and Administrative Expenses. SG&A expenses increased 5% to \$78.6 million in 2015 from \$75.1 million in 2014. The SG&A expenses increased at a slower rate as compared to our sales growth, as well as compared to our SG&A expense increase in 2014.

Employee-related expenses increased \$3.9 million during 2015 compared to 2014, including an increase of \$5.3 million in salaries, sales commission and bonus expenses offset by a decrease of \$1.4 million in stock-based compensation. The increase in employee-related expenses was offset by a decrease of \$0.3 million in travel expenses, supplies, and outside services as compared to the same period in 2014.

Research and Development Expenses. R&D expenses increased 7% to \$17.0 million in 2015 from \$15.8 million in 2014. The increase in R&D expenses in 2015 consisted primarily of an increase of \$1.0 million in employee-related expenses. Included in R&D expenses were \$1.0 million milestone payments made to DexCom, under the development and commercialization agreement, in each of the years ended December 31, 2015 and 2014.

Other Income (Expense). Other expense in 2015 was \$3.4 million, compared to \$3.8 million in 2014. Other expense in 2015 and 2014 primarily consisted of interest expense as a result of the Term Loan Agreement.

### **Liquidity and Capital Resources**

At December 31, 2016, we had \$55.5 million in cash and cash equivalents and short-term investments, which included \$2.0 million of restricted cash. During 2016, we borrowed \$15.0 million in January and \$35.0 million in December under the Term Loan Agreement. At the date our financial statements for the

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year ended December 31, 2016 were issued, we did not have sufficient cash to fund our operation through December 31, 2017, without additional financing and, therefore, we concluded there was substantial doubt about our ability to continue as a going concern within one year after the date the financial statements were issued. As a result, the audit report and opinion of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016 includes a paragraph that states that conditions existed that could raise substantial doubt about our ability to continue as a going concern. The financial information throughout this prospectus and the financial statements included elsewhere in this prospectus have been prepared on a basis that assumes that we will continue as a going concern, which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. This financial information and these financial statements do not include any adjustments that may result from the outcome of this uncertainty.

Management currently believes that it will be necessary for us to raise additional funding in the form of an equity financing of common stock. This offering is being conducted to obtain such funding. However, we expect our ability to raise additional financing may be negatively impacted by a number of factors, including our recent financial results, recent changes in our stock price, our conclusion that there is substantial doubt about our ability to continue as a going concern, the competitive environment in our industry, and accounting complexities brought about by our Technology Upgrade Program. There can be no assurances that we will be able to complete any financing on acceptable terms or at all. If we are unable to complete the financing, we may be required to significantly alter our business strategy, substantially curtail our current operations, or cease operations altogether.

We expect that, in addition to the outcome of any additional financing activities, our sales performance and the resulting operating income or loss, as well as the status of each of our new product development programs, will significantly impact our cash management decisions. We may also use additional cash for the manufacture of t:slim X2 to fulfill our obligations under the Technology Upgrade Program, which will be partially offset by any fees we collect under the program.

In November 2013, we completed an initial public offering of common stock that resulted in net proceeds of approximately \$125.0 million. In March 2015, we completed a public offering of common stock that resulted in net proceeds of approximately \$64.9 million.

We have utilized, and may continue to utilize, debt arrangements with debt providers and financial institutions to finance our operations. Factors such as debt service obligations, interest rates, repayment terms, available cash and projected operating results will impact our decision to continue to utilize debt arrangements as a source of cash.

Historically, our principal sources of cash have included private placements and public offerings of equity securities, debt arrangements, and cash generated from operations. Our historical cash outflows have primarily been associated with cash used for operating activities such as the expansion and support of our sales and marketing infrastructure, increase in our R&D activities, the acquisition of intellectual property, expenditures related to equipment and improvements used to increase our manufacturing capacity and improve our manufacturing efficiency, overall facility expansion, and other working capital needs.

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The following table shows a summary of our cash flows for the years ended December 31, 2016, 2015 and 2014:

	Year	Year Ended December 31,			
(in thousands)	2016	2015	2014		
Net cash provided by (used in):					
Operating activities	\$ (61,186)	\$ (58,764)	\$ (61,378)		
Investing activities	10,461	2,421	(35,470)		
Financing activities	52,315	68,255	3,639		
Total	\$ 1,590	\$ 11,912	\$ (93,209)		

*Operating activities.* Net cash used in operating activities was \$61.2 million for the year ended December 31, 2016, compared to \$58.8 million and \$61.4 million for the same periods in 2015 and 2014, respectively.

The increase in net cash used in operating activities for 2016 compared to 2015 was primarily associated with an increase in our operating loss, offset by changes in working capital. The changes in working capital were primarily due to greater cash collections from accounts receivable and an increase in deferred revenue and guarantee liability associated with the Technology Upgrade Program, offset by changes in employee-related liabilities, other current liabilities, accounts payable and an increase in inventory to meet higher production volumes, including those associated with new products, and an increase in prepaid expenses.

The decrease in net cash used in operating activities for 2015 compared to 2014 was primarily associated with an improvement in operating margin, offset by changes in working capital. The change in working capital was primarily due to an increase in accounts receivable and increase in inventory to meet higher production volumes, including those associated with new products, offset by increase in accounts payable, employee-related liabilities and other current liabilities.

Investing activities. Net cash provided by investing activities was \$10.5 million for the year ended December 31, 2016, which was primarily related to proceeds from sales and maturities of short-term investments of \$50.0 million offset by the net purchase of \$30.6 million in short-term investments and \$8.9 million in purchases of property and equipment. Net cash provided by investing activities was \$2.4 million for the year ended December 31, 2015, which was primarily related to proceeds from sales and maturities of short-term investments of \$88.5 million offset by the net purchase of \$80.2 million in short-term investments and \$5.8 million in purchases of property and equipment. Net cash used in investing activities was \$35.5 million for the year ended December 31, 2014, which was primarily related to the net purchase of \$67.1 million in short-term investments and \$4.4 million in purchases of property and equipment, offset by proceeds from sales and maturities of short-term investments of \$36.2 million.

Financing activities. Net cash provided by financing activities was \$52.3 million for the year ended December 31, 2016, which was primarily due to net proceeds from issuance of indebtedness under the Term Loan Agreement in the amount of \$50.0 million and \$2.3 million in proceeds from the exercise of outstanding stock options, and proceeds from employee contributions for the purchase of our common stock through our ESPP. Net cash provided by financing activities was \$68.3 million for the year ended December 31, 2015, which was primarily due to net proceeds from a public offering of our common stock in the amount of \$64.9 million and \$3.4 million in proceeds from the exercise of outstanding stock options and warrants, as well as proceeds from employee contributions for the purchase of our common stock through our ESPP. The net cash provided by financing activities was \$3.6 million for the year ended December 31, 2014, which was primarily related to \$3.7 million in net proceeds from the exercise of outstanding stock options and warrants, as well as proceeds from employee contributions for the purchase of our common stock through our ESPP.

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Our liquidity position and capital requirements are subject to fluctuation based on a number of factors. In particular, our cash inflows and outflows are principally impacted by the following:

our ability to generate sales, the timing of those sales and the collection of receivables generated from those sales from period to period; our ability to complete any additional equity financing; fluctuations in gross margins and operating margins; and fluctuations in working capital. Our primary short-term capital needs, which are subject to change, include expenditures related to: support of our commercialization efforts related to our current and future products; costs associated with the Technology Upgrade Program; improvements in our manufacturing capacity and efficiency; new research and product development efforts, including clinical trial costs; payment of interest due under the Term Loan Agreement; acquisition of equipment and other fixed assets; facilities expansion needs, including the funding of tenant improvements at our Barnes Canyon location; and

payments under our licensing, development and commercialization agreements.

Although we believe the foregoing items reflect our most likely uses of cash in the short-term, we cannot predict with certainty all of our particular short-term cash uses or the timing or amount of cash used. We expect we will need to raise additional funds in the future. Management currently believes that it will be necessary for us to raise additional funding in the form of an equity financing from the sale of common stock. This offering is being conducted to obtain such funding, although there can be no guarantee that we will successfully raise all the funding we require in this offering. Depending on the amount of funding we receive in this offering as well as other factors, we may in the future seek additional capital from public or private offerings of our capital stock or we may elect to borrow additional amounts under new credit lines or from other sources. If we issue equity securities, our existing stockholders may experience dilution, and the new equity securities may have rights, preferences and privileges senior to those of our existing stockholders. If we issue debt securities or obtain additional credit facilities, we may incur debt service obligations, we may become subject to restrictions limiting our ability to operate our business and we may be required to encumber all or a portion of our assets. There can be no assurance that we will be able to raise any such capital on terms acceptable to us, if at all

### **Indebtedness**

### Capital Royalty Partners Term Loan Agreement

At December 31, 2015, we had \$30.2 million aggregate borrowings outstanding under the Term Loan Agreement. In January 2016, we entered into the Third Amendment, which allowed us to borrow up to an additional \$50.0 million. We borrowed \$15.0 million of this amount in January 2016 and the remaining \$35.0 million in December 2016. At December 31, 2016, we had \$81.1 million aggregate borrowings outstanding under the Term Loan Agreement.

Under the Term Loan Agreement, interest is payable, at our option, (i) in cash at a rate of 11.5% per annum or (ii) at a rate of 9.5% of the 11.5% per annum in cash and 2.0% of the 11.5% per annum to be added to the principal of the loan and subject to accruing interest. Interest-only payments are due

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quarterly on March 31, June 30, September 30 and December 31 of each year of the interest-only payment period, which ends on December 31, 2019. The principal balance is due in full on the maturity date of the Term Loan Agreement, which is March 31, 2020. We had elected to pay interest in cash at a rate of 11.5% per annum through September 30, 2015. Beginning October 1, 2015, we elected to pay interest in cash at a rate of 9.5% per annum and to have 2.0% per annum added to the principal of the loan. As a result, \$0.9 million and \$0.2 million were added to the principal of the loan for the years ended December 31, 2016 and 2015, respectively, which we refer to as PIK Loans.

The loan is collateralized by all of our assets. The Term Loan Agreement also imposes various affirmative and negative covenants on us. The principal financial covenants require that we attain minimum annual revenues of \$65.0 million in 2016, \$80.0 million in 2017 and \$95.0 million each year thereafter until the end of the term of the loan.

The audit report and opinion of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016, includes an explanatory paragraph that describes conditions that raise substantial doubt about our ability to continue as a going concern. This explanatory paragraph included in the report of our independent registered public accounting firm constitutes a potential event of default under the Term Loan Agreement.

As a result, on March 7, 2017, we entered into the Fourth Amendment, which includes a limited waiver of a potential event of default that could have resulted from the explanatory paragraph in the audit report of our independent registered public accounting firm contained in our financial statements for the year ended December 31, 2016. In consideration for the waiver, we agreed to: (i) issue Capital Royalty Partners ten-year warrants to purchase an aggregate of 1,937,890 shares of our common stock at an exercise price equal to \$2.35 per share, the closing price of our common stock on the NASDAQ Global Market on the date of the Fourth Amendment, (ii) increase our minimum cash balance requirement under the Term Loan Agreement from \$2.0 million to \$10.0 million, (iii) provide Capital Royalty Partners the same information we make available to our board of directors, subject to limited exceptions, and (iv) not incur additional third party indebtedness secured solely by accounts receivable, inventory and cash. In addition, the Fourth Amendment includes a covenant requiring us to complete a financing in which our gross proceeds from the sale of equity securities is at least \$30.0 million, no later than January 15, 2018.

Furthermore, in connection with the Third Amendment, we previously agreed to pay, on the earlier of (i) the maturity date of the Term Loan Agreement, which is March 31, 2020, (ii) the date that the loan under the Term Loan Agreement becomes due, and (iii) the date on which we make a voluntary pre-payment of the loan, a financing fee equal to 3.0% of the sum of (x) the aggregate amount drawn under the Third Amendment, and (y) any PIK Loans (as defined in the Term Loan Agreement) issued in relation to the Third Amendment, which we refer to as the Back End Financing Fee. Pursuant to the Fourth Amendment, we have agreed to increase the Back End Financing Fee to 5.0% of the entire aggregate principal amount of borrowings outstanding, including total PIK Loans issued, under the Term Loan Agreement, which was \$81.1 million as of December 31, 2016. The Back End Financing Fee is payable at maturity of our loans and on the principal amount of any loans for which we make an optional prepayment, and may be payable in connection with asset sales not permitted under the Term Loan Agreement or in connection with a change of control.

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### **Contractual Obligations & Commitments**

The following table summarizes our long-term contractual obligations as of December 31, 2016:

	Payments Due by Period					
		Less than			Mor	e than
(in thousands)	Total	1 year	1-3 years	3-5 years		ears
Operating lease obligation relating to our facility <sup>(1)</sup>	\$ 11,355	\$ 3,198	\$ 5,529	\$ 1,986	\$	642
Capital Royalty Partners term loans, including interest <sup>(2)</sup>	115,145	8,182	16,868	90,095		
Firm purchase commitments <sup>(3)</sup>	28,768	24,205	4,563			
Total contractual obligations	\$ 155,268	\$ 35,585	\$ 26,960	\$ 92,081	\$	642

- (1) The Barnes Canyon Lease allows for a tenant improvement allowance, or the TI Allowance, of up to approximately \$3.4 million to be applied to non-structural improvements to the Barnes Canyon Building. Any amounts funded by the landlord from the TI Allowance will be subject to an interest accrual at a rate of 8.0% per annum and must be repaid in full during the base term in monthly installments, or the TI Rent, paid concurrently with the base rent. TI Rent is not included in the table above. No TI Rent was due as of December 31, 2016. Assuming the full TI Allowance is drawn on April 1, 2017, TI Rent would be \$0.5 million for the year ended December 31, 2017, \$0.7 million for each of the years ended December 31, 2018 through 2021, and \$1.3 million for the years ended December 31, 2022 and thereafter.
- (2) The amounts indicated include principal, interest and other payments due under the Term Loan Agreement. These amounts assume that we will continue to elect to pay interest in cash at a rate of 9.5% per annum and to have 2.0% per annum added to the principal of the loan. These amounts also assume that the principal, as well as the accrued 3.0% financing fee, will be paid in full at the maturity date.
- (3) The amounts indicated are for purchase orders that are cancellable under the standard terms of our purchase order agreements.

### Critical Accounting Policies Involving Management Estimates and Assumptions

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about our financial condition and results of operations that are not readily apparent from other sources. Actual results may differ from these estimates.

While our significant accounting policies are more fully described in Note 2 to our financial statements included in this prospectus, we believe that the following accounting policies are the most critical to the judgments and estimates used in the preparation of our financial statements.

### Revenue Recognition

Our revenue is generated from sales of our insulin pumps, disposable cartridges and infusion sets to customers in the United States. Our customers are comprised of individuals, and third-party distributors that resell our product to insulin-dependent diabetes customers. We are paid directly by customers who use our products, distributors and third-party payors.

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred and title passed, the price is fixed or determinable, and collectability is reasonably assured.

### Trade-In Rights

The trade-in rights under our Technology Upgrade Program are accounted for as guarantees or rights to return based on specific factors and circumstances, including the period of time the trade-in rights are

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exercisable, the likelihood that the trade-in rights will be exercised, and the amount of the specified-price trade-in value.

We have determined that trade-in rights for t:slim G4 Pump customers are guarantees. We account for the guarantees under applicable accounting standards, which requires a guarantee to recognize, at the inception of a guarantee, a liability for the estimated fair value of the obligation undertaken in issuing certain guarantees. Subsequently, the initial liability recognized for the guarantee is generally reduced as we are released from the risk under the guarantee, which is when the trade-in right is exercised or the right expires. The guarantee is accounted for as an element of a multiple element arrangement. The estimated fair value of the guarantees are based on various economic and customer behavioral assumptions, including the probability of a trade-in, the specified trade-in amount, the expected fair value of the used t:slim G4 Pump at trade-in and the expected sales price of t:slim X2. At December 31, 2016, \$1.2 million was recorded as a guarantee liability in other current liabilities on our balance sheet.

We have determined that t:slim Pump trade-in rights are in-substance rights to return products. Such rights to return are accounted for pursuant to the right of return accounting guidance. As we do not have sufficient history to reasonably estimate returns associated with trade-in rights, all eligible t:slim Pump sales between July 1, 2016 and December 31, 2016 were recorded as deferred revenue until such time as the trade-in right is exercised or the right expires. At December 31, 2016, \$3.2 million was recorded as a trade-in rights reserve in deferred revenue on our balance sheet.

Revenue Recognition for Arrangements with Multiple Deliverables

We consider the deliverables in our product offering as separate units of accounting and recognize deliverables as revenue upon delivery only if (i) the deliverable has standalone value and (ii) if the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is probable and substantially controlled by the Company. We allocate consideration to the separate units of accounting, unless the undelivered elements were deemed perfunctory and inconsequential. The amount of the determined guarantee fair value is allocated in full to the guarantee and the remaining allocable consideration is allocated to other separate units of accounting using the relative selling price method, in which allocation of consideration is based on vendor-specific objective evidence, or VSOE, if available, third-party evidence, or TPE, or if VSOE and TPE are not available, management s best estimate of a standalone selling price, or ESP, for the undelivered elements.

We offer a cloud-based data management application, t:connect, which is made available to customers upon purchase of any of our insulin pumps. In July 2016, we received clearance from the FDA to begin offering the Tandem Device Updater, which is a Mac and PC-compatible tool for the remote update of Tandem insulin pump software. Utilizing the Tandem Device Updater, we may from time to time provide future unspecified software upgrades to the insulin pumps essential software. The t:connect service and the embedded right included with qualifying insulin pumps to receive on a when-and-if-available basis, future unspecified software upgrades relating to the product s essential software are deemed undelivered elements at the time of the insulin pump sale. Because we have neither VSOE nor TPE for these deliverables, the allocation of revenue is based on our ESP. We establish our ESP based on the estimated cost to provide such services, including consideration for a reasonable profit margin, which is then corroborated by comparable market data. We allocate fair value based on management s ESP to these elements at the time of sale and recognize the revenue over a four-year period, which is the hosting period for t:connect and the period that software upgrades are expected to be provided using the Tandem Device Updater. At December 31, 2016 and 2015, \$1.6 million and \$1.1 million were recorded as deferred revenue for these undelivered elements, respectively. All other undelivered elements at the time of sale are deemed inconsequential or perfunctory.

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#### Product Returns

We offer a 30-day right of return to our customers from the date of shipment of any of our insulin pumps, provided a physician s confirmation of the medical reason for the return is received. Estimated allowances for sales returns are based on historical returned quantities as compared to pump shipments in those same periods of return. The return rate is then applied to the sales of the current period to establish a reserve at the end of the period. The return rates used in the reserve are adjusted for known or expected changes in the marketplace when appropriate. The allowance for product returns is recorded as a reduction of revenue and accounts receivable in the period in which the related sale is recorded. The amount recorded on our balance sheet for product return allowance was \$0.2 million and \$0.3 million at December 31, 2016 and 2015, respectively. Actual product returns have not differed materially from estimated amounts reserved.

### Warranty Reserve

We generally provide a four-year warranty on our insulin pumps to end user customers and may replace any pumps that do not function in accordance with the product specifications. Insulin pumps returned to us may be refurbished and redeployed. Additionally, we offer a six-month warranty on disposable cartridges and infusion sets. Estimated warranty costs are recorded at the time of shipment. Warranty costs are estimated based on the current expected replacement product cost and expected replacement rates based on historical experience. We evaluate the reserve quarterly and make adjustments when appropriate. Changes to the actual replacement rates could have a material impact on our estimated liability. At December 31, 2016 and 2015, the warranty reserve was \$5.7 million and \$3.5 million, respectively.

### **Off-Balance Sheet Arrangements**

As of December 31, 2016, we did not have any off-balance sheet arrangements.

### JumpStart Our Business Startups Act of 2012 (JOBS Act)

The JOBS Act permits an emerging growth company such as ours to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We have chosen to opt out of this provision and, as a result, we will comply with new or revised accounting standards as required when they are adopted. This decision to opt out of the extended transition period under the JOBS Act is irrevocable.

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### QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

We invest our excess cash primarily in commercial paper, government-sponsored enterprise securities and U.S. government treasury securities. Some of the financial instruments in which we invest have market risk associated with them, in that a change in prevailing interest rates may cause the principal amount of the instrument to fluctuate. Other financial instruments in which we invest potentially subject us to credit risk, in that the value of the instrument may fluctuate based on the issuer s ability to pay.

The primary objectives of our investment activities are to maintain liquidity and preserve principal while maximizing the income we receive from our financial instruments without significantly increasing risk. We have established guidelines regarding approved investments and maturities of investments, which are primarily designed to maintain liquidity and preserve principal.

Because of the short-term maturities of our financial instruments, we do not believe that an increase or decrease in market interest rates would have any significant impact on the realized value of our investment portfolio. If a 10% change in interest rates were to have occurred on December 31, 2016, this change would not have had a material effect on the fair value of our investment portfolio as of that date.

The interest rate under the Term Loan Agreement is fixed and not subject to changes in market interest rates.

Our operations are located in the United States, and nearly all of our sales since inception have been made in U.S. dollars. Accordingly, we have assessed that we do not currently have any material exposure to foreign currency rate fluctuations. From time to time, we may have foreign exchange risk associated with currency exposure related to existing assets and liabilities, committed transactions and forecasted future cash flows. In certain circumstances, we may seek to manage such foreign exchange risk by using derivative instruments such as foreign exchange forward contracts to hedge our risk. In general, we may hedge material foreign exchange exposures up to 12 months in advance. However, we may choose not to hedge some exposures for a variety of reasons including prohibitive economic costs.

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#### BUSINESS

#### Overview

We are a medical device company with an innovative approach to the design, development and commercialization of products for people with insulin-dependent diabetes. We believe that our competitive advantage is rooted in our unique consumer-focused approach and proprietary technology platform. This allows us to deliver innovative hardware and software solutions to meet the various needs and preferences of people with diabetes and their healthcare providers. We manufacture and sell insulin pump products in the United States that are designed to address large and differentiated segments of the insulin-dependent diabetes market. Our insulin pump products include:

the t:slim X2 Insulin Delivery System, or t:slim X2, our next-generation flagship product,

the t:flex Insulin Delivery System, or t:flex, for people with greater insulin needs, and

the t:slim G4 Insulin Delivery System, or t:slim G4, the first continuous glucose monitoring, or CGM, enabled pump with touchscreen simplicity.

From the launch of our first product in August 2012, through December 2016, we have shipped more than 50,000 pumps. For the past three consecutive years, our company and our products have been ranked #1 by insulin pump users in the United States for customer support, product features and ease of training in an independent survey by dQ&A, a leading diabetes research firm.

According to the Centers for Disease Control and Prevention, or CDC, in 2016, approximately 22 million people in the United States had diagnosed diabetes. Close Concerns, Inc., an independent consulting and publishing company that provides diabetes advisory services, or Close Concerns, estimated in 2015 that there are approximately 1.6 million people with type 1 diabetes in the United States and 1.7 million people with type 2 diabetes in the United States who require daily administration of rapid acting insulin. All people with type 1 diabetes require daily rapid acting insulin, but only a subset of people with type 2 diabetes require daily rapid acting insulin, as a majority manage their therapy through improvements in diet and exercise, oral medications, or injectable therapies, such as long acting insulin. Our target market consists of the approximately 3.3 million people in the United States who require daily rapid acting insulin.

We began commercial sales of our first insulin pump product, the t:slim Insulin Delivery System, or t:slim, in August 2012. During 2015, we commenced commercial sales of two additional insulin pumps: t:flex in May 2015 and t:slim G4 in September 2015. In October 2016, we commenced commercial sales of t:slim X2, and discontinued new sales of t:slim. Each of our insulin pump products is compatible with the Tandem Device Updater, a new tool that allows pump users to update their pumps—software quickly and easily from a personal computer. The Tandem Device Updater provides our customers access to new and enhanced features faster than the industry has been able to in the past. Its first cleared use by the U.S. Food and Drug Administration, or FDA, was to update t:slim Pumps purchased before April 2015 to the latest software. In the first quarter of 2017, we filed a regulatory submission with the FDA to permit t:slim X2 customers to update their pumps software using the Tandem Device Updater to allow integration with the DexCom G5 Mobile CGM system, which is manufactured by DexCom, Inc., or DexCom. Subject to FDA approval, we intend to offer this update to t:slim X2 customers free of charge. In the future, this tool has the potential to enable users to add other new features and functionality to their pumps, such as automated insulin delivery, or AID, algorithms, independent of the typical four-year insurance pump replacement cycle.

Our innovative approach to product design and development is consumer-focused and based on our extensive market research, as we believe the user is the primary decision maker when purchasing an insulin pump. Our market research consists of interviews, focus groups and online surveys to understand

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what people with diabetes, their caregivers and healthcare providers are seeking in order to improve diabetes therapy management. We also apply the science of human factors to our design and development process, which seeks to optimize our devices, allowing users to successfully operate our devices in their intended environment.

We developed our products to provide the specific features that people with insulin-dependent diabetes seek in a next-generation insulin pump. Our proprietary pumping technology allows us to design the slimmest and smallest durable insulin pumps on the market, without sacrificing insulin capacity. Our insulin pump platform features our patented Micro-Delivery technology, and a miniaturized pumping mechanism that draws insulin from a flexible bag within the pump s cartridge, rather than relying on a syringe and plunger mechanism. It also features an easy-to-navigate software architecture, a vivid color touchscreen and a micro-USB connection that supports a rechargeable battery, software updates through the Tandem Device Updater, and uploads to t:connect Diabetes Management Application, or t:connect. t:connect is our custom cloud-based data management application that provides customers and healthcare providers a fast, easy and visual way to display therapy management data from the pump and supported blood glucose meters. Our next generation pump, t:slim X2, also features an advanced Bluetooth radio capable of communicating with multiple compatible devices.

Based on customer surveys, approximately half of our customers are new to insulin pump therapy, and the average age of our existing customers is 32 years old, with relatively equal distribution between men and women. By offering multiple differentiated products that are all based on our proprietary technology platform, our strategy is to leverage a single sales, marketing and clinical organization, a shared manufacturing and supply chain infrastructure, and the expertise of our customer support services.

In the third quarter of 2016, we launched a Technology Upgrade Program that provides eligible t:slim and t:slim G4 customers a path towards ownership of a t:slim X2 by providing customers the right to exchange their t:slim or t:slim G4 for a t:slim X2, under a variable pricing structure. The Technology Upgrade Program expires on September 30, 2017.

The Technology Upgrade Program results in complex accounting treatment of sales and cost of sales, including deferral of amounts from the time of initial sale to the earlier of the date that we complete the upgrade of the original pump and when the program ends. In general, the deferrals required by the Technology Upgrade Program have the effect of initially decreasing our GAAP sales even where the number of our pump shipments increases. When a customer elects to participate in the Technology Upgrade Program, we recognize upgrade fees that we receive, if any, and the associated costs, at the time of fulfilling the given obligation. At this time, we are not able to estimate when we will recognize deferred sales or costs of sales as a result of the Technology Upgrade Program, nor are we able to estimate the amount of upgrade fees or associated costs for a customer selection to participate in the Technology Upgrade Program.

For the years ended December 31, 2016, 2015 and 2014, our sales were \$84.2 million, \$72.9 million and \$49.7 million, respectively. For the years ended December 31, 2016, 2015 and 2014, our net loss was \$83.4 million, \$72.4 million, and \$79.5 million, respectively. For the year ended December 31, 2016, we recorded net sales deferrals of \$4.3 million and recognized an additional net cost of sales of \$0.3 million as a result of our Technology Upgrade Program. Our accumulated deficit as of December 31, 2016 was \$404.6 million. Pump sales accounted for 74%, 83% and 86% of sales, respectively, for the years ended December 31, 2016, 2015 and 2014, while pump-related supplies primarily accounted for the remainder in each year. Sales of accessories were not material in any of these years.

We have rapidly increased sales since our commercial launch by expanding our sales, clinical and marketing infrastructure, by developing, commercializing and marketing multiple differentiated products that utilize our technology platform and consumer-focused approach, and by providing strong customer

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support. We believe that by demonstrating our product benefits and the shortcomings of existing insulin therapies, more people will choose our insulin pumps for their therapy needs, allowing us to further penetrate and expand the market. We also believe we are well positioned to address consumers needs and preferences with our current products and products under development and by offering customers a pathway to our future innovations through the Tandem Device Updater as they are approved by the FDA.

Our headquarters and our manufacturing facility are located in San Diego, California and we employed 591 full-time employees as of December 31, 2016.

#### The Market

Diabetes is a chronic, life-threatening disease for which there is no known cure. The disease is categorized by improper function of the pancreas when it either does not produce enough insulin or the body cannot effectively use the insulin it produces. Insulin is a life-sustaining hormone that allows cells in the body to absorb glucose from blood and convert it to energy. As a result, a person with diabetes cannot utilize the glucose properly and it continues to accumulate in the blood. If not closely monitored and properly treated, diabetes can lead to serious medical complications, including damage to various tissues and organs, seizures, coma and death.

The International Diabetes Federation estimates that in 2015 approximately 415 million people had diabetes worldwide and that by 2040, this number will increase to 642 million people worldwide. According to the Center for Disease Control and Prevention, or CDC, in 2016 approximately 22 million people in the United States had diagnosed diabetes.

There are two primary types of diabetes:

Type 1 diabetes is caused by an autoimmune response in which the body attacks and destroys the insulin-producing cells of the pancreas. As a result, the pancreas can no longer produce insulin, requiring patients to administer daily insulin to survive. According to Close Concerns, in 2015, approximately 1.6 million people had type 1 diabetes in the United States.

Type 2 diabetes occurs when the body does not produce enough insulin to regulate the amount of glucose in the blood, or cells become resistant to insulin and are unable to use it effectively. Initially, many people with type 2 diabetes attempt to manage their diabetes with improvements in diet, exercise and oral medications. However, as their diabetes advances, some patients progress to requiring injectable therapies, such as long-acting insulin, and a subset of this population will require daily rapid acting insulin therapy. According to Close Concerns, in 2015, approximately 1.7 million people in the United States with type 2 diabetes required daily administration of rapid acting insulin.

Our target market consists of approximately 3.3 million people in the United States who require daily administration of insulin, which includes approximately 1.6 million people with type 1 diabetes and approximately 1.7 million people with type 2 diabetes who require daily rapid acting insulin. Throughout this prospectus, we refer to people with type 1 diabetes and people with type 2 diabetes who require daily rapid acting insulin as people with insulin-dependent diabetes.

People with insulin-dependent diabetes require intensive insulin therapy to manage their blood glucose levels within a healthy range, which is typically between 70-120 milligrams per deciliter, or mg/dL. Blood glucose levels can be affected by many factors, such as type or quantity of food eaten, illness, stress and exercise. Hypoglycemia, or low blood glucose levels, can cause a variety of long-term effects or complications, including damage to various tissues and organs, seizures, coma or death. Hyperglycemia, or high blood glucose levels, can also cause a variety of long-term effects or complications, including

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cardiovascular disease and damage to various tissues and organs. It can also cause the emergency condition ketoacidosis, which can result in vomiting, shortness of breath, coma or death.

There are two primary therapies practiced by people with insulin-dependent diabetes, insulin injections and insulin pumps, each of which is designed to supplement or replace the insulin-producing function of the pancreas. Insulin injections are often referred to as multiple daily injection, or MDI, and involve the use of syringes or insulin pens to inject insulin into the person s body. Insulin pumps are used to perform what is often referred to as continuous subcutaneous insulin infusion, or insulin pump therapy, and typically use a programmable device and an infusion set to administer insulin into the person s body.

MDI therapy involves the administration of a rapid acting insulin before meals, or bolus insulin, to bring blood glucose levels down into the healthy range. MDI therapy may also require a separate injection of a long-acting insulin, or basal insulin, to control glucose levels between meals; this type of insulin is typically taken once or twice per day. By comparison, insulin pump therapy uses only rapid acting insulin to fulfill both mealtime (bolus) and background (basal) requirements. Insulin pump therapy allows a person to customize their bolus and basal insulin doses to meet their insulin needs throughout the day, and is intended to more closely resemble the physiologic function of a healthy pancreas.

Insulin pump therapy has been shown to provide people with insulin-dependent diabetes with numerous advantages relative to MDI therapy. The following chart illustrates some of the key advantages and disadvantages of using MDI therapy versus insulin pump therapy:

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Comparison of MDI Therapy vs. Insulin Pump Therapy

Therapy Multiple Daily Injection or MDI	Advantages Less training and shorter time to educate	<b>Disadvantages</b> Requires injections up to seven times per day
	Lower upfront and ongoing supply costs	Delivers insulin less accurately than insulin pumps
	Lower risk of technological malfunction	
		Results in greater variability in blood glucose levels or less accurate glycemic control
		Requires more planning around and restrictions regarding meals and exercise
Insulin Pump	Eliminates individual insulin injections	Requires intensive education on insulin pump therapy and management
	Delivers insulin more accurately and precisely than injections	Wearing a pump can be bothersome
	Often improves HbA1c, a common measure of blood glucose levels over time	More costly
	Fewer large swings in blood glucose levels	Risk of diabetic ketoacidosis if the catheter comes out and insulin infusion is interrupted
	Provides greater flexibility with meals, exercise and daily schedules	
	Can improve quality of life	

Reduces severe low blood glucose episodes

Eliminates unpredictable effects of intermediate or long-acting insulin

Allows exercise without having to eat large amounts of carbohydrates, as insulin delivery can be adjusted

According to Close Concerns estimates in 2015, approximately 425,000 people with type 1 diabetes in the United States use an insulin pump, or approximately 27% of the type 1 diabetes population. In addition, approximately 125,000 people with type 2 diabetes in the United States use an insulin pump, or approximately 7% of the type 2 diabetes population who are insulin-dependent.

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Insulin pump therapy can provide a person with insulin-dependent diabetes with benefits when used independently or in conjunction with CGM. A pump featuring integrated CGM is known as a sensor augmented pump, or SAP, which allows the pump to receive CGM data directly from a wearable sensor. SAPs may feature an AID algorithm that is designed to automatically adjust a person s insulin delivery based on their CGM trends to help minimize the frequency and/or duration of hypoglycemia and/or hyperglycemic events.

We believe that the distinct advantages and increased awareness of insulin pump therapy as compared to other available insulin therapies will continue to generate demand for insulin pump devices and pump-related supplies. We also believe that the adoption of insulin pump therapy would have been even greater if not for the significant and fundamental perceived shortcomings of durable syringe-and-plunger insulin pumps currently available, which we refer to as traditional pumps.

#### The Opportunity

The foundation of our consumer-focused approach is market research, through which we seek to better understand the opportunity within the insulin-dependent diabetes market. This opportunity includes both the introduction of the benefits of pump therapy to people using MDI and the introduction of the features and benefits of our pumps to people who use traditional pumps. We have conducted extensive research obtained from interviews, focus groups and online surveys to understand what people with diabetes, their caregivers and healthcare providers are seeking to improve diabetes therapy management, as we believe the user is the primary decision-maker when purchasing an insulin pump. Based on our research, we believe that the limited adoption of insulin pump therapy by people with insulin-dependent diabetes has been largely due to the shortcomings of traditional pumps currently available. These shortcomings include:

Antiquated style. While consumer electronic devices have rapidly evolved in form and function over the past decade, traditional pumps have not achieved similar advances. Our market research has shown that consumers believe traditional pumps resemble dated consumer technology, such as a pager, as they generally still feature small display screens, push-button interfaces, plastic cases and disposable batteries. Because an insulin pump must be used multiple times throughout the day, often in social settings, its style and appearance are important to users. Our market research has shown that traditional insulin pump users frequently report being embarrassed by the style of their traditional pump. For current MDI users, the style of traditional pumps is often cited as a reason for not adopting pump therapy.

**Not adaptable.** Traditional pumps are typically sold as a single-product offering that are then iterated to add features, rather than being designed as a technology platform that is easily updatable to support new features and functionality as they are developed and approved by the FDA. We believe this is due to hardware and user interface limitations that prevent traditional pumps from being easily updatable to provide new feature offerings. As a result, consumers have had limited product choices from pump manufacturers, and healthcare providers are required to learn a greater number of user interfaces. We believe the lack of adaptability of traditional pump platforms has been a restricting factor in offering people with diabetes differentiated product features to best meet their therapy needs.

**Bulky size.** Our market research has shown that consumers view traditional pumps as large, bulky and inconvenient to carry or wear, especially when compared to modern consumer electronic devices, such as smartphones. The size of the pump further contributes to users being embarrassed by the pump. This complaint, along with concerns relating to how and where the pump can be utilized due to its size and shape, is frequently cited among users of traditional pumps. For current MDI users, the size of traditional pumps is often communicated as a reason for not adopting pump therapy.

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Difficult to learn and teach. Traditional pumps often rely on complicated and outdated technology and are not intuitive to operate. Our research has shown that it can take several days to competently learn how to use traditional pumps, leading to frustration, frequent mistakes and additional training, each of which may discourage adoption. We believe difficult-to-use traditional pumps result in a higher frequency of calls by the user to the pump manufacturer or their healthcare provider for support, adding both frustration and cost to the learning process. We also believe that the complicated functionality of traditional pumps significantly limits the willingness of healthcare providers to recommend insulin pump therapy to many patients, and limits the number of patients they consider as candidates for insulin pump therapy.

Complicated to use. Traditional pumps are designed with linear software menus, which require the user to follow display screens sequentially, limiting their ability to access information within workflows or easily return to the starting point. Most traditional pumps require users to scroll through numerous menus and input multiple commands to make selections. This process, which must be performed multiple times per day, can be frustrating and time-consuming. Our research has shown that the complicated nature of the process can lead to confusion, frustration and fear of making mistakes with the pump, which in turn can limit the user s willingness to take advantage of advanced therapy features, or even discourage use entirely.

**Pump mechanism limitations.** Traditional pumps utilize a syringe and plunger mechanism to deliver insulin. This design limits the ability to reduce the size of the pump due to the length and diameter of the syringe and plunger. The design also potentially exposes the user to the unintended delivery of the full volume of insulin within the pump, which can cause hypoglycemia or death. This effect is well documented and can occur when traditional pumps are elevated above the user s infusion site, referred to as siphoning, or when the user experiences changes in air pressure, such as during air travel. Our research has shown that the fear of adverse health events due to technical malfunctions related to traditional pump mechanism limitations deters the adoption of insulin pump therapy.

#### **Traditional Pump Mechanism**

We believe that these shortcomings of traditional pumps have limited the adoption of pump therapy. By addressing these issues, there is a meaningful opportunity to not only motivate MDI users to adopt pump therapy, but also to respond to the concerns and unmet needs of traditional insulin pump users.

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#### **Our Solution**

We developed our proprietary technology platform using a consumer-focused approach by first utilizing extensive market research to ascertain what people with insulin-dependent diabetes require and prefer from their diabetes therapy. We then look to modern consumer technology for inspiration, and design our hardware and software solutions to meet those specific demands. Our development process then applies the science of human factors, which optimizes a device or system to the intended user through iterative usability and design refinement. This multi-step approach has resulted in products that provide users with the distinct product features they seek and in a manner that makes the features usable. We believe this approach is fundamentally different from the approach applied to the traditional medical device development process. All of our insulin pump products were developed using this approach, as were our complementary offerings, the Tandem Device Updater and the t:connect Data Management Application.

Our insulin pump products, which we believe address the shortcomings of traditional pumps, include:

Contemporary style. Our current products, as well as our products under development, have the look and feel of a modern consumer electronic device, such as a smartphone. Relying on significant consumer input and feedback during the development process, we believe the aesthetically-pleasing, modern design of our products addresses the embarrassing appearance-related concerns of insulin pump users. Key product features such as a high-resolution, color touchscreen with shatter-resistant glass, aluminum casing and rechargeable battery, make our products unique in the insulin pump market.

### Our Insulin Pump Form Factor (Actual Size of All Tandem Pump Products)

Adaptable platform. Our products share a pump form factor, as well as an updatable, easy-to-navigate software architecture combined with a touchscreen user interface. This enables us to offer differentiated features and functionality while on a shared technology platform, which allows us to execute on our strategy of leveraging a single sales, marketing and clinical organization, as well as a shared manufacturing and supply chain infrastructure. It also creates efficiencies when training healthcare providers as our products—user interface operations are the same across all products, subject only to slight differences that relate to specific features such as a large volume cartridge or CGM integration. t:slim, t:slim X2 and t:flex are also compatible with the Tandem Device Updater, a new tool that allows pump users to update their pumps—software quickly and easily from a personal computer. This tool uniquely positions us to bring new features and benefits, such as CGM integration or AID algorithms, to customers within their typical four-year insurance pump replacement cycle. We believe the adaptability of our pump platform uniquely positions us to address the needs and preferences of people with insulin-dependent diabetes, and to do so quickly as those needs and preferences change and the functionality of our products evolves.

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Compact size. With a narrow profile, similar to many smartphones, our products can easily and discreetly fit into a pocket. t:slim X2 and t:slim G4 are the slimmest and smallest durable insulin pumps on the market, while still offering a cartridge with 300 units of insulin. More specifically, t:slim X2 and t:slim G4 are at least 25% smaller than all other durable insulin pumps available in the United States, and 38% smaller than the newest insulin pump form factor offered by one of our leading competitors. t:flex offers a similar sleek pump form factor, while utilizing a cartridge with 480 units of insulin, providing enhanced flexibility to people with greater insulin needs. The size and shape of our products are designed to provide increased flexibility with respect to how and where a pump can be worn. Based on extensive consumer input during development, we believe our products address both the embarrassment and functionality concerns related to the size and inconvenience of carrying a traditional pump.

#### t:slim X2 Profile (Actual Size)

Easy to learn and teach. Our technology platform allows for the use of a color touchscreen and easy-to-navigate software architecture, providing users intuitive access to the key functions of their pump directly from the Home Screen. Insulin pump users can quickly learn how to efficiently navigate their pumps—software, thereby enabling healthcare providers to spend less time teaching a person how to use the pump and more time improving management of their diabetes. We believe these features also allow healthcare providers to more efficiently train people to use our pump and have a higher degree of confidence that users can successfully operate our pump, including its more advanced features. Our touch-screen technology also allows us to offer our t:simulator App, which permits anyone to experience our easy-to-navigate software for any of our pumps free of charge on a mobile device. We believe the ease with which our pump can be learned and taught, and the accessibility of our t:simulator App that broadly demonstrates our software technology, will help attract consumers who may have been frustrated or intimidated by traditional pumps.

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### t:simulator App Acessible Through Mobile Device

Intuitive to use. Similar to what is found in modern consumer electronic devices, the embedded software displayed on our color touchscreen features intuitive and commonly interpreted colors, language, icons and feedback. Our software also features numerous shortcuts, including a simple way to return to the Home Screen and view critical information for therapy management. These features were designed to enable users to operate their pump more efficiently and with greater confidence, and to expand the set of therapy features they regularly utilize. Users can also execute most tasks in fewer steps than traditional pumps, which we believe further encourages people to use more advanced pump features. We believe these features also allow users to more efficiently manage their diabetes without fear or frustration.

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### Easy-to-Navigate Pump Software Architecture

Next generation technology platform. Our Micro-Delivery technology is unique compared to traditional pumps. Its miniaturized pumping mechanism draws insulin from a flexible bag within the pump's cartridge rather than relying on a mechanical syringe and plunger mechanism. The pump is specifically designed to help prevent the unintentional delivery of insulin from the reservoir by limiting the volume of insulin that can be delivered to a person at any one time and to reduce fear associated with using a pump. Our technology was tested under both typical and extreme operating conditions and is designed to last for at least the anticipated four-year warranty life of the pump. Our technology allows us to reduce the size of the device as compared to traditional pumps, which allows our pumps to be the slimmest and smallest durable insulin pumps on the market. In addition, our technology is capable of delivering the smallest increment of insulin to users of any pump currently available, which allows insulin therapy to be individualized for each user.

**Quick Access to Pump History** 

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### **Our Insulin Pump Mechanism**

Our technology platform features a micro-USB connection that supports a rapid rechargeable battery and uploads to t:connect, both of which can be performed without disconnecting or interrupting insulin delivery. This connection also supports software updates through the Tandem Device Updater.

We believe our technology platform will allow our products to further penetrate and expand the insulin pump therapy market by addressing the specific product and technology limitations associated with traditional pumps that were raised by people with diabetes, their caregivers and healthcare providers. We also believe our technology platform provides us with the opportunity to address unmet needs in the insulin-dependent diabetes market, including the potential for further device miniaturization and advancements in AID.

#### **Our Strategy**

Our goal is to significantly expand and further penetrate the insulin-dependent diabetes market and become the leading provider of insulin pump therapy by focusing on both consumer and clinical needs. By continually conducting market research to determine what people with insulin-dependent diabetes desire from their insulin therapy, and by offering insulin pump products with different features and functionality, we believe we are uniquely positioned to provide a broad range of insulin pump products that allow us to address multiple segments of the diabetes market. At the same time, by offering multiple pump products that are based on our proprietary technology platform, we are also able to leverage a single sales, marketing and clinical organization, a shared manufacturing and supply chain infrastructure, and the expertise of our customer support services.

To achieve our goal, we intend to pursue the following business strategies:

Drive adoption of our products through our expanded sales, marketing and clinical infrastructure and multiple product offerings. We have achieved commercial success since the launch of our first commercial product, t:slim, by investing in the development of our sales, marketing and clinical infrastructure. We believe we are now in a position to leverage this infrastructure to increase access to our products by more people with insulin-dependent diabetes, their caregivers and healthcare providers. For example, we are leveraging this infrastructure by marketing our new products, including t:slim X2, to primarily the same healthcare providers as our previous pump products, thereby increasing the efficiency of new product launches. We believe that our investment in our sales, marketing and clinical infrastructure, combined with the launch of additional product offerings through the same infrastructure and the marketing of new products to our existing customers, will drive continued adoption of our products, while efficiently increasing our revenues over the long-term.

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Promote awareness of our differentiated products to consumers, their caregivers and healthcare providers. Our products were specifically designed to address the shortcomings of currently available technologies that we believe have limited the adoption of insulin pump therapy. We intend to broaden our direct-to-consumer marketing to promote the insulin therapy features and functionality offered by our products through our website, the use of social media tools, our t:simulator App and motivational spokespeople at industry forums and events. We also expect to leverage our sales and marketing force, together with our clinical specialists, to cultivate relationships with diabetes clinics, insulin-prescribing healthcare professionals and other key opinion leaders. By promoting awareness of our products, we believe that we will attract users of other pump therapies and MDI to our products.

Advance our clinical activities to further demonstrate that use of our pump products may contribute to improved clinical outcomes. Data analyzed from t:connect suggests that use of our pump products may provide users with improved clinical outcomes. For example, in a recent study, we compared retrospective user data from our SAP and a leading competitor s SAP. Our SAP demonstrated statistically significant clinical advantages, including reduced hypoglycemia, increased time in range, and improved overall glycemic control, despite approximately half of our competitors SAP users actively using a feature that suspends insulin delivery if blood glucose levels fall below a preset threshold. This study suggests that our simple-to-use touchscreen interface may translate to improved clinical outcomes for people with insulin-dependent diabetes. Another recent study demonstrated a reduced risk of hypoglycemia associated with use of our pumps compared to other methods of diabetes therapy, as well as a statistically significant reduction in ambulance rides due to severe hypoglycemia and in days spent at the hospital due to severe hypoglycemia. We plan to continue to invest in clinical activities intended to demonstrate that the use of our pump products contributes to improved clinical outcomes.

Advance our platform of innovative, consumer-focused products to address the unmet needs of people in the insulin-dependent diabetes market. We believe that our proprietary technology platform allows us to provide the most sophisticated and intuitive insulin pump therapy products on the market. In addition, our FDA-cleared Tandem Device Updater is a new tool that is designed to allow pump users to quickly and easily update their pump s software from a personal computer. For example, subject to obtaining FDA approvals, we intend to leverage our technology platform to allow t:slim X2 users to update their pumps software to include CGM integration and AID algorithms. We also intend to leverage our platform to continue to pursue advances in the automated delivery of insulin, including through strategic agreements and commercial product development efforts. As examples of these efforts, we have entered into development agreements with DexCom to allow the integration of our insulin pumps with DexCom s CGM systems, and a license agreement with TypeZero Technologies, LLC, or TypeZero, to allow the integration of TypeZero s inControl AID algorithms with t:slim X2. In addition, we intend to continue to explore further advancements in our technology platform to expand our product offerings, as well as the features and functionality associated with our products, in order to address different segments of the large and growing insulin-dependent diabetes market.

*Invest in our consumer-focused approach.* We believe that our consumer-focused approach to product design, marketing and customer care is a key differentiator. Our extensive market research involving people with diabetes, their caregivers and healthcare providers has driven the design and development of our current products and customer care model. This approach allows us to add the product features most requested by people with insulin-dependent diabetes, thereby affording the consumer the opportunity to more efficiently manage their diabetes. We will continue to apply the science of human factors throughout the design, development and continuous improvement of our products to optimize our products for intended users. We will continue to invest in our consumer-focused approach throughout our business.

Broaden direct access to third-party payor reimbursement for our products in the United States. We believe that third-party reimbursement is an important determinant in driving consumer adoption of

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insulin pump therapy. We also believe that customer and healthcare provider interest in our products is an important factor that enhances our prospect of contracting with third-party payors. We intend to intensify our efforts to encourage third-party payors to establish direct reimbursement for our products as we expand our market presence and product offerings. We also plan to participate in clinical studies to demonstrate the benefits of our products relative to other pump products and therapies as a way to gain support from third-party payors.

Leverage our manufacturing operations to achieve cost and production efficiencies. We manufacture our products at our headquarters in San Diego, California. We utilize a semi-automated manufacturing process for our pump products and disposable cartridges. We have significantly increased our manufacturing output since we began commercialization of our products. During 2017, we intend to relocate our manufacturing operations to a new larger facility, which will allow us to expand our production capacity further by replicating our production lines and gaining efficiencies from the operation of a facility designed to maximize our manufacturing processes and workflows. Because each of our products is based on our proprietary technology platform, the products have shared product design features, making our production system highly adaptable to new products. As demand for our products increase, we intend to drive operational efficiencies by leveraging our manufacturing infrastructure, which we expect will result in improvements in gross margin over the long-term.

### **Our Technology Platform**

Utilizing our unique consumer-focused approach, which is based on our extensive market research and the science of human factors, we have developed an innovative technology platform that is fundamental to the design of our existing products and provides the foundation for development of future products. The key elements of our platform are:

Advanced core technology. Our patented Micro-Delivery technology is unique compared to traditional pumps. Our miniaturized pumping mechanism allows us to reduce the size of the pump as compared to traditional pumps. Reducing the size of the pumping mechanism also allows us to support various insulin cartridge capacities. It was designed to provide precise dosing as frequently as every five minutes and in increments as small as 0.001 u/hr, or units per hour, as compared to the smallest increment available in traditional pumps, which is 0.025 u/hr. This technology also helps prevent unintentional insulin delivery by limiting the volume of insulin that can be delivered to a person at any one time.

Easy-to-navigate embedded software architecture. Our technology platform was developed using an iterative human factors design process that results in the intuitive software architecture which features commonly interpreted colors, language, icons and feedback. This allows the user to easily navigate the system and perform necessary functions in fewer steps than traditional pumps, including a one-touch method to return to the Home Screen. Our intuitive software architecture is designed to facilitate ease of learning, teaching and use. The flexible software architecture also facilitates updates to the software through the Tandem Device Updater without requiring any hardware changes.

*Vivid color touchscreen.* Our full color touchscreen allows users to access a streamlined, easy-to-use interface that promotes user confidence. The high-grade, shatter-resistant glass touchscreen provides the user the ability to enter numbers and access features directly, rather than scrolling through numerous screens and options. The touchscreen facilitates safety features that were designed to prevent unintended pump operations. The touchscreen also supports enhanced visual and tactile feedback.

*Lithium-polymer rechargeable battery technology.* Our products are the first and only insulin pumps to use a rechargeable battery, unlike traditional pumps that rely on expensive disposable batteries. By using a built-in rechargeable battery, we eliminate the risk of losing personal settings associated with replacing batteries. Our lithium-polymer rechargeable battery charges rapidly with a standard micro-USB connection, and a full charge lasts for up to seven days. Users report that they keep their battery powered by charging it for just 10 to 15

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minutes each day, often while showering or commuting with the use of the car charger we provide with the pump. Our battery has been tested to last for at least the four-year warranty life of the pump. Our battery also allows for accessible monitoring of the current charge level on the device s Home Screen.

Compatibility and connectivity. Our PC- and Mac-compatible, cloud-based data management application, t:connect, provides our insulin pump users a fast, easy and visual way to display therapy management data from all of our pump products and supported blood glucose meters. Our platform empowers people with diabetes, as well as their caregivers and healthcare providers, to quickly and easily identify meaningful insights and trends, allowing them to fine-tune therapy and lifestyle choices for better control of their diabetes. Additionally, our platform enables rapid data uploads through a micro-USB connection, without interrupting insulin delivery.

#### **Our Products**

In 2016, we introduced to the market t:slim X2, the next generation of our flagship t:slim product that originally launched in 2012. In 2016, we also launched the Tandem Device Updater, a Mac and PC-compatible tool for the remote update of our insulin pumps software. In 2015, we launched two additional pumps, t:flex and t:slim G4, which were each designed to address different needs of people with insulin-dependent diabetes. In 2013, we launched t:connect, a companion diabetes management application for use with our pumps. We believe our unique products address the significant and fundamental shortcomings of traditional pumps and will allow people to manage their diabetes more efficiently.

#### **Commercial Products**

#### Our Insulin Pump Products

All of our insulin pump products feature a vivid, full color touchscreen made of high-grade, shatter-resistant glass that provides users the ability to enter numbers and access features directly, rather than scrolling through a list of numbers and screens. We designed the streamlined, user-friendly interface of our products to facilitate rapid access to the features people use most, such as delivering a bolus, viewing insulin remaining on board, viewing insulin cartridge volume and monitoring current pump status and settings. The interface also includes an options menu that provides quick and intuitive navigation to key insulin management features, pump settings, cartridge loading and use history. Our insulin pumps also feature a Home Screen button that immediately returns the user to the Home Screen where important administrative features are displayed, including the current battery charge level, a time and date display and an LED indicator for alerts, alarms and reminders.

In addition, our insulin pump products allow for the creation of multiple customizable personal profiles, each supporting up to 16 timed insulin delivery settings. This feature allows users to manage their day-to-day insulin therapy with less effort and interruption. Users can quickly and easily adjust insulin settings based on a number of key factors, including basal rate, correction factor, insulin-to-carbohydrate ratio and target blood glucose levels.

Furthermore, our insulin pump products share important common features, including a black aluminum case and chrome trim, that give them the look and feel of a modern consumer electronic device, such as a smartphone. Our insulin pumps are also watertight, with an IPX7 rating, eliminating concerns about accidentally getting it wet. Each device also features a micro-USB connection that supports a rechargeable battery, software updates through the Tandem Device Updater, and uploads to t:connect.

t:slim X2 Insulin Delivery System

Our next-generation flagship product, t:slim X2 Insulin Delivery System, is comprised of a t:slim X2 Pump, its 300-unit disposable insulin cartridge and an infusion set. We began commercial sales of t:slim X2 in the

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United States in the fourth quarter of 2016. t:slim X2 replaced t:slim, which was originally commercialized in the third quarter of 2012. t:slim X2 features new hardware advancements, including a two-way Bluetooth wireless technology radio for communicating with more than one external device at a time. We believe that these advancements, together with future anticipated applications of the Tandem Device Updater, have the potential to enable users to add new features and functionality, such as CGM integration or AID algorithms, to their pumps independent of their typical four-year insurance pump replacement cycle. Measuring 2.0 x 3.1 x 0.6 inches, t:slim X2 (and t:slim G4) is the slimmest and smallest durable insulin pump on the market.

In the third quarter of 2016, we launched a Technology Upgrade Program that provides eligible t:slim and t:slim G4 customers a path towards ownership of t:slim X2 by providing customers the right to exchange t:slim or t:slim G4, under a variable pricing structure. The Technology Upgrade Program expires on September 30, 2017.

#### 300-unit Insulin Cartridge being inserted into Pump

t:flex Insulin Delivery System

t:flex Insulin Delivery System is comprised of a t:flex Pump, its 480-unit disposable insulin cartridge and an infusion set. We began commercial sales of t:flex in the United States in the second quarter of 2015.

### t:flex Insulin Pump

People with insulin-dependent diabetes require different amounts of insulin based on their level of insulin sensitivity, which can vary significantly from person to person. t:flex is designed for individuals who require more than 100 units of U-100 insulin per day on MDI or more than 80 units per day using a

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pump, such as teenagers with type 1 diabetes and many people with type 2 diabetes. t:flex incorporates the same technology platform as t:slim, but offers a 480-unit insulin reservoir, the largest capacity currently approved in the United States. This provides users the benefits of pump therapy without the frequent cartridge changes required by 200- and 300-unit capacity pumps. The insulin cartridge used in t:flex extends out slightly on one side to accommodate the extra volume while maintaining all of the other benefits of t:slim, including its slim and sleek appearance.

In our market research, two-thirds of endocrinologists cited limited volume capacity as the number one barrier to pump adoption for their patients with type 2 diabetes who use daily rapid acting insulin. We believe that offering a 480-unit cartridge addresses the typical insulin needs of a person with type 2 diabetes who is insulin-dependent. Our research has also shown that the appearance and bulky size of traditional pumps is a deterrent to pump adoption for people with greater insulin needs. We believe the combination of t:flex s larger insulin reservoir, combined with the other features and benefits offered by our technology platform, provides us with an opportunity to expand the current insulin pump market to address the unmet needs of individuals with greater insulin requirements.

t:slim G4 Insulin Delivery System with Integrated CGM

t:slim G4 Insulin Delivery System includes the first and only touchscreen pump with CGM integration. It combines features of a t:slim and DexCom G4 PLATINUM CGM System, both devices that have consistently ranked #1 in independent surveys, into a single device that is simple to use. We began commercial sales of t:slim G4 in the United States in the third quarter of 2015.

We have a development and commercialization agreement with DexCom, which provides us a non-exclusive license to integrate our product platform with the DexCom G4 PLATINUM CGM System. t:slim G4 incorporates the same pump technology and user interface as t:slim, but also provides the added convenience of allowing CGM information to be displayed on the pump, eliminating the need to carry an additional device. Based on this information, users are able to utilize the pump to take direct action with their insulin pump therapy.

CGM is a therapy used in conjunction with blood glucose testing, and provides users with real-time access to their glucose levels as well as trend information. Notwithstanding the significant potential benefits associated with using CGM technology as a component of diabetes management therapy, Close Concerns estimates that approximately only 10% of people with type 1 diabetes currently use CGM. We believe that CGM utilization may be significantly increased by offering an accurate CGM sensor in combination with an innovative and consumer-focused insulin pump, such as t:slim. t:slim G4 is designed to meet these requirements for the diabetes market.

We commenced commercial sales of t:slim G4 in September 2015. During the fourth quarter of 2015, and in the first half of 2016, t:slim G4 represented the majority of our insulin pump shipments. However, following our announcement of the commercial launch of t:slim X2, sales of t:slim G4 decreased and began to represent the smallest percentage of our pump shipments compared to our other insulin pump products.

### **Our Complementary Products**

Tandem Device Updater

Our Tandem Device Updater was cleared by the FDA in the third quarter of 2016 and is a Mac and PC-compatible tool for the remote update of Tandem insulin pump software. Our pump software may be updated in a manner similar to how a user would update software on a smartphone. We are uniquely positioned to offer this capability due to the intuitive software architecture and convenient micro-USB connection included within our pump products. This tool allows us to provide our customers access to

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new and enhanced pump features and functionality faster than the industry has been able to in the past, and separate from the typical four-year insurance pump replacement cycle.

The first use of our Tandem Device Updater was for deployment of the latest t:slim software to in-warranty t:slim Pumps purchased before April 2015. This updated software began shipping on new t:slim Pumps as of April 2015 and includes a variety of product enhancements that offer convenience and flexibility. We expect that future software upgrades will be implemented through our Tandem Device Updater as we obtain regulatory approval for their commercialization.

t:connect Diabetes Management Application

We commercially introduced t:connect Diabetes Management Application, or t:connect, our cloud-based data management application, in the first quarter of 2013. It provides users, their caregivers and their healthcare providers a fast, easy and visual way to display therapy management data from our pumps and supported blood glucose meters. This application empowers people with diabetes, as well as their caregivers and healthcare providers, to quickly and easily identify meaningful insights and trends, allowing them to refine therapy and lifestyle choices for better management of their diabetes. It also provides us with valuable data that we can analyze computationally to reveal patterns, trends and associations that can be used in continuous product improvements, and providing clinical outcomes data for marketing purposes and to payors. We also believe that t:connect can serve as a key component of mobile health applications that are currently under development.

We developed t:connect to be intuitive, with the same consumer-focused approach utilized in the development of our insulin pumps. It features built-in smart logic that manages duplicate blood glucose readings from a user s pump and blood glucose meter to ensure report accuracy. t:connect can also generate color-coded graphs and interactive, multi-dimensional reports that make it easy to identify therapy management trends, problems and successes. While our insulin pumps hold the data generated over a period of up to 90 days, once a user uploads their therapy management information to t:connect, the information is retained in their account. t:connect maintains the highest standards of patient data privacy and is hosted on secure servers that are compliant with the Health Insurance Portability and Accountability Act of 1996, or HIPAA.

In 2016, we initiated the launch of an enhanced version of t:connect that we expect will simplify the ability of patients to share their t:connect data with their healthcare providers, which we refer to as t:connect HCP. We expect to make t:connect HCP available to all interested healthcare providers in 2017. This application will allow a healthcare provider to establish a separate account that centralizes t:connect data from all of their enrolled patients.

t:connect Diabetes Management Application

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Infusion Sets

We offer our customers various infusion set choices for use with our insulin pump products. During 2015, we launched a Tandem-branded infusion set under the t:90 brand name. The t:90 offers a 90-degree soft cannula and comes pre-loaded in an automatic spring inserter, making one-handed insertions quick and easy, even in hard-to-reach areas. During 2016, we launched the second Tandem-branded infusion set under the t:30 brand name. The t:30 offers the same features and benefits as the t:90, but with a 30-degree soft cannula, which is often preferred by users who are lean or lead an active lifestyle. Both the t:90 and t:30 infusion sets come in a wide variety of tubing lengths to fit customers individual needs.

Beginning in the second half of 2017, we intend to replace the standard Luer-lok connector that currently joins an infusion set to our cartridge with a new connector, the t:lock Connector. Our t:lock Connector was designed to address the most requested improvement to our products that we have received from customers. It will be similar in its design to that of a standard Luer connector, but will, on average, reduce the time required to fill tubing by approximately 30 seconds and reduce the amount of insulin used in the process by approximately four and a half units. It will also reduce the likelihood that air bubbles will become trapped in the connector. We intend to offer our customers the same choice in infusion set configurations as they are able to purchase from us today, but with the added benefits associated with our t:lock Connector. However, we expect to offer customers both the original Luer-lok connector and our t:lock Connector concurrently for a period of time to facilitate the transition, and by year end we intend to only offer our t:lock Connector. We anticipate that the transition to our t:lock Connector will also result in an increase in our sales of infusion sets beginning in the second half of 2017. We intend to continue to invest in the development of enhancements to our infusion set products to address the perceived shortcomings of existing products on the market.

#### Pump Accessories

We offer our customers a broad range of accessories for their pumps, allowing users to customize their device to their individual lifestyle and sense of style. We believe our accessories increase user flexibility and willingness to use and carry their insulin pump. These accessories include different color casings, belt clips, and leather cases.

### **Insulin Pump Accessories**

#### **Products under Development**

Our products under development support our strategy to focus on both consumer and clinical needs. We intend to leverage our consumer-focused approach and proprietary technology platform to continue to develop products that have the features and functionality that will allow us to target people in different

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segments of the insulin-dependent diabetes market. In addition, we are evaluating the potential benefit of our technology platform when used to administer alternative therapies for diseases outside of diabetes.

t:slim X2 with G5 integration

The first new feature that we plan to roll out on t:slim X2 is the display of DexCom G5 CGM sensor information directly on the pump s Home Screen. In our market research, t:slim X2 with G5 integration was shown to be highly competitive when compared to alternative pump offerings, including pumps featuring AID algorithms. We filed a PMA supplement for this feature in the first quarter of 2017 and we are preparing to launch t:slim X2 with G5 integration in mid-2017 pending FDA approval. Subject to FDA approval, we also intend to offer customers who purchase a t:slim X2 prior to the availability of G5 CGM integration the ability to quickly update their pump software using the Tandem Device Updater to add this feature for no charge.

Automated Insulin Delivery Systems

An AID system generally involves an external device, or combination of devices, intended to aid a person with insulin-dependent diabetes by automatically testing and controlling their blood glucose through the administration of insulin by itself or in combination with a second hormone. This may be achievable by combining an insulin pump and a CGM with computer software that allows the two devices to automatically communicate to determine and provide the right amount of insulin, or insulin plus another hormone, at the correct time.

We have supported leading researchers at facilities such as the University of Virginia, Boston University, Massachusetts General Hospital and Stanford University by providing pump hardware and software to advance development of AID solutions. Within t:slim, t:slim X2 and t:flex there is a Bluetooth low energy radio, or BLE, that is not presently enabled. In July 2013, we submitted a Master File to the FDA, allowing researchers to use t:slim technology with the BLE enabled. This device provides researchers wireless use of our device with their selected algorithm and CGM for single hormone or dual hormone clinical studies.

#### t:slim X2 with PLGS

Our first generation AID system is expected to include a predictive low glucose suspend, or PLGS, algorithm. The algorithm will be integrated with t:slim X2 and use DexCom G5 CGM sensor data to help predict future hypoglycemia before it happens. This product will be designed to adjust the rate of insulin delivery to help minimize the frequency and/or duration of hypoglycemic events. The algorithm was developed internally in consultation with clinical thought leaders in AID research. In our market research, a PLGS algorithm was reported as the most valuable AID feature among people with insulin-dependent diabetes and their healthcare providers. During 2016, we completed a pilot study of our PLGS algorithm. We expect to begin a pivotal study for t:slim X2 with PLGS in the first half of 2017, the results of which could then be used to prepare a PMA supplement that we intend to file with the FDA by the end of 2017.

#### t:slim X2 with TypeZero

We expect our second generation AID system will also involve t:slim X2, will use DexCom s G6 CGM technology, and will feature inControl AID technology that we licensed from TypeZero. TypeZero s technology includes a series of algorithms developed from research initially conducted at the University of Virginia. To date, this technology has been used in more than 28 clinical studies including more than 475 participants and the data has been referenced in a number of journal articles. This product will be differentiated from competing products, as we expect it will include automated correction boluses, which we believe will bring additional benefits to our customers.

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In November 2016, we announced that we are working with DexCom and TypeZero on the integration of our technologies into the National Institute of Health funded International Diabetes Closed Loop Trial, or IDCL Trial. The IDCL Trial is expected to enroll 240 adults with type 1 diabetes and enrollment began in late 2016.

The IDCL trial is structured in two phases:

- 1) The first phase will use a modified t:slim and DexCom s G5 sensor as part of an AID system that combines these devices with a smartphone running TypeZero s inControl AID algorithms. The system will predict high and low blood sugar levels and adjust the rate of insulin delivery throughout the day in order to try to keep a user s blood sugar levels within a predetermined range, while still allowing the user to administer a bolus manually for meals.
- 2) In the second phase, we anticipate the IDCL Trial will utilize a t:slim X2 integrated with a DexCom G6 sensor that will also incorporate TypeZero s inControl AID algorithms directly into the pump s touchscreen interface.

We anticipate that the integrated design used in the second phase of the IDCL Trial, together with data from the first phase of the trial, will be the primary basis for us to file a PMA submission with the FDA for the potential future commercial launch of t:slim X2 with TypeZero s inControl AID algorithms. We also anticipate conducting a smaller targeted pediatric study in a summer or winter camp setting for our planned PMA submission. In our market research, people with insulin-dependent diabetes and healthcare providers reported a strong preference for t:slim X2 with TypeZero as compared to a competitive AID system. Subject to the timely completion of a successful IDCL Trial, and subject to future FDA approval, we are currently planning to launch this product by the end of 2018.

t:sport Insulin Delivery System

The t:sport Insulin Delivery System, or t:sport, is currently about half the size of t:slim and is being designed for people who seek even greater discretion and flexibility with the use of their insulin pump. We anticipate that t:sport will feature a low-cost 200-unit cartridge, an on-pump bolus button, a rechargeable battery and a Bluetooth radio. We also anticipate that t:sport will utilize a pumping mechanism that differs from our current MicroDelivery technology and will be controlled through a separate controller or mobile device application.

In 2016, we began discussions with the FDA on the t:sport controller, and whether it can be implemented as a mobile device application or if it needs to be a separate device. Based on their feedback and concerns regarding the use of mobile phones, we believe that controlling a pump via a mobile device will be a longer path-to-market, and so we plan to design the product so that it can be technically capable of being controlled using either a dedicated controller or a mobile device. Because of the nature of our touchscreen user interface, we are well positioned to pursue either option.

At this time, there is not a predicate device for an insulin pump wirelessly controlled through a mobile device application. The timing of the commercialization will be based on our ongoing dialogue with the FDA.

#### Sales and Marketing

Our sales and marketing objectives are to:

generate demand and acceptance for our current product offerings and future products developed with our technology platform among people with insulin-dependent diabetes; and

promote advocacy and support for our products and brands with healthcare providers.

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As of December 31, 2016, we had a sales, clinical and marketing team of approximately 200 full-time employees. In the first quarter of 2016, we expanded our sales and clinical organization from 60 to 72 territories. Each territory within our sales organization consists of a territory manager and a clinical diabetes specialist who as a team call on endocrinologists, nurse practitioners, primary care physicians, certified diabetes educators and potential customers. Our sales team is augmented by individuals in our internal customer sales support organization who follow up on leads generated through promotional activities and educate people on the benefits of our proprietary technology and products. Our internal customer sales support organization also contacts existing customers who are approaching their insurance renewal date to aid in the renewal process. As our market penetration continues to build momentum, and as we launch new products into the market, we may consider further expanding our sales, clinical and marketing infrastructure in the United States and may evaluate international commercialization opportunities.

In addition, as of December 31, 2016, we had executed agreements with approximately 40 independent distributors. For the year ended December 31, 2016, Edgepark Medical Supplies, Inc., and Byram Healthcare accounted for 18.7%, and 14.0% of our sales, respectively. For the year ended December 31, 2015, Edgepark Medical Supplies, Inc., and Byram Healthcare accounted for 17.8%, and 17.2% of our sales, respectively. None of our independent distributors have been required to sell our products exclusively and each of them may freely sell the products of our competitors. Our distributor agreements generally have one-year initial terms with automatic one-year renewal terms, and are terminable in connection with a party s material breach.

Healthcare provider focused initiatives. Healthcare providers are a critical resource in helping patients understand and select their diabetes therapy options. Each of our territories is supported by a clinical diabetes specialist who is a certified diabetes educator and holds either a registered nurse or registered dietician license. Our clinical diabetes specialists support and educate healthcare providers on our products and proprietary technology, certify healthcare providers to train people to use our products and support our customers with initial training following the purchase of our products.

In addition to calling on healthcare providers in their offices, some of our recent marketing initiatives include:

presentations and product demonstrations at local, regional, and national tradeshows, including American Diabetes Association Scientific Sessions and the American Association of Diabetes Educators Annual Meeting;

our Demonstration Unit Program, through which we provide healthcare professionals with our products, or a mobile device that operates our t:simulator App, for pump demonstrations to their patients; and

partnerships with third-party diabetes management systems for the display of Tandem pump data, including diasend Clinic and Tidepool.

Consumer-focused initiatives. We sell our products directly to consumers through referrals from healthcare providers and through leads generated through our promotional activities. Our direct-to-consumer marketing efforts focus on positioning our products as innovative, consumer-focused insulin pumps with a unique Micro-Delivery technology, slim touchscreen design, and an intuitive user interface designed to meet different needs in the diabetes community. In connection with the launch of t:slim G4, our marketing also emphasizes the greater accuracy of the DexCom G4 PLATINUM CGM over competitive products. Some of our recent consumer-focused marketing initiatives include:

participation at consumer-focused regional diabetes conferences and events including the JDRF Type One Nation Summits, the American Diabetes Association Expos, Children With Diabetes Friends for Life and Taking Control Of Your Diabetes, or TCOYD, conferences and local diabetes camps;

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website enhancements and utilization of social media, online webinars and consumer-focused newsletters to drive online awareness and expand web presence;

promotion of our t:simulator App, which allows anyone to explore the key features of our pump products for free using their mobile device:

corporate sponsorships of organizations focused on people with diabetes, including JDRF, TCOYD, Diabetes Hands Foundation, Students with Diabetes, College Diabetes Network, Diabetes Scholars; and

community diabetes fundraising and awareness events.

Branding. We developed our comprehensive branding strategy to engage consumers and communicate our identity as a modern and progressive company that works in tandem with the diabetes community, healthcare providers, our employees and business partners. We strive to embody this through our product offerings, marketing efforts and interactions throughout our business. Our product names are consistently branded using a t: to create uniformity and help consumers quickly identify our products. Our touch simplicity marketing campaign highlights the slim touchscreen design and easy-to-navigate software associated with our pump products. Our other product packaging, website, advertising and promotional materials are a reflection of our consumer-focused approach and modern style. We value having clear, friendly and helpful communications throughout our business.

#### **Training and Customer Care**

Given the chronic nature of diabetes, and the potentially complicated dynamic of health insurance coverage, training and customer care is important for developing long-term relationships with our customers. Our customer care infrastructure consists of individuals focused on training, technical services and insurance verification. We believe our consumer-focused approach enables us to develop a personal relationship with the customer, or potential customer, beginning with the process of evaluating our products, then navigating insurance coverage and extending to our provision of training and ongoing support. Providing reliable and effective ongoing customer support reduces anxiety, improves our customers—overall experiences with our products and helps reinforce our positive reputation in the diabetes community. In order to provide complete training and customer care solutions, we leverage the expertise of our clinical diabetes specialists who provide one-on-one training, and we offer ongoing complementary technical services, as well as ongoing support with insurance verification.

*Training.* Our research has shown that it can take several days for a user to competently learn how to use a traditional pump, leading to frustration, frequent mistakes and additional training, each of which may ultimately discourage adoption. As a result, we believe that healthcare providers may be less likely to recommend pump therapy to potential candidates.

By offering an intuitive user interface, we believe healthcare providers will be able to train people to use our products more efficiently than traditional pumps, and will have a higher degree of confidence in their patients—ability to operate it, including the more advanced features. In addition, the intuitive nature of our pump products likely will allow healthcare providers to spend less time teaching a person how to use their pump and more time helping to improve the management of their diabetes. This ease of training may also help users feel less intimidated and fearful of pump therapy, leading to increased adoption and market expansion.

We tailor our training efforts for insulin pump users and healthcare providers. In some cases, our clinical training managers may certify clinic-based healthcare providers to train their patients on our products. In other cases, a member of our clinical team will conduct one-on-one training on our products with the customer. We have also established a network of independent, licensed diabetes educators who have been certified to train on our products and will conduct customer training on our behalf.

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In connection with t:slim G4, we also offer our customers online training on the use of the CGM components of the system. Customers can access one or more modules of the training system at their own pace and at the location that they prefer, which offers them a convenient method to access the latest training available. We anticipate using similar online training modules for the CGM components of t:slim X2 with DexCom s G5 sensor integration, which is currently pending FDA review.

**Technical Services.** We believe that a difficult-to-use pump will result in users making more frequent calls to the pump manufacturer or their healthcare provider for support in using the device. This can be frustrating for the customer and costly for the pump manufacturer as well as for the healthcare provider. In general, we expect the intuitive nature of our products to result in fewer calls from users requesting support from our technical services team or their healthcare provider. However, because of the significant percentage of our customers who are new to pump therapy, we also anticipate receiving high call volume from customers who are still becoming familiar with the fundamentals of insulin pump therapy.

Our customer-focused technical services team provides support seven days a week, 24 hours a day by answering questions, trouble-shooting and addressing issues or concerns. Our insulin pump products are covered by a four-year warranty that includes our product replacement program through which our technical services team members can provide a customer with a replacement device within as little as 24 hours to minimize the interruption of his or her therapy.

*Insurance Verification.* Our insurance verification team provides support to help customers, and potential customers, understand their insurance benefits. We work with the customers and their healthcare providers to collect information required by the insurance provider and to determine their insurance benefit coverage for our products and notify them of their benefit.

Following communication of a person s estimated financial responsibility, final confirmation of their desire to purchase the device and method of fulfillment, the customer s order is typically shipped to their home. The initial order generally contains their insulin pump as well as 20-day supply of infusion sets and cartridges. For customers that we service on a direct basis, a member of our internal team then contacts the customer prior to the end of their 90-day supply to re-verify their insurance benefits and assist in reordering supplies. For customers who purchase our insulin pump through one of our authorized distributors, ongoing supplies are typically also arranged through the distributor.

### **Third-Party Reimbursement**

Customer orders are typically fulfilled by billing third-party payors on behalf of our customers, or by utilizing our network of distributors who then bill third-party payors on our customers behalf. Our fulfillment and reimbursement systems are fully integrated such that our products are shipped only after receipt of a valid physician s order and verification of current health insurance information.

We are accredited by the Community Health Accreditation Program and are an approved Medicare provider. We currently bill for all of our insulin pump products and associated supplies using existing Healthcare Common Procedure Coding System codes for which Medicare reimbursement is well established. However, pump eligibility criteria for people with type 2 diabetes can be different and often requires additional documentation and laboratory testing to gain in-network insurance reimbursement benefits.

Over the last ten years, Medicare reimbursement rates for insulin pumps and disposable cartridges have remained relatively unchanged. However, Medicare periodically reviews its reimbursement practices for diabetes-related products. Medicare implemented a competitive bidding process for blood glucose strip reimbursement, which resulted in a significant reduction in the reimbursement rate for those products.

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More recently, in 2017, Medicare announced, and then shortly thereafter suspended, a competitive bidding process for insulin pumps. As a result, there is some uncertainty as to the future Medicare reimbursement rate for our current and future products.

As of December 31, 2016, we had entered into commercial contracts with approximately 150 national and regional third-party payors to establish reimbursement for our insulin pump products, disposable cartridges and other related supplies. We employ a team of managed care managers who are responsible for negotiating and securing contracts with third-party payors throughout the United States. For the year ended December 31, 2016, approximately 23% of our sales were generated through our direct third-party payor contracts.

If we are not contracted with a person s third-party payor and n-network status cannot be otherwise obtained, then to the extent possible we utilize distribution channels so our customers orders can be serviced. As of December 31, 2016, we had executed distributor agreements with approximately 40 independent distributors. In some cases, but not all, this network of distributors allows us to access people who are covered by commercial payors with whom we are not contracted, at in-network rates that are generally more affordable for our customers. However, effective July 1, 2016, UnitedHealthcare designated one of our competitors as their preferred, in-network durable medical equipment provider of insulin pumps for most customers over the age of 18. We expect this decision will prevent a majority of UnitedHealthcare members from purchasing our insulin pump for the foreseeable future, whether directly from us or through our network of distributors.

#### **Manufacturing and Quality Assurance**

We currently manufacture our products at our headquarters in San Diego, California, but will be transitioning the manufacturing operations to a nearby facility that will allow for future capacity expansion. By maintaining close proximity to our other business functions, we believe we will enhance our ability to monitor and manage our manufacturing processes, and to adjust manufacturing operations quickly in response to our business needs. The transition to the new manufacturing facility is expected to begin during the second quarter of 2017 and to be completed by the end of 2017. During the transition period, we expect to experience some temporary duplication of operations to support ongoing product requirements, as well as some incremental manufacturing costs.

We currently utilize a semi-automated manufacturing process for our pump products and disposable cartridges. The pump production line requires approximately 20 manufacturing assemblers and limited support staff to run the line and reaches a maximum output of approximately 30,000 pumps per year on a single shift. Disposable cartridges are manufactured on a production line that requires 12 manufacturing operators and limited support staff and reaches a maximum output of approximately 1,000,000 cartridges per year on a single shift. We are actively working to improve the efficiency of our disposable cartridge manufacturing process. For instance, we are currently working towards manufacturing t:flex cartridges primarily using the same semi-automated manufacturing equipment used in the manufacture of t:slim X2 and t:slim G4 cartridges, as well as reducing the number of operators required to operate a production line.

The cartridge automation equipment is designed to operate at capacity. As such, the line is constructed in several modular sections that perform different aspects of the assembly. This is important because at any given time, maintenance, service or inspection can be performed on any one section independent of the rest of the line. The manufacturing process may then continue uninterrupted while the assembly step is performed manually until the automation section is back on-line.

We have significantly increased our manufacturing output since we began the commercialization of our first product and we will have the ability to expand our production capacity in the new facility by

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replicating our production lines. Our production system is also adaptable to new products due to shared product design features. We intend to drive operational efficiencies by leveraging our manufacturing infrastructure.

Outside suppliers are the source for most of the components and some sub-assemblies in the production of our insulin pumps. Any sole and single source supplier is managed through our supplier management program that is focused on reducing supply chain risk. Key aspects of this program include managing component inventory in house and at the supplier, contractual requirements for last time buy opportunities and second sourcing approaches for specific suppliers. Typically, our outside vendors produce components to our specifications and in many instances to our designs.

Our suppliers are audited periodically by our quality department to ensure conformity with the specifications, policies and procedures for our devices. Members of our quality department also inspect our devices at various steps during the manufacturing cycle to facilitate compliance with our devices stringent specifications.

We have received certification from BSI Group, a Notified Body to the International Standards Organization, or ISO, of our quality system. This ISO 13485 certification includes design control requirements. Certain processes utilized in the manufacturing and testing of our devices have been verified and validated as required by the FDA and other regulatory bodies. As a medical device manufacturer, our manufacturing facility and the facilities of our sterilization and other critical suppliers are subject to periodic inspection by the FDA and certain corresponding state agencies.

#### **Research and Development**

Our research and development team includes employees who specialize in software engineering, mechanical engineering, electrical engineering, fluid dynamics and graphical user interface design, many of whom have considerable experience in diabetes-related products. Our research and development team focuses on the continuous improvement and support of current product offerings, as well as our products under development.

We entered into a Development and Commercialization Agreement with DexCom, which provides us a non-exclusive license to integrate the DexCom G4 PLATINUM CGM System with t:slim G4 during the term of the agreement. The license covers the United States, and such other territories as may be added from time to time. We paid DexCom \$1.0 million at the commencement of the collaboration, and a \$1.0 million milestone payment in July 2014, and a final \$1.0 million payment in September 2015. The payments were recorded as research and development costs. We agreed to pay DexCom a royalty payment in the amount of \$100 for each integrated system sold. In September 2015, we amended the agreement with DexCom such that, in lieu of the \$100 royalty payment, we will commit \$100 for each t:slim G4 sold for incremental marketing activities associated with t:slim G4 that are in addition to a level of ordinary course marketing activities or marketing activities to support other jointly funded development projects. Our agreement with DexCom runs until January 4, 2019, with automatic one-year renewals. Either party may terminate the agreement without cause upon 18 months prior notice. In addition, in the event of a change of control of either party, the other party may unilaterally elect to terminate the agreement, subject to limited ongoing obligations. The agreement also contains customary provisions for termination in the event of an uncurred material breach or in the event of a dissolution of the other party.

In June 2015, we entered into non-exclusive agreements with DexCom to allow the integration of our insulin pump products with the DexCom G5 and G6 continuous glucose monitoring systems worldwide. Each agreement has an initial term of five years, and thereafter renew automatically for additional one-year terms unless either party provides advance notice to the other party that they do not wish to

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extend the agreement. The agreements do not require any licensing fees, milestone payments or royalty obligations to DexCom. The agreements contain customary provisions for termination in the event of an uncured material breach or in the event of a dissolution of the other party, and prohibit our assignment of the agreements to a DexCom competitor without DexCom s prior consent.

In 2016, we entered into a worldwide, non-exclusive, royalty-bearing license agreement with TypeZero to allow the integration of our insulin pump products with TypeZero s inControl AID technology. The agreement also provides us access to TypeZero s future AID innovations for five years following the date of the agreement. In addition, the license agreement contemplates that our insulin pump products will be used alongside TypeZero s AID technology in the IDCL Trial. The agreement is effective until the patents covered by the agreement have expired, but also contains customary provisions for termination in the event of an uncured material breach.

Research and development costs were \$18.8 million, \$17.0 million, and \$15.8 million in 2016, 2015 and 2014, respectively. This includes the \$1.0 million milestone payments made to DexCom under the Development and Commercialization Agreement relating to t:slim G4, in each of the years ended December 31, 2015 and 2014.

#### **Intellectual Property**

We have made protection of our intellectual property a strategic priority. We rely on a combination of copyright, patent, trademark, trade secret and other intellectual property laws, non-disclosure agreements and other measures to protect our proprietary rights.

As of December 31, 2016 our patent portfolio consisted of approximately 50 issued U.S. patents and 46 pending U.S. patent applications. Of these, our issued U.S. patents expire between approximately 2021 and 2035. We are also seeking patent protection for our proprietary technology in other countries throughout the world. In addition, we also have one pending U.S. trademark applications as well as 23 trademark registrations, including 10 U.S. trademark registrations and 13 foreign trademark registrations.

In July 2012, we entered into an agreement with Smiths Medical pursuant to which we were granted, through certain assignments and certain non-exclusive and exclusive, worldwide, fully paid-up, royalty-free licenses, certain rights to patents and patent applications related to ambulatory infusion pumps and related software and accessories for the treatment of diabetes. We agreed to pay \$5.0 million in license fees and to share equally any associated sublicense revenues we may receive. As of December 31, 2016, we had paid the initial license fees in full and have not entered into any sublicense agreements.

### Competition

The medical device industry is intensely competitive, subject to rapid change and highly sensitive to the introduction of new products, treatment techniques or technologies, or other market activities of industry participants. We compete with a number of companies that manufacture insulin delivery devices, such as Medtronic MiniMed, a division of Medtronic, Inc., Animas Corporation, a division of Johnson & Johnson, and Insulet Corporation. However, the market for insulin pumps is currently undergoing significant changes. For instance, in late 2016, Roche Diabetes Care, a division of F. Hoffman-La Roche discontinued sales of new insulin pumps in the United States, and in early 2017, Johnson & Johnson announced that it is evaluating strategic options for its diabetes business unit, including Animas. It is too early to evaluate the potential impact of these changes on our competitive landscape.

Our current primary competitors are either publicly traded companies or divisions or subsidiaries of publicly traded companies with significantly more market share and resources than we have. These

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companies have several competitive advantages over us, including greater financial resources for sales and marketing and product development, established relationships with healthcare providers and third-party payors, and larger and more established distribution networks. In some instances, our competitors also offer products that include features that we do not currently offer. For instance, Insulet offers an insulin pump with a tubeless delivery system that does not utilize an infusion set, and Medtronic offers a traditional insulin pump that is integrated with a CGM system featuring a threshold suspend feature and has FDA approval for a traditional insulin pump with a hybrid closed-loop AID algorithm that it intends to launch in 2017.

In addition, we face competition from a number of companies, medical researchers and existing pharmaceutical companies that are pursuing new delivery devices, delivery technologies, sensing technologies, procedures, drugs and other therapeutics for the monitoring, treatment and prevention of diabetes.

For additional information, see the section of this prospectus under the caption Risk Factors.

servicing and post-market surveillance.

#### **Government Regulation**

Our products are medical devices subject to extensive regulation by the FDA, corresponding state regulatory authorities and, if we commence international sales, other regulatory bodies in other countries. The Federal Food, Drug and Cosmetic Act, or FDCA, and the FDA s implementing regulations govern:

product design and development;
pre-clinical and clinical testing;
establishment registration and product listing;
product manufacturing;
labeling and storage;
pre-market clearance or approval; advertising and promotion;
product sales and distribution;
recalls and field safety corrective actions; and

referred to as a 510(k) clearance, or approval from the FDA through the PMA process. Both the 510(k) clearance and PMA processes can be expensive, lengthy and require payment of significant user fees, unless an exemption is available.

The FDA classifies medical devices into one of three classes. Devices requiring fewer controls because they are deemed to pose lower risk are

FDA Pre-Market Clearance and Approval Requirements. Unless an exemption applies, each new or significantly modified medical device we seek to commercially distribute in the United States will require either a pre-market notification under Section 510(k) of the FDCA, also

placed in Class I or II. Class I devices are subject to general controls such as labeling, pre-market notification and adherence to the FDA s

Quality System Regulation, or QSR, which cover manufacturers methods and documentation of the design, testing, production, control quality assurance, labeling, packaging, sterilization, storage and shipping of products. Class II devices are subject to special controls such as performance standards, post-market surveillance, FDA guidelines, or particularized labeling, as well as general controls. Some Class I and Class II devices are exempted by regulation from the 510(k) clearance requirement, and the requirement of compliance with substantially all of the QSR. t:slim, t:flex and t:connect received FDA clearance as

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Class II devices. However, t:connect was subsequently down-classified to a Class I device. A PMA application is required for devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or certain implantable devices, or those that are not substantially equivalent either to a device previously cleared through the 510(k) process or to a preamendment Class III device in commercial distribution before May 28, 1976 when PMA applications were not required. t:slim G4 received FDA approval as a Class III device. t:slim X2 is currently considered a Class II device, but upon approval by the FDA of t:slim X2 with DexCom s G5 sensor integration, we anticipate that t:slim X2 will thereafter also be considered a Class III device.

We first obtained 510(k) clearance for t:slim in November 2011. Subsequently, in October 2014, we received 510(k) clearance for the updated t:slim, which included software modifications for feature enhancements. t:slim is one of the first insulin pumps to be cleared under the FDA s Infusion Pump Improvement Initiative. Infusion pumps are one of the most commonly recalled categories of medical devices, often as a result of deficiencies in device design and engineering. The Infusion Pump Improvement Initiative is intended to improve the current pre-market and post-market regulatory processes and requirements associated with infusion pumps and other home use medical devices. As part of this effort, the FDA is reviewing the adverse event reporting and recall processes for insulin pumps.

We obtained 510(k) clearance for t:connect in February 2013 and for t:flex in January 2015. In September 2015, we received approval of our PMA for t:slim G4. In July 2016, we received FDA clearance for the Tandem Device Updater. Also in 2016, we received FDA clearance for an expanded pediatric indication for t:slim and t:slim X2, lowering its use to children ages six and older from children ages 12 and older.

A PMA application must be supported by valid scientific evidence that typically includes extensive technical, pre-clinical, clinical, manufacturing and labeling data, to demonstrate to the FDA s satisfaction the safety and efficacy of the device. A PMA application also must include a complete description of the device and its components, a detailed description of the methods, facilities and controls used to manufacture the device, and proposed labeling. After a PMA application is submitted and found to be sufficiently complete, the FDA begins an in-depth review of the submitted information. During this review period, the FDA may request additional information or clarification of information already provided. Also during the review period, an advisory panel of experts from outside the FDA may be convened to review and evaluate the application and provide recommendations to the FDA. In addition, the FDA generally will conduct a pre-approval inspection of the manufacturing facility to evaluate compliance with QSR, which requires manufacturers to implement and follow design, testing, control, documentation and other quality assurance procedures.

FDA review of a PMA application generally takes between one and three years, but may take significantly longer. The FDA can delay, limit or deny approval of a PMA application for many reasons, including:

systems may not be safe or effective to the FDA s satisfaction;

the data from pre-clinical studies and clinical trials may be insufficient to support approval;

the manufacturing process or facilities may not meet applicable requirements; and

changes in FDA approval policies or adoption of new regulations may require additional data.

If an FDA evaluation of a PMA application is favorable, the FDA will issue either an approval letter, or approvable letter, which usually contains a number of conditions that must be met in order to secure final approval of the PMA. When and if those conditions have been fulfilled to the satisfaction of the FDA, the agency will issue a PMA approval letter authorizing commercial marketing of a device, subject

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to the conditions of approval and the limitations established in the approval letter. If the FDA s evaluation of a PMA application or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. The FDA also may determine that additional tests or clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and data is submitted in an amendment to the PMA. The PMA process can be expensive, uncertain and lengthy and a number of devices for which FDA approval has been sought by other companies have never been approved by the FDA for marketing.

New PMA applications or PMA supplements may be required for modifications to the manufacturing process, labeling, device specifications, materials or design of a device that has been approved through the PMA process. PMA supplements often require submission of the same type of information as an initial PMA application, except that the supplement is limited to information needed to support any changes from the device covered by the approved PMA application and may or may not require as extensive technical or clinical data or the convening of an advisory panel.

Clinical trials are typically required to support a PMA application and are sometimes required for a 510(k) clearance. These trials generally require submission of an application for an Investigational Device Exemption, or IDE, to the FDA. The IDE application must be supported by appropriate data, such as animal and laboratory testing results, showing that it is safe to test the device in humans and that the testing protocol is scientifically sound. The IDE application must be approved in advance by the FDA for a specified number of patients, unless the product is deemed a non-significant risk device and eligible for abbreviated IDE requirements. Generally, clinical trials for a significant risk device may begin once the IDE application is approved by the FDA and the study protocol and informed consent are approved by appropriate institutional review boards at the clinical trial sites. The FDA is approval of an IDE allows clinical testing to go forward, but it does not bind the FDA to accept the results of the trial as sufficient to prove the product is safety and efficacy, even if the trial meets its intended success criteria. All clinical trials must be conducted in accordance with the FDA is IDE regulations that govern investigational device labeling, prohibit promotion, and specify an array of recordkeeping, reporting and monitoring responsibilities of study sponsors and study investigators. Clinical trials must further comply with the FDA is regulations for institutional review board approval and for informed consent and other human subject protections. Required records and reports are subject to inspection by the FDA. The results of clinical testing may be unfavorable or, even if the intended safety and efficacy success criteria are achieved, may not be considered sufficient for the FDA to grant approval or clearance of a product. The commencement or completion of any clinical trial may be delayed or halted, or be inadequate to support approval of a PMA application, for numerous reasons, including, but no

the FDA or other regulatory authorities do not approve a clinical trial protocol or a clinical trial, or place a clinical trial on hold;
patients do not enroll in clinical trials at the rate expected;
patients do not comply with trial protocols;
patient follow-up is not at the rate expected;
patients experience adverse side effects;
patients die during a clinical trial, even though their death may not be related to the products that are part of our trial;
institutional review boards and third-party clinical investigators may delay or reject the trial protocol;
third-party clinical investigators decline to participate in a trial or do not perform a trial on the anticipated schedule or consistent with the clinical trial protocol, good clinical practices or other FDA requirements:

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we or third-party organizations do not perform data collection, monitoring and analysis in a timely or accurate manner or consistent with the clinical trial protocol or investigational or statistical plans;

third-party clinical investigators have significant financial interests related to us or our study that the FDA deems to make the study results unreliable, or the company or investigators fail to disclose such interests;

regulatory inspections of our clinical trials or manufacturing facilities, which may, among other things, require us to undertake corrective action or suspend or terminate our clinical trials;

changes in governmental regulations or administrative actions;

the interim or final results of the clinical trial are inconclusive or unfavorable as to safety or efficacy; and

the FDA concludes that our trial design is inadequate to demonstrate safety and efficacy.

\*Other Regulatory Requirements.\*\* Even after a device receives clearance or approval and is placed in commercial distribution, numerous regulatory requirements apply. These include:

establishment registration and device listing;

QSR, which requires manufacturers, including third-party manufacturers, to follow stringent design, testing, production, control, supplier/contractor selection, complaint handling, documentation and other quality assurance procedures during all aspects of the manufacturing process;

labeling regulations that prohibit the promotion of products for uncleared, unapproved or off-label uses, and impose other restrictions on labeling, advertising and promotion;

Medical Device Reporting, or MDR, regulations, which require that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur;

voluntary and mandatory device recalls to address problems when a device is defective and could be a risk to health; and

corrections and removals reporting regulations, which require that manufacturers report to the FDA field corrections and product recalls or removals if undertaken to reduce a risk to health posed by the device or to remedy a violation of the FDCA that may present a risk to health.

Also, the FDA may require us to conduct post-market surveillance studies or establish and maintain a system for tracking our products through the chain of distribution to the patient level. The FDA and the Food and Drug Branch of the California Department of Health Services enforce regulatory requirements by conducting periodic, unannounced inspections and market surveillance. Inspections may include the manufacturing facilities of our subcontractors.

In general, failure to comply with applicable regulatory requirements can result in enforcement actions by the FDA and other regulatory agencies. These may include any of the following sanctions or consequences:

warning letters or untitled letters that require corrective action;

fines and civil penalties;

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unanticipated expenditures;
delays in approving or refusal to approve future products;
FDA refusal to issue certificates to foreign governments needed to export products for sale in other countries;
suspension or withdrawal of FDA clearance or approval;
product recall or seizure;
interruption of production;
operating restrictions;
injunctions; and

criminal prosecution.

We and our contract manufacturers, specification developers and some suppliers of components or device accessories, also are required to manufacture our products in compliance with current Good Manufacturing Practice, or GMP, requirements set forth in the QSR. The QSR requires a quality system for the design, manufacture, packaging, labeling, storage, installation and servicing of marketed devices, and it includes extensive requirements with respect to quality management and organization, device design, buildings, equipment, purchase and handling of components or services, production and process controls, packaging and labeling controls, device evaluation, distribution, installation, complaint handling, servicing, and record keeping. The FDA evaluates compliance with the QSR through periodic unannounced inspections that may include the manufacturing facilities of our subcontractors. If the FDA believes that we or any of our contract manufacturers, or regulated suppliers, are not in compliance with these requirements, it can shut down our manufacturing operations, require recall of our products, refuse to approve new marketing applications, institute legal proceedings to detain or seize products, enjoin future violations or assess civil and criminal penalties against us or our officers or other employees.

Licensure. Several states require that durable medical equipment, or DME, providers be licensed in order to sell products to patients in that state. Some of these states require that DME providers maintain an in-state location or retain a licensed pharmacist, and in those states we sell our products through a third-party distributor. Although we believe we are in compliance with applicable state regulations regarding licensure requirements, if we were found to be noncompliant, we could lose our licensure in that state, which could prohibit us from selling our current or future products to patients in that state. In addition, we are subject to certain state laws regarding professional licensure. We believe that our certified diabetes educators are in compliance with all such state laws. However, if our educators or we were to be found non-compliant in a given state, we may need to modify our approach to providing education, clinical support and customer service.

*Fraud and Abuse Laws.* There are numerous U.S. federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback laws and physician self-referral laws. Our relationships with healthcare providers and other third parties are subject to scrutiny under these laws. Violations of these laws are punishable by criminal and civil sanctions, including, in some instances, imprisonment and exclusion from participation in federal and state healthcare programs, including the Medicare, Medicaid and Veterans Administration health programs.

Federal Anti-Kickback and Self-Referral Laws. The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging of a good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid. The definition of remuneration has been broadly interpreted to include anything of

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value, including such items as gifts, discounts, the furnishing of supplies or equipment, credit arrangements, waiver of payments and providing anything at less than its fair market value. The U.S. Department of Health and Human Services, or HHS, has issued regulations, commonly known as safe harbors, that set forth certain provisions which, if fully met, will result in parties to a transaction or arrangement being assured that the transaction or arrangement does not violate the federal Anti-Kickback Statute. The failure of a transaction or arrangement to fit precisely within one or more safe harbors does not necessarily mean that it is illegal or that prosecution will be pursued. However, conduct and business arrangements that do not fully satisfy each element of an applicable safe harbor may result in increased scrutiny by government enforcement authorities such as the HHS Office of Inspector General.

The penalties for violating the federal Anti-Kickback Statute include imprisonment for up to five years, fines of up to \$25,000 per violation and possible exclusion from federal healthcare programs such as Medicare and Medicaid. Many states have adopted prohibitions similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare services reimbursed by any source, not only by the Medicare, Medicaid and other federal healthcare programs. Further, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or PPACA, amends the intent requirement of the federal Anti-Kickback Statute and certain other criminal healthcare fraud statutes. An individual or entity no longer is required to have actual knowledge of a particular statute or specific intent to violate it. The PPACA also provides that claims submitted in violation of the Anti-Kickback Statute automatically constitute false claims for purposes of the False Claims Act.

We provide the initial training to customers necessary for appropriate use of our products either through our own diabetes educators or by contracting with outside diabetes educators who have completed a Tandem pump-training course. Outside diabetes educators are reimbursed for their services at fair market value. Although we believe that these arrangements do not violate the law, regulatory authorities may determine otherwise, especially as enforcement of this law historically has been a high priority for the federal government. Noncompliance with the federal Anti-Kickback Statute could result in our exclusion from Medicare, Medicaid or other governmental programs (which could adversely affect our revenues to a material extent), restrictions on our ability to operate in certain jurisdictions, and civil and criminal penalties.

Federal law also includes a provision commonly known as the Stark Law, which prohibits a physician from referring Medicare or Medicaid patients to an entity providing designated health services, including a company that furnishes durable medical equipment, in which the physician has an ownership or investment interest or with which the physician has entered into a compensation arrangement. Violation of the Stark Law could result in denial of payment, disgorgement of reimbursements received under a noncompliant arrangement, civil penalties, and exclusion from Medicare, Medicaid or other governmental programs. Although we believe that we have structured our provider arrangements to comply with current Stark Law requirements, these arrangements may not expressly meet the requirements for applicable exceptions from the law.

The scope and enforcement of these laws is uncertain and subject to rapid change in the current environment of healthcare reform. As a result, our provider and training arrangements may ultimately be found to not comply with applicable federal law.

**Federal False Claims Act.** The Federal False Claims Act provides, in part, that the federal government may bring a lawsuit against any person whom it believes has knowingly presented, or caused to be presented, a false or fraudulent request for payment from the federal government, or who has made a false statement or used a false record to get a claim approved. In addition, amendments in 1986 to the Federal False Claims Act have made it easier for private parties to bring qui tam whistleblower

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lawsuits under the Federal False Claims Act. Qui tam actions have increased significantly in recent years, causing greater numbers of healthcare companies to have to defend a false claim action, pay fines and/or be excluded from Medicare, Medicaid or other federal or state healthcare programs as a result of an investigation arising out of such action.

On November 2, 2015, President Obama signed into law the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015, which provides for adjustments to civil money penalties. In particular, the 2015 legislation provided for an initial catch up adjustment, followed by annual adjustments thereafter. For violations of the False Claims Act that occurred on or before November 2, 2015, and for violations of the False Claims Act occurring after November 2, 2015 for which civil money penalties were assessed prior to August 1, 2016, penalties include fines ranging from \$5,500 to \$11,000 for each false claim, plus three times the amount of damages that the federal government sustained because of the false claim. For civil money penalties assessed after August 1, 2016, and on or before February 3, 2017, for violations of the False Claims Act occurring after November 2, 2015, penalties include fines ranging from \$10,781 and \$21,563 per claim, plus three times the amount of damages that the federal government sustains because of the false claim. Finally, for civil money penalties assessed after February 3, 2017 for violations of the False Claims Act that occurred after November 2, 2015, penalties include fines ranging from \$10,957 to \$21,916.

We submit reimbursement claims to federal healthcare programs, and we also may provide some coding and billing information to purchasers of our devices. These activities, if inappropriate, could result in liability under the False Claims Act. We believe that we currently are in compliance with the federal government s laws and regulations concerning the submission of claims and the provision of coding and billing information. However, because we cannot guarantee that the government or qui tam relators will regard as inadvertent any billing errors that may be made, we may have exposure under the False Claims Act.

Civil Monetary Penalties Law. The Federal Civil Monetary Penalties Law prohibits the offering or transferring of remuneration to a Medicare or Medicaid beneficiary that the person knows or should know is likely to influence the beneficiary s selection of a particular supplier of Medicare or Medicaid payable items or services. Noncompliance can result in civil money penalties of up to \$10,000 for each wrongful act, assessment of three times the amount claimed for each item or service and exclusion from federal healthcare programs. We believe that our arrangements comply with the requirements of the Federal Civil Monetary Penalties Law.

State Fraud and Abuse Provisions. Many states have also adopted some form of anti-kickback and anti-referral laws and a false claims act. We believe that we are in conformance to such laws. Nevertheless, a determination of liability under such laws could result in fines and penalties and restrictions on our ability to operate in these jurisdictions.

Health Insurance Portability and Accountability Act of 1996. The Health Insurance Portability and Accountability Act of 1996, or HIPAA, created two new federal crimes: healthcare fraud and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private payors. A violation of this statute is a felony and may result in fines, imprisonment or exclusion from government sponsored programs. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. A violation of this statute is a felony and may result in fines or imprisonment. We believe we are in substantial compliance with HIPAA.

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*U.S. Foreign Corrupt Practices Act.* The U.S. Foreign Corrupt Practices Act, or FCPA, prohibits U.S. corporations and their representatives from offering, promising, authorizing or making corrupt payments, gifts or transfers to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business abroad. The scope of the FCPA would include interactions with certain healthcare professionals in many countries.

#### **International Regulation**

We may evaluate international expansion opportunities in the future. International sales of medical devices are subject to local government regulations, which vary substantially from country to country. The time required to obtain approval in another country may be longer or shorter than that required for FDA approval, and the requirements may differ. There is a trend towards harmonization of quality system standards among the European Union, United States, Canada and various other industrialized countries.

The primary regulatory body in Europe is that of the European Union, which includes most of the major countries in Europe. Other countries, such as Switzerland, have voluntarily adopted laws and regulations that mirror those of the European Union with respect to medical devices. The European Union has adopted numerous directives and standards regulating the design, manufacture, clinical trials, labeling and adverse event reporting for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be commercially distributed throughout Europe. The method of assessing conformity varies depending on the class of the product, but normally involves a combination of self-assessment by the manufacturer and a third-party assessment by a Notified Body. This third-party assessment may consist of an audit of the manufacturer s quality system and specific testing of the manufacturer s product. An assessment by a Notified Body of one country within the European Union is required in order for a manufacturer to commercially distribute the product throughout the European Union. Additional local requirements may apply on a country-by-country basis. Outside of the European Union, regulatory approval would need to be sought on a country-by-country basis in order for us to market our products.

#### **Employees**

As of December 31, 2016, we had 591 full-time employees. None of our employees are represented by a collective bargaining agreement, and we have never experienced any work stoppage. We believe we have good relations with our employees.

#### **Additional Information**

We were incorporated in Colorado in January 2006 and reincorporated in Delaware in January 2008. Our website address is <a href="https://www.tandemdiabetes.com">www.tandemdiabetes.com</a>. We post links to our website to the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the SEC: annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements, information statements, beneficial ownership reports and any amendments to those reports or statements filed or furnished pursuant to Sections 13(a), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or Exchange Act. All such filings are available through our website free of charge. However, the information contained on or accessed through our website does not constitute part of this prospectus, and references to our website address in this prospectus are inactive textual references only.

Our filings may also be read and copied at the SEC s Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains an internet site at <a href="https://www.sec.gov">www.sec.gov</a> that contains periodic and current reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

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#### MANAGEMENT

#### **Executive Officers and Directors**

The following table sets forth information concerning our executive officers and directors as of March 7, 2017:

Name	Age	Position
Kim D. Blickenstaff	64	Director, President and Chief Executive Officer
John Cajigas	51	Executive Vice President, Chief Financial Officer and Treasurer
John F. Sheridan	61	Executive Vice President and Chief Operating Officer
Brian B. Hansen	49	Executive Vice President and Chief Commercial Officer
David B. Berger	47	Executive Vice President, General Counsel and Secretary
Susan M. Morrison	37	Chief Administrative Officer
Dick P. Allen <sup>(1)</sup>	72	Director, Chairman of the Board
Edward L. Cahill <sup>(1)</sup>	63	Director
Fred E. Cohen, M.D., D.Phil.,		
F.A.C.P. <sup>(3)</sup>	60	Director
Howard E. Greene, Jr. (2)	74	Director
Douglas A. Roeder <sup>(2)(3)</sup>	46	Director
Jesse I. Treu, Ph.D. <sup>(2)(3)</sup>	69	Director
Christopher J. Twomey <sup>(1)</sup>	57	Director

<sup>(1)</sup> Member of the audit committee.

The following are biographical summaries of the experience of our executive officers and directors:

### **Executive Officers**

Kim D. Blickenstaff has served as our President and Chief Executive Officer and as one of our directors since September 2007. Prior to joining our company, Mr. Blickenstaff served as Chairman and Chief Executive Officer of Biosite Incorporated, or Biosite, a provider of medical diagnostic products, from 1988 until its acquisition by Inverness Medical Innovations, Inc. in June 2007. Mr. Blickenstaff previously served as a director of Medivation, Inc. (NASDAQ: MDVN) from 2005 to 2016, until its acquisition by Pfizer, and as a director of DexCom, Inc. (NASDAQ: DXCM), a provider of glucose monitoring systems, from June 2001 to September 2007. Mr. Blickenstaff was formerly a certified public accountant and has more than 20 years of experience overseeing the preparation of financial statements. He received a B.A. in Political Science from Loyola University, Chicago, and an M.B.A. from the Graduate School of Business, Loyola University, Chicago.

We believe Mr. Blickenstaff brings to our board of directors valuable perspective and experience as our President and Chief Executive Officer, extensive experience at the board level of various healthcare companies, as well as leadership skills, industry experience and knowledge that qualify him to serve as one of our directors.

John Cajigas has served as our Chief Financial Officer and Treasurer since May 2008 and as Executive Vice President since January 2016. Prior to joining our company, Mr. Cajigas served in various accounting and finance positions, most recently as Vice President, Finance, of Biosite from August 1995

<sup>(2)</sup> Member of the Compensation committee.

<sup>(3)</sup> Member of the nominating and corporate governance committee.

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until August 2007. Prior to joining Biosite, Mr. Cajigas worked as an Audit Manager with Ernst & Young LLP, working primarily with clients in the technology and biotechnology industries. Mr. Cajigas is a certified public accountant (inactive) and holds a B.S. in Business Administration (Accounting) from San Diego State University.

John F. Sheridan has served as Our Executive Vice President and Chief Operating Officer since April 2013. Prior to joining our company, Mr. Sheridan served as Chief Operating Officer of Rapiscan Systems, Inc., a provider of security equipment and systems, from March 2012 to February 2013. Mr. Sheridan served as Executive Vice President of Research and Development and Operations for Volcano Corporation, a medical technology company, from November 2004 to March 2010. From May 2002 to May 2004, Mr. Sheridan served as Executive Vice President of Operations at CardioNet, Inc., a medical technology company, now operating as BioTelemetry, Inc. (NASDAQ: BEAT). From March 1998 to May 2002, he served as Vice President of Operations at Digirad Corporation, a medical imaging company. Mr. Sheridan holds a B.S. in Chemistry from the University of West Florida and an M.B.A. from Boston University.

Brian B. Hansen has served as our Executive Vice President and Chief Commercial Officer since February 2016. Prior to joining our company, Mr. Hansen served from September 2014 as Chief Commercial Officer of Adaptive Biotechnologies Corp. From May 2013 to September 2014, Mr. Hansen served as Head of Commercial, Sales and Marketing, of Genoptix, a Novartis Company. From December 2005 to February 2013, he served in various roles of increasing responsibility at Gen-Probe, Inc., a medical diagnostics company, most recently serving as Senior Vice President, Global Sales and Services from January 2012 to February 2013. Mr. Hansen received an M.B.A. from the School of Business at San Diego State University and a B.S. in Business Administration from the University of Missouri Columbia.

David B. Berger has served as our General Counsel since August 2013, as our Corporate Secretary since January 2015, and as our Executive Vice President since January 2016. Prior to joining our company, from January 2008 until August 2013, he served as Vice President and General Counsel of Senomyx, Inc. (NASDAQ: SNMX), a flavor technology company, and was promoted to Senior Vice President in January 2012. He served as Corporate Secretary of Senomyx from January 2008 until May 2014. From April 2003 until October 2007, Mr. Berger was responsible for all commercial aspects of legal affairs at Biosite. At Biosite, Mr. Berger most recently held the position of Vice President, Legal Affairs. Previously, Mr. Berger was an attorney at Cooley Godward LLP and Amylin Pharmaceuticals, Inc. Mr. Berger holds a B.A. in Economics from the University of California, Berkeley and a J.D. from Stanford Law School.

Susan M. Morrison has served as our Chief Administrative Officer since September 2013. From April 2013 until September 2013, she served as our Vice President, Human Resources, Corporate and Investor Relations. Ms. Morrison served as our Director, Corporate and Investor Relations, from January 2009 to March 2013, and was our Director, Corporate Services from November 2007 to December 2008. Prior to joining our company, Ms. Morrison held various positions in Corporate and Investor Relations at Biosite from August 2003 through November 2007. Ms. Morrison holds a B.A. in Public Relations from Western Michigan University.

#### Directors

Biographical information for Kim D. Blickenstaff is set forth above under the heading Executive Officers.

Dick P. Allen has served on our board of directors since July 2007. Mr. Allen was the President of DIMA Ventures, Inc., a private investment firm providing seed capital and board-level support for start-up companies in the healthcare field, until July 2009. Mr. Allen was a co-founder of Caremark, Inc., a home

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infusion therapy company that was later acquired by Baxter International and served as a Vice President from its inception in 1979 until 1986. Mr. Allen was also a co-founder and director of Pyxis Corporation, which was later acquired by Cardinal Health, Inc. Mr. Allen served as Chairman of the Board of JDRF International from July 2012 until June 2014. Mr. Allen was also a Lecturer at the Stanford University Graduate School of Business for a total of 13 years. Mr. Allen holds a B.S. in Industrial Administration from Yale University and an M.B.A. from Stanford University Graduate School of Business.

We believe Mr. Allen s background in management and on boards of directors of companies in the healthcare industry, as well as his long-term investing experience, brings to our board critical skills related to financial oversight of complex organizations, strategic planning, and corporate governance and qualify him to serve as one of our directors.

Edward L. Cahill has served on our board of directors since May 2009. Mr. Cahill has served as Managing Partner of HLM Venture Partners, a venture capital firm that invests primarily in emerging companies focused on healthcare information technology, healthcare services and medical technology, since May 2000. He served as a director of Animas Corporation, a developer of external insulin pumps, from March 2001 until its acquisition by Johnson & Johnson in February 2006. From June 1995 to May 2000, Mr. Cahill served as a founding partner of Cahill, Warnock Company (now Camden Partners), a venture capital firm based in Baltimore. Previously, Mr. Cahill was a Managing Director of Alex Brown & Sons, an investment services brokerage, where he led the firm shealthcare group from January 1986 through March 1995. From January 1999 until August 2014, Mr. Cahill was a director of Masimo Corporation (NASDAQ: MASI), a medical technology company. He is also a director of several privately held healthcare companies and serves as a trustee of Johns Hopkins Medicine, Johns Hopkins Health System and Mercy Health Services. Mr. Cahill holds an A.B. in American Civilization from Williams College and a Masters of Public and Private Management from Yale University.

We believe Mr. Cahill s diverse and extensive experience on boards of directors and in management, which has included public and private companies in the life sciences industry, provides him with key skills in working with directors, understanding board process and functions and working with financial statements. We also believe that he brings to our board his long-term investing experience with numerous companies in the healthcare and biotechnology industries, as well as a strong financial background, all of which qualify him for service on our board of directors.

Fred E. Cohen, M.D., D.Phil., F.A.C.P. has served on our board of directors since June 2013. Dr. Cohen is a Senior Advisor of TPG, a private equity firm he joined in 2001, and serves as co-head of TPG s biotechnology group. Dr. Cohen was a Professor of Cellular and Molecular Pharmacology at the University of California, San Francisco (UCSF) from 1988 until 2014. From 1995 to 2001, Dr. Cohen served as the Chief of the Division of Diabetes, Endocrinology and Metabolism in the Department of Medicine of UCSF. Dr. Cohen also serves as a director of BioCryst Pharmaceuticals, Inc. (NASDAQ: BCRX), CareDx, Inc. (NASDAQ: CDNA), Five Prime Therapeutics, Inc. (NASDAQ: FPRX), Genomic Health, Inc. (NASDAQ: GHDX), Roka Bioscience, Inc. (NASDAQ: ROKA), and Veracyte, Inc. (NASDAQ: VCYT). In addition, Dr. Cohen serves as a director of several privately held companies. Dr. Cohen holds a B.S. in Molecular Biophysics and Biochemistry from Yale University, a D.Phil. in Molecular Biophysics from Oxford University and an M.D. from Stanford University.

We believe Dr. Cohen s diverse and extensive experience on boards of directors and in management, which has included public and private companies in the life sciences industry, provides him with key skills in working with directors, and understanding board process and functions. We also believe he brings to our board his long-term investing experience with numerous companies in the healthcare and biotechnology industries, including serving on public company audit committees.

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Howard E. Greene, Jr. has served on our board of directors since January 2008. Mr. Greene is an entrepreneur who has participated in the founding and management of 11 medical technology companies over 25 years, including three companies for which he served as chief executive officer. He was the co-founder of Amylin Pharmaceuticals, Inc., a public pharmaceutical company that was acquired by Bristol Myers Squibb in August 2012, serving as the Chief Executive Officer of that company from 1987 to 1996. He also served as a director of Amylin Pharmaceuticals from 1987 to April 2009. Mr. Greene also served on the board of directors of Biosite from June 1989 until its sale in 2007. From 1986 until 1993, Mr. Greene was a founding general partner of Biovest Partners, a seed venture capital firm. He was Chief Executive Officer of Hybritech Incorporated from March 1979 until its acquisition by Eli Lilly & Co. in March 1986, and he was co-inventor of Hybritech s patented monoclonal antibody assay technology. Prior to joining Hybritech, he was an executive with the medical diagnostics division of Baxter Healthcare Corporation and a consultant with McKinsey & Company. Mr. Greene holds a B.A. in Physics from Amherst College and an M.B.A. from Harvard Business School.

We believe Mr. Greene s background as a Chief Executive Officer and director of publicly-traded biotechnology companies, his extensive experience at the executive and board level in multiple companies in the medical technology industry, and his long-term investing experience, brings to our board critical skills related to financial oversight of complex organizations, strategic planning, and corporate governance and qualify him to serve as one of our directors.

Douglas A. Roeder has served on our board of directors since May 2009. Mr. Roeder joined Delphi Ventures as an Associate in 1998, and has been a Partner since 2000, focusing on medical devices, diagnostics and biotechnology. Prior to joining Delphi Ventures, Mr. Roeder was an Associate with Alex Brown s Healthcare Investment Banking Group in San Francisco, where he focused on the medical device, life sciences and healthcare services industries. Mr. Roeder serves as a director of Senseonics Holdings, Inc. (NYSE-MKT: SENS), a continuous glucose monitoring company, and several privately held companies. He previously served as a director of Trivascular Technologies, Inc., a medical device company, which was acquired by Endologix, Inc. (NASDAQ: ELGX) in February 2016. He also previously worked with Putnam Associates, a strategy consulting firm focused on the pharmaceutical and biotechnology industries. Mr. Roeder holds an A.B. in Biochemistry from Dartmouth College.

We believe Mr. Roeder s experience on several boards of directors of companies in the life sciences industry, provides him with key skills in working with directors, understanding board process and functions and working with financial statements. We also believe that he brings to our board his long-term investing experience with numerous companies in the healthcare and medical device industries, all of which qualify him for service on our board.

Jesse I. Treu, Ph.D. has served on our board of directors since June 2008. Dr. Treu has been a Partner of Domain Associates, L.L.C. since its inception in 1985, and is currently a Managing Member. Dr. Treu has been a director of over 35 early-stage healthcare companies and has also previously served as a founder, president and chairman of numerous venture-stage companies. Dr. Treu currently serves as a director of Aldeyra Pharmaceuticals, Inc. (NASDAQ: ALDX) and Veracyte, Inc. (NASDAQ: VCYT), as well as several privately held companies. Dr. Treu also serves as a member of the Princeton Healthcare System Board of Trustees. Prior to the formation of Domain Associates, Dr. Treu had 12 years of experience working in the healthcare industry. Dr. Treu previously held positions with The Wilkerson Group and its venture capital arm, CW Ventures, and General Electric Company. Dr. Treu received his B.S. in Physics from Rensselaer Polytechnic Institute and his M.A. and Ph.D. in physics from Princeton University.

We believe Dr. Treu s extensive experience as an officer and member of the board of directors of several companies in the healthcare industry brings to our board valuable industry expertise, understanding of financial statements, and significant executive management experience and leadership skills, as well as a strong understanding of corporate governance principles.

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Christopher J. Twomey has served on our board of directors since July 2013. From March 1990 until his retirement in 2007, Mr. Twomey held various positions with Biosite, most recently serving as Senior Vice President, Finance and Chief Financial Officer. From 1981 to 1990, Mr. Twomey worked for Ernst & Young LLP, where he served as an Audit Manager. Mr. Twomey has also served as a director of Senomyx since March 2006 and is chair of that company s audit committee. Mr. Twomey also served as a director and chair of the audit committee of Cadence Pharmaceuticals, Inc., from July 2006 until it was acquired by Mallinckrodt plc in March 2014. Mr. Twomey holds a B.A. in Business Economics from the University of California, Santa Barbara.

We believe Mr. Twomey s experience in senior financial management and on boards of directors of companies in the life sciences industry, as well as his long-term accounting and auditing experience, brings to our board critical skills related to financial oversight of complex organizations, strategic planning, and corporate governance.

#### **Director Independence**

Our board of directors has affirmatively determined that each of Drs. Fred E. Cohen and Jesse I. Treu, and Messrs. Dick P. Allen, Edward L. Cahill, Howard E. Greene, Jr., Douglas A. Roeder, and Christopher J. Twomey meet the definition of independent director under the applicable SEC rules and NASDAQ Listing Rules.

### **Family Relationships**

There are no family relationships between any director, executive officer or person nominated to become a director or executive director.

#### **Board of Directors**

We currently have eight directors and we have one vacancy. Our board of directors is divided into three classes, as follows:

Class I, which consists of Kim D. Blickenstaff, Howard E. Greene, Jr. and Christopher J. Twomey, whose terms will expire at our annual meeting of stockholders to be held in 2017;

Class II, which consists of Dick P. Allen, Edward L. Cahill and one vacant position, whose terms will expire at our annual meeting of stockholders to be held in 2018; and

Class III, which consists of Fred E. Cohen, Douglas A. Roeder and Jesse I. Treu, whose terms will expire at our annual meeting of stockholders to be held in 2019.

At each of our annual meetings of stockholders, each director in the class up for election shall be elected for a term of three years and serve until a successor is duly elected and qualified or until his or her earlier death, resignation or removal. Any additional directorships resulting from an increase in the number of directors or a vacancy may be filled by the directors then in office. Directors may only be removed with cause by the affirmative vote of at least a majority of the shares then entitled to vote at an election of directors. Because only a portion of our directors will be elected at each annual meeting, two consecutive annual meetings of stockholders could be required for the stockholders to change a majority of the board.

Our current and future executive officers and significant employees serve at the discretion of our board of directors.

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### Board Leadership Structure and Board's Role in Risk Oversight

The positions of chairman of the board and chief executive officer are presently separated. We believe that separating these positions allows our chief executive officer to focus on our day-to-day business, while allowing the chairman of the board to lead our board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the chief executive officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as our board of directors—oversight responsibilities continue to grow. While our amended and restated bylaws and nominating and corporate governance committee charter do not require that our chairman and chief executive officer positions be separate, our board of directors believes that having separate positions is the appropriate leadership structure for us at this time and demonstrates our commitment to good corporate governance.

Risk is inherent in every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our operations, strategic direction and intellectual property, which are discussed in the section entitled Risk Factors beginning on page 13 of this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of our board of directors in overseeing the management of our risks is realized primarily through committees of our board of directors, as disclosed in the descriptions of each of the committees below and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting.

### Committees of our Board of Directors

Our board of directors has three standing committees: the audit committee, the compensation committee, and the nominating and corporate governance committee. In addition, from time to time, special committees may be established under the direction of our board of directors when necessary to address specific issues.

Each of the three standing committees has a written charter that has been approved by our board of directors. A copy of each charter is available on our website at <a href="http://investor.tandemdiabetes.com/governance.cfm">http://investor.tandemdiabetes.com/governance.cfm</a>. However, the information contained on our website is not incorporated by reference in, or considered part of, this prospectus.

#### Audit Committee

We have an audit committee consisting of Christopher J. Twomey (Chair), Dick P. Allen and Edward L. Cahill, each of whom has been determined to be an independent director under applicable SEC rules and the applicable NASDAQ Listing Rules. Our board of directors has affirmatively determined that Mr. Twomey is designated as an audit committee financial expert.

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The audit committee s responsibilities include:

appointing, terminating, compensating and overseeing the work of any independent auditor engaged to prepare or issue an audit report or to provide other audit, review or attest services;

reviewing all audit and non-audit services to be performed by the independent auditor, taking into consideration whether the independent auditor s provision ofion-audit services to us is compatible with maintaining the independent auditor s independence;

reviewing and discussing the adequacy and effectiveness of our accounting and financial reporting processes and internal controls and the audits of our financial statements;

establishing and overseeing procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters, including procedures for the confidential, anonymous submission by our employees regarding questionable accounting or auditing matters;

investigating any matter brought to its attention within the scope of its duties and engaging independent counsel and other advisors as the audit committee deems necessary;

determining the compensation of the independent auditors, and of other advisors hired by the audit committee;

reviewing and discussing with management and the independent auditor the annual and quarterly financial statements prior to their release;

monitoring and evaluating the independent auditor s qualifications, performance and independence on an ongoing basis;

reviewing reports to management prepared by the internal audit function, as well as management s response;

reviewing and assessing, on an annual basis, the adequacy of the audit committee s formal written charter;

reviewing related party transactions for potential conflict of interest situations on an ongoing basis, and approving or rejecting such transactions; and

overseeing such other matters that are specifically delegated to the audit committee by our board of directors from time to time. *Compensation Committee* 

We have a compensation committee consisting of Douglas A. Roeder (Chair), Howard E. Greene, Jr. and Jesse I. Treu, each of whom has been determined to be an independent director under applicable SEC rules and the applicable NASDAQ Listing Rules.

The compensation committee s responsibilities include:

developing, reviewing, and approving our overall compensation programs, and regularly reporting to the full board of directors regarding the adoption of such programs;

developing, reviewing and approving our cash and equity incentive plans, including approving individual grants or awards thereunder, with the exception of grants or awards to our chief executive officer which must be approved by our independent directors, and regularly reporting to the full board of directors regarding the terms of such plans and individual grants or awards;

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reviewing and approving individual and Company performance goals and objectives that may be relevant to the compensation of executive officers and other key employees;

reviewing and approving the terms of any employment agreement, severance or change in control arrangements, or other compensatory arrangement with any executive officers or other key employees, with the exception of our chief executive officer for whom any such arrangements must be approved by our independent directors;

reviewing and discussing with management the tables and narrative discussion regarding executive officer and director compensation to be included in the annual proxy statement;

reviewing and assessing, on an annual basis, the adequacy of the compensation committee s formal written charter; and

overseeing such other matters that are specifically delegated to the compensation committee by our board of directors from time to time.

Nominating and Corporate Governance Committee

We have a nominating and corporate governance committee consisting of Jesse I. Treu (Chair), Douglas A. Roeder and Fred E. Cohen, each of whom has been determined to be an independent director under applicable SEC rules and the applicable NASDAQ Listing Rules.

The nominating and corporate governance committee s responsibilities include:

identifying and screening candidates for our board of directors, and recommending nominees for election as directors;

assessing, on an annual basis, the performance of our board of directors and any committee thereof;

overseeing overall business risk and acquiring insurance policies;

reviewing the structure of the board s committees and recommending to the board for its approval directors to serve as members of each committee, including each committee s respective chair, if applicable;

reviewing and assessing, on an annual basis, the adequacy of the nominating and corporate governance committee s formal written charter; and

generally advising our board of directors on corporate governance and related matters.

### **Compensation Committee Interlocks and Insider Participation**

None of our executive officers serves as a member of our board of directors or compensation committee (or other committee performing equivalent functions) of any entity that has one or more executive officers serving on our board of directors or compensation committee. No interlocking relationship exists between any member of our board of directors and any member of the compensation committee (or other committee performing equivalent functions) of any other company.

We have entered into an indemnification agreement with each of our directors, including Messrs. Roeder and Greene and Dr. Treu, who comprise our compensation committee. For additional information, see the section entitled Certain Relationships and Related Party Transactions Indemnification Agreements with our Directors and Officers of this prospectus.

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#### **Codes of Conduct and Ethics**

We have adopted a code of ethics that applies to our chief executive officer and other senior financial officers (our chief financial officer, vice president of finance and other senior financial officers performing similar functions), which is designed to meet the requirements of Item 406 of Regulation S-K. We have also adopted a code of ethics that applies to all of our employees, officers and directors, which is designed to meet the requirements of the applicable NASDAQ Listing Rules. Each of these documents is available on our website at <a href="http://investor.tandemdiabetes.com/governance.cfm">http://investor.tandemdiabetes.com/governance.cfm</a>. However, the information contained on our website is not incorporated by reference in, or considered part of, this prospectus.

#### **Director Compensation**

During 2016, pursuant to our director compensation program, we paid our non-employee directors a cash retainer for service on our board of directors and an additional amount for service on each committee of which the director is a member. The chairman of our board of directors, and the chairman of each committee, receives a higher retainer for such service. Under the program, the annual fees paid to non-employee directors for service on our board of directors, and for service on each committee of our board of directors of which the director is a member, were as follows:

	Member	Chairman
	Annual	Annual
	Retainer	Retainer
Board of Directors	\$ 44,000	\$ 88,000
Audit Committee	8,500	23,000
Compensation Committee	6,000	17,000
Nominating and Corporate Governance Committee	5,000	9,000

Under our director compensation program, each non-employee director receives an option to purchase 25,000 shares of our common stock upon his or her initial election to our board of directors. Each of these options vest in equal monthly installments over a period of 36 months following the grant date, subject to the individual s continued service as a director. Further, annually on November 15 of each year (or on the next business day if the 15th is a day on which financial markets are not operating), each non-employee director then serving on our board of directors will receive an option to purchase an additional 17,000 shares of our common stock (subject to pro-ration for each full month of service on our board of directors prior to such date). Each of these options will vest in equal monthly installments over a period of 12 months following the grant date, subject to the individual s continued service as a director. The exercise price of all options granted to ounon-employee directors will equal the closing price of our common stock on the date of grant. In November 2016, each non-employee director then serving on our board of directors received an option to purchase 17,000 shares of our common stock in accordance with the terms of our director compensation program, as described above.

We reimburse our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending our board of director and committee meetings.

In June 2014, we implemented the Tandem Diabetes Care, Inc. Deferred Compensation Plan, or the Deferred Compensation Plan. Each of our non-employee directors is eligible to participate in the Deferred Compensation Plan and is able to elect to defer up to 100% of his cash retainer into the plan. During 2016, none of our non-employee directors elected to participate in the Deferred Compensation Plan.

Our director compensation program is intended to provide a total compensation package that enables us to attract and retain qualified and experienced individuals to serve as directors and to align our directors interests with those of our stockholders.

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All stock options or other equity awards to non-employee directors have been, and are expected to continue to be, made pursuant to the 2013 Plan. For additional information, see the section entitled Executive Compensation 2013 Stock Incentive Plan of this prospectus.

## **Director Compensation Table**

The following table sets forth compensation information with respect to our non-employee directors that served on the board of directors in 2016, and that are still members of the board of directors, for amounts earned during 2016:

	Fees Ea	rned or Paid in			
Name	(	Cash (\$)	Options	s Awards(\$) <sup>(1)</sup>	Total
Dick P. Allen	\$	96,500	\$	16,913	\$ 113,413
Edward L. Cahil	\$	52,500	\$	16,913	\$ 69,413
Fred E. Cohen, M.D., D.Phil., F.A.C.P.	\$	49,000	\$	16,913	\$ 65,913
Howard E. Greene, Jr.	\$	50,000	\$	16,913	\$ 66,913
Douglas A. Roeder	\$	66,000	\$	16,913	\$ 82,913
Jesse I. Treu, Ph.D.	\$	59,000	\$	16,913	\$ 75,913
Christopher J. Twomey	\$	67,000	\$	16,913	\$ 83,913

<sup>(1)</sup> The dollar amounts listed do not necessarily reflect the dollar amounts of compensation actually realized, or that may be realized, by our non-employee directors. These amounts reflect the grant date fair value of the options awarded to each of our non-employee directors calculated in accordance with FASB ASC Topic 718. Information regarding calculation of the award value of these stock options, including assumptions and methodologies to value the option grants, can be found in Note 6 of the Notes to Financial Statements in the financial statements and the related notes included elsewhere in this prospectus.

#### **EXECUTIVE COMPENSATION**

This narrative discussion of the compensation philosophy, objectives, policies and arrangements that apply to our named executive officers and other senior management personnel is intended to assist your understanding of, and to be read together with, the Summary Compensation Table and related disclosures set forth below.

#### Named Executive Officers

For 2016, our named executive officers included our principal executive officer, our principal financial officer and our two other most highly compensated executive officers serving as of the end of the year. For 2016, our named executive officers were:

Kim D. Blickenstaff, who currently serves as our President and Chief Executive Officer, as well as a member of our board of directors, and is our principal executive officer;

John Cajigas, who currently serves as our Executive Vice President, Chief Financial Officer and Treasurer, and is our principal financial officer:

Brian B. Hansen, who currently serves as our Executive Vice President and Chief Commercial Officer; and

John F. Sheridan, who currently serves as our Executive Vice President and Chief Operating Officer.

#### **Compensation Philosophy and Objectives**

The primary objective of our executive compensation program is to attract and retain talented executives with the skills necessary to lead us and create long-term value for our stockholders. We recognize that there is significant competition for talented executives, especially in the medical device industry, and it can be particularly challenging for early-stage companies to recruit experienced executives. When establishing our executive compensation program, our compensation committee, which we refer to as the committee for purposes of this Executive Compensation section, is guided by the following four principles:

attract executives with the background and experience required for our future growth and success;

provide a total compensation package that is competitive with other companies in the medical device industry that are similar to us in size and stage of growth;

align the interests of our executives with those of our stockholders by tying a meaningful portion of total compensation to increases in our value through the grant of equity-based awards; and

tie a meaningful portion of potential total compensation to the achievement of our performance objectives, such as annual revenue, which can increase or decrease to reflect achievement with respect to the objectives.

The committee is primarily responsible for developing, reviewing and approving our compensation programs, including the compensation arrangements that apply to our named executive officers, and regularly reporting to our board of directors regarding the adoption of such programs. In particular, the committee is responsible for overseeing our cash and equity incentive plans, including approving individual grants or awards thereunder, with the exception of compensation arrangements for our chief executive officer which must be approved by our independent directors. The committee is also responsible for approving individual and company performance goals and objectives that are relevant to the compensation of our executive officers and other key employees.

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The committee evaluates the total compensation of our named executive officers and other executives relative to available compensation information from companies in our industry that are similar to us in size and stage of growth. The committee s historical practice has been to benchmark our executive salaries just above market at the 60th percentile compared to relevant survey data, in order to compete in the market for talented executives.

The committee has not established any formal policies or guidelines for allocating between long-term and currently-paid compensation, or between cash and non-cash compensation. In determining the amount and mix of compensation elements and whether each element provides the correct incentives in light of our compensation objectives, the committee relies on its judgment and experience rather than adopting a formulaic approach to compensation decisions.

Since our initial public offering in November 2013, the committee has authorized our management team to engage Barney & Barney to provide compensation consulting services directly to the committee. These services have included advising the committee on the selection of an appropriate peer group of other publicly traded healthcare companies, collecting and analyzing compensation data from those companies, and performing an independent review of our compensation practices for both our executive officers, as well as our non-employee directors, as compared to the peer group. Our compensation arrangements for 2016 were based on services provided during 2015 and early 2016. Our peer group for this analysis, which we refer to as our 2016 peer group, was selected primarily based on the peer companies—similarities to us as of the time that the survey was performed, based on factors such as revenue, market capitalization, nature of operations, number of employees and location. In selecting our 2016 peer group, the committee also expressed its desire to generally maintain consistency between this group and our peer group from the previous year, but also acknowledged that some of the companies in the previous peer group had been acquired or experienced significant changes in certain factors that would no longer make them appropriate peers at the time that our 2016 peer group was selected.

Following a review and discussion of the composition of the proposed peer group, for the purpose of making decisions that established executive officer compensation in 2016, our peer group was comprised of the 23 companies in the medical device and biotechnology industries listed below, of which 15 were also part of our peer group in the prior year. With respect to Insulet, in particular, the committee recognized that the company is significantly larger than us based on revenue, market capitalization and number of employees, but determined that it should be included in our 2016 peer group because of its strong similarities to our operations and target customers.

AtriCure Entellus Medical Intersect ENT Sequenom Atrion Exactech Invuity Sientra

BioTelemetry Fluidigm LDR Holding Trivascular Technologies
Cardiovascular Systems Genmark Diagnostics Nevro Vascular Solutions
Cutera Inogen Orexigen Therapeutics Zeltiq Aesthetics
Endologix Insulet Quidel

Barney & Barney also provided insurance brokerage services to us during 2014, 2015 and 2016 and continues to do so. In particular, during 2015 and 2016, Barney & Barney earned commission payments totaling approximately \$323,000 and \$377,000, respectively, in connection with insurance brokerage services that they provided to us during the year. We also paid Barney & Barney approximately \$32,000 for the compensation consulting services described above during 2015 and early 2016. The committee has considered whether the work of Barney & Barney as a compensation consultant has raised any potential conflicts of interest, taking into account the following factors: (i) the amount of fees paid by us to Barney & Barney as a percentage of that firm s total revenue, (ii) the provision of other services to us by Barney & Barney, (iii) Barney & Barney s policies and procedures that are designed to prevent conflicts of interest, (iv) any business or personal relationship of the individual compensation advisors

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with any member of the committee, (v) any business relationship of Barney & Barney or business or personal relationship of the individual compensation advisors, with any of our executive officers and (vi) any ownership of our stock by Barney & Barney or the individual compensation advisors. Based on the above factors, the committee has concluded that the work of Barney & Barney, including the work performed by the individual compensation advisors employed by Barney & Barney, has not created any conflict of interest.

#### **Compensation Elements**

In light of the committee s review of the information provided by Barney & Barney as set forth above, and in furtherance of our compensation philosophy and objectives, the executive compensation program for our named executive officers generally consists of a base salary, a cash incentive program, equity-based awards and other benefits.

## Base Salary

We pay base salaries to attract and retain key executives with the necessary experience to contribute to our future growth and success. Base salaries reflect each executive officer s responsibility level, tenure with us, individual performance and business experience.

The committee establishes base salaries after reviewing industry compensation data as discussed above. In keeping with its philosophy of paying just above market salaries in order to attract executive talent and stay competitive in the market, the committee generally sets base salaries at approximately the 60th percentile of the base salaries paid to executives with similar titles and levels of responsibility at the surveyed companies. Salaries are then reviewed periodically and adjusted as the committee deems necessary in response to updated data regarding comparable market salaries, as well as factors such as individual performance and responsibility level.

In January 2016, based on the authority delegated to it by the board of directors, the committee approved the following base salaries for each of our named executive officers that were employed at that time:

	2016 Base
Name	Salary <sup>(1)</sup>
Kim D. Blickenstaff	\$ 583,495
John Cajigas	\$ 375,000
Brian B. Hansen <sup>(2)</sup>	\$ 375,000
John F. Sheridan	\$ 375,000

<sup>(1)</sup> Effective on March 5, 2016.

## Cash Bonus Awards

For 2016, we adopted a cash incentive program, or the 2016 Cash Bonus Plan, that applied to each of our executive officers, as well as to certain other senior management personnel. The committee approved the 2016 Cash Bonus Plan because it believes that aligning the payment of cash incentives with the achievement of a specified company performance objective creates long-term value for us and aligns the compensation of our executive officers with the interests of our stockholders.

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<sup>(2)</sup> Mr. Hansen s base salary was approved by the committee in January 2016 among other terms within his employment offer letter. Mr. Hansen commenced his employment with us on February 1, 2016.

Under the terms of the 2016 Cash Bonus Plan, cash bonuses could be earned based on our achievement of specified financial performance objectives and product development milestones. The 2016 base salary, target percentage and resulting target cash bonus amount for each named executive officer is set forth in the table below:

Name	2016 Base Salary	Target Percentage	Target Cash Bonus
Kim D. Blickenstaff	\$ 583,495	80 % <sup>(1)</sup>	\$ 466,796
John Cajigas	\$ 375,000	50%	\$ 187,500
Brian Hansen	\$ 375,000	50 % <sup>(2)</sup>	\$ 187,500
John F. Sheridan	\$ 375,000	50%	\$ 187,500

<sup>(1)</sup> Mr. Blickenstaff s target bonus percentage will be reduced by 50% if the Financial Performance Objectives (Part II), as described below, are not met.

The percentage of the target cash bonus for each named executive officer that is subject to the financial performance objectives and product development milestones, respectively, is set forth in the table below:

Targets	Percentage of Target Bonus
Financial Performance Objectives (Part I)	60%
Financial Performance Objectives (Part II)	20%
Product Development Milestones	20%
TOTAL	100%

The financial performance components and product development components of the 2016 Cash Bonus Plan may be earned independent of one another. However, all bonus payments under the 2016 Cash Bonus Plan remain subject to the discretion of the board of directors or the committee. The plan provided that if we did not achieve any portion of any of the financial performance components or the product development components, no payouts would be made unless the board of directors or the committee, in its sole discretion, determines that there are other factors that merit consideration in the determination of bonus awards, which may be determined on an individual basis.

In January, 2017, the board of directors, upon the recommendation of the committee, determined that no cash bonus payments were earned pursuant to the terms of the 2016 Cash Bonus Plan.

In January 2017, the board of directors, upon the recommendation of the committee, also approved the adoption of an alternative cash bonus award applicable to our officers, or the Cash Bonus Award. Mr. Blickenstaff, our President and Chief Executive Officer, declined to participate in the Cash Bonus Award and will not receive any cash payments pursuant to the award. The committee awarded Messrs. Cajigas, Hansen and Sheridan payments in the amounts set forth opposite their names in the table below:

Name	2016 Cash Bonus
Kim D. Blickenstaff	\$
John Cajigas	\$ 109,500
Brian B. Hansen	\$ 99,519
John F. Sheridan	\$ 109,500

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<sup>(2)</sup> Mr. Hansen s bonus will be prorated based on actual base salary earned in 2016 from his start date.

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50% of the amount earned under the Cash Bonus Award was paid on February 10, 2017. The remaining 50% will be paid on June 30, 2017 and, among other terms, is conditioned on the individual s continuous employment with us through the applicable payment date. Further, in their sole discretion, the board of directors or the committee may determine in the future that there are other factors that merit consideration in the determination of the amount and timing of payments of any Cash Bonus Award, which may be determined on an individual basis.

The committee has not approved a cash bonus plan based on 2017 performance criteria, but intends to do so in the future.

#### **Equity-Based Awards**

In keeping with our executive compensation philosophy, the committee believes that meaningful equity ownership is important to align the interests of our executives with those of our stockholders and to provide our executives with incentives to create long-term value for our stockholders. The executives interests are aligned with those of our stockholders because, as the value of our company increases over time, the value of the executives equity grants increases as well. The committee also believes that granting equity awards that vest over time promotes the retention of our executives.

Prior to the completion of our initial public offering, our outstanding equity awards were principally granted pursuant to the 2006 Plan, which allowed for the issuance of equity awards to our officers, directors and employees in the form of stock options or restricted stock. Following the completion of our initial public offering, the committee and our board of directors determined not to make any further awards under the 2006 Plan

In connection with our initial public offering, our board of directors and stockholders approved the 2013 Plan, which allows for the issuance of equity awards to our officers, directors and employees in the form of stock options, restricted stock, stock appreciation rights, or SARs, and restricted stock units, or RSUs.

When determining the number of equity awards to be granted to each executive, the committee generally considers several factors, including the position and level of responsibility of the executive, the executive s tenure with us, and survey data regarding the level of equity ownership by executives with similar titles and levels of responsibility at the surveyed companies. The committee also takes into account our achievement of significant milestones during the period prior to the grant date, such as completing financing transactions or receiving regulatory clearance or approval to commercialize products.

In February 2016, the independent directors of our board of directors approved the grant of the following number of stock options to each of our named executive officers pursuant to the 2013 Plan as follows, including an award to Mr. Hansen as an inducement for his joining our company:

	Aggregate
	Number of
	Option
Name	Awards (#)
Kim D. Blickenstaff	236,850
John Cajigas	84,600
Brian B. Hansen	135,000
John F. Sheridan	84,600

Each of the options vests over a period of 48 months, with 25% of the shares vesting on the date that is 12 months following the date of grant, and the remaining 75% of the shares vesting in equal monthly

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installments over the remaining 36 months. The number of options granted to each named executive officer was also determined by reference to the factors discussed above.

In December 2016, the independent directors of our board of directors also approved the grant of additional stock options to each of our named executive officers pursuant to the 2013 Plan as listed below. When determining the number of equity awards to be granted to each executive, in addition to the factors described above, the board of directors also considered the recent decline in our stock price and the lack of retention value of outstanding stock options held by our executive officers. However, Mr. Blickenstaff declined to participate in the grant and did not receive an award

Name	Aggregate Number of Option Awards (#)
Kim D. Blickenstaff	
John Cajigas	169,200
Brian B. Hansen	112,800
John F. Sheridan	169,200

Each of these options vests over a period of 24 months, with 50% of the shares vesting on the date that is 12 months following the date of grant, and the remaining 50% of the shares vesting in equal monthly installments over the remaining 12 months.

We expect that future equity awards will be granted to our named executive officers and other employees pursuant to the 2013 Plan. For additional information, see the section entitled Stock Incentive Plans below.

### Benefits

We have adopted a defined contribution 401(k) plan for the benefit of our employees. Employees are eligible to participate in the plan beginning on the first day of the calendar quarter following their date of hire. Under the terms of the plan, employees may make voluntary contributions as a percent of compensation. We do not match contributions at this time.

In June 2014, we adopted and approved the Deferred Compensation Plan. The Deferred Compensation Plan is a nonqualified deferred compensation program that we sponsor to provide non-employee directors and certain of our management employees designated by our board of directors the opportunity to defer compensation under the plan. The effective date for the Deferred Compensation Plan for the first year was July 1, 2014, and thereafter the plan year runs from January 1 to December 31. There is no limit on the amount that a participant may defer under the Deferred Compensation Plan, whether in a particular plan year or in the aggregate. Our board of directors may also elect to make additional discretionary contributions to be credited to the account of any or all participants in the Deferred Compensation Plan; however, no such contributions have been made since the inception of the plan. All contributions by a participant, and any discretionary contributions that we make in the future, will fully vest immediately. We established a trust for the purpose of reserving any benefits that may become payable under the Deferred Compensation Plan. Distributions from the Deferred Compensation Plan will be governed by the U.S. Internal Revenue Code of 1986, as amended, or the Code, and the terms of the plan.

We also offer a standard benefits package that we believe is necessary to attract and retain key executives. Our named executive officers are eligible to participate in our health and welfare benefit plans. We also pay the premiums for long-term disability insurance and life insurance for our named executive officers.

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### Hedging and Pledging Policy

Our Insider Trading Policy prohibits our employees, including our named executive officers, from engaging in transactions to hedge ownership of our stock, including short sales or trading in any derivatives involving our securities. We believe this policy is consistent with good corporate governance and with our pay-for-performance compensation model. Our policies also prohibit pledging of our common stock. There are no outstanding pledged shares.

#### Clawback Policy

In accordance with the provisions of Section 304 of the Sarbanes-Oxley Act of 2002, if we are required, as a result of misconduct, to restate our financial results due to our material noncompliance with any financial reporting requirements under the federal securities laws, our chief executive officer and chief financial officer may be legally required to reimburse us for any bonus or other incentive-based or equity-based compensation they received as a result of the material noncompliance. In addition, we will comply with the requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act and will adopt a compensation recovery policy once the SEC adopts final regulations on the subject.

## Tax and Accounting Considerations

Section 162(m) of the Code generally provides that a publicly held company may not deduct compensation paid to certain of its top executive officers in excess of \$1 million in a calendar year, unless such compensation qualified as performance-based compensation within the meaning of Section 162(m) of the Code. We are mindful of the benefit to us and our stockholders of the full deductibility of compensation and have taken steps so that both the cash and equity awards that we grant may qualify for deductibility under Section 162(m) of the Code. However, the committee retains the discretion to provide compensation that potentially may not be fully deductible to reward performance to enhance retention, or to otherwise further our compensation objectives, consistent with our compensation philosophy. In addition, awards that we grant that are intended to qualify as performance-based awards may not necessarily qualify for such status under Section 162(m) of the Code.

The committee also considers the impact of Section 409A of the Code, and in general, our executive plans and programs are designed to comply with the requirements of that section so as to avoid possible adverse tax consequences that may result from noncompliance.

#### **Employment Agreements**

We have not entered into employment agreements with any of our current executive officers to date.

## **Employment Arrangements**

Mr. Hansen commenced his employment with us on February 1, 2016. As a condition to his employment, Mr. Hansen relocated to San Diego, California. We paid Mr. Hansen a sign on bonus, or Sign On Bonus, and relocation bonus, or Relocation Expense Reimbursement, of \$75,000 and \$80,000, respectively, which was paid to him in cash in 2016. We entered into an Agreement for Repayment of Relocation Payments with Mr. Hansen. Under the terms of his offer letter and the Agreement for Repayment of Relocation Payments, Mr. Hansen will be required to repay his Sign On Bonus and Relocation Expense Reimbursement in full in the event of his termination of employment within 12 months following his commencement of employment, or a pro-rata portion based on the number of months for which he was employed in the event of his termination of employment within 24 months following his commencement of employment.

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#### **Employment Severance Agreements**

Our board of directors has approved employment severance agreements with all of our senior management personnel, including our named executive officers. Our board of directors believes it is important to provide our executive officers with severance benefits under limited circumstances in order to provide them with enhanced financial security and sufficient incentive and encouragement to remain employed by us.

Pursuant to the terms of each of the severance agreements, if within three months prior or 12 months following a change of control (as defined in the severance agreements), the executive officer s employment is terminated as a result of (i) an involuntary termination or (ii) a resignation for good reason (each as defined in the severance agreements), then the executive will continue to receive salary at the salary amount in effect at the time of such termination (less applicable withholdings and deductions) for the applicable severance period beginning immediately following such termination, as well as the executive s target bonus for the year in which the termination occurs. The executive will also vest in and have the right to exercise all outstanding options, restricted stock awards and SARs that were unvested as of the date of such termination. Additionally, all of our repurchase rights with respect to any vested and unvested restricted stock will lapse and any right to repurchase any of our common stock will terminate.

If within 12 months following a change of control, the executive officer s employment is terminated as a result of voluntary resignation, termination for cause, disability or death, then the executive officer will not be entitled to receive severance change of control benefits except for those as may be established under our then-existing severance and benefit plans and practices or pursuant to other written agreements between us and such executive officer.

Pursuant to the terms of each of the severance agreements, upon the termination of the executive officer s employment for any reason, we will pay the executive:

any unpaid base salary due for periods prior to the termination date;

all of the executive s accrued paid time off through the termination date; and

all expenses reasonably and necessarily incurred and submitted on proper expense reports in connection with our business prior to the termination date.

The severance agreements are substantially identical for each of the executive officers except that the severance period for Mr. Blickenstaff is 24 months and the severance period for each of Messrs. Cajigas, Hansen and Sheridan is 18 months.

The benefits payable under the severance agreements may be immediately terminated in certain circumstances, including the unauthorized use by an executive officer of our material confidential information or any prohibited or unauthorized competitive activity undertaken by an executive officer.

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#### **Summary Compensation Table**

The following table provides a summary of the compensation of our named executive officers for the fiscal years ended December 31, 2016, 2015 and 2014 as applicable:

						on-Equity ncentive			
				Option	1	Plan	All (	Other	
		Salary	Bonus	Awards	Cor	npensatior	Comp	ensation	
Name and Principal Position	Year	(\$)	$(\$)^{(1)}$	<b>(\$)</b> <sup>(2)</sup>		$(\$)^{(3)}$	(\$	(4)	Total (\$)
Kim D. Blickenstaff	2016	\$ 569,006	\$	\$ 866,656	\$		\$	2,772	\$ 1,438,434
President and Chief Executive Officer	2015	\$ 566,310	\$	\$ 1,093,333	\$	392,959	\$	2,772	\$ 2,055,374
	2014	\$ 532,692	\$	\$	\$	254,180	\$	2,774	\$ 789,646
John Cajigas Executive Vice President, Chief Financial Officer and Treasurer <sup>(5)</sup>	2016 2015		\$ 109,500 \$	\$ 523,351 \$ 390,525		156,291	\$ \$	966 630	\$ 998,817 \$ 907,825
Brian B. Hansen	2016	\$ 331,731	\$ 99,519	\$ 636,505	\$		\$ 1	80,252	\$ 1,248,007
Executive Vice President and Chief Commercial Officer <sup>(5)</sup>									
John F. Sheridan Executive Vice President and Chief Operating Officer	2016 2015 2014	\$ 365,000 \$ 360,379 \$ 347,115	\$ 109,500 \$ \$	\$ 523,351 \$ 390,525 \$		156,291 99,378	\$ \$ \$	15,637 3,105 1,808	\$ 1,013,488 \$ 910,300 \$ 448,301

- (1) These amounts reflect the Cash Bonus Award for 2016. For additional information, see the section entitled 2016 Cash Bonus Plan above. We did not pay any discretionary bonuses to our named executive officers in 2015 or in 2014.
- (2) The dollar amounts listed do not necessarily reflect the dollar amounts of compensation actually realized, or that may be realized, by our named executive officers. These amounts reflect the grant date fair value of the options awarded to each of our named executive officers calculated in accordance with FASB ASC Topic 718 (without regard to estimates of forfeitures related to service-based vesting). Information regarding calculation of the award value of these stock options, including assumptions and methodologies to value the option grants, can be found in Note 6 of the Notes to Financial Statements in the financial statements and the related notes included elsewhere in this prospectus. We did not grant any equity awards to our named executive officers in 2014.
- (3) These amounts reflect cash bonuses paid under the 2015 Cash Bonus Plan and 2014 Cash Bonus Plan. We did not pay any non-equity incentive plan compensation to our named executive officers in 2016.
- (4) During fiscal year 2016, Mr. Sheridan, and Mr. Hansen and his spouse, participated in our incentive award trip for selected members of our executive and sales teams. Amounts listed include the incremental costs to us of meals, entertainment and other expenses for Mr. Hansen and his spouse of \$14,860, as well as statutory tax with respect to the imputed income associated with the trip for Mr. Hansen of \$8,946 for fiscal year 2016. Amounts listed include the incremental costs to us of meals, entertainment and other expenses for Mr. Sheridan of \$7,430, as well as statutory tax with respect to the imputed income associated with the trip for Mr. Sheridan of \$4,473 for fiscal year 2016. The dollar amounts listed also reflect the Sign On Bonus and Relocation Expense Reimbursement of \$75,000 and \$80,000, respectively, for Mr. Hansen, which was paid to him in cash in 2016. The dollar amounts listed reflect a cell phone allowance of \$962 for Mr. Hansen, which was paid to him in cash in 2016 and 2015, respectively. All other amounts for all individuals in all years reflect the value of premiums paid by us for group term life insurance.
- (5) Mr. Cajigas was not a named executive officer in 2014, so his compensation for 2014 has been excluded. Mr. Hansen was not a named executive officer in 2015 and 2014, so his compensation for 2015 and 2014 has been excluded.

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### **Outstanding Equity Awards at Fiscal Year End**

The following table summarizes the outstanding equity awards held by our named executive officers as of December 31, 2016:

	Number	Option Awards			
Name	of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price (\$)	Option Expiration Date <sup>(1)</sup>	
Kim Blickenstaff	574,718 423,188 62,502	125,812 <sup>(3)</sup> 95,398 <sup>(4)</sup> 236,850 <sup>(5)</sup>	\$ 1.11 \$ 15.00 \$ 11.92 \$ 6.95	4/23/2023 11/13/2023 5/21/2025 2/16/2026	
John Cajigas	119,360 147,229 22,325	43,771 <sup>(3)</sup> 34,075 <sup>(4)</sup> 84,600 <sup>(5)</sup> 169,200 <sup>(6)</sup>	\$ 1.11 \$ 15.00 \$ 11.92 \$ 6.95 \$ 2.30	4/23/2023 11/13/2023 5/21/2025 2/16/2026 12/16/2026	
Brian Hansen		135,000 <sup>(5)</sup> 112,800 <sup>(6)</sup>	\$ 6.95 \$ 2.30	2/16/2026 12/16/2026	
John Sheridan	79,580 76,313 22,325	7,460 <sup>(2)</sup> 22,687 <sup>(3)</sup> 34,075 <sup>(4)</sup> 84,600 <sup>(5)</sup> 169,200 <sup>(6)</sup>	\$ 1.11 \$ 15.00 \$ 11.92 \$ 6.95 \$ 2.30	4/23/2023 11/13/2023 5/21/2025 2/16/2026 12/16/2026	

<sup>(1)</sup> The expiration date of all option awards is ten years from the date of grant.

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<sup>(2)</sup> This amount represents options to purchase shares of our common stock that were granted on April 23, 2013 and remained unvested as of December 31, 2016. The shares underlying these options vest as to 25% of the shares on April 23, 2014, the first anniversary of the grant date, and thereafter the remaining shares vest in 36 equal monthly installments until February 25, 2017, provided that the option holder continues to provide services to us through such dates.

<sup>(3)</sup> This amount represents options to purchase shares of our common stock that were granted on November 13, 2013 and remained unvested as of December 31, 2016. The shares underlying these options vest as to 25% of the shares on November 13, 2014, the first anniversary of the grant date, and thereafter the remaining shares vest in 36 equal monthly installments until November 13, 2017, provided that the option holder continues to provide services to us through such dates.

<sup>(4)</sup> This amount represents options to purchase shares of our common stock that were granted on May 21, 2015 and remained unvested as of December 31, 2016. The shares underlying these options vest as to 25% of the shares on May 21, 2016, the first anniversary of the grant date, and thereafter the remaining shares vest in 36 equal monthly installments until May 21, 2019, provided that the option holder continues to provide services to us through such dates.

<sup>(5)</sup> This amount represents options to purchase shares of our common stock that were granted on February 16, 2016 and remained unvested as of December 31, 2016. The shares underlying these options vest as to 25% of the shares on February 16, 2017, the first anniversary of the grant date, and thereafter the remaining shares vest in 36 equal monthly installments until February 16, 2020, provided that the option holder continues to provide services to us through such dates.

<sup>(6)</sup> This amount represents options to purchase shares of our common stock that were granted on December 16, 2016 and remained unvested as of December 31, 2016. The shares underlying these options vest as to 50% of the shares on December 16, 2017, the first anniversary of the grant date, and the remaining 50% of the shares vest in 12 equal monthly installments until December 16, 2018, provided that the option holder continues to provide services to us through such dates.

### Option Exercises and Stock Vested at Fiscal Year End

The following table presents certain information concerning the exercise of options by our named executive officers during the fiscal year ended December 31, 2016:

	Option	Option Awards			
	Number of Shares				
Name	Acquired on Exercise (#)	Exerci	ise (\$) <sup>(1)</sup>		
Kim D. Blickenstaff		\$			
John Cajigas		\$			
Brian B. Hansen		\$			
John F. Sheridan	25,000	\$	174.335		

<sup>(1)</sup> The dollar amounts listed do not necessarily reflect the dollar amounts of compensation actually realized, or that may be realized, by our named executive officers. Amounts realized upon exercise of options are calculated by subtracting the exercise price of the options from the fair market value of the underlying shares on the date of exercise.

#### **Stock Incentive Plans**

As of December 31, 2016, the number of shares reserved for issuance, number of shares issued, number of shares underlying outstanding stock options and number of shares remaining available for future issuance under the 2006 Plan and the 2013 Plan are set forth in the table below. The table below also reflects the number of shares reserved for issuance and number of shares remaining available for future issuance under the ESPP. The committee and our board of directors have determined not to make any further awards under the 2006 Plan.

_	Number of Shares Reserved for	Number of	Number of Shares Underlying Outstanding	Number of Shares Remaining Available for
Name	Issuance	Shares Issued	Options	Future Issuance
2006 Plan	2,685,605	626,987	1,825,300	
2013 Plan	6,965,369		6,403,087	562,282
ESPP	1,324,348	1,245,889		78,459

## 2006 Stock Incentive Plan

The 2006 Plan was originally approved by our board of directors in September 2006, was subsequently approved by our stockholders in July 2007 and was most recently amended in April 2013.

We have reserved an aggregate of 1,825,300 shares of our common stock for issuance pursuant to awards that were outstanding under the 2006 Plan as of December 31, 2016.

The 2006 Plan permits us to make grants of options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Code, and options that do not so qualify, which are referred to as non-qualified stock options. Incentive stock options may only be issued to our employees. Non-qualified stock options may be issued to employees, officers, directors, consultants and other service providers. The option exercise price of each option granted pursuant to the 2006 Plan is determined by the committee, and may not be less than 100% of the fair market value of the common stock on the date of grant, subject to certain exceptions. The term of each option is fixed by the committee and may not exceed ten years from the date of grant. All option grants under the 2006 Plan were made pursuant to a written option agreement.

The 2006 Plan also permits us to make grants of restricted stock. Restricted stock awards may be issued to employees, officers, directors, consultants and other service providers. The purchase price for the

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restricted stock awards granted pursuant to the 2006 Plan is determined by the committee, and may not be less than 85% of the fair market value of the common stock on the date of grant, subject to certain exceptions. All restricted stock grants under the 2006 Plan are made pursuant to a written restricted stock agreement.

The 2006 Plan is administered by the committee. The committee has the authority to manage and control the administration of the 2006 Plan. In particular, the committee has the authority to determine the persons to whom awards are granted and the number of shares of common stock underlying each award. In addition, the committee has the authority to accelerate the exercisability or vesting of any award, and to determine the specific terms and conditions of each award. However, the committee typically recommends specific equity grants to each executive officer, which grants are then approved by our full board of directors.

With respect to options granted under the 2006 Plan, the committee may provide that, in the event of a change in control, vesting will accelerate automatically effective as of immediately prior to the change in control. The committee has the discretion to provide other terms and conditions that relate to the vesting of options upon a change in control, or for the assumption of options in the event of a change in control. Outstanding options terminate upon a change in control except to the extent they are assumed in the change in control transaction. With respect to restricted stock granted under the 2006 Plan, in the event of a change in control, all repurchase rights automatically terminate immediately prior to the change in control, and the shares immediately vest in full, except to the extent that the acquiring entity provides for the assumption of the restricted stock award, or such accelerated vesting is precluded by other limitations imposed by the committee at the time the restricted stock is issued.

The committee may amend, suspend or terminate the 2006 Plan at any time, subject to compliance with applicable law. The committee may also amend, modify or terminate any outstanding award, provided that no amendment to an award may substantially affect or impair the rights of any participant under any awards previously granted without such participant s written consent.

The committee and our board of directors determined not to make any further awards under the 2006 Plan.

#### 2013 Stock Incentive Plan

Our board of directors and our stockholders have approved the 2013 Plan. The 2013 Plan provides us flexibility with respect to our ability to attract and retain the services of qualified employees, officers, directors, consultants and other service providers upon whose judgment, initiative and efforts the successful conduct and development of our business depends, and to provide additional incentives to such persons to devote their effort and skill to the advancement and betterment of our company, by providing them an opportunity to participate in the ownership of our company and thereby have an interest in its success and increased value.

We have reserved an aggregate of 6,965,369 shares of our common stock for issuance under the 2013 Plan as of December 31, 2016. This number is subject to adjustment in the event of a recapitalization, stock split, reverse stock split, reclassification, stock dividend or other change in our capital structure. In the event that an award terminates or expires for any reason, any shares subject to the award may be used again for new grants. However, shares which are (i) not issued or delivered as a result of the net settlement of outstanding options or SARs, (ii) used to pay the exercise price related to outstanding options, (iii) used to pay withholding taxes related to outstanding options or SARs or (iv) repurchased on the open market with the proceeds from an option exercise, will not be available for grant under the 2013 Plan.

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The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2015 through January 1, 2022, by the lower of (i) 4% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year or (ii) a number determined by our board of directors that is less than (i).

The 2013 Plan permits us to make grants of (i) incentive stock options pursuant to Section 422 of the Code and (ii) non-qualified stock options. Incentive stock options may only be issued to our employees. Non-qualified stock options may be issued to our employees, directors, consultants and other service providers. The option exercise price of each option granted pursuant to the 2013 Plan is determined by the committee and may not be less than 100% of the fair market value of the common stock on the date of grant, subject to certain exceptions. The term of each option is fixed by the committee and may not exceed ten years from the date of grant. All option grants under the 2013 Plan are made pursuant to a written option agreement.

The 2013 Plan permits us to sell or make grants of restricted stock. Restricted stock may be sold or granted to our employees, directors, consultants and other service providers (or those of any current or future parent or subsidiary of our company). Restricted stock issued under the 2013 Plan is sold or granted pursuant to a written restricted stock purchase agreement.

The 2013 Plan also permits us to issue SARs. SARs may be issued to our employees, directors, consultants and other service providers. The base price per share of common stock covered by each SAR may not be less than 100% of the fair market value of the common stock on the date of grant, subject to certain exceptions. SAR grants under the 2013 Plan are made pursuant to a written SAR agreement.

Further, the 2013 Plan permits us to issue RSUs. RSUs may be issued to our employees, directors, consultants and other service providers. RSU grants under the 2013 Plan are made pursuant to a written RSU agreement.

The 2013 Plan is administered by the committee, which has the authority to control and manage the operation and administration of the 2013 Plan. In particular, the committee has the authority to determine (i) the persons to whom, and the time or times at which, incentive options, nonqualified stock options, restricted stock, SARs or RSUs will be granted, (ii) the number of shares to be represented by each option agreement or covered by each restricted stock purchase agreement, SAR agreement or RSU agreement and (iii) the exercise price of such options and the base price of such SARs. In addition, the committee has the authority to accelerate the exercisability or vesting of any award, and to determine the specific terms, conditions and restrictions of each award.

Unless provided otherwise any each written option agreement, restricted stock purchase agreement, SAR agreement or RSU agreement, as the case may be, the vesting of all options, restricted stock, SARs and RSUs granted under the 2013 Plan will accelerate automatically in the event of a change in control (as defined in the 2013 Plan) effective as of immediately prior to the consummation of the change in control unless (i) such equity awards are to be assumed by the acquiring or successor entity (or parent thereof), (ii) equity awards of comparable value are to be issued in exchange therefor or (iii) the equity awards granted under the 2013 Plan are to be replaced by the acquiring entity with other incentives under a new incentive program containing such terms and provisions as the committee in its discretion may consider equitable.

Our board of directors may from time to time alter, amend, suspend or terminate the 2013 Plan in such respects as our board of directors may deem advisable, provided that no such alteration, amendment, suspension or termination may be made which would substantially affect or impair the rights of any participant under any awards previously granted, without such participant s consent.

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No awards may be granted under the 2013 Plan after the date that is ten years from the date that the 2013 Plan was approved by our stockholders.

## 2013 Employee Stock Purchase Plan

Our board of directors and our stockholders have approved the ESPP. The purpose of the ESPP is to retain the services of new employees and secure the services of new and existing employees while providing incentives for such individuals to exert maximum efforts toward our success. The ESPP is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Code.

The ESPP authorizes the issuance of shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. We have reserved an aggregate of 78,459 shares of our common stock for issuance under the ESPP as of December 31, 2016. This number is subject to adjustment in the event of a recapitalization, stock split, reverse stock split, reclassification, stock dividend or other change in our capital structure.

The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2014 through January 1, 2022, by the lower of (i) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year or (ii) a number determined by our board of directors that is less than (i).

Our board of directors has delegated its authority to administer the ESPP to the committee. The ESPP is implemented through a series of offerings of purchase rights to eligible employees. Under the ESPP, we may specify offerings with duration of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased by employees participating in the offering. An offering may be terminated under certain circumstances.

Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for accounts of employees participating in the ESPP at a price per share equal to the lower of (i) 85% of the fair market value of a share of our common stock on the first date of an offering or (ii) 85% of the fair market value of a share of our common stock on the date of purchase.

Employees may have to satisfy one or more service requirements before participating in the ESPP, as determined by our board of directors. No employee may purchase shares under the ESPP at a rate in excess of \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering, for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights were to be granted, such employee would have voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

In the event of a change in our capital structure through a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, our board of directors will make appropriate adjustments to (i) the number of shares reserved under the ESPP, (ii) the maximum number of shares by which the share reserve may increase automatically each year and (iii) the number of shares and purchase price of all outstanding purchase rights.

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In the event of certain significant corporate transactions, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity elects not to assume, continue or substitute for such purchase rights, then the participants—accumulated payroll contributions will be used to purchase shares of our common stock within a specified period prior to such corporate transaction, and any purchase rights will terminate immediately. A corporate transaction generally has the same meaning as such term is used in the 2013 Plan.

Our board of directors has the authority to amend or terminate the ESPP, provided that any such amendment or termination may not materially impair any outstanding purchase rights without the holder s consent, except in certain circumstances. We will obtain stockholder approval of any amendment to the ESPP as required by applicable law or the applicable NASDAQ Listing Rules.

#### **Compensation Risk Assessment**

We believe that, although a portion of the compensation provided to our executives and other employees is subject to the achievement of specified company performance criteria, our executive compensation program does not encourage excessive or unnecessary risk-taking. We do not believe that our compensation programs are reasonably likely to have a material adverse effect on us.

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#### CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of each transaction or series of similar transactions since January 1, 2014, or any currently-proposed transaction, to which we were or are a party, in which:

the amount involved exceeded or exceeds \$120,000; and

any of our directors or executive officers, any holder of 5% of any class of our voting capital stock or any member of their immediate family had or will have a direct or indirect material interest.

### Third Amended and Restated Investors Rights Agreement

We entered into the Third Amended and Restated Investors Rights Agreement with the Series D preferred stockholders and certain of our other stockholders. This agreement, as amended, provides the Series D preferred stockholders and certain other stockholders with demand registration rights, piggyback registration rights, Form S-3 registration rights and rights of first refusal with respect to new issuances of our securities. All registration rights will terminate at the earlier of (i) the date five years after our initial public offering or (ii) as to any stockholder, the first date after our initial public offering on which such stockholder is able to dispose of all of its registrable securities without restriction under Rule 144 of the Securities Act of 1933, as amended, or the Securities Act. The rights of first refusal terminated upon the closing of our initial public offering. For additional information, see the section entitled Description of Capital Stock of this prospectus.

#### **Equity Awards**

We have granted equity awards to our executive officers and our directors. For additional information, see the section entitled Executive Compensation Outstanding Equity Awards at Fiscal Year End of this prospectus.

### **Indemnification Agreements with our Directors and Officers**

Our amended and restated certificate of incorporation permits us to, and our bylaws provide that we shall, indemnify our directors and officers to the fullest extent permitted by law. In addition, as permitted by the laws of the State of Delaware, we have entered into indemnification agreements with each of our directors and certain of our officers. Under the terms of our indemnification agreements, we are required to indemnify each of our directors and officers, to the fullest extent permitted by the laws of the State of Delaware, if the indemnitee acted in good faith and in a manner that the indemnitee reasonably believed to be in or not opposed to our best interests, and with respect to any criminal proceeding, had no reasonable cause to believe the indemnitee s conduct was unlawful. We must indemnify our officers and directors against any and all (i) costs and expenses (including attorneys and experts fees, expenses and charges) actually and reasonably paid or incurred in connection with investigating, defending, being a witness in or participating in, or preparing to investigate, defend, be a witness in or participate in and (ii) damages, losses, liabilities, judgments, fines, penalties (whether civil, criminal or other), ERISA excise taxes, and amounts paid or payable in settlement and all other charges paid or payable in connection with, in the case of either (i) or (ii), any threatened, pending or completed action, suit, proceeding, alternate dispute resolution mechanism, investigation or inquiry, related to the fact that (x) such person is or was a director or officer, employee or agent of our company or (y) such person is or was serving at our request as a director, officer, employee, member, manager, trustee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise. The indemnification agreements also require us, if so requested, to advance within 10 days of such request any and all costs and expenses that such director or officer incurred, provided that such person will return any such advance if it shall ultimately be determined that such person is not entitled to be indemnified for such costs and expenses. Our bylaws also require that such person return any such advance if it is ultimately determined that such person is not entitled to indemnification by us as authorized by the laws of the State of Delaware.

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We are not required to provide indemnification under our indemnification agreements for certain matters, including: (i) indemnification in connection with certain proceedings or claims initiated or brought voluntarily by the director or officer, (ii) indemnification that is finally determined, under the procedures and subject to the presumptions set forth in the indemnification agreements, to be unlawful, (iii) indemnification related to disgorgement of profits made from the purchase or sale of securities of our company under Section 16(b) of the Exchange Act, or similar provisions of state statutory or common law or (iv) indemnification for reimbursement to us of any bonus or other incentive-based or equity-based compensation previously received by the director or officer or payment of any profits realized by the director or officer from the sale of our securities, as required in each case under the Exchange Act (including any such reimbursements under Section 304 of the Sarbanes-Oxley Act of 2002 in connection with an accounting restatement or the payment to us of profits arising from the purchase or sale by the director or officer of securities in violation of Section 306 of the Sarbanes-Oxley Act), our certificate of incorporation or bylaws or any other contract or otherwise, except with respect to any excess amount beyond the amount so received by such director or officer. The indemnification agreements require us, to the extent that we maintain an insurance policy or policies providing liability insurance for directors or officers of our company, to cover such person by such policy or policies to the maximum extent available.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling our company pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

### **Procedures for Approval of Related Party Transactions**

Our board of directors has adopted a Related Party Transaction Policy to assist us in identifying, reviewing and approving or rejecting related party transactions. Under our Related Party Transaction Policy, our Compliance Officer (as defined in the Related Party Transaction Policy) is charged with the primary responsibility for determining whether, based on the facts and circumstances, a related person has a direct or indirect material interest in a current or proposed transaction. To assist the Compliance Officer in making this determination, the policy sets forth certain categories of transactions that are deemed not to involve a direct or indirect material interest of the related person. If, after applying these categorical standards and weighing all of the facts and circumstances, the Compliance Officer determines that the related person would have a direct or indirect material interest in the transaction, the Compliance Officer must present the transaction to the audit committee for review or, if impracticable under the circumstances, to the chairman of the audit committee. The audit committee must then either approve or reject the transaction in accordance with the terms of the Related Party Transaction Policy.

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#### DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 100,000,000 shares of our common stock, \$0.001 par value per share, and 5,000,000 shares of undesignated preferred stock, \$0.001 par value per share. The following description summarizes the material terms and provisions of our amended and restated certificate of incorporation currently in effect and our amended and restated bylaws affecting the rights of holders of our capital stock. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to our amended and restated certificate of incorporation and amended and restated bylaws.

#### Common Stock

As of December 31, 2016, there were 31,095,598 shares of our common stock outstanding and held of record by 72 stockholders.

*Dividend Rights.* Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of funds legally available at the times and in the amounts that our board of directors may determine.

*Voting Rights.* Holders of our common stock are entitled to one vote per share. We have not provided for cumulative voting for the election of directors in our amended and restated certificate of incorporation. The board of directors is divided into three classes, which are as nearly equal in number as possible. One class is elected at each year sannual meeting of stockholders and each director serves a three-year term.

No Preemptive or Similar Rights. Our common stock is not entitled to preemptive rights, and is not subject to redemption. There are no sinking fund provisions applicable to our common stock.

Conversion. Our common stock is not convertible into any other shares of our capital stock.

Right to Receive Liquidation Distributions. Upon our liquidation, dissolution, distribution of assets or winding-up, the assets legally available for distribution to our stockholders would be distributable ratably among the holders of our common stock and any participating preferred stock outstanding at that time, if any, after payment of liquidation preferences, if any, on any outstanding shares of preferred stock and payment of claims of creditors.

*Fully Paid and Non-Assessable.* All of the outstanding shares of our common stock are, and the shares of our common stock to be issued pursuant to this offering will be, fully paid and non-assessable.

#### **Preferred Stock**

As of December 31, 2016, there were no shares of preferred stock outstanding.

Pursuant to the terms of our amended and restated certificate of incorporation, our board of directors will be authorized, subject to limitations prescribed by the Delaware General Corporation Law, or DGCL, to issue up to 5,000,000 shares of preferred stock, par value \$0.001 per share, in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further action by our stockholders. Our board of directors also can increase or decrease the number of shares of any series of preferred stock, but not below the number of shares of that series then outstanding. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights which could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while

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providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of our company or the removal of management, and could adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. We have no current plans to issue any shares of preferred stock.

## **Options and ESPP**

As of December 31, 2016, we had outstanding options to purchase 8,228,387 shares of common stock that, if exercised, will result in these additional shares becoming available for sale. As of December 31, 2016, there was also 562,282 shares and 78,459 shares of our common stock reserved for future grant or issuance under the 2013 Plan and the ESPP, respectively.

#### Warrants

As of December 31, 2016, we had outstanding warrants to purchase 990,031 shares of common stock that, if exercised, will result in these additional shares becoming available for sale.

#### **Registration Rights**

Stockholders holding approximately 13,211,513 shares of our common stock will have the right, subject to various conditions and limitations, to include their shares in registration statements relating to our securities. The holders of a majority of the shares subject to these registration rights have the right, on up to two occasions, to demand that we register such shares under the Securities Act, subject to certain limitations. In addition, these holders are entitled to piggyback registration rights with respect to the registration under the Securities Act of shares of our common stock. In the event that we propose to register any shares of common stock under the Securities Act either for our account or for the account of other security holders, the holders of shares having piggyback registration rights are entitled to receive notice of such registration and to include shares in any such registration, subject to certain limitations. Further, at any time after we become eligible to file a registration statement on Form S-3, any holder of shares subject to these registration rights may require us to file a registration statement under the Securities Act on Form S-3 with respect to shares of common stock having an aggregate offering price of at least \$1,000,000. These registration rights are subject to conditions and limitations, among them the right of the underwriters of an offering to limit the number of shares of common stock held by such security holders to be included in such registration according to market factors. We are generally required to bear all of the expenses of such registrations, including reasonable fees of a single counsel acting on behalf of all selling holders, except underwriting discounts, selling commissions and stock transfer taxes. Registration of any of the shares of common stock held by security holders with registration rights would result in such shares becoming freely tradable without restriction under the Securities Act immediately upon effectiveness of such registration.

#### Anti-takeover Provisions of Delaware Law, Our Certificate of Incorporation and Bylaws

The provisions of the DGCL, our amended and restated certificate of incorporation and our amended and restated bylaws may have the effect of delaying, deferring or discouraging another person from acquiring control of our company by means of a tender offer, a proxy contest or otherwise, or removing incumbent officers and directors. These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and takeover bids that our board of directors may consider inadequate and to encourage any person seeking to acquire control of our company to first negotiate with our board of directors. We believe the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company outweighs the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms.

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Delaware Law. We are governed by the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a public Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the date such stockholder became an interested stockholder. A business combination includes mergers, asset sales or other transactions resulting in a financial benefit to the stockholder. An interested stockholder is a person who, together with affiliates and associates, owns, or within three years did, prior to the determination of interested stockholder status, own, 15% or more of the corporation s outstanding voting stock. These provisions may have the effect of delaying, deferring or preventing a change in control of our company not approved in advance by our board of directors.

Certificate of Incorporation and Bylaw Provisions. Our amended and restated certificate of incorporation and our amended and restated bylaws include a number of other provisions that could deter hostile takeovers or delay or prevent changes in control of our company, including the following:

Board of Directors Vacancies. Our amended and restated certificate of incorporation and amended and restated bylaws authorize our board of directors to fill vacant directorships.

Classified Board. Our amended and restated certificate of incorporation and amended and restated bylaws provide that our board is classified into three classes of directors. This could delay a successful tender offeror from obtaining majority control of our board of directors, and the prospect of that delay might deter a potential offeror. For additional information, see the section entitled Management Board of Directors of this prospectus.

Stockholder Action; Special Meeting of Stockholders. Our amended and restated certificate of incorporation eliminates the right of stockholders to act by written consent. Our amended and restated certificate of incorporation further provides that special meetings of our stockholders may be called only by a majority of our board of directors.

Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our amended and restated certificate of incorporation and amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders, or to nominate candidates for election as directors at our annual meeting of stockholders. To be timely, a stockholder s notice must be delivered to, or mailed and received at, our principal executive offices not later than the 90th day nor earlier than the 120th day prior to the first anniversary of the preceding year s annual meeting of stockholders. Our amended and restated bylaws also specify certain requirements regarding the form and content of a stockholder s notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders.

*Removal of Directors.* Our amended and restated bylaws provide that our stockholders may only remove our directors with cause and only upon a vote of at least a majority of the outstanding shares.

Amendment. Our amended and restated certificate of incorporation and our amended and restated bylaws provide that the affirmative vote of the holders of at least 66 2/3% of our voting stock then outstanding is required to amend certain provisions relating to the number, term, election and removal of our directors, the filling of our board vacancies, stockholder notice procedures, the calling of special meetings of stockholders and the indemnification of directors.

Size of Board and Vacancies. Our amended and restated certificate of incorporation and amended and restated bylaws provide that the number of directors on our board of directors is fixed exclusively by our board of directors. Newly created directorships resulting from any increase in our authorized number of directors will be filled by a majority of our board of directors then in office, provided that a majority of

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our entire board of directors, or a quorum, is present and any vacancies in our board of directors resulting from death, resignation, retirement, disqualification, removal from office or other causes will be filled generally by the majority vote of our remaining directors in office, even if less than a quorum is present.

Issuance of Undesignated Preferred Stock. Our board of directors will have the authority, without further action by our stockholders, to issue up to 5,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. Our board of directors may utilize such shares for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or other means. If we issue such shares without stockholder approval and in violation of limitations imposed by NASDAQ or any stock exchange on which our stock may then be trading, our stock could be delisted.

*No Cumulative Voting.* The DGCL provides that stockholders are denied the right to cumulate votes in the election of directors unless our amended and restated certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation does not provide for cumulative voting.

Authorized but Unissued Shares. Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. We may use additional shares for a variety of purposes, including future public offerings to raise additional capital, to fund acquisitions and as employee compensation. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of our company by means of a proxy contest, tender offer, merger or otherwise.

Exclusive Forum. Our amended and restated certificate of incorporation provides that unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws or (iv) any action asserting a claim against us governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the foregoing provisions. Although we have included this provision in our amended and restated certificate of incorporation, it is possible that a court could rule that this provision is invalid or unenforceable.

## **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The address of American Stock Transfer & Trust Company is 6201 15th Avenue, Brooklyn, NY 11219 and the telephone number is (718) 921-8200.

### **NASDAQ Global Market Listing**

Our common stock is listed on the NASDAQ Global Market under the symbol TNDM.

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#### PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding the beneficial ownership of our common stock as of January 31, 2017, except as noted in the footnotes below, for:

each of our named executive officers (as defined in the section entitled Executive Compensation below);

each of our directors;

all of our executive officers and directors as a group; and

each person, or group of affiliated persons, known by us to be the beneficial owner of more than 5% of our outstanding shares of common stock.

The percentage ownership information shown in the column titled Before Offering in the table is based upon 31,335,857 shares of common stock outstanding as of January 31, 2017. The percentage ownership information shown in the column titled After Offering in the table is based upon 31,335,857 shares of our common stock outstanding as of January 31, 2017, assuming the sale of shares of our common stock by us in this offering, assuming no exercise of outstanding options or warrants and no exercise of the underwriters option to purchase up to of additional shares of common stock.

Except as indicated in the footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them, based on information provided to us or filed with the SEC by such stockholders. The address for each director and executive officer listed is: c/o Tandem Diabetes Care, Inc., 11045 Roselle Street, San Diego, California 92121.

	Number of Shares	Warrants Exercisable	Options Exercisable	Bene	centage eficially wned
Name	Beneficially Owned	by April 1, 2017	by April 1, 2017	Before Offering	After Offering
5% or Greater Stockholders:				Ü	Ü
Delphi Ventures and Affiliated Entities <sup>(1)</sup>	3,668,019			11.7%	
Domain Partners and Affiliated Entities <sup>(2)</sup>	3,243,448	358,359		11.4%	
TPG Biotechnology Partners III, L.P. <sup>(3)</sup>	2,496,194	275,153		8.8%	
HLM Venture Partners II, L.P. <sup>(4)</sup>	1,739,154			5.6%	
Directors and Named Executive Officers:					
Kim D. Blickenstaff <sup>(5)</sup>	407,939	135,633	1,168,736	5.2%	
John Cajigas <sup>(6)</sup>	48,985	5,228	327,290	1.2%	
Brian B. Hansen	3,671		36,563	*	
John F. Sheridan	7,763		218,303	*	
Dick P. Allen <sup>(7)</sup>	172,211	31,867	73,377	*	
Edward L. Cahill <sup>(8)</sup>	1,739,154		56,667	5.7%	
Fred E. Cohen <sup>(9)</sup>			56,667	*	
Howard E. Greene, Jr. (10)	117,865	25,933	74,794	*	
Douglas A. Roeder <sup>(11)</sup>	3,668,019		56,667	11.9%	
Jesse I. Treu <sup>(12)</sup>	3,243,448	358,359	56,667	11.5%	
Christopher J. Twomey <sup>(13)</sup>	43,070	7,001	79,379	*	
All directors and executive officers as a group (13 individuals)	9,482,964	567,275	2,834,371	37.1%	

 $footnotes\ on\ following\ page$ 

- \* Represents beneficial ownership of less than one percent (1.0%)
- (1) Consists of (i) 3,632,552 shares held by Delphi Ventures VIII, L.P. and (ii) 35,467 shares held by Delphi BioInvestments VIII, L.P. (together, the Delphi Funds ). Delphi Management Partners VIII, L.L.C. is the general partner of each of the Delphi Funds. The managing members of Delphi Management Partners VIII, L.L.C. are Douglas A. Roeder, one of our directors, James J. Bochnowski, David L. Douglass and Deepika R. Pakianathan, Ph.D. Delphi Management Partners VIII, L.L.C. and each of the foregoing managing members may be deemed a beneficial owner of the reported shares, but each disclaims beneficial ownership except to the extent of any indirect pecuniary interest therein. The address for all entities and individuals affiliated with Delphi Ventures is 160 Bovet Rd, Suite #408, San Mateo, CA 94402
- (2) Consists of (i) 3,189,058 shares and warrants to purchase up to 352,351 shares held by Domain Partners VII, L.P. and (ii) 54,390 shares and warrants to purchase up to 6,008 shares held by DP VII Associates, L.P. (together, the Domain Funds). One Palmer Square Associates VII, L.L.C. is the general partner of each of the Domain Funds. The managing members of One Palmer Square Associates VII, L.L.C. are Jesse I. Treu, one of our directors, James Blair, Brian Dovey, Nicole Vitullo and Brian Halak. One Palmer Square Associates VII, L.L.C. and each of the foregoing managing members may be deemed a beneficial owner of the reported shares, but each disclaims beneficial ownership except to the extent of any indirect pecuniary interest therein. The address for all entities and individuals affiliated with Domain Partners is c/o Domain Associates, L.L.C., One Palmer Square, Princeton, NJ 08542.
- (3) TPG Group Holdings (SBS) Advisors, Inc. is the general partner of TPG Group Holdings (SBS), L.P., which is the sole member of TPG Holdings I-A, LLC, which is the general partner of TPG Holdings I, L.P., which is the sole member of TPG Biotechnology GenPar III Advisors, LLC, which is the general partner of TPG Biotechnology GenPar III, L.P., which is the general partner of TPG Biotechnology Partners III, L.P., which directly holds (i) 2,496,194 shares and (ii) warrants to purchase 275,153 shares. David Bonderman and James G. Coulter are officers and sole shareholders of TPG Group Holdings (SBS) Advisors, Inc. TPG Group Holdings (SBS) Advisors, Inc. and each of the foregoing shareholders may be deemed a beneficial owner of the reported shares, but each disclaims beneficial ownership except to the extent of any indirect pecuniary interest therein. The address for all entities and individuals affiliated with TPG Group Holdings (SBS) Advisors, Inc. is c/o TPG Global, LLC, 301 Commerce Street, Suite 3300, Fort Worth, TX 76102.
- (4) Consists of 1,739,154 shares that are held by HLM Venture Partners II, L.P. HLM Venture Associates II, L.L.C. is the general partner of HLM Venture Partners II, L.P. The managing members of HLM Venture Associates II, L.L.C. are Edward L. Cahill, one of our directors, and Peter J. Grua. HLM Venture Associates II, L.L.C. and each of the foregoing managing members may be deemed a beneficial owner of the reported shares but each disclaims beneficial ownership except to the extent of any indirect pecuniary interest therein. The address for all entities and individuals affiliated with HLM Venture Partners II, L.P. is c/o HLM Venture Partners, 222 Berkeley Street, 20th Floor, Boston, MA 02116.
- (5) Includes 407,939 shares and warrants to purchase up to 135,633 shares held by the Kim Blickenstaff Revocable Trust dated April 15, 2010.
- (6) Includes 41,463 shares and warrants to purchase up to 5,228 shares held by the John Cajigas and Mary E. Cajigas Family Trust, dated August 11, 2005. Mr. Cajigas is co-trustee of the John Cajigas and Mary E. Cajigas Family Trust, dated August 11, 2005 and has shared voting and investment power over the shares held by the John Cajigas and Mary E. Cajigas Family Trust, dated August 11, 2005.
- (7) Consists of (i) 131,598 shares and warrants to purchase up to 27,796 shares held by the Allen Family Trust dated October 12, 1981, (ii) 38,975 shares and warrants to purchase up to 4,071 shares held by Allen Cornerstone Ventures, L.P., (iii) 819 shares held by the Gammon Children s 2000 Trust FBO Hannah Lee Gammon and (iv) 819 shares held by the Gammon Children s 2000 Trust FBO Jake Allen Gammon. Mr. Allen is trustee of the Allen Family Trust dated October 12, 1981. Mr. Allen is a managing partner of Allen Cornerstone Ventures, L.P. and Mr. Allen disclaims beneficial ownership of the shares held by Allen Cornerstone Ventures, L.P., except to the extent of his proportionate pecuniary interest therein. Mr. Allen is co-trustee of the Gammon Children s 2000 Trust FBO Hannah Lee Gammon, and disclaims beneficial ownership of such shares. Mr. Allen is co-trustee of the Gammon Children s 2000 Trust FBO Jake Allen Gammon and has shared voting and investment power over the shares held by the Gammon, and disclaims beneficial ownership of such shares.
- (8) Consists of (i) the shares identified in footnote 4 and (ii) options granted to Mr. Cahill personally pursuant to our director compensation program. Mr. Cahill is one of our directors. Mr. Cahill, Peter J. Grua and Russell T. Ray are the managing members of HLM Venture Associates II, L.L.C., which is the general partner of HLM Venture Partners II, L.P. Mr. Cahill has shared voting and investment power over the shares held by HLM Venture Partners II, L.P. Mr. Cahill disclaims beneficial ownership of the shares held by HLM Venture Partners II, L.P., except to the extent of his proportionate pecuniary interest therein.
- (9) Consists of options granted to Dr. Cohen personally pursuant to our director compensation program. Dr. Cohen is one of our directors, and is a partner and managing director of TPG Biotech, which is an affiliate of TPG Biotechnology Partners III, L.P. Dr. Cohen has no voting or investment power over the shares held by TPG Biotechnology Partners III, L.P. Dr. Cohen disclaims beneficial ownership of the shares held by TPG Biotechnology Partners III, L.P.
- (10) Includes 117,865 shares and warrants to purchase up to 25,933 shares held by the Greene Family Trust.
- (11) Consists of (i) the shares identified in footnote 1 and (ii) options granted to Mr. Roeder personally pursuant to our director compensation program. Mr. Roeder is one of our directors. Mr. Roeder, James J. Bochnowski, David L. Douglass and Deepika R. Pakianathan, Ph.D are the managing members of Delphi Management Partners VIII, L.L.C, which is the general partner of

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- each of the Delphi Funds. Mr. Roeder has shared voting and investment power over the shares held by the Delphi Funds. Mr. Roeder disclaims beneficial ownership of the shares held by the Delphi Funds, except to the extent of his proportionate pecuniary interest therein.
- (12) Consists of (i) the shares identified in footnote 2 and (ii) options granted to Mr. Treu personally pursuant to our director compensation program. Mr. Treu is one of our directors. Mr. Treu, James Blair, Brian Dovey, Nicole Vitullo and Brian Halak are the managing members of One Palmer Square Associates VII, L.L.C., which is the general partner of each of the Domain Funds. Mr. Treu has shared voting and investment power over the shares held by the Domain Funds. Mr. Treu disclaims beneficial ownership of the shares held by the Domain Funds, except to the extent of his proportionate pecuniary interest therein.
- (13) Consists of (i) 25,498 shares and warrants to purchase up to 4,291 shares held by the Christopher J. Twomey and Rebecca J. Twomey Family Trust UTD September 20, 2002 and (ii) 17,572 shares and warrants to purchase up to 2,710 shares held by Twomey Family Investments, LLC. Mr. Twomey is co-trustee of the Christopher J. Twomey and Rebecca J. Twomey Family Trust UTD September 20, 2002 and has shared voting and investment power over the shares held by the Christopher J. Twomey and Rebecca J. Twomey Family Trust UTD September 20, 2002. Mr. Twomey is co-manager of Twomey Family Investments, LLC and Mr. Twomey disclaims beneficial ownership of the shares held by Twomey Family Investments, LLC, except to the extent of his proportionate pecuniary interest therein.

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#### SHARES ELIGIBLE FOR FUTURE SALE

Based on the number of shares outstanding as of December 31, 2016, upon the closing of this offering, shares of our common stock will be outstanding. Of the shares to be outstanding immediately after the closing, the shares of our common stock sold in our initial public offering, the shares of common stock sold under our registration statements on Form S-3, the shares of common stock sold under our registration statements on Form S-8 and the shares of common stock to be sold in this offering will be freely tradable without restriction under the Securities Act unless purchased by our affiliates, as that term is defined in Rule 144 under the Securities Act.

The remaining shares of our common stock will be restricted securities under Rule 144. Restricted securities may be sold in the public market only if registered or if their resale qualifies for exemption from registration described below under Rule 144 promulgated under the Securities Act.

Subject to the lock-up agreements described below and the provisions of Rules 144 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

	Shares Eligible for	
Date Available for Sale	Sale	Description
Date of Prospectus		Shares saleable under Rules 144 that are not subject to a lock-up
90 Days after Date of Prospectus		Lock-up released; shares saleable under Rule 144

In addition, of the shares of our common stock that were issuable upon the exercise of warrants outstanding as of December 31, 2016, warrants to purchase shares of common stock were exercisable as of that date, and upon exercise these shares of common stock will be eligible for sale subject to the lock-up agreements described below and Rule 144.

#### **Rule 144**

In general, under Rule 144 under the Securities Act, a person who has not been one of our affiliates at any time during the three months preceding a sale, and who has beneficially owned the shares of our common stock to be sold for at least six months, including the holding period of any prior owner other than our affiliates, would be entitled to sell an unlimited number of shares of our common stock, provided current public information about us is available. In addition, under Rule 144, if such a non-affiliated person beneficially owned the shares of our common stock proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, they would be entitled to sell an unlimited number of shares without regard to whether current public information about us is available.

Our affiliates, or those persons who were our affiliates at any time during the three months preceding a sale, who have beneficially owned shares of our common stock for at least six months, are entitled to sell within any three-month period a number of shares that does not exceed the greater of:

1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering based on the number of shares outstanding as of December 31, 2016; and

the average weekly trading volume in our common stock on NASDAQ during the four calendar weeks preceding the date of filing of a Notice of Proposed Sale of Securities Pursuant to Rule 144 with respect to the sale.

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Sales by affiliates under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about our company. Rule 144 also provides that affiliates relying on Rule 144 to sell shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares, other than the holding period requirement.

#### **Lock-up Agreements**

In connection with this offering, our officers and directors, and certain of our stockholders, have each entered into a lock-up agreement with the underwriter of this offering that restricts the sale of shares of our common stock by those parties for a period of 90 days after the date of this prospectus. Piper Jaffray & Co. may, in its sole discretion, choose to release any or all of the shares of our common stock subject to these lock-up agreements at any time prior to the expiration of the lock-up period without notice. For more information, see the section entitled Underwriting of this prospectus.

## **Registration Rights**

Stockholders holding approximately 13,211,513 shares of our common stock have the right, subject to various conditions and limitations, to include their shares in registration statements relating to our securities. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. Pursuant to the lock-up agreements described above, certain of our stockholders have agreed not to exercise those rights during the lock-up period without the prior written consent of Piper Jaffray & Co. For additional information, see the section entitled Description of Capital Stock Registration Rights of this prospectus.

#### Form S-8 Registration Statements

As of December 31, 2016, we had outstanding options to purchase an aggregate of 8,228,387 shares of our common stock, of which options to purchase 4,238,105 shares were vested. We have filed registration statements on Form S-8 under the Securities Act to register all of the shares of our common stock subject to outstanding options and options and other awards issuable pursuant to the 2006 Plan, 2013 Plan and ESPP. For additional information, see the section entitled Executive Compensation Stock Incentive Plans of this prospectus. Accordingly, shares of our common stock registered under the registration statements will be available for sale in the open market, subject to Rule 144 volume limitations applicable to affiliates, and subject to any vesting restrictions and lock-up agreements applicable to these shares.

#### CERTAIN U.S. FEDERAL TAX CONSIDERATIONS APPLICABLE TO HOLDERS OF COMMON STOCK

The following is a description of certain U.S. federal income and estate tax considerations related to the purchase, ownership and disposition of our common stock that are applicable to U.S. and non-U.S. holders (defined below), which:

is based on the Code, U.S. federal tax regulations promulgated or proposed thereunder, or Treasury Regulations, judicial authority and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or IRS, each as of the date of this prospectus and each of which are subject to change at any time, possibly with retroactive effect; is applicable only to holders who hold the shares as capital assets within the meaning of section 1221 of the Code; does not discuss the applicability of any U.S. state or local taxes, non-U.S. taxes or any other U.S. federal tax except for U.S. federal income tax; and does not address all aspects of U.S. federal income taxation that may be relevant to holders in light of their particular circumstances, including alternative minimum tax considerations, or who are subject to special treatment under U.S. federal income tax laws, including but not limited to: certain former citizens and long-term residents of the United States; banks or financial institutions; insurance companies; tax-exempt organizations; tax-qualified retirement and pension plans; brokers, dealers or traders in securities, commodities or currencies; persons that own or have owned more than 5% of our common stock; persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;

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conversion transaction, or other risk-reduction

investors holding our common stock as part of a straddle, hedge,

transaction;

investors who are an integral part or controlled entity of a foreign sovereign, partnerships or other pass-through entities;

real estate investment trusts and regulated investment companies; and

controlled foreign corporations and passive foreign investment companies.

This description constitutes neither tax nor legal advice. Prospective investors are urged to consult their own tax advisors to determine the specific tax consequences and risks to them of purchasing, holding and disposing of our common stock, including the application to their particular situations of any U.S. federal, state, local and non-U.S. tax laws and of any applicable income tax treaty.

Certain U.S. Federal Income Tax Considerations Applicable to U.S. Holders

U.S. Holder Defined

For purposes of this discussion, a U.S. holder is a beneficial owner of our common stock that is a U.S. person for U.S. federal income tax purposes. A U.S. person is any of the following:

a citizen or resident of the United States for U.S. federal income tax purposes;

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a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, that was created or organized in or under the laws of the United States or any state thereof or the District of Columbia;

an estate, the income of which is subject to U.S. federal income tax regardless of its source; or

a trust if (i) a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all substantial decisions of the trust or (ii) the trust has a valid election in effect to be treated as a U.S. person.

If a partnership (or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) owns our common stock, then the U.S. federal income tax treatment of a partner in that partnership, including a partner that is a U.S. person, generally will depend on the status of the partner and the partnership s activities. Partners and partnerships should consult their own tax advisors with regard to the U.S. federal income tax treatment of an investment in our common stock.

#### Distributions to U.S. Holders

Distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions made on our common stock that are treated as dividends generally will be included in a U.S. holder s income as ordinary dividend income. With respect to noncorporate taxpayers, including individuals, such dividends are generally subject to reduced tax rates of U.S. federal income tax provided certain holding period requirements are satisfied.

Amounts not treated as dividends for U.S. federal income tax purposes will constitute a non-taxable return of capital and first be applied against and reduce a U.S. holder s adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below.

#### Sale or Taxable Disposition of Common Stock by U.S. Holders

Upon the sale, exchange or other taxable disposition of our common stock, a U.S. holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of any property received upon the sale or exchange and (ii) the U.S. holder s adjusted tax basis in the common stock. Such capital gain or loss will be long-term capital gain or loss if the U.S. holder s holding period in the common stock is more than one year at the time of the sale, exchange or other taxable disposition. Long-term capital gains recognized by certain noncorporate U.S. holders, including individuals, will generally be subject to reduced rates of U.S. federal income tax. The deductibility of capital losses is subject to limitations.

#### **Medicare Contributions Tax**

Certain U.S. holders who are individuals, estates or certain trusts must pay a 3.8% tax on the U.S. person s net investment income. Net investment income generally includes, among other things, dividend income and net gains from the disposition of our common stock. A U.S. holder that is an individual, estate or trust should consult its tax advisor regarding the applicability of the Medicare tax to its income and gains in respect of its investment in our common stock.

#### Certain U.S. Federal Income Tax Considerations Applicable to Non-U.S. Holders

#### Non-U.S. Holder Defined

For purposes of this discussion, a non-U.S. holder is a beneficial owner of our common stock that is (1) not a U.S. holder (as defined under the section entitled U.S. Holder Defined above) and (2) for

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an individual, is not present in the United States for 183 days or more in the year of the disposition. An individual who is present in the United States for 183 days or more in a taxable year should consult his or her own tax advisor with respect to the U.S. tax consequences of a disposition of our common stock.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes owns our common stock, then the U.S. federal income tax treatment of a partner, including a partner that is a non-U.S. person, in that partnership generally will depend on the status of the partner and the partnership s activities. Partners and partnerships should consult their own tax advisors with regard to the U.S. federal income tax treatment of an investment in our common stock.

#### Distributions to Non-U.S. Holders

Distributions of cash or property, if any, paid to a non-U.S. holder of our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. If the amount of a distribution exceeds both our current and accumulated earnings and profits, such excess will first constitute a nontaxable return of capital, which will reduce the holder s tax basis in our common stock, but not below zero. Any excess will be treated as gain from the sale of our common stock and will be treated as described below.

Subject to the following paragraphs, dividends on our common stock generally will be subject to U.S. federal withholding tax at a 30% gross rate, subject to any exemption or lower rate as may be specified by an applicable income tax treaty. We may withhold up to 30% of either (i) the gross amount of the entire distribution, even if the amount of the distribution is greater than the amount constituting a dividend, as described above or (ii) the amount of the distribution we project will be a dividend, based upon a reasonable estimate of both our current and our accumulated earnings and profits for the taxable year in which the distribution is made. If tax is withheld on the amount of a distribution in excess of the amount constituting a dividend, then a non-U.S. holder may obtain a refund of that excess amount by timely filing a claim for refund with the IRS.

To claim the benefit of a reduced rate of or an exemption from U.S. federal withholding tax under an applicable income tax treaty, a non-U.S. holder will be required (i) to satisfy certain certification requirements, which may be made by providing us or our agent with a properly executed and completed IRS Form W-8BEN or W-8BEN-E (or other applicable form) certifying, under penalty of perjury, that the holder qualifies for treaty benefits and is not a U.S. person or (ii) if our common stock is held through certain non-U.S. intermediaries, to satisfy the relevant certification requirements of the applicable Treasury Regulations. Special certification and other requirements apply to certain non-U.S. holders that are pass-through entities. Non-U.S. holders that do not timely provide us or our paying agent with the required certification, but that qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty.

Dividends that are effectively connected with the conduct of a trade or business by the non-U.S. holder within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment, or a fixed base in the case of an individual non-U.S. holder, that is maintained by the non-U.S. holder in the United States), or effectively connected dividends, are not subject to the U.S. federal withholding tax, provided that the non-U.S. holder certifies, under penalty of perjury, that the dividends paid to such holder are effectively connected dividends on a properly executed and completed IRS Form W-8ECI (or other applicable form). Instead, any such dividends will be subject to U.S. federal income tax on a net income basis in a manner similar to that which would apply if the non-U.S. holder were a U.S. holder.

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Corporate non-U.S. holders who receive effectively connected dividends may also be subject to an additional branch profits tax at a gross rate of 30% on their earnings and profits for the taxable year that are effectively connected with the holder s conduct of a trade or business within the United States, subject to any exemption or reduction provided by an applicable income tax treaty.

#### Sale or Taxable Disposition of Common Stock by Non-U.S. Holders

Any gain realized on the sale, exchange or other taxable disposition of our common stock generally will not be subject to U.S. federal income tax unless:

the gain is effectively connected with the conduct of a trade or business by the non-U.S. holder within the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment, or fixed base in the case of an individual non-U.S. holder, that is maintained by the non-U.S. holder in the United States); or

we are or have been a United States real property holding corporation for U.S. federal income tax purposes at any time during the shorter of the five-year period ending on the date of such disposition and the non-U.S. holder s holding period in our common stock.

A non-U.S. holder described in the first bullet point above generally will be subject to U.S. federal income tax on the net gain derived from the sale or other taxable disposition under applicable U.S. federal income tax rates as if the holder were a U.S. holder. If the non-U.S. holder is a corporation, then the gain may also, under certain circumstances, be subject to the branch profits tax discussed above.

With respect to the second bullet point, although there can be no assurance, we believe we are not, have not been and will not become a United States real property holding corporation for U.S. federal income tax purposes. In the event that we are or become a United States real property holding corporation at any time during the applicable period described in the third bullet point above, any gain recognized on a sale or other taxable disposition of our common stock may be subject to U.S. federal income tax, including any applicable withholding tax, if (i) the non-U.S. holder beneficially owns, or has owned, more than 5% of our common stock at any time during the applicable period or (ii) our common stock ceases to be regularly traded on an established securities market within the meaning of the Code. Non-U.S. holders who intend to acquire more than 5% of our common stock are encouraged to consult their tax advisors with respect to the U.S. tax consequences of a disposition of our common stock.

#### Federal Estate Tax

Common stock owned or treated as owned by an individual who is a non-U.S. holder at the time of his or her death generally will be included in the individual s gross estate for U.S. federal estate tax purposes and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise.

#### Information Reporting and Backup Withholding

Information returns will be filed with the IRS in connection with payments of dividends on our common stock and the proceeds from a sale or other taxable disposition of our common stock. Copies of information returns may be made available to the tax authorities of the country in which a non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

You may be subject to backup withholding with respect to dividends paid on our common stock or with respect to proceeds received from a disposition of the shares of our common stock. Certain holders (including, among others, corporations and certain tax-exempt organizations) are generally not subject to backup withholding. You will be subject to backup withholding if you are not otherwise exempt and you:

fail to furnish your taxpayer identification number, or TIN, which, for an individual, is ordinarily his or her social security number;

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furnish an incorrect TIN:

are notified by the IRS that you have failed to properly report payments of interest or dividends; or

fail to certify, under penalties of perjury, that you have furnished a correct TIN and that the IRS has not notified you that you are subject to backup withholding.

Backup withholding is not an additional tax, but rather is a method of tax collection. You generally will be entitled to credit any amounts withheld under the backup withholding rules against your U.S. federal income tax liability provided that the required information is furnished to the IRS in a timely manner.

A non-U.S. holder may have to comply with certification procedures to establish that it is not a U.S. person in order to avoid information reporting and backup withholding tax requirements. The certification procedures required to claim a reduced rate of withholding under an income tax treaty will satisfy the certification requirements necessary to avoid backup withholding as well. The amount of any backup withholding from a payment to a non-U.S. holder may be allowed as a credit against such holder s U.S. federal income tax liability and may entitle such non-U.S. holder to a refund, provided that the required information is timely furnished to the IRS.

### Foreign Account Compliance Act Considerations

Under the Foreign Account Tax Compliance Act provisions of the Code and related Treasury guidance, or FATCA, a withholding tax of 30% will be imposed in certain circumstances on payments of (i) dividends on our common stock and (ii) gross proceeds from the sale or other disposition of our common stock after December 31, 2018. In the case of payments made to a foreign financial institution (as defined for FATCA purposes), as a beneficial owner or as an intermediary, the tax generally will be imposed, subject to certain exceptions, unless such institution (i) enters into (or is otherwise subject to) and complies with a reporting agreement with the U.S. government, or FATCA Agreement or (ii) complies with applicable foreign law enacted in connection with an intergovernmental agreement between the United States and a foreign jurisdiction in either case to, among other things, collect and provide to the U.S. or other relevant tax authorities certain information regarding U.S. account holders of such institution. In the case of payments made to a foreign entity that is not a financial institution, the tax generally will be imposed, subject to certain exceptions, unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners (generally, any specified U.S. person that directly or indirectly owns more than a 10% of such entity) or that identifies its substantial U.S. owners. If our common stock is held through a foreign financial institution that enters into (or is otherwise subject to) a FATCA Agreement, such foreign financial institution (or, in certain cases, a person paying amounts to such foreign financial institution) may be required, subject to applicable exceptions, to withhold such tax on payments of dividends and gross proceeds described above made to (i) a person (including an individual) that fails to comply with certain information requests or (ii) a foreign financial institution that has not complied with its obligations under FATCA. Each non-U.S. holder should consult its own tax advisor regarding the application of FATCA to an investment in our common stock.

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#### UNDERWRITING

We are offering the shares of common stock described in this prospectus through Piper Jaffray & Co. as the book-running manager. We have entered into an underwriting agreement with Piper Jaffray, as representative of the several underwriters named below. Subject to the terms and conditions set forth in the underwriting agreement, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of our common stock listed opposite its name below.

Underwriter	Number of Shares
Piper Jaffray & Co.	
Wedbush Securities Inc.	
Total	

#### **Option to Purchase Additional Shares**

We have granted the underwriters an option to buy up to additional shares of common stock from us to cover over-allotments, if any. The underwriters may exercise this option at any time and from time to time during the 30-day period from the date of this prospectus. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

#### **Discounts and Commissions**

The underwriters have advised us that they propose to offer the common stock directly to the public at the offering price set forth on the cover page of this prospectus. The underwriters propose to offer the shares to certain dealers at the same price less a concession of not more than per share. After the offering, these figures may be changed by the underwriters.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The following table shows the per share and total underwriting discount to be paid by the underwriters in connection with this offering, assuming either no exercise and full exercise of the over-allotment option:

		Total			
	Per Share	Without Option	With Option		
Public offering price		\$	\$		
Underwriting discounts and commissions		\$	\$		
Proceeds, before expenses, to us					

We estimate that the total fees and expenses payable by us, excluding underwriting discount, will be approximately \$ , which includes up to \$125,000 that we have agreed to reimburse the underwriters for the fees incurred by them in connection with the offering.

#### **Indemnification of Underwriters**

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

#### No Sales of Similar Securities

We, our executive officers and directors, and certain of our other existing stockholders are subject to lock-up agreements that prohibit us and them from (i) offering, pledging, selling, contracting to sell, selling any option or contract to purchase, purchasing any option or contract to sell, granting any option, right or warrant for the sale of, or otherwise transferring or disposing of, any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock or (ii) entering into any swap or any other agreement for a period of at least 90 days following the date of this prospectus without the prior written consent of Piper Jaffray.

The lock-up agreements do not prohibit our directors and executive officers from transferring shares of our common stock for bona fide estate or tax planning purposes, subject to certain requirements, including that the transferee be subject to the same lock-up terms. The lock-up provisions do not prohibit us from issuing shares upon the exercise or conversion of securities outstanding on the date of this prospectus. The lock-up provisions do not prevent us from selling shares to the underwriters pursuant to the underwriting agreement, or from granting options to acquire securities under our existing stock option plans or issuing shares upon the exercise or conversion of securities outstanding on the date of this prospectus.

#### Listing

Our common stock is listed on the NASDAQ Global Market under the symbol TNDM.

## Price Stabilization, Short Positions and Penalty Bids

To facilitate the offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock during and after the offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own account by selling more shares of common stock than we have sold to them. Short sales involve the sale by the underwriters of a greater number of shares than the underwriters are required to purchase in the offering. The underwriters may close out any short position by either exercising their option to purchase additional shares or purchasing shares in the open market.

In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if shares of common stock previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time. The underwriters may also engage in passive market making transactions in our common stock. Passive market making consists of displaying bids on the NASDAQ Global Market is limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

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#### **Electronic Distribution**

This prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters and the underwriters may distribute prospectuses and prospectus supplements electronically.

#### **Affiliations**

From time to time in the ordinary course of its businesses, the underwriters and certain of their respective affiliates have engaged, and may in the future engage, in commercial banking or investment banking transactions with us and our affiliates.

#### **Selling Restrictions**

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, or, each, a Relevant Member State, an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer to the public in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (as amended by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

United Kingdom

Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or the FSMA, received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

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#### Canada

The common shares may be sold only to purchasers purchasing as principal that are both accredited investors as defined in National Instrument 45-106 Prospectus and Registration Exemptions and permitted clients as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the common shares must be made in accordance with an exemption from the prospectus requirements and in compliance with the registration requirements of applicable securities laws.

#### Hong Kong

The common shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong) and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to common shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

#### Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common shares may not be circulated or distributed, nor may the common shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with conditions set forth in the SFA.

Where the common shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest (howsoever described) in that trust shall not be transferred within six months after that

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corporation or that trust has acquired the common shares pursuant to an offer made under Section 275 of the SFA except:

- (a) to an institutional investor (for corporations, under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or to any person pursuant to an offer that is made on terms that such shares, debentures and units of shares and debentures of that corporation or such rights and interest in that trust are acquired at a consideration of not less than \$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;
- (b) where no consideration is or will be given for the transfer; or
- (c) where the transfer is by operation of law.

Switzerland

The common shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or the SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the common shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, or the common shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of common shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of common shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. Accordingly, no public distribution, offering or advertising, as defined in CISA, its implementing ordinances and notices, and no distribution to any non-qualified investor, as defined in CISA, its implementing ordinances and notices, shall be undertaken in or from Switzerland, and the investor protection afforded to acquirers of interests in collective investment schemes under CISA does not extend to acquirers of common shares.

#### United Arab Emirates

This offering has not been approved or licensed by the Central Bank of the United Arab Emirates, or the UAE, Securities and Commodities Authority of the UAE and/or any other relevant licensing authority in the UAE including any licensing authority incorporated under the laws and regulations of any of the free zones established and operating in the territory of the UAE, in particular the Dubai Financial Services Authority, or DFSA, a regulatory authority of the Dubai International Financial Centre, or DIFC. The offering does not constitute a public offer of securities in the UAE, DIFC and/or any other free zone in accordance with the Commercial Companies Law, Federal Law No 8 of 1984 (as amended), DFSA Offered Securities Rules and NASDAQ Dubai Listing Rules, accordingly, or otherwise. The common shares may not be offered to the public in the UAE and/or any of the free zones.

The common shares may be offered and issued only to a limited number of investors in the UAE or any of its free zones who qualify as sophisticated investors under the relevant laws and regulations of the UAE or the free zone concerned.

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France

This prospectus (including any amendment, supplement or replacement thereto) is not being distributed in the context of a public offering in France within the meaning of Article L. 411-1 of the French Monetary and Financial Code (Code monétaire et financier).

This prospectus has not been and will not be submitted to the French Autorité des marchés financiers, or the AMF, for approval in France and accordingly may not and will not be distributed to the public in France.

Pursuant to Article 211-3 of the AMF General Regulation, French residents are hereby informed that:

- 1. the transaction does not require a prospectus to be submitted for approval to the AMF;
- 2. persons or entities referred to in Point 2°, Section II of Article L.411-2 of the Monetary and Financial Code may take part in the transaction solely for their own account, as provided in Articles D. 411-1, D. 734-1, D. 744-1, D. 754-1 and D. 764-1 of the Monetary and Financial Code; and
- 3. the financial instruments thus acquired cannot be distributed directly or indirectly to the public otherwise than in accordance with Articles L. 411-1, L. 411-2, L. 412-1 and L. 621-8 to L. 621-8-3 of the Monetary and Financial Code.

This prospectus is not to be further distributed or reproduced (in whole or in part) in France by the recipients of this prospectus. This prospectus has been distributed on the understanding that such recipients will only participate in the issue or sale of our common stock for their own account and undertake not to transfer, directly or indirectly, our common stock to the public in France, other than in compliance with all applicable laws and regulations and in particular with Articles L. 411-1 and L. 411-2 of the French Monetary and Financial Code.

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#### **LEGAL MATTERS**

Certain legal matters relating to this offering will be passed upon for us by Stradling Yocca Carlson & Rauth, a Professional Corporation, Newport Beach, California. Certain legal matters relating to this offering will be passed upon for the underwriters by Clifford Chance US LLP, New York, New York.

#### **EXPERTS**

The financial statements of Tandem Diabetes Care, Inc. at December 31, 2016 and 2015, and for each of the three years in the period ended December 31, 2016, appearing in this Prospectus and Registration Statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company substitution of such report given on the authority of such firm as experts in accounting and auditing.

#### WHERE YOU CAN FIND ADDITIONAL INFORMATION

Under the Securities Act, with respect to this offering of our securities, we have filed with the SEC a registration statement on Form S-1, which includes exhibits, schedules and amendments. Although this prospectus, which forms a part of the registration statement, contains all material information included in the registration statement, parts of the registration statement have been omitted as permitted by the rules and regulations of the SEC. We refer you to the registration statement and its exhibits for further information about us, our securities and this offering. The registration statement and its exhibits, as well as any other documents that we have filed with the SEC, may be inspected and copied at the SEC s public reference room at 100 F Street, N.E., Washington, D.C. 20549-1004. The public may obtain information about the operation of the public reference room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a website at <a href="http://www.sec.gov">http://www.sec.gov</a> that contains registration statements, reports, proxy and information statements, and other information regarding issuers like us that file electronically with the SEC.

We are subject to the information and reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. We make these filings available on our website at *www.tandemdiabetes.com*. You may read and copy any reports, statements or other information on file at the public reference rooms. You can also request copies of these documents, for a copying fee, by writing to the SEC.

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## TANDEM DIABETES CARE, INC.

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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Tandem Diabetes Care, Inc.

We have audited the accompanying balance sheets of Tandem Diabetes Care, Inc. as of December 31, 2016 and 2015, and the related statements of operations and comprehensive loss, convertible preferred stock and stockholders—equity (deficit) and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company—s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company s internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Tandem Diabetes Care, Inc. at December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has recurring losses from operations and has a net capital deficiency, and does not have sufficient cash to fund it operations through December 31, 2016. These conditions raise substantial doubt about the Company s ability to continue as a going concern. Management s plans in regard to these matters are also described in Note 1. The 2016 financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that may result from the outcome of this uncertainty.

/s/ Ernst & Young LLP

San Diego, California March 8, 2017

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## TANDEM DIABETES CARE, INC.

#### **BALANCE SHEETS**

## (In thousands except par values)

		aber 31,
	2016	2015
Assets		
Current assets:	Φ 44.670	Ф. 42.000
Cash and cash equivalents	\$ 44,678	\$ 43,088
Restricted cash	2,000	2,000
Short-term investments	8,860	28,018
Accounts receivable, net	11,172	14,055
Inventory, net	21,195	17,543
Prepaid and other current assets	4,187	2,280
Total current assets	92,092	106,984
Property and equipment, net	18,409	15,526
Patents, net	1,784	2,110
Other long-term assets	107	105
Total assets	\$ 112,392	\$ 124,725
Liabilities and stockholders equity (deficit)		
Current liabilities:		
Accounts payable	\$ 7,513	\$ 5,234
Accrued expense	1,629	2,121
Employee-related liabilities	10,183	11,761
Deferred revenue	5,208	1,822
Other current liabilities	6,943	5,582
Total current liabilities	31,476	26,520
Notes payable long-term	78,960	29,275
Deferred rent long-term	2,609	2,743
Other long-term liabilities	5,274	2,719
Total liabilities	118,319	61,257
Commitments and contingencies (Note 10)		
Stockholders equity (deficit):		
Common stock, \$0.001 par value; 100,000 shares authorized as of December 31, 2016 and 2015, respectively, 31,096 and 30,255 shares issued and outstanding at December 31, 2016 and 2015,		
respectively, 51,096 and 50,255 shares issued and outstanding at December 51, 2016 and 2015, respectively.	31	30
Additional paid-in capital	398,623	384,551
Accumulated other comprehensive (loss) income	(1)	20
Accumulated deficit  Accumulated deficit	(404,580)	(321,133)
Accumulated deficit	(404,500)	(321,133)
Total stockholders equity (deficit)	(5,927)	63,468
Total liabilities and stockholders equity (deficit)	\$ 112,392	\$ 124,725

The accompanying notes are an integral part of the financial statements.

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## TANDEM DIABETES CARE, INC.

## STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(In thousands, except per share data)

	Year Ended December 2016 2015			aber 31, 2014		
Sales	\$	84,248	\$ '	72,850	\$	49,722
Cost of sales		60,656	4	46,270		34,474
Gross profit		23,592	,	26,580		15,248
Operating expenses:						
Selling, general and administrative		82,834	,	78,621		75,121
Research and development		18,809		16,963		15,791
Total operating expenses		101,643	(	95,584		90,912
Operating loss		(78,051)	((	59,004)	(	75,664)
Other income (expense), net						
Interest and other income		296		337		112
Interest and other expense		(5,707)		(3,741)		(3,901)
Total other expense, net		(5,411)		(3,404)		(3,789)
Loss before taxes		(83,462)	(	72,408)	(	79,453)
Provision for income tax (benefit) expense		(15)		10		71
Net loss	\$	(83,447)	\$ (	72,418)	\$ (	79,524)
						, ,
Other comprehensive loss:						
Unrealized gain (loss) on short-term investments	\$	(21)	\$	12	\$	8
0 ()	7	()	-		-	
Comprehensive loss	\$	(83,468)	\$ C	72,406)	\$ (	79,516)
Comprehensive 1000	Ψ	(03, 100)	Ψ (	, 2, 100)	Ψ (	, , , , , , , )
Net loss per share, basic and diluted	\$	(2.73)	\$	(2.50)	\$	(3.42)
The 1055 per share, basic and unuted	Ψ	(2.13)	Ψ	(2.30)	Ψ	(3.74)
Weighted average shares used to compute basic and diluted net loss per share		30,570	,	28,923		23,272
weighted average shares used to compute basic and diluted het loss per share		50,570		20,923		43,414

The accompanying notes are an integral part of the financial statements.

## TANDEM DIABETES CARE, INC.

## STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT)

(In thousands, except per share data)

	Commo	on Stoc	ek		Accun	nulated			
				Additional	Ot	her			Total
	Shares	Am	ount	Paid-in Capital		ehensive ome	Ac	cumulated Deficit	ckholders ty (Deficit)
Balance at December 31, 2013	22,926	\$	23	\$ 284,705	\$		\$	(169,191)	\$ 115,537
Exercise of common stock warrants	334		1	137					138
Exercise of stock options	144			325					325
Issuance of common stock for Employee Stock									
Purchase Plan	251			3,168					3,168
Stock-based compensation				14,920					14,920
Unrealized gain on short-term investments						8			8
Net loss								(79,524)	(79,524)
Balance at December 31, 2014	23,655	\$	24	\$ 303,255	\$	8	\$	(248,715)	\$ 54,572
Exercise of common stock warrants	17			122					122
Exercise of stock options	243			337					337
Issuance of common stock in public offering, net of									
underwriter s discount and offering costs	6,038		6	64,856					64,862
Issuance of common stock for Employee Stock									
Purchase Plan	302			2,934					2,934
Stock-based compensation				13,047					13,047
Unrealized gain on short-term investments						12			12
Net loss								(72,418)	(72,418)
Balance at December 31, 2015	30,255	\$	30	\$ 384,551	\$	20	\$	(321,133)	\$ 63,468
Exercise of stock options	149			170					170
Issuance of common stock for Employee Stock									
Purchase Plan	692		1	2,150					2,151
Stock-based compensation				11,752					11,752
Unrealized loss on short-term investments						(21)			(21)
Net loss								(83,447)	(83,447)
Balance at December 31, 2016	31,096	\$	31	\$ 398,623	\$	(1)	\$	(404,580)	\$ (5,927)

The accompanying notes are an integral part of the financial statements.

## TANDEM DIABETES CARE, INC.

## STATEMENTS OF CASH FLOWS

(In thousands)

	Year I 2016	Ended December 2015	ber 31, 2014	
Operating activities				
Net loss	\$ (83,447)	\$ (72,418)	\$ (79,524)	
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization expense	5,489	4,829	4,389	
Interest expense related to amortization of debt discount and debt issuance costs	274	138	219	
Payment in kind interest accrual of notes payable	927	153		
Provision for allowance for doubtful accounts	632	70	188	
Provision for inventory reserve	3,343	404	163	
Amortization of (discount) premium on short-term investments	(85)	4	(53)	
Stock-based compensation expense	11,660	13,096	14,995	
Other	(78)	(76)	41	
Changes in operating assets and liabilities:				
Accounts receivable, net	2,251	(6,473)	(2,541)	
Inventory	(6,904)	(6,084)	(1,820)	
Prepaid and other current assets	(2,466)	(395)	(82)	
Other long-term assets	(2)	131	(150)	
Accounts payable	3,234	3,355	(1,225)	
Accrued expenses	(497)	(734)	973	
Employee-related liabilities	(1,578)	2,039	3,846	
Deferred revenue	4,610	981	429	
Other current liabilities	573	1,924	(1,575)	
Deferred rent	1	(631)	(461)	
Other long-term liabilities	890	923	810	
Net cash used in operating activities  Investing activities  Purchase of short-term investments  Proceeds from sales and maturities of short-term investments  Purchase of property and equipment	(61,173) (30,622) 50,000 (8,930)	(80,191) 88,450 (5,764)	(61,378) (67,101) 36,210 (4,406)	
Purchase of patents	· · · · · · · · · · · · · · · · · · ·	(74)	(173)	
Net cash provided by (used in) investing activities  Financing activities	10,448	2,421	(35,470)	
	49,994		29,925	
Issuance of notes payable, net of issuance costs Restricted cash in connection with notes payable and corporate credit card	49,994		29,923	
Principal payments on notes payable			(30,000)	
Proceeds from public offering, net of offering costs		64,862	(30,000)	
Proceeds from issuance of common stock	2,321	3,393	3,664	
Net cash provided by financing activities	52,315	68,255	3,639	
Net increase (decrease) in cash and cash equivalents	1,590	11,912	(93,209)	
Cash and cash equivalents at beginning of period	43,088	31,176	124,385	
Cash and cash equivalents at end of period	\$ 44,678	\$ 43,088	\$ 31,176	
Supplemental disclosures of cash flow information	6 4 401	ф. 2.245	ф. 2.260	
Interest paid	\$ 4,401	\$ 3,345	\$ 3,369	

Income taxes paid	\$ 23	\$ 9	\$ 71
Supplemental schedule of noncash investing and financing activities			
Lease incentive lessor-paid tenant improvements	\$	\$ 933	\$ 1,604
Property and equipment included in accounts payable & other current liabilities	\$ 501	\$ 1,457	\$ 789
Patent included in accrued expense	\$	\$	\$ 74

The accompanying notes are an integral part of the financial statements.

#### TANDEM DIABETES CARE, INC.

#### NOTES TO FINANCIAL STATEMENTS

# 1. Organization and Basis of Presentation The Company

Tandem Diabetes Care, Inc. is a medical device company focused on the design, development and commercialization of products for people with insulin-dependent diabetes. The Company is incorporated in the state of Delaware. Unless the context requires otherwise, the terms the Company or Tandem refer to Tandem Diabetes Care, Inc.

The Company manufactures and sells insulin pump products in the United States that are designed to address large and differentiated needs of the insulin-dependent diabetes market. During 2016, the Company s pump products included:

the t:slim Insulin Delivery System, or t:slim,

the t:flex Insulin Delivery System, or t:flex,

the t:slim G4 Insulin Delivery System, or t:slim G4, and

the t:slim X2 Insulin Delivery System, or t:slim X2.

The Company began commercial sales of its first product, t:slim, in August 2012. During 2015, the Company commenced commercial sales of two additional insulin pumps: t:flex in May 2015 and t:slim G4 in September 2015.

In July 2016, the Company received clearance from the U.S. Food and Drug Administration (FDA) to begin offering the Tandem Device Updater, a Mac and PC-compatible tool for the remote update of Tandem insulin pump software.

In July 2016, the Company announced and launched a Technology Upgrade Program that provides eligible t:slim and t:slim G4 customers a path to obtain t:slim X2. Participating customers have the right to exchange their original t:slim and t:slim G4 for a t:slim X2, under a variable pricing structure. The Technology Upgrade Program expires on September 30, 2017.

In October 2016, the Company began shipping t:slim X2. As a result, the Company discontinued new shipments of t:slim, though the Company will continue to provide ongoing service and support to existing t:slim customers.

For the year ended December 31, 2016, the Company has adopted FASB Accounting Standard Codification ASC Topic 205-40, Presentation of Financial Statements Going Concern, which requires that management evaluate whether there are relevant conditions and events that, in the aggregate, raise substantial doubt about the entity s ability to continue as a going concern and to meet its obligations as they become due within one year after the date that the financial statements are issued.

The Company has incurred operating losses since its inception and, as reflected in the accompanying financial statements, the Company has an accumulated deficit of \$404.6 million as of December 31, 2016, which includes a net loss of \$83.4 million for the year ended December 31, 2016. Additionally, the Company used \$61.2 million in cash for operations in the year ended December 31, 2016, which exceeded cash and cash equivalents and short-term investments of \$53.5 million at December 31, 2016. The Company concluded that, at the date its financial statements for the year ended December 31, 2016

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#### TANDEM DIABETES CARE, INC.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

were issued, it did not have sufficient cash to fund its operations through December 31, 2017 without additional financing and, therefore, there was substantial doubt about its ability to continue as a going concern within one year after the date the financial statements were issued.

As a result, the audit report contained in the accompanying financial statements includes an explanatory paragraph that describes conditions that raise substantial doubt about the Company's ability to continue as a going concern. This explanatory paragraph could constitute a potential event of default under the Company's existing term loan agreement (as amended by Consent and Amendment Agreement, dated June 20, 2014, Omnibus Amendment Agreement No. 2, dated February 23, 2015, Amendment No. 3 to Term Loan Agreement, dated January 8, 2016, and Waiver and Amendment No. 4 to Term Loan Agreement, dated March 7, 2017, the Term Loan Agreement ) with Capital Royalty Partners II, L.P. and its affiliate funds ( Capital Royalty Partners ). Accordingly, on March 7, 2017, the Company entered into an amendment to the terms of the Term Loan Agreement (the Fourth Amendment ) that included a limited waiver of the potential event of default that could have occurred due to the explanatory paragraph included in the audit report. (See Note 5 Term Loan Agreement and Note 12 Subsequent Event. )

The financial statements included in this prospectus have been prepared on a basis that assumes that the Company will continue as a going concern, and do not include any adjustments that may result from the outcome of this uncertainty. This basis of accounting contemplates the recovery of the Company s assets and the satisfaction of the Company s liabilities and commitments in the normal course of business and does not include any adjustments to reflect the possible future effects of the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

The Company believes that it will be necessary to raise additional funding in the form of an equity financing from the sale of common stock. The Company may in the future seek additional capital from public or private offerings of its capital stock or it may elect to borrow additional amounts under new credit lines or from other sources. If the Company issues equity or debt securities to raise additional funds, its existing stockholders may experience dilution, it may incur significant financing costs, and the new equity or debt securities may have rights, preferences and privileges senior to those of its existing stockholders. The Company s ability to continue as a going concern, meet its minimum liquidity requirements in the future or satisfy the other covenants under the Term Loan Agreement is dependent on its ability to raise significant additional capital, of which there can be no assurance. If the Company cannot generate sufficient revenues from the sale of its products or secure additional financing on acceptable terms, it may be forced to significantly alter its business strategy, substantially curtail its current operations, or cease operations altogether.

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#### TANDEM DIABETES CARE, INC.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### **Basis of Presentation**

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). The accompanying financial statements have been prepared assuming that the Company will continue as a going concern, which contemplates the Company is realization of assets and satisfaction of liabilities in the normal course of business. The financial statements do not include any adjustments relating to the recoverability and classification of assets and liabilities that might be necessary should the Company be unable to continue as a going concern. The Company is continuation as a going concern is dependent upon its ability to raise additional equity or refinance its existing debt and ultimately, to attain profitability. There is no assurance that the Company will be successful in raising additional funds or that, if it does raise additional funds, that it will be able to attain profitability or even continue in business.

# 2. Summary of Significant Accounting Policies Use of Estimates

The preparation of the financial statements in conformity with GAAP requires management to make informed estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosure of contingent assets and liabilities in the Company s financial statements and accompanying notes as of the date of the financial statements. Actual results could differ materially from those estimates and assumptions.

#### **Segment Reporting**

Operating segments are identified as components of an enterprise about which segment discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. To date, the Company has viewed its operations and managed its business as one segment, operating in the United States.

#### **Cash and Cash Equivalents**

The Company considers all highly liquid investments with a maturity of three months or less from the date of purchase and that can be liquidated without prior notice or penalty, to be cash equivalents.

#### **Short-Term Investments**

Based on the nature of the assets, the Company s short-term investments are classified as either available-for-sale or trading securities. Such securities are carried at fair value as determined by prices for identical or similar securities at the balance sheet date. The Company s short-term investments consist of Level 1 and Level 2 financial instruments in the fair value hierarchy. The net unrealized gains or losses on available-for-sale securities are reported as a component of other comprehensive loss within the statements of operations and accumulated other comprehensive (loss) income as a separate component of stockholders equity (deficit) on the balance sheets. Unrealized gains or losses on trading securities are reported as a component of other income or expense within the statements of operations. At December 31, 2016 and 2015, the Company had no investments that were classified as held-to-maturity. The Company determines the realized gains or losses of available-for-sale securities using the specific identification method and includes net realized gains and losses as a component of other income or expense within the statements of operations. The Company periodically reviews available-for-sale securities for other than temporary declines in fair value below the cost basis whenever events or changes

#### TANDEM DIABETES CARE, INC.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

in circumstances indicate that the carrying amount of an asset may not be recoverable. To date, no other than temporary declines in fair value have been identified.

#### **Restricted Cash**

Restricted cash as of December 31, 2016 and 2015 was comprised of a \$2.0 million minimum cash balance requirement in connection with the Term Loan Agreement (see Note 5, Term Loan Agreement ).

#### **Accounts Receivable**

The Company grants credit to various customers in the normal course of business. The Company maintains an allowance for doubtful accounts for potential credit losses. Provisions are made based on historical experience, assessment of specific risk, specific review of outstanding invoices or various assumptions and estimates that are believed to be reasonable under the circumstances. Uncollectible accounts are written off against the allowance after appropriate collection efforts have been exhausted and when it is deemed that a balance is uncollectible.

#### **Concentration of Credit Risk**

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, short-term investments and accounts receivable. The Company maintains deposit accounts in federally insured financial institutions in excess of federally insured limits. The Company also maintains investments in money market funds that are not federally insured. Additionally, the Company has established guidelines regarding investment instruments and their maturities, which are designed to maintain preservation of principal and liquidity.

The following table summarizes customers who accounted for 10% or more of net accounts receivable:

	Decemb	er 31,
	2016	2015
Edgepark Medical Supplies, Inc.	15.2%	16.4%
Byram Healthcare	14.7%	21.8%

The following table summarizes customers who accounted for 10% or more of sales for the periods presented:

		December 31,			
	2016	2015	2014		
Edgepark Medical Supplies, Inc.	18.7%	17.8%	16.0%		
Byram Healthcare	14.0%	17.2%	10.9%		
Solara Medical Supplies, Inc.	10.7%	N/A	N/A		
CCS Medical	N/A	N/A	11.6%		

#### **Fair Value of Financial Instruments**

The carrying amounts of cash and cash equivalents, accounts receivable, accounts payable, accrued expense, and employee-related liabilities are reasonable estimates of their fair values because of the short-term nature of these assets and liabilities. Short-term investments and foreign exchange forward contracts

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#### TANDEM DIABETES CARE, INC.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

that are not designated as hedges are carried at fair value. Based on the borrowing rates currently available for loans with similar terms, the Company believes that the fair value of its long-term notes payable approximates its carrying value.

The Company offers to certain eligible customers trade-in rights which are determined to be guarantees. The Company records a liability for the estimated fair value of the guarantee at its inception. If actual results differ significantly from these estimates, the Company s results of operations could be materially affected. For further details regarding our guarantees, see the following section Revenue Recognition within Note 2 and Note 4, Fair Value Measurements.

#### **Inventories**

Inventories are valued at the lower of cost or market (net realizable value), determined by the first-in, first-out method. Inventory is recorded using standard cost, including material, labor and overhead costs, at December 31, 2016 and 2015. The Company periodically reviews inventories for potential impairment based on quantities on hand, expectations of future use, judgments based on quality control testing data and assessments of the likelihood of scrapping or obsoleting certain inventories.

#### **Long Lived Assets**

#### Property and Equipment

Property and equipment, which primarily consist of office furniture and equipment, manufacturing equipment, scientific equipment, computer equipment, and leasehold improvements, are stated at cost. Property and equipment are depreciated over the estimated useful lives of the assets, generally three to seven years, using the straight-line method. Leasehold improvements are amortized over the lesser of the estimated useful lives of the assets or the remaining lease term. Maintenance and repair costs are expensed as incurred.

#### Patents

Costs associated with the purchase or licensing of patents associated with the Company s commercialized products are capitalized. The Company reviews its capitalized patent costs periodically to determine that they have future value and an alternative future use. Costs related to patents that the Company is not actively pursuing for commercial purposes are expensed. The Company amortizes patent costs over the lesser of the duration of the patent term or the estimated useful lives of 10 years, beginning with the date the patents are issued or acquired.

The Company periodically re-evaluates the original assumptions and rationale utilized in the establishment of the carrying value and estimated lives of all of its long-lived assets, including property and equipment and acquired patents. The determinants used for this evaluation include management s estimate of the asset s ability to generate positive income from operations and positive cash flow in future periods as well as the strategic significance of the asset to the Company s business objective. The Company has not recognized any impairment losses through December 31, 2016.

#### **Deferred Rent**

Rent expense on noncancelable leases containing known future scheduled rent increases is recorded on a straight-line basis over the term of the respective leases beginning when the Company takes possession of the leased property. The difference between rent expense and rent paid is accounted for as deferred rent. The current portion of deferred rent was included in other current liabilities on the Company s balance

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## TANDEM DIABETES CARE, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

sheet. Landlord improvement allowances and other such lease incentives are recorded as property and equipment and as deferred rent and are amortized on a straight-line basis as a reduction to rent expense.

## **Research and Development Costs**

All research and development costs are charged to expense as incurred. Such costs include personnel-related costs, including stock-based compensation, supplies, license fees, development prototypes, outside design and testing services, depreciation, allocated facilities and information services, milestone payments under the Company s development and commercialization agreements and other indirect costs.

#### **Income Taxes**

The Company uses the asset and liability method of accounting for income taxes. Deferred income tax assets or liabilities are recognized based on the temporary differences between financial statement and income tax bases of assets and liabilities using enacted tax rates in effect for the years in which the differences are expected to reverse. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized.

The Company is required to file federal and state income tax returns in the United States and various other state jurisdictions. The preparation of these income tax returns requires the Company to interpret the applicable tax laws and regulations in effect in such jurisdictions, which could affect the amount of tax paid by the Company. An amount is accrued for the estimate of additional tax liability, including interest and penalties, for any uncertain tax positions taken or expected to be taken in an income tax return. The Company reviews and updates the accrual for uncertain tax positions as more definitive information becomes available. For further information, see Note 7, Income Taxes.

## **Revenue Recognition**

Revenue is generated from sales in the United States of insulin pumps, disposable cartridges and infusion sets to individual customers and third-party distributors that resell the product to insulin-dependent diabetes customers. The Company is paid directly by customers who use the products, distributors and third-party insurance payors.

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred and title passed, the price is fixed or determinable, and collectability is reasonably assured.

## Trade-In Rights

The trade-in rights associated with the Company s Technology Upgrade Program are accounted for as guarantees or rights to return based on specific factors and circumstances, including the period of time the trade-in rights are exercisable, the likelihood that the trade-in rights will be exercised, and the amount of the specified-price trade-in value.

The Company has determined that trade-in rights for t:slim G4 Pump customers are guarantees. The Company accounts for the guarantees under applicable accounting standards, which require a guarantor to recognize, at the inception of a guarantee, a liability for the estimated fair value of the obligation undertaken in issuing certain guarantees. Subsequently, the initial liability recognized for the guarantee is reduced as the Company is released from the risk under the guarantee, which is when the trade-in right is exercised or the right expires. The guarantee is accounted for as an element of a multiple element arrangement. The estimated fair value of the guarantees are based on various economic and customer

## TANDEM DIABETES CARE, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

behavioral assumptions, including the probability of a trade-in, the specified trade-in amount, the expected fair value of the used t:slim G4 Pump at trade-in and the expected sales price of the t:slim X2 Pump. At December 31, 2016, \$1.2 million was recorded as a guarantee liability in other current liabilities on the accompanying balance sheet.

The Company has determined that t:slim Pump trade-in rights are in-substance rights to return products. Such rights to return are accounted for pursuant to the right of return accounting guidance. As the Company does not have sufficient history to reasonably estimate returns associated with trade-in rights, all eligible t:slim Pump sales between July 1, 2016 and December 31, 2016 were recorded as deferred revenue until the trade-in right is exercised or the right expires. At December 31, 2016, \$3.2 million was recorded as a trade-in rights reserve in deferred revenue on the accompanying balance sheet.

## Revenue Recognition for Arrangements with Multiple Deliverables

The Company considers the deliverables in its product offering as separate units of accounting and recognizes deliverables as revenue upon delivery only if (i) the deliverable has standalone value and (ii) if the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is probable and substantially controlled by the Company. The Company allocates consideration to the separate units of accounting, unless the undelivered elements were deemed perfunctory and inconsequential. The amount of the determined guarantee fair value is allocated in full to the guarantee and the remaining allocable consideration is allocated to other separate units of accounting using the relative selling price method, in which allocation of consideration is based on vendor-specific objective evidence ( VSOE ) if available, third-party evidence ( TPE ), or if VSOE and TPE are not available, management s best estimate of a standalone selling price ( ESP ) for the undelivered elements.

The Company offers a cloud-based data management application, t:connect, which is made available to customers upon purchase of any of its insulin pumps. In July 2016, the Company received clearance from the FDA to begin offering the Tandem Device Updater, a Mac and PC-compatible tool for the remote update of Tandem insulin pump software. Utilizing Tandem Device Updater, the Company may from time to time provide future unspecified software upgrades to the insulin pump s essential software. The t:connect service and the embedded right included with qualifying insulin pumps to receive, on a when-and-if-available basis, future unspecified software upgrades relating to the product s essential software are deemed undelivered elements at the time of the insulin pump sale. Because the Company has neither VSOE nor TPE for these deliverables, the allocation of revenue is based on the Company s ESP. The Company establishes its ESP based on the estimated cost to provide such services, including consideration for a reasonable profit margin, which is then corroborated by comparable market data. The Company allocates fair value based on management s ESP to these elements at the time of sale and recognizes the revenue over a four-year period, which is the hosting period for t:connect and the period that software upgrades are expected to be provided. At December 31, 2016 and 2015, \$1.6 million and \$1.1 million were recorded as deferred revenue for these undelivered elements, respectively. All other undelivered elements at the time of sale are deemed inconsequential or perfunctory.

## **Product Returns**

The Company offers a 30-day right of return to its customers from the date of shipment of any of its insulin pumps, provided a physician s confirmation of the medical reason for the return is received. Estimated allowances for sales returns are based on historical returned quantities as compared to pump shipments in those same periods of return. The return rate is then applied to the sales of the current

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## TANDEM DIABETES CARE, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

period to establish a reserve at the end of the period. The return rates used in the reserve are adjusted for known or expected changes in the marketplace when appropriate. The allowance for product returns is recorded as a reduction of revenue and accounts receivable in the period in which the related sale is recorded. The amount recorded on the Company s balance sheet for product return allowance was \$0.2 million and \$0.3 million at December 31, 2016 and 2015, respectively. Actual product returns have not differed materially from estimated amounts reserved in the accompanying financial statements.

### **Warranty Reserve**

The Company generally provides a four-year warranty on its insulin pumps to end user customers and may replace any pumps that do not function in accordance with the product specifications. Insulin pumps returned to the Company may be refurbished and redeployed. Additionally, the Company offers a six-month warranty on disposable cartridges and infusion sets. Estimated warranty costs are recorded at the time of shipment. Warranty costs are estimated based on the current expected replacement product cost and expected replacement rates based on historical experience. The Company evaluates the reserve quarterly and makes adjustments when appropriate. Changes to the actual replacement rates and actual replacement product costs could have a material impact on the Company s estimated liability.

At December 31, 2016 and December 31, 2015, the warranty reserve was \$5.7 million and \$3.5 million, respectively. The following table provides a reconciliation of the change in estimated warranty liabilities for the years ended December 31, 2016 and 2015:

	Decem	ber 31,
(in thousands)	2016	2015
Balance at beginning of the year	\$ 3,547	\$ 1,974
Provision for warranties issued during the period	8,830	1,948
Settlements made during the period	(8,739)	(4,373)
Increases in warranty estimates	2,052	3,998
Balance at end of the year	\$ 5,690	\$ 3,547
Current portion	\$ 2,302	\$ 1,050
Non-current portion	\$ 3,388	2,497
Total	\$ 5,690	\$ 3,547

## **Stock-Based Compensation**

Stock-based compensation cost is measured at the grant date based on the estimated fair value of the award, and the portion that is ultimately expected to vest is recognized as compensation expense over the requisite service period on a straight-line basis. The Company estimates the fair value of stock options issued under the Company s 2013 Stock Incentive Plan ( 2013 Plan ) and shares issued under the Company s 2013 Employee Stock Purchase Plan ( ESPP ) using a Black-Scholes option-pricing model on the date of grant. The Black-Scholes option-pricing model requires the use of subjective assumptions including volatility, expected term, and risk-free rate. For awards that vest based on service conditions, the Company recognizes expense using the straight-line method less estimated forfeitures based on historical experience.

The Company records the expense for stock option grants to non-employees based on the estimated fair value of the stock options using the Black-Scholes option-pricing model. The fair value of non-employee

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## TANDEM DIABETES CARE, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

awards is remeasured at each reporting period as the underlying awards vest unless the instruments are fully vested, immediately exercisable and nonforfeitable on the date of grant.

## **Advertising Costs**

The Company expenses advertising costs as they are incurred. For the years ended December 31, 2016, 2015 and 2014, advertising costs were \$0.9 million, \$1.0 million, and \$1.5 million, respectively.

### **Shipping and Handling Expenses**

Shipping and handling expenses associated with product delivery are included within cost of sales in the Company s statements of operations.

## **Comprehensive Loss**

All components of comprehensive loss, including net loss, are reported in the financial statements in the period in which they are recognized. Comprehensive loss is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources, including unrealized gains and losses on marketable securities.

#### **Net Loss Per Share**

Basic net loss per share is calculated by dividing the net loss by the weighted average number of common shares that were outstanding for the period, without consideration for common stock equivalents. Diluted net loss per share is calculated by dividing the net loss by the sum of the weighted-average number of dilutive common share equivalents outstanding for the period determined using the treasury stock method. Dilutive common share equivalents are comprised of warrants, potential awards granted pursuant to the ESPP, and options outstanding under the Company s other equity incentive plans. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the Company s net loss position.

Potentially dilutive securities not included in the calculation of diluted net loss per share (because inclusion would be anti-dilutive) are as follows (in common stock equivalent shares, in thousands):

	Year Ei	Year Ended December 31,		
	2016	2015	2014	
Warrants for common stock		990	1,007	
Common stock options	1,511	2,015	2,233	
ESPP	18	4	4	
	1,529	3,009	3,244	

#### Reclassifications

Certain reclassifications of prior year amounts have been made to conform to the current year presentation.

## **Recent Accounting Pronouncements**

In August 2016, the Financial Accounting Standards Board (FASB) issued new guidance that clarifies how entities should classify certain cash receipts and cash payments on the statement of cash flows. The

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## TANDEM DIABETES CARE, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

guidance also clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flows. The guidance is effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those years. The Company does not believe the adoption of the standard will have a material impact on the Company s statement of cash flow.

In June 2016, FASB issued a new credit loss standard that changes the impairment model for most financial assets and certain other instruments. The standard is effective for public business entities for annual periods beginning after December 15, 2019, and interim periods within those years. Early adoption is permitted for all entities for annual periods beginning after December 15, 2018, and interim periods within those years. The Company is in the process of assessing the impact of the adoption of the standard on its financial statements.

In March 2016, FASB issued ASU 2016-09, Compensation Stock Compensation (Topic 718) ( ASU 2016-09 ), which is intended to simplify several areas of accounting for share-based payment arrangements. The amendments in this update cover such areas as the recognition of excess tax benefits and deficiencies, the classification of those excess benefits on the statement of cash flows, an accounting policy election for forfeitures, the amount an employer can withhold to cover income taxes and still qualify for equity classification and the classification of those taxes paid on the statement of cash flows. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. The Company will adopt this standard beginning in the first quarter of 2017. The Company has excess tax benefits for which a benefit could not previously be recognized of approximately \$656,000. Upon adoption, the balance of the unrecognized excess tax benefits will be reversed with the impact recorded to (accumulated deficit) retained earnings, including any change to the valuation allowance as a result of the adoption. Due to the full valuation allowance on the U.S. deferred tax assets as of December 31, 2016, the Company does not expect any impact to the financial statements as a result of this adoption in the first quarter of 2017.

In February 2016, FASB issued final guidance for lease accounting. The new guidance requires lessees to put most leases on their balance sheet but to recognize expenses on their income statement in a manner similar to today s accounting. The new guidance also eliminates today s real estate-specific provisions for all entities. The standard is effective for public business entities for annual periods beginning after December 15, 2018, and interim periods within those years. Early adoption is permitted for all entities. The Company is in the process of assessing the impact of the adoption of the standard on its financial statements.

In April 2015, FASB issued new guidance, which amended requirements that require debt issuance costs, related to a recognized debt liability, to be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, effective for the Company beginning January 1, 2016 and applied retroactively for all consolidated balance sheets presented. The Company applied the amended presentation requirements in the first quarter 2016, which resulted in the reclassification of \$0.4 million of debt issuance costs in the Company s balance sheet from other long-term assets to long-term notes payable at December 31, 2015.

In August 2014, FASB issued an accounting standards update, which requires management of public and private companies to evaluate whether there are conditions and events that raise substantial doubt about the entity s ability to continue as a going concern within one year after the financial statements are issued (or available to be issued when applicable) and, if so, to disclose that fact. Management is required to

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## TANDEM DIABETES CARE, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

make this evaluation for both annual and interim reporting periods, if applicable. Management is also required to evaluate and disclose whether its plans alleviate that doubt. The standard is effective for annual periods ending after December 15, 2016, and interim periods within annual periods beginning after December 15, 2016. The Company adopted this standard as of December 31, 2016 and has included the expanded discussion on going concern above (see Note 1 The Company ).

In May 2014, FASB and the International Accounting Standards Board issued a comprehensive new revenue recognition standard ( Revenue from Contracts with Customers Standard ) that will supersede existing revenue guidance under U.S. GAAP and International Financial Reporting Standards. The Revenue from Contracts with Customers Standard's core principle is that a company will recognize revenue when it transfers

standards, the relief from contracts with customers standard s core principle is that a company will recognize to conditions	
promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for	
those goods or services. In doing so, companies will need to use more judgment and make more estimates than under cud #000000">	

City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32 1,540 1,805,404 Missouri 0.2% Bi-State Development Agency of the Missouri-Illinois Metropolitan District, Refunding RB, Combined Lien, Series A, 5.00%, 10/01/44 125 138,880 State of Missouri Health & Educational Facilities Authority, Refunding RB, St. Louis College of Pharmacy Project, 5.50%, 5/01/43 130 142,217

281,097

New Hampshire 1.0%

New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38

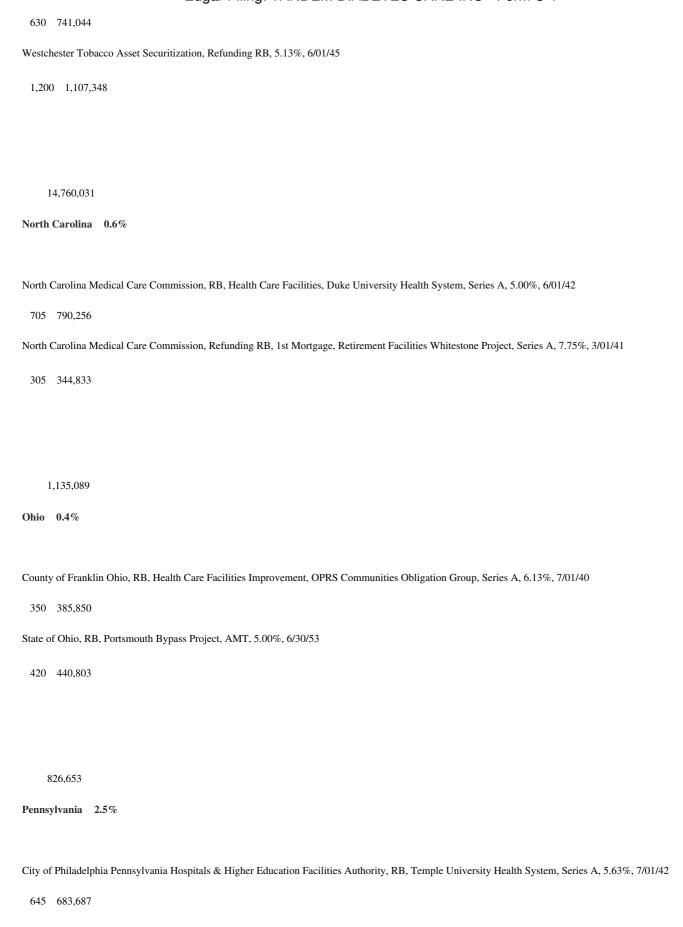
1,530 1,777,585

New Jersey 4.8%

Casino Reinvestment Development Authority, Refunding RB:

Edgar Filling: TANDEM DIABETES CARE INC - Form 5-1
5.25%, 11/01/39
530 562,563
5.25%, 11/01/44
415 442,822
New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT:
5.13%, 9/15/23
1,040 1,144,322
5.25%, 9/15/29
990 1,084,634
New Jersey EDA, Refunding, Special Assessment Bonds, Kapkowski Road Landfill Project, 5.75%, 4/01/31
1,125 1,310,895
New Jersey Transportation Trust Fund Authority, RB:
Transportation Program, Series AA, 5.00%, 6/15/44
1,810 1,881,151
Transportation System, Series A, 5.50%, 6/15/41
1,025 1,122,887
Transportation System, Series B, 5.25%, 6/15/36
1,235 1,301,604
0.050.050
8,850,878
New York 8.1%
City of New York New York Transitional Finance Authority, RB, Future Tax Secured Bonds, Fiscal 2012, Sub-Series E-1, 5.00%, 2/01/42
740 832,715
Counties of New York Tobacco Trust IV, Refunding RB, Settlement Pass-Through Turbo, Series A, 6.25%, 6/01/41 (b)
1,000 1,016,920

County of Dutchess New York Industrial Development Agency, Refunding RB, Bard College Civic Facility, 5.00%, 8/01/46 2,800 2,803,332 County of Westchester New York Healthcare Corp., RB, Senior Lien, Series A, 5.00%, 11/01/44 292 323,558 Long Island Power Authority, Refunding RB, Electric System, Series A, 5.75%, 4/01/39 1,050 1,188,495 Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/38 1,255 1,441,782 Metropolitan Transportation Authority, Refunding RB, Dedicated Tax Fund, Series B, 5.00%, 11/15/34 1,270 1,447,584 New York Liberty Development Corp., Refunding RB: 2nd Priority, Bank of America Tower at 1 Bryant Park Project, Class 3, 6.38%, 7/15/49 615 700,977 3 World Trade Center Project, Class 1, 5.00%, 11/15/44 (b) 1,650 1,718,590 Municipal Bonds Par (000) Value New York (concluded) New York Liberty Development Corp., Refunding RB (concluded): 3 World Trade Center Project, Class 2, 5.15%, 11/15/34 (b) 175 190,468 3 World Trade Center Project, Class 2, 5.38%, 11/15/40 (b) 440 482,649 Port Authority of New York & New Jersey, JFK International Air Terminal LLC Project, ARB, Special Project, Series 8: 6.00%, 12/01/36 650 764,569 6.00%, 12/01/42



Pennsylvania Economic Development Financing Authority, RB: American Water Co. Project, 6.20%, 4/01/39 1,830 2,112,534 AMT, Rapid Bridge Replacement Project, 5.00%, 12/31/38 310 334,781 Pennsylvania Economic Development Financing Authority, Refunding RB, National Gypson Co., AMT, 5.50%, 11/01/44 800 821,496 Pennsylvania Turnpike Commission, RB, Series A, 5.00%, 12/01/44 585 651,889 4,604,387 Rhode Island 0.7% Tobacco Settlement Financing Corp., Refunding RB, Series B, 4.50%, 6/01/45 1,375 1,348,270 South Carolina 2.3% South Carolina State Ports Authority, RB, 5.25%, 7/01/40 1,650 1,832,507 State of South Carolina Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 12/01/54 2,040 2,327,864

4,160,371

Tennessee 2.5%

City of Chattanooga Tennessee Health Educational & Housing Facility Board, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45

720 794,398

 $County\ of\ Hardeman\ Tennessee\ Correctional\ Facilities\ Corp.,\ RB,\ Series\ B,\ 7.38\%,\ 8/01/17$ 

1,225 1,227,952

See Notes to Financial Statements.

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BlackRock MuniHoldings Fund II, Inc. (MUH)

(Percentages shown are based on Net Assets)

Municipal Bonds Tennessee (concluded)	Par (000)	Value	
County of Shelby Tennessee Health Educational & Housing Facilities Board, Refunding RB, St. Jude s Childrens Research Hospital, 5.00%, 7/01/31	\$ 2,500	\$ 2,615,650	
		4,638,000	
Texas 7.5%			
Central Texas Regional Mobility Authority, Refunding RB:			
Senior Lien, 6.25%, 1/01/46	1,070	1,246,068	
Sub-Lien, 5.00%, 1/01/33	180	195,554	
City of Austin Texas Airport System, ARB, Revenue, AMT, 5.00%, 11/15/39	320	352,102	
City of Houston Texas Airport System, Refunding ARB, Senior Lien, Series A, 5.50%, 7/01/39	535	599,312	
County of Harris Texas Cultural Education Facilities Finance Corp., RB, 1st Mortgage, Brazos	240	277.950	
Presbyterian Homes, Inc. Project, Series B, 7.00%, 1/01/48	240	276,850	
County of Harris Texas Health Facilities Development Corp., Refunding RB, Memorial Hermann	1 200	1 675 220	
Healthcare System, Series B, 7.25%, 12/01/18 (c)	1,380	1,675,320	
County of Midland Texas Fresh Water Supply District No. 1, RB, CAB, City of Midland Project, Series A (a):			
0.00%, 9/15/40	2,525	785,629	
0.00%, 9/15/41	1,395	410,897	
La Vernia Higher Education Finance Corp., RB, Kipp, Inc., Series A, 6.38%, 8/15/19 (c)	320	384,787	
New Hope Cultural Education Facilities Corp., RB, Collegiate Housing Stephenville III, LLC.,	320	304,707	
5.00%, 4/01/35	145	155,788	
North Texas Tollway Authority, RB, CAB, Special Project System, Series B, 0.00%, 9/01/37 (a)	1,015	361,249	
North Texas Tollway Authority, Refunding RB:	1,010	301,219	
2nd Tier System, Series F, 6.13%, 1/01/16	3,020	3,137,116	
Series A, 5.00%, 1/01/35	600	661,866	
Series A, 5.00%, 1/01/38	480	525,000	
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:		,	
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40	1,165	1,406,574	
NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	1,300	1,541,748	
V		13,715,860	
Vermont 0.0%			
Vermont Educational & Health Buildings Financing Agency, RB, Development & Mental Health,	00	00.024	
6.50%, 6/15/32 Virginia 3.1%	80	80,934	
County of Fairfax Virginia EDA, Refunding RB, Goodwin House, Inc., 5.13%, 10/01/42	2,500	2,570,550	
Virginia Small Business Financing Authority, RB, Senior Lien, Elizabeth River Crossings OpCo	2,300	2,370,330	
LLC Project, AMT:			
5.25%, 1/01/32	400	438.840	
6.00%, 1/01/37	2,325	2,685,026	
*******	2,020	2,000,020	
		5 604 416	
Washington 0.8%		5,694,416	
Washington 0.8% Washington Health Care Facilities Authority, RB, Catholic Health Initiatives, Series A,			
5.75%, 1/01/45	1,195	1,386,618	
Wisconsin 3.1%	1,193	1,300,010	
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	3,620	4,236,269	
or a reconstit, retuining RD, selles A, 0.00 /0, J/01/30	3,020 <b>Par</b>	7,230,207	
Municipal Bonds	(000)	Value	
Wisconsin (concluded)	(000)	v aruc	
State of Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior Credit Group, Series E, 5.00%, 11/15/33	1,235	1,373,493	
		5 600 762	
Total Municipal Bonds 109.3%		5,609,762	
Total Municipal Bonds 109.3%		200,309,657	

#### **Municipal Bonds Transferred to Tender Option Bond Trusts (e)** California 7.7% Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/19 (c) 1,640 1,928,325 California Educational Facilities Authority, RB, University of Southern California, Series B, 5.25%, 10/01/39 (f) 1,335 1,495,200 City & County of San Francisco California Public Utilities Commission, RB, Water Revenue, Series B, 5.00%, 11/01/39 4,770 5,405,602 City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Senior Series A, 5.00%, 5/15/40 2,968 3,370,986 Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/17 (c) 1,170 1,280,799 San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33 553 638,301 14.119.213 Colorado 2.4% Colorado Health Facilities Authority, RB, Catholic Health (AGM): Series C-3, 5.10%, 10/01/41 1,870 1,987,848 Series C-7, 5.00%, 9/01/36 1,200 1,276,236 Colorado Health Facilities Authority, Refunding RB, Catholic Health Initiatives, Series A, 5.50%, 7/01/34 (f) 1,080 1,230,341 4,494,425 Connecticut 2.7% Connecticut State Health & Educational Facility Authority, RB, Yale University: 2,299 2,470,747 Series T-1, 4.70%, 7/01/29 Series X-3, 4.85%, 7/01/37 2,362 2,534,243 5,004,990 Florida 1.8% 2,840 County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34 3,240,514 Georgia 1.0% Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38 1,649 1,824,892 Massachusetts Massachusetts School Building Authority, RB, Senior, Series B, 5.00%, 10/15/41 3,211 3,591,406 New Hampshire 0.6%

1,019

810

1,157,510

931,211

See Notes to Financial Statements.

5.25%, 6/01/39 (f)

New York 8.5%

New Hampshire Health & Education Facilities Authority, RB, Dartmouth College,

System, 2nd General Resolution, Series FF-2, 5.50%, 6/15/40

City of New York New York Municipal Water Finance Authority, Refunding RB, Water & Sewer

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BlackRock MuniHoldings Fund II, Inc. (MUH)

(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to Tender Option Bond Trusts (e)		Par (000)	Value
New York (concluded)		(3.1.)	
City of New York New York Transitional Finance Authority, BARB, Fiscal 2009, Series S-3,		2.200	2 (04 5(0
5.25%, 1/15/39	\$	3,299	\$ 3,691,569
Hudson Yards Infrastructure Corp., RB, Fiscal 2012, Series A, 5.75%, 2/15/47 (f) New York Liberty Development Corp., RB, 1 World Trade Center Port Authority Consolidated		810	931,627
Bonds, 5.25%, 12/15/43		5,400	6,180,732
New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project, 5.75%, 11/15/51 (f)		3,250	3,760,542
			15,495,681
North Carolina 0.5%			15,495,001
North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38		800	889,888
Ohio 4.3%		000	002,000
State of Ohio, Refunding RB, Cleveland Clinic Health System Obligated Group, Series A,		6,974	7 922 174
5.50%, 1/01/39 <b>Texas</b> 5.0%		0,974	7,833,176
City of San Antonio Texas Public Service Board, RB, Electric & Gas Systems, Junior Lien,			
5.00%, 2/01/43		1,260	1,397,227
County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38 (f)		3,363	3,760,350
County of Harris Texas Metropolitan Transit Authority, Refunding RB, Series A, 5.00%, 11/01/41		1,710	1,898,220
University of Texas, Refunding RB, Financing System, Series B, 5.00%, 8/15/43		1,800	2,054,792
			9,110,589
Utah 0.8%			.,,
City of Riverton Utah, RB, IHC Health Services, Inc., 5.00%, 8/15/41		1,394	1,530,937
Municipal Bonds Transferred to		Par	
Tender Option Bond Trusts (e)		(000)	Value
Virginia 2.6%			
University of Virginia, Refunding RB, General, 5.00%, 6/01/40		2,729	3,019,547
Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40		1,553	1,734,936
			4,754,483
Washington 0.8%			
Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32		1,365	1,484,108
Wisconsin 1.7%			
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community		2.050	2 124 015
Health, Inc., Obligated Group, Series C, 5.25%, 4/01/39 (f)  Fotal Municipal Bonds Transferred to		2,859	3,124,015
Fender Option Bond Trusts 42.4%			77,655,827
Fotal Long-Term Investments			77,033,027
Cost \$250,374,330) 151.7%			277,965,484
CI . T. C. W. A46	~		
Short-Term Securities 0.4%		hares	(01.400
FFI Institutional Tax-Exempt Fund, 0.02% (g)(h)  Fotal Short-Term Securities	08	31,480	681,480
Cost \$681,480) 0.4%			681,480
Fotal Investments (Cost \$251,055,810) 152.1%			278,646,964
Other Assets Less Liabilities 1.7%			3,143,954
Liability for TOB Trust Certificates, Including Interest			- /
Expense and Fees Payable (23.8%)			(43,576,649)
VMTP Shares, at Liquidation Value (30.0%)			(55,000,000)
Net Assets Applicable to Common Shares 100.0%			\$ 183,214,269
N-4 4- C-1- July - 8 I44-			
Notes to Schedule of Investments			

- (a) Zero-coupon bond.
- (b) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (c) U.S. Government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (d) Represents a step-up bond that pays an initial coupon rate for the first period and then a higher coupon rate for the following periods. Rate shown is as of report date.
- (e) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing. See Note 3 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts.
- (f) All or a portion of security is subject to a recourse agreement, which may require the Fund to pay the liquidity provider in the event there is a shortfall between the TOB Trust Certificates and proceeds received from the sale of the security contributed to the TOB Trust or in the event of a default on the security. In the case of a shortfall or default, the aggregate maximum potential amount the Fund could ultimately be required to pay under the agreements, which expire from October 1, 2016 to February 15, 2031, is \$8,457,544.
- (g) During the year ended April 30, 2015, investments in issuers considered to be an affiliate of the Fund for purposes of Section 2(a)(3) of the 1940 Act were as follows:

	Shares Held		Shares Held	
	at April 30,	Net	at April 30,	
Affiliate	2014	Activity	2015	Income
FFI Institutional Tax-Exempt Fund	944.029	(262, 549)	681.480	\$ 855

(h) Represents the current yield as of report date.

As of April 30, 2015, financial futures contracts outstanding were as follows:

(	Contracts				Unrealized
	Short	Issue	Exchange	Expiration	Notional Value Depreciation
	(92)	10-Year U.S. Treasury Note	Chicago Board of Trade	June 2015	\$ 11,810,500 \$ (158,235)

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial statement purposes. The hierarchy gives the highest priority to unadjusted quoted prices in

See Notes to Financial Statements

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BlackRock MuniHoldings Fund II, Inc. (MUH)

active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices in active markets/exchanges for identical assets or liabilities that the Fund has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund s own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund s policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Fund s policy regarding valuation of investments and derivative financial instruments, refer to Note 2 of the Notes to Financial Statements.

As of April 30, 2015, the following tables summarize the Fund s investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments <sup>1</sup>		\$ 277,965,484		\$ 277,965,484
Short-Term Securities	\$ 681,480			681,480
Total	\$ 681,480	\$ 277,965,484		\$ 278,646,964
10เลเ	\$ 081,480	\$ 211,965,484		\$ 278,046,964

<sup>&</sup>lt;sup>1</sup> See above Schedule of Investments for values in each state or political subdivision.

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments <sup>2</sup>				
Liabilities:				
Interest rate contracts	\$ (158,235)			\$ (158,235)

<sup>&</sup>lt;sup>2</sup> Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation (depreciation) on the instrument. The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial statement purposes. As of April 30, 2015, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 131,000			\$ 131,000
Liabilities:				
Bank overdraft		\$ (36,043)		(36,043)
TOB Trust Certificates		(43,568,059)		(43,568,059)
VMTP Shares		(55,000,000)		(55,000,000)
Total	\$ 131,000	\$ (98,604,102)		\$ (98,473,102)

During the year ended April 30, 2015, there were no transfers between levels.

See Notes to Financial Statements.

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APRIL 30, 2015

# Schedule of Investments April 30, 2015

BlackRock MuniHoldings Quality Fund, Inc. (MUS)

(Percentages shown are based on Net Assets)

	Par	
Municipal Bonds	(000)	Value
Alabama 1.8%	(000)	, arac
City of Birmingham Alabama Special Care Facilities Financing Authority, RB, Children s Hospital (AGC), 6.00%, 6/01/39	\$ 2,330	\$ 2,695,880
City of Selma Alabama IDB, RB, Gulf Opportunity Zone, International Paper Co. Project,	Ψ <b>2</b> ,555	<b>2</b> ,000,000
Series A, 5.38%, 12/01/35	565	639,371
		307,013
		3,335,251
California 27.5%		3,333,231
California Educational Facilities Authority, RB, University of Southern California, Series A,		
5.25%, 10/01/38	2,895	3,252,677
California Health Facilities Financing Authority, RB, Sutter Health, Series B, 6.00%, 8/15/42	1,730	2,066,537
Central Unified School District, GO, Election of 2008, Series A (AGC), 5.63%, 8/01/33	1,325	1,511,414
City & County of San Francisco California Airports Commission, Refunding ARB, 2nd Series	,	· ·
A, AMT:		
5.50%, 5/01/28	1,085	1,280,387
5.25%, 5/01/33	850	965,107
City of San Jose California, Refunding ARB, Series A-1, AMT:		
5.50%, 3/01/30	2,400	2,710,704
5.75%, 3/01/34	2,180	2,493,440
City of Sunnyvale California, Refunding RB, 5.25%, 4/01/40	1,605	1,820,824
County of Sacramento California, ARB, Senior Series A (AGC), 5.50%, 7/01/41	2,100	2,355,213
County of Ventura California Community College District, GO, Election of 2002, Series C,		
5.50%, 8/01/18 (a)	1,850	2,120,322
Kern Community College District, GO, Safety, Repair & Improvement, Election of 2002,		
Series C, 5.50%, 11/01/33	1,420	1,680,002
Los Angeles Community College District California, GO, Election of 2008, Series C,		
5.25%, 8/01/39	1,000	1,165,060
Los Angeles Department of Water & Power, RB, Power System, Sub-Series A-1,		
5.25%, 7/01/38	1,575	1,753,243
Oceanside Unified School District, GO, Series A (AGC), 5.25%, 8/01/33	1,825	2,017,173
Redondo Beach Unified School District, GO, Election of 2008, Series E, 5.50%, 8/01/34	1,335	1,554,754
San Pablo Joint Powers Financing Authority, Refunding, Tax Allocation Bonds, CAB (NPFGC) (b):		
0.00%, 12/01/24	2,635	1,577,127
0.00%, 12/01/25	2,355	1,334,767
0.00%, 12/01/26	2,355	1,255,003
Sequoia Union High School District, GO, Refunding, Election of 2004, Series B (AGM),		
5.50%, 7/01/16 (a)	3,150	3,341,457
State of California, GO, Various Purpose, 5.00%, 4/01/43	4,500	5,035,860
State of California Public Works Board, LRB:		
Department of Corrections & Rehabilitation, Series F, 5.25%, 9/01/33	725	848,576
Various Capital Projects, Series I, 5.50%, 11/01/30	1,500	1,803,300
Various Capital Projects, Series I, 5.50%, 11/01/31	2,465	2,949,003
Township of Washington California Health Care District, GO, Election of 2004, Series B,		
5.50%, 8/01/40	540	640,667
	Par	
Municipal Pands	(000)	Value
Municipal Bonds California (concluded)	(000)	v aiue
University of California, Refunding RB, The Regents of Medical Center, Series J, 5.25%,		
5/15/38	\$ 4,070	\$ 4,682,291
0.10.00	Ψ τ,070	Ψ 1,002,271
		50.044.000
		52,214,908
Colorado 2.2%		
City & County of Denver Colorado Airport System, ARB, Series A, AMT:	1.000	1.165.520
5.50%, 11/15/28 5.50%, 11/15/20	1,000	1,165,520
5.50%, 11/15/30 5.50%, 11/15/21	340	393,084 466,280
5.50%, 11/15/31	405	466,289

Colorado Health Facilities Authority, RB, Hospital, NCMC, Inc. Project, Series B (AGM),			
6.00%, 5/15/26	1,900	2,152,681	
		4,177,574	
District of Columbia 1.2%		1,177,571	
District of Columbia Water & Sewer Authority, Refunding RB, Series A, 5.50%, 10/01/39	2,000	2,257,260	
Florida 14.4%			
City of Jacksonville Florida, Refunding RB, Series A, 5.25%, 10/01/33	400	461,048	
City of St. Petersburg Florida Public Utility Revenue, Refunding RB (NPFGC), 5.00%,	2.707	2071006	
10/01/15 (a)	2,795	2,851,096	
County of Hillsborough Florida Aviation Authority, Refunding ARB, Tampa International	1.725	1 000 200	
Airport, Series A, AMT, 5.50%, 10/01/29	1,735	1,998,390	
County of Lee Florida, Refunding ARB, Series A, AMT, 5.38%, 10/01/32 County of Miami-Dade Florida Aviation, Refunding ARB, Series A, AMT, 5.00%, 10/01/31	1,500	1,647,735 3,220,595	
	2,900	3,220,393	
County of Miami-Dade Florida, RB, Seaport Department: Series A, 5.38%, 10/01/33	1,015	1,147,579	
Series A, 6.00%, 10/01/38	1,000	1,147,379	
Series B, AMT, 6.25%, 10/01/38	460	565,110	
Series B, AMT, 6.00%, 10/01/38  Series B, AMT, 6.00%, 10/01/42	615	740,694	
County of Orange Florida School Board, COP, Series A (AGC), 5.50%, 8/01/34	4,645	5,209,553	
County of Osceola Florida, RB, Sales Tax, Series A:	7,073	3,207,333	
5.00%, 10/01/40	685	765,597	
5.00%, 10/01/44	1,575	1,749,195	
Reedy Creek Improvement District, GO, Series A, 5.25%, 6/01/32	1,040	1,194,804	
Tohopekaliga Water Authority, Refunding RB, Series A, 5.25%, 10/01/36	3,995	4,584,063	
		27,342,299	
Hawaii 0.5%			
State of Hawaii, Department of Transportation, COP, AMT:			
5.25%, 8/01/25	425	492,860	
5.25%, 8/01/26	460	529,101	
		1,021,961	
Illinois 17.8%			
City of Chicago Illinois, GARB, O Hare International Airport, 3rd Lien:			
Series A, 5.75%, 1/01/39	1,145	1,304,842	
Series C, 6.50%, 1/01/41	5,225	6,326,221	
City of Chicago Illinois, GO, Refunding, Series A, 5.25%, 1/01/33	850	852,873	
City of Chicago Illinois, Refunding RB, Sales Tax, Series A, 5.25%, 1/01/38	1,000	1,085,890	
City of Chicago Illinois Midway International Airport, Refunding GARB, 2nd Lien, Series A, 5.00%, 1/01/41	565	611,177	

See Notes to Financial Statements.

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BlackRock MuniHoldings Quality Fund, Inc. (MUS)

(Percentages shown are based on Net Assets)

	Par		
Municipal Bonds	(000)	Value	
Illinois (concluded)	(***)		
City of Chicago Illinois Transit Authority, RB:			
Federal Transit Administration, Section 5309, Series A (AGC), 6.00%, 6/01/26	\$ 2,000	\$ 2,302,460	
Sales Tax Receipts, 5.25%, 12/01/36	1,000	1,106,450	
Sales Tax Receipts, 5.25%, 12/01/40	1,790	1,976,106	
Sales Tax Receipts, 5.00%, 12/01/44	2,455	2,739,927	
City of Chicago Illinois Wastewater Transmission, RB, 2nd Lien, 5.00%, 1/01/42 County of Cook Illinois Community College District No. 508, GO, City College of Chicago:	2,050	2,163,939	
5.50%, 12/01/38	1,250	1,428,000	
5.25%, 12/01/43	4,165	4,649,015	
Railsplitter Tobacco Settlement Authority, RB:	, i	•	
5.50%, 6/01/23	1,405	1,644,539	
6.00%, 6/01/28	400	471,140	
State of Illinois, GO:			
5.25%, 2/01/31	875	939,006	
5.25%, 2/01/32	1,355	1,446,964	
5.50%, 7/01/33	2,000	2,208,660	
5.50%, 7/01/38	425	467,475	
		33,724,684	
Indiana 3.8%		33,724,004	
Indiana Finance Authority, RB, Private Activity Bond, Ohio River Bridges, Series A, AMT,			
5.00%, 7/01/40	565	604,217	
Indianapolis Local Public Improvement Bond Bank, RB, Series F, 5.25%, 2/01/36 Indianapolis Local Public Improvement Bond Bank, Refunding RB, Waterworks Project, Series	3,055	3,398,504	
A (AGC), 5.50%, 1/01/38	2,780	3,155,244	
		7,157,965	
Louisiana 3.5%		7,137,903	
City of New Orleans Louisiana Aviation Board, RB, Series B, AMT, 5.00%, 1/01/45	1,580	1,720,130	
Lake Charles Harbor & Terminal District, RB, Series B, AMT, 5.50%, 1/01/29	1,500	1,695,045	
Louisiana Local Government Environmental Facilities & Community Development Authority,	1,500	1,055,045	
RB, Louisiana Community and Technical Colleges Act 360 Project, 5.00%, 10/01/37	1,615	1,821,736	
Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, Series A, 5.50%, 5/15/29	1,215	1,344,422	
Touceo Settlement I manering corp., Refunding RB, Asset Backed, Series 14, 5.50 %, 5/15/25	1,213	1,544,422	
		6,581,333	
Massachusetts 3.5%			
Massachusetts Educational Financing Authority, RB, Education Loan, Issue I, AMT, 5.00%,			
1/01/26	1,300	1,447,446	
Massachusetts HFA, Refunding RB, Series C, AMT, 5.35%, 12/01/42	1,500	1,557,090	
Massachusetts School Building Authority, RB, Dedicated Sales Tax, Series A (AGM),			
5.00%, 8/15/15 (a)	3,600	3,650,616	
		6,655,152	
Michigan 1.2%			
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, Series V, 8.25%, 9/01/18 (a)	1,910	2,360,531	
Minnesota 0.8%			
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series B (AGC),	1 225	1.540.024	
6.50%, 11/15/38	1,325 <b>Par</b>	1,540,034	
	-		
Municipal Bonds	(000)	Value	
Mississippi 2.4%			
Mississippi Development Bank, RB, Special Obligation, Jackson Water & Sewer System			
Project (AGM), 6.88%, 12/01/40	\$ 2,595	\$ 3,348,251	
	1,000	1,138,270	

Mississippi State University Educational Building Corp., Refunding RB, Mississippi State University Improvement Project, 5.25%, 8/01/38

		4,486,521
Nevada 3.8%		
County of Clark Nevada, ARB, Las Vegas-McCarran International Airport, Series A (AGM),		
5.25%, 7/01/39	1,410	1,586,461
County of Clark Nevada, GO, Limited Tax, 5.00%, 6/01/38	3,500	3,837,575
County of Clark Nevada Water Reclamation District, GO, Series A, 5.25%, 7/01/34	1,500	1,703,385
		7,127,421
New Jersey 8.0%		7,127,121
New Jersey EDA, RB, The Goethals Bridge Replacement Project, AMT:		
5.38%, 1/01/43	3,000	3,317,820
(AGM) 5.00%, 1/01/31	790	878,851
New Jersey Health Care Facilities Financing Authority, RB, Virtua Health, Series A (AGC),	770	070,001
5.50%, 7/01/38	2,100	2,341,731
New Jersey Transportation Trust Fund Authority, RB:	2,100	2,0 11,701
Transportation Program, Series AA, 5.50%, 6/15/39	1.890	2.057.568
Transportation System, Series A, 5.50%, 6/15/41	1,780	1,949,990
Transportation System, Series A (AGC), 5.63%, 12/15/28	3.170	3,650,255
Transportation System, Series B, 5.25%, 6/15/36	1,000	1,053,930
Transportation by stein, series B, 5.25 %, 6/15/50	1,000	1,033,330
		15.050.115
N X 1 # CO		15,250,145
New York 5.6%		
City of New York New York Municipal Water Finance Authority, Refunding RB, Water &		
Sewer System, 2nd General Resolution, Series EE:	1.205	1 505 541
5.38%, 6/15/43	1,305	1,535,541
Fiscal 2009, 5.25%, 6/15/40	3,410	3,870,998
Hudson Yards Infrastructure Corp., RB, Senior, Fiscal 2012, Series A, 5.75%, 2/15/47	2,510	2,887,128
Port Authority of New York & New Jersey, Refunding ARB, Consolidated, 166th Series,	2 000	2.255.640
5.25%, 7/15/36	2,000	2,255,640
		10,549,307
Ohio 1.2%		
State of Ohio Turnpike Commission, RB, Junior Lien, Infrastructure Projects, Series A-1,		
5.25%, 2/15/31	2,000	2,307,500
Pennsylvania 1.6%		
Pennsylvania Economic Development Financing Authority, RB, PA Bridges Finco LP:		
5.00%, 12/31/34	1,170	1,272,282
5.00%, 12/31/38	510	550,769
Township of Bristol Pennsylvania School District, GO, 5.25%, 6/01/37	1,000	1,140,420
		2,963,471
South Carolina 3.6%		2,703,771
County of Charleston South Carolina, RB, Special Source, 5.25%, 12/01/38	2,180	2,523,633
County of Charleston South Carolina, RD, Special South, 3.23 //, 12/01/36	2,100	2,323,033

See Notes to Financial Statements.

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BlackRock MuniHoldings Quality Fund, Inc. (MUS)

(Percentages shown are based on Net Assets)

		Par			
Municipal Bonds		(000)		Value	
South Carolina (concluded)		(000)		value	
County of Charleston South Carolina Airport District, ARB, Series A, AMT:					
5.50%, 7/01/38	\$	1,000	\$	1,128,860	
6.00%, 7/01/38	Ψ	1,695	Ψ	1,975,404	
5.50%, 7/01/41		1,000		1,129,620	
5.50%, 7/01/41		1,000		1,129,020	
				6,757,517	
Texas 23.3%					
Austin Community College District Public Facility Corp., RB, Educational Facilities Project,					
Round Rock Campus, 5.25%, 8/01/33		2,500		2,779,975	
City of Beaumont Texas, GO, Certificates of Obligation, 5.25%, 3/01/37		1,360		1,551,828	
City of Houston Texas Utility System, Refunding RB, Combined 1st Lien, Series A (AGC),		•			
6.00%, 11/15/35		4,000		4,738,600	
Dallas Area Rapid Transit, Refunding RB, Senior Lien, 5.25%, 12/01/38		2,600		2,908,256	
Dallas-Fort Worth International Airport, ARB, Joint Improvement, AMT:		2,000		2,700,200	
Series A, 5.00%, 11/01/38		2,965		3,165,286	
Series H, 5.00%, 11/01/37		2,200		2,369,224	
Lower Colorado River Authority, Refunding RB, 5.50%, 5/15/33		1,240		1,448,444	
North Texas Tollway Authority, RB, Special Projects, Series A, 5.50%, 9/01/41		4,250		4,989,287	
North Texas Tollway Authority, Refunding RB, 1st Tier System:		4,230		7,707,207	
Series A (NPFGC), 5.63%, 1/01/33		6,585		7,236,586	
Series A (NPFGC), 5.75%, 1/01/40		4,885		5,409,893	
				6,949,249	
Series B (NPFGC), 5.75%, 1/01/40  Ped Biran Education Financing Corn. BB. Tayon Christian University Project. 5.25%, 2/15/28		6,275			
Red River Education Financing Corp., RB, Texas Christian University Project, 5.25%, 3/15/38		620		708,765	
				44,255,393	
Virginia 1.1%					
City of Lexington Virginia IDA, RB, Washington & Lee University, 5.00%, 1/01/43		570		631,514	
Virginia Public School Authority, RB, Fluvanna County School Financing, 6.50%, 12/01/18 (a)		1,300		1,547,585	
				2,179,099	
Washington 1.5%				2,177,077	
City of Seattle Washington Municipal Light & Power, Refunding RB, Series A, 5.25%, 2/01/36		1,375		1,558,260	
State of Washington, GO, Various Purposes, Series B, 5.25%, 2/01/36		1,075		1,241,647	
State of Washington, GO, Various Fulposes, Series B, 5.25 //, 2/01/50		1,073		1,241,047	
				2,799,907	
Total Municipal Bonds 130.3%				247,045,233	
Municipal Bonds Transferred to					
Tender Option Bond Trusts (c)					
Colorado 3.1%					
Colorado Health Facilities Authority, RB, Catholic Health, Series C-3 (AGM), 5.10%, 10/01/41		5,610		5,963,542	
District of Columbia 0.6%					
District of Columbia Water & Sewer Authority, Refunding RB, Series A,					
6.00%, 10/01/18 (a)(d)		1,039		1,211,882	
Florida 4.7%					
County of Lee Florida Housing Finance Authority, RB, S/F Housing, Multi-County Program,					
Series A-2, AMT (Ginnie Mae), 6.00%, 9/01/40		304		310,091	
		Par			
Municipal Bonds Transferred to					
Tender Option Bond Trusts (c)		(000)		Value	
Florida (concluded)		(==0)			
County of Miami-Dade Florida, GO, Building Better Communities Program, Series B-1,					
6.00%, 7/01/38	\$	7,500	\$	8,577,150	
		•			

		8,887,241	
Illinois 1.5%		-,,	
City of Chicago Illinois, Refunding RB, Waterworks, 2nd Lien (AGM), 5.25%, 11/01/33	2,508	2,748,018	
Kentucky 0.8%			
Kentucky State Property & Building Commission, Refunding RB, Project No. 93 (AGC),			
5.25%, 2/01/27	1,406	1,601,402	
Nevada 5.3%			
County of Clark Nevada Water Reclamation District, GO:			
Limited Tax, 6.00%, 7/01/38	5,000	5,721,450	
Series B, 5.50%, 7/01/29	3,749	4,351,966	
		10,073,416	
New Jersey 1.3%			
New Jersey Housing & Mortgage Finance Agency, RB, S/F Housing, Series CC, 5.25%,			
10/01/29	2,291	2,426,692	
New York 5.2%			
City of New York New York Transitional Finance Authority, BARB, Fiscal 2009, Series S-3,			
5.25%, 1/15/39	1,400	1,566,120	
New York Liberty Development Corp., RB, 1 World Trade Center Port Authority Consolidated			
Bonds, 5.25%, 12/15/43	4,530	5,184,948	
New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project,			
5.75%, 11/15/51 (d)	2,660	3,077,859	
		9,828,927	
Utah 0.6%			
City of Riverton Utah, RB, IHC Health Services, Inc., 5.00%, 8/15/41	1,004	1,102,933	
Total Municipal Bonds Transferred to			
Tender Option Bond Trusts 23.1%		43,844,053	
Total Long-Term Investments			
(Cost \$263,809,651) 153.4%		290,889,286	
Short-Term Securities	Shares		
FFI Institutional Tax-Exempt Fund, 0.02% (e)(f)	3,776,544	3,776,544	
Total Short-Term Securities			
(Cost \$3,776,544) 2.0%		3,776,544	
Total Investments (Cost \$267,586,195) 155.4%		294,665,830	
Other Assets Less Liabilities 2.1%		3,870,274	
Liability for TOB Trust Certificates, Including Interest			
Expense and Fees Payable (11.6%)		(21,942,336)	
VMTP Shares, at Liquidation Value (45.9%)		(87,000,000)	
Net Assets Applicable to Common Shares 100.0%		\$ 189,593,768	

See Notes to Financial Statements.

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BlackRock MuniHoldings Quality Fund, Inc. (MUS)

#### Notes to Schedule of Investments

- (a) U.S. Government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (b) Zero-coupon bond.
- (c) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing. See Note 3 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts.
- (d) All or a portion of security is subject to a recourse agreement, which may require the Fund to pay the liquidity provider in the event there is a shortfall between the TOB Trust Certificates and proceeds received from the sale of the security contributed to the TOB Trust or in the event of a default on the security. In the case of a shortfall or default, the aggregate maximum potential amount the Fund could ultimately be required to pay under the agreements, which expire from October 1, 2016 to November 15, 2019, is \$2,225,646.
- (e) During the year ended April 30, 2015, investments in issuers considered to be an affiliate of the Fund for purposes of Section 2(a)(3) of the 1940 Act were as follows:

	Shares Held		Shares Held	
	at April 30,	Net	at April 30,	
Affiliate	2014	Activity	2015	Income
FFI Institutional Tax-Exempt Fund	4,947,879	(1,171,335)	3,776,544	\$ 1,226

(f) Represents the current yield as of report date.

As of April 30, 2015, financial futures contracts outstanding were as follows:

(	Contracts				Notional	Unrealized	
	Short	Issue	Exchange	Expiration	Value	Depreciation	
	(129)	10-Year U.S. Treasury Note	Chicago Board of Trade	June 2015	\$ 16,560,375	\$ (145,794)	

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial statement purposes. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices in active markets/exchanges for identical assets or liabilities that the Fund has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund s own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund s policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Fund s policy regarding valuation of investments and derivative financial instruments, refer to Note 2 of the Notes to Financial Statements.

As of April 30, 2015, the following tables summarize the Fund s investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments <sup>1</sup>		\$ 290,889,286		\$ 290,889,286
Short-Term Securities	\$ 3,776,544			3,776,544
Total	\$ 3,776,544	\$ 290,889,286		\$ 294,665,830

See above Schedule of Investments for values in each state or political subdivision.

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments <sup>2</sup>				
Liabilities:				
Interest rate contracts	\$ (145,794)			\$ (145,794)

<sup>&</sup>lt;sup>2</sup> Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation (depreciation) on the instrument.
The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial statement purposes. As of April 30, 2015, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 183,000			\$ 183,000
Liabilities:				
TOB Trust Certificates		\$ (21,936,718)		(21,936,718)
VMTP Shares		(87,000,000)		(87,000,000)
Total	\$ 183,000	\$ (108,936,718)		\$ (108,753,718)

During the year ended April 30, 2015, there were no transfers between levels.

See Notes to Financial Statements.

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# Schedule of Investments April 30, 2015

## BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

	Par		
Municipal Bonds	(000)	Value	
Alabama 2.9%	(111)		
City of Birmingham Alabama Special Care Facilities Financing Authority, RB, Children s Hospital (AGC), 6.00%, 6/01/34	\$ 4,615	\$ 5,349,523	
County of Jefferson Alabama, RB, Limited Obligation School, Series A:			
5.50%, 1/01/21	5,500	5,527,390	
5.25%, 1/01/23	6,500	6,532,370	
		17,409,283	
Arizona 4.9%			
Arizona Board of Regents, University of Arizona, RB, 5.00%, 8/01/28	2,000	2,288,100	
Arizona Health Facilities Authority, Refunding RB, Phoenix Children s Hospital, Series A,			
5.00%, 2/01/30	2,685	2,918,488	
City of Phoenix Arizona IDA, RB, Facility, Legacy Traditional Schools Project, Series A,			
5.75%, 7/01/24 (a)	750	822,705	
City of Tucson Arizona, COP (AGC):	1.070	2.040.245	
4.25%, 7/01/21	1,870 1,895	2,040,245 2,050,902	
4.25%, 7/01/22 City of Tucson Arizona, COP, Refunding (AGC), 4.00%, 7/01/20	2,325	2,584,888	
County of Maricopa Arizona IDA, RB, Arizona Charter School Project 1, Series A,	2,323	2,364,000	
6.63%, 7/01/20	570	554,792	
County of Pima Arizona IDA, RB, Arizona Charter Schools Project, Series K, 6.38%,	310	334,172	
7/01/31	895	897,703	
County of Pinal Arizona Electric District No. 3, Refunding RB, 5.00%, 7/01/25	1,600	1,804,416	
Glendale Union School District No. 205, GO, Series C:	,	, , .	
5.00%, 7/01/24	1,945	2,310,932	
5.00%, 7/01/27	500	576,855	
Phoenix-Mesa Gateway Airport Authority, RB, Mesa Project, AMT:			
5.00%, 7/01/27	700	790,895	
5.00%, 7/01/32	1,925	2,115,556	
Salt River Project Agricultural Improvement & Power District, RB, Series A, 5.00%,			
1/01/25	4,000	4,425,960	
Scottsdale IDA, Refunding RB, Scottsdale Healthcare, Series C (AGM), 5.00%, 9/01/35	2,050	2,270,949	
State of Arizona, COP, Department of Administration, Series A (AGM), 4.25%, 10/01/23	1,000	1,080,390	
		29,533,776	
Arkansas 2.2%			
Arkansas State University, RB, 5.00%, 12/01/33	480	544,018	
City of Benton, RB:			
5.00%, 6/01/28	600	691,668	
5.00%, 6/01/29	1,055	1,209,948	
University of Arkansas, Refunding RB:	2.215	2 (00 170	
5.00%, 3/01/31	2,315 5,845	2,698,179	
5.00%, 3/01/33 5.00%, 2/01/24	·	6,753,254	
5.00%, 3/01/34	1,270	1,461,554	
		13,358,621	
California 3.5%			
California Health Facilities Financing Authority, RB, Sutter Health, Series B, 5.00%,			
8/15/22	2,135	2,501,900	
California Pollution Control Financing Authority, RB, Mandatory Put Bonds, Republic	20 <del>2</del>	CEO 005	
Services, Inc. Project, Series B, AMT, 5.25%, 6/01/23 (b)	605	653,987	
California Pollution Control Financing Authority, Refunding RB, Pacific Gas, Series C,	5,000	5 200 000	
AMT (NPFGC), 4.75%, 12/01/23	5,000 Por	5,298,800	
Municipal Bonds	Par (000)	Value	
California (concluded)	(000)	v aiut	
City of San Jose California, Refunding ARB, Series A-1, AMT, 5.00%, 3/01/25	2,000	2,238,220	
State of California, GO:	2,000	2,250,220	
5.50%, 4/01/28	15	15,065	
		-,	

5.00%, 11/01/32	2,000	2,185,280	
Various Purposes, 5.75%, 4/01/31	7,000	8,134,000	
		21,027,252	
Colorado 0.9%		21,027,202	
Denver Urban Renewal Authority, Refunding, Tax Allocation Bond, Stapleton,			
Senior-Series A-1, 5.00%, 12/01/23	2,500	2,921,700	
University of Northern Colorado, Refunding RB, Series A, 5.00%, 6/01/31	2,000	2,317,740	
- · · · · · · · · · · · · · · · · · · ·	,	7 7-	
		5 220 440	
Connecticut 2.3%		5,239,440	
	1 160	1 102 249	
Connecticut State Development Authority, RB, Learjet, Inc. Project, AMT, 7.95%, 4/01/26	1,160	1,192,248	
Connecticut State Health & Educational Facility Authority, Refunding RB, Lawrence &	4.520	4.056.500	
Memorial Hospital, Series F, 5.00%, 7/01/31	4,530	4,956,500	
State of Connecticut, GO, Series B, 5.00%, 4/15/31	6,990	7,965,524	
		14,114,272	
Florida 5.9%			
County of Broward Florida School Board, COP, Refunding, Series A (AGM), 5.00%,			
7/01/24	10,000	11,408,600	
County of Highlands Health Facilities Authority, Refunding RB, Adventis Health, Series G,			
5.13%, 11/15/16 (c)	35	37,442	
County of Lee Florida, Refunding ARB, Series A, AMT:			
5.50%, 10/01/23	1,000	1,175,520	
(AGM), 5.00%, 10/01/27	1,635	1,824,873	
County of Miami-Dade Florida, RB, AMT, Series B:			
6.00%, 10/01/28	3,470	4,237,911	
6.00%, 10/01/29	3,480	4,248,697	
County of Miami-Dade Florida Transit System Sales Surtax Revenue, Refunding RB,			
5.00%, 7/01/32	1,500	1,697,340	
County of Miami-Dade Florida Water & Sewer System Revenue, Refunding RB, Series C			
(BHAC), 5.00%, 10/01/23	8,000	8,949,200	
Midtown Miami Community Development District, Refunding, Special Assessment Bonds,			
Series A, 4.25%, 5/01/24	1,835	1,953,009	
Sterling Hill Community Development District, Refunding RB, Special Assessment Bonds,			
Series B, 5.50%, 11/01/10 (d)(e)	155	92,998	
		35,625,590	
Georgia 3.1%		22,020,000	
City of Atlanta Georgia Water & Wastewater Revenue, Refunding RB, 5.00%, 11/01/32	10,000	11,567,500	
Fulton County Development Authority, Refunding RB, Robert Woodruff, Series B, 5.25%,	10,000	11,007,000	
3/15/24	3,000	3,356,220	
Medical Center Hospital Authority, Refunding RB, Columbus Regional Healthcare (AGM):	2,300	5,550,550	
4.00%, 8/01/23	1,500	1,590,135	
4.13%, 8/01/24	2,000	2,117,840	
······································	2,500	2,227,010	
		10 (21 (27	
0.40		18,631,695	
Guam 0.4%	2 100	2 225 102	
Territory of Guam, RB, Section 30, Series A, 5.38%, 12/01/24	2,100	2,325,183	

See Notes to Financial Statements.

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BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

Municipal Bonds Hawaii 0.9%	Par (000)	Value	
State of Hawaii Airports System, Refunding ARB, Series A, 5.25%, 7/01/29	\$ 5,000	\$ 5,747,800	
Illinois 16.3%			
City of Chicago Illinois, Refunding RB, GO, Series A, 5.25%, 1/01/30	1,000	1,009,630	
City of Chicago Illinois Midway International Airport, Refunding ARB, 2nd Lien, Series A, AMT, 5.50%, 1/01/32	1,500	1,707,750	
City of Chicago Illinois Midway International Airport, Refunding RB, AMT, Series A, 5.00%, 1/01/32	5,000	5,478,050	
City of Chicago Illinois O Hare International Airport, Refunding GARB, AMT:	12.000	15 105 150	
Senior Lien, Series A, 5.00%, 1/01/23	13,000	15,107,170	
Series C, 5.25%, 1/01/28 Series C, 5.25%, 1/01/29	1,350 3,020	1,537,812	
City of Chicago Illinois Transit Authority, RB, 5.25%, 12/01/31	3,700	3,418,217 4,126,166	
Madison-Macoupin Etc. Counties Community College District No. 536, GO, Refunding, Lewis & Clark Community College:	3,700	4,120,100	
5.00%, 5/01/30	475	527,630	
5.00%, 5/01/31	500	554,295	
5.00%, 5/01/32	500	559,280	
McHenry County Conservation District, GO, 5.13%, 2/01/17 (c)	12,695	13,699,175	
Railsplitter Tobacco Settlement Authority, RB:			
5.50%, 6/01/23	3,500	4,096,715	
6.25%, 6/01/24	12,750	13,561,155	
State of Illinois, GO:	7.000	5 202 200	
5.25%, 2/01/30	5,000	5,392,300	
5.00%, 5/01/30 State of Illinois Tell Highway Authority, PR. Series A. 5.00%, 1/01/24	10,000 9,140	10,617,700	
State of Illinois Toll Highway Authority, RB, Series A, 5.00%, 1/01/34 Village of Hodgkins Illinois, RB, MBM Project, AMT, 5.90%, 11/01/17	6,000	10,237,440 6,010,440	
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF	0,000	0,010,440	
Project, 6.00%, 1/01/25	1,290	1,290,529	
Indiana 4.1% City of Whiting Indiana, RB, BP Products North America, Inc. Project, 5.25%, 1/01/21 County of Jasper Indiana, Refunding RB, Northern Indiana Public Service Co., Series C (NPFGC), 5.85%, 4/01/19 Indiana Finance Authority, RB, Wastewater, 1st Lien, Series A, 5.25%, 10/01/31 Indiana Finance Authority, Refunding RB, US Steel Corp. Project, 6.00%, 12/01/19	4,800 2,000 10,000 5,000	98,931,454 5,576,160 2,275,260 11,546,100 5,575,650	
		24,973,170	
Iowa 1.0%			
Iowa Higher Education Loan Authority, RB, Private College Facility:		<b>7</b> 040	
5.25%, 4/01/23	695	796,053	
5.25%, 4/01/24	730	844,048	
5.25%, 4/01/25 5.25%, 4/01/26	520 360	596,606 409,853	
Iowa Higher Education Loan Authority, Refunding RB, Private College Facility:	300	409,833	
5.00%, 9/01/22	2,315	2,386,950	
Upper Iowa University Project, 5.00%, 9/01/20	1,000	1,068,870	
	2,000	6,102,380	
	Par		
Municipal Bonds Kansas 1.4%	(000)	Value	
Kansas Development Finance Authority, Refunding RB, Adventist Health System/Sunbelt Obligated Group, Series C, 5.00%, 11/15/23	\$ 1,500	\$ 1,705,305	
Seward County Unified School District No. 480 Liberal, GO, Refunding, 5.00%, 9/01/33	6,000	6,684,360	
Bernard Country Onlined School District Ivo. 400 Elocial, GO, Returning, 3.00%, 9/01/35	0,000		
Kentucky 1.5%		8,389,665	
incheuchy 1.60/0			

State of Kentucky Property & Building Commission, Refunding RB, Project No. 93 (AGC),			
5.25%, 2/01/24	8,000	9,135,120	
Louisiana 6.3%	· ·	,	
City of Bossier City Louisiana Utilities, Refunding RB, 5.00%, 10/01/32	2,000	2,285,480	
City of New Orleans Louisiana Aviation Board, Refunding GARB, Restructuring, Series			
A-2 (AGC), 6.00%, 1/01/23	850	977,823	
Jefferson Parish Hospital Service District No. 1, Refunding RB, West Jefferson Medical			
Center, Series A (AGM), 5.50%, 1/01/26	3,000	3,466,020	
Louisiana Local Government Environmental Facilities & Community Development			
Authority, Refunding RB, 5.00%, 11/01/32	7,000	7,969,010	
Louisiana Local Government Environmental Facilities & Community Development			
Authority, Refunding RB, BRCC Facilities Corp. Project:			
5.00%, 12/01/27	3,445	3,876,727	
5.00%, 12/01/28	3,715	4,154,559	
Louisiana Public Facilities Authority, Refunding RB, Entergy Gulf States Louisiana LLC			
Project, Series A, 5.00%, 9/01/28	2,000	2,029,960	
New Orleans Aviation Board, RB, Series A:			
5.00%, 1/01/31	855	968,399	
5.00%, 1/01/32	1,000	1,128,230	
5.00%, 1/01/33	1,000	1,125,600	
State of Louisiana Gasoline & Fuels Tax Revenue, Refunding RB, 4.00%, 5/01/34	5,750	5,992,535	
Terrebonne Levee & Conservation District, RB, Sales Tax, 5.00%, 7/01/28	3,660	4,092,502	
		38,066,845	
Maine 0.3%		38,066,845	
Maine 0.3% Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities,		38,066,845	
	1,965	38,066,845 1,987,106	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%	1,965		
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20	1,965 1,750		
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%		1,987,106	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33		1,987,106	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health	1,750	1,987,106 1,928,938	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33	1,750 1,140	1,987,106 1,928,938 1,276,686	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33	1,750 1,140	1,987,106 1,928,938 1,276,686 1,663,935	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33	1,750 1,140	1,987,106 1,928,938 1,276,686	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%	1,750 1,140	1,987,106 1,928,938 1,276,686 1,663,935	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester	1,750 1,140 1,500	1,987,106 1,928,938 1,276,686 1,663,935 4,869,559	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25	1,750 1,140	1,987,106 1,928,938 1,276,686 1,663,935	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25  Massachusetts School Building Authority, RB, Dedicated Sales Tax, Series A (AGM),	1,750 1,140 1,500	1,987,106 1,928,938 1,276,686 1,663,935 4,869,559	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25	1,750 1,140 1,500	1,987,106 1,928,938 1,276,686 1,663,935 4,869,559	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25  Massachusetts School Building Authority, RB, Dedicated Sales Tax, Series A (AGM),	1,750 1,140 1,500	1,987,106 1,928,938 1,276,686 1,663,935 4,869,559 1,185,822 5,952,532	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25  Massachusetts School Building Authority, RB, Dedicated Sales Tax, Series A (AGM), 5.00%, 8/15/15 (c)	1,750 1,140 1,500	1,987,106 1,928,938 1,276,686 1,663,935 4,869,559	
Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34  Maryland 0.8%  Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20  Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33  Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33  Massachusetts 1.2%  Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25  Massachusetts School Building Authority, RB, Dedicated Sales Tax, Series A (AGM),	1,750 1,140 1,500	1,987,106 1,928,938 1,276,686 1,663,935 4,869,559 1,185,822 5,952,532	

See Notes to Financial Statements.

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BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

	Par		
Municipal Bonds	(000)	Value	
Michigan (concluded)			
Michigan Finance Authority, Refunding RB, Senior Lien, Detroit Water and Sewer, Series C-3, 5.00%, 7/01/31	\$ 4,000	\$ 4,457,000	
Michigan State Building Authority, Refunding RB, Facilities Program, Series II-A,	\$ 4,000	4,437,000	
5.00%, 10/15/24	2,500	2,892,775	
Michigan State Hospital Finance Authority, Refunding RB, Henry Ford Health System,	4.000	5.561.000	
5.25%, 11/15/24 State of Michigan Trunk Line Revenue, RB, 5.00%, 11/15/31	4,900 2,000	5,561,990 2,271,540	
State of Michigan Trunk Line Revenue, RB, 5.00%, 11/13/31	2,000	2,271,340	
		16,317,885	
Minnesota 1.5%		10,517,005	
City of St. Cloud Minnesota, Refunding RB, Centracare Health System, Series A,			
4.25%, 5/01/21	2,300	2,555,300	
St. Cloud Minnesota Independent School District No. 742, GO, Series A, 3.00%, 2/01/31	350	338,429	
University of Minnesota, RB, Biomedical Science Research Facilities Funding Program:			
Series B, 5.00%, 8/01/36	1,000	1,125,960	
Series C, 5.00%, 8/01/27	1,390	1,624,021	
Series C, 5.00%, 8/01/28	740	855,943	
Series C, 5.00%, 8/01/29	1,555	1,789,385	
Series C, 5.00%, 8/01/30	835	956,250	
		0.245.200	
Mississippi 0.7%		9,245,288	
Mississippi Business Finance Corp., Refunding RB, System Energy Resource, Inc. Project,			
5.88%, 4/01/22	4,190	4,215,140	
Missouri 1.9%	.,	.,,	
Health & Educational Facilities Authority of the State of Missouri, Refunding RB, Series A,			
5.00%, 6/01/30	2,000	2,283,540	
Missouri Joint Municipal Electric Utility Commission Power, RB, Prairie State Project,			
Series A (BHAC), 5.00%, 1/01/17 (c)	5,000	5,364,850	
Missouri State Environmental Improvement & Energy Resource Authority, Refunding			
RB, Revolving Funds Program, Series A, 5.00%, 1/01/25	3,150	3,741,539	
		11 200 020	
Montana 0.3%		11,389,929	
Montana State Board of Regents, RB, 5.00%, 11/15/30	1,000	1,157,860	
Yellowstone County School District No. 2 Billings, GO, 5.00%, 6/15/30	715	840,869	
Tenowstone County School District No. 2 Dinnings, GO, 3.00 //, 0/13/30	713	040,009	
		1,998,729	
Nebraska 0.9%		1,990,729	
Lancaster County Hospital Authority No. 1, Refunding RB, Immanuel Obligation Group,			
5.50%, 1/01/30	1,000	1,104,460	
Nebraska Public Power District, Refunding RB:			
Series A, 5.00%, 1/01/30	1,000	1,127,120	
Series A, 5.00%, 1/01/32	2,000	2,234,960	
Series A-1, 3.00%, 1/01/33	900	857,295	
V 1 4 69		5,323,835	
Nevada 1.6%	5,000	5 (20 (50	
Clark County Department of Aviation, Refunding RB, 5.00%, 7/01/33	5,000	5,629,650	
M. Chain at	Par	¥7. ¥	
Municipal Bonds Nevada (concluded)	(000)	Value	
County of Humboldt Nevada, Refunding RB, Idaho Power Co. Project, 5.15%, 12/01/24	\$ 3,800	\$ 4,275,798	
County of Transporter revisua, Returning RD, Indito Fower Co. 110Ject, 3.13 /0, 12/01/24	ψ 5,000	Ψ 7,273,770	
		9,905,448	
New Jersey 19.2%		7,703, <del>44</del> 0	
	2,000	2,215,560	

County of Essex New Jersey Improvement Authority, LRB, Newark Project, Series A			
(AGM), 5.00%, 11/01/20 Garden State Preservation Trust, RB, Election of 2005, Series A (AGM), 5.80%, 11/01/15			
(c) Garden State Preservation Trust, RB, Election of 2005, Series A (AGM), 5.80%, 11/01/15	5,050	5,192,461	
New Jersey EDA, RB, AMT:	3,030	3,192,401	
5.50%, 1/01/26	1,500	1,757,460	
5.50%, 1/01/27	1,000	1,159,340	
Continental Airlines, Inc. Project, 5.13%, 9/15/23	6,040	6,645,872	
New Jersey EDA, Refunding RB:	0,040	0,043,872	
New Jersey American Water Co., Series E, AMT, 4.70%, 12/01/25	3,000	3,237,450	
School Facilities Construction, Series AA, 4.25%, 12/15/24	3,850	3,965,154	
School Facilities Construction, Series EE, 5.00%, 9/01/23	3,465	3,770,093	
New Jersey Educational Facilities Authority, RB, Higher Education Facilities Trust Fund,	3,403	3,770,093	
5.00%, 6/15/28	10,000	10,780,100	
	10,000	10,780,100	
New Jersey Health Care Facilities Financing Authority, Refunding RB, Hackensack University Medical, Series B (AGM), 4.00%, 1/01/24	635	679,901	
New Jersey Higher Education Student Assistance Authority, Refunding RB:	033	679,901	
	1 665	1 942 055	
Series 1, AMT, 5.50%, 12/01/26	1,665 2,585	1,843,055	
Series 1, AMT, 5.00%, 12/01/27	1,930	2,585,284 2,062,359	
Student Loan, Series 1A, 4.75%, 12/01/21			
New Jersey State Turnpike Authority, Refunding RB, Series B, 5.00%, 1/01/29	10,000	11,309,500	
New Jersey Transportation Trust Fund Authority, RB:	12.500	12 510 500	
5.25%, 6/15/32	12,500	13,519,500	
Series B, 5.25%, 6/15/26	3,500	3,814,020	
Transportation Program, Series AA, 5.25%, 6/15/31	12,000	12,893,400	
Transportation System, Series A, 5.25%, 6/15/24	3,185	3,521,177	
Transportation System, Series B, 5.50%, 6/15/31	13,970	15,481,554	
Newark Housing Authority, RB, Series A:	1.000	1 422 005	
5.00%, 12/01/23	1,230	1,433,085	
5.00%, 12/01/25	1,345	1,546,885	
South Jersey Port Corp., RB, Marine Terminal, Series O-1 (AGC), 4.63%, 1/01/23	1,375	1,484,821	
State of New Jersey, GO, 5.00%, 6/01/28	5,000	5,719,100	
		116,617,131	
New Mexico 0.9%			
Albuquerque Bernalillo County Water Utility Authority, Refunding RB, 4.00%, 7/01/33	5,510	5,734,257	
New York 19.1%			
City of New York New York, GO:			
Series D1, 5.13%, 12/01/26	4,615	5,123,573	
Sub-Series B-1, 5.25%, 9/01/22	8,250	9,358,800	
Sub-Series I-1, 5.50%, 4/01/21	5,000	5,802,200	
City of New York New York, GO, Refunding, Fiscal 2013, Series E:			
5.00%, 8/01/24	4,000	4,579,520	
5.00%, 8/01/30	6,230	7,090,550	

See Notes to Financial Statements.

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BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

	Par		
Municipal Bonds	(000)	Value	
New York (concluded)	` ′		
County of Essex New York Industrial Development Agency, Refunding RB, International			
Paper Co. Project, Series A, AMT, 5.20%, 12/01/23	\$ 5,000	\$ 5,090,300	
County of Westchester New York Healthcare Corp., Refunding RB, Senior Lien,			
Remarketing, Series A:	F 450	6.171.500	
5.00%, 11/01/24	5,470	6,171,582	
5.00%, 11/01/30 Long Jeland Bouyer Authority, Refunding RR, Fleatric System, Series A, 5.50%, 4/01/24	1,000	1,090,920 1,120,760	
Long Island Power Authority, Refunding RB, Electric System, Series A, 5.50%, 4/01/24 Metropolitan Transportation Authority, RB:	1,000	1,120,760	
Series B, 5.25%, 11/15/33	4,405	5,109,051	
Sub-Series B-1, 5.00%, 11/15/24	2,300	2,743,877	
Sub-Series B-4, 5.00%, 11/15/24	1,500	1,789,485	
Monroe County Industrial Development Corp., Refunding RB, Series A, 5.00%, 7/01/29	5,695	6,572,600	
New York City Transitional Finance Authority, BARB, Fiscal 2009, Series S-3, 5.00%,	3,073	0,572,000	
1/15/23	3,560	4,030,632	
New York City Trust for Cultural Resources, Refunding RB, Carnegie Hall, Series A,	-,	.,	
5.00%, 12/01/29	2,750	3,138,025	
New York State Dormitory Authority, RB:	,	· · ·	
Education, Series D, 5.00%, 9/15/16 (c)	5	5,315	
Fordham University, Series A, 5.25%, 7/01/25	900	1,051,308	
Mount Sinai School of Medicine, Series A (NPFGC), 5.15%, 7/01/24	1,000	1,159,760	
Municipal Health Facilities Lease, Sub-Series 2-4, 5.00%, 1/15/27	6,900	7,622,085	
New York University Hospitals Center, Series A, 5.00%, 7/01/22	1,725	1,971,106	
New York University Hospitals Center, Series A, 5.13%, 7/01/23	1,670	1,914,889	
North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/30	1,495	1,680,604	
New York State Dormitory Authority, Refunding RB:			
North Shore-Long Island Jewish Obligated Group, Series E, 5.00%, 5/01/22	650	729,274	
Series A, 4.00%, 7/01/32	1,345	1,395,074	
Yeshiva University, 4.25%, 9/01/24	2,750	2,778,078	
New York State Urban Development Corp., RB, Service Contract, Series B, 5.00%, 1/01/21	8,000	8,984,080	
Port Authority of New York & New Jersey, ARB, JFK International Air Terminal LLC			
Project, 5.00%, 12/01/20	2,475	2,830,361	
Port Authority of New York & New Jersey, Refunding ARB, Consolidated, 152nd	1.000	1,002,660	
Series, AMT, 5.00%, 11/01/23	1,000	1,092,660	
Port Authority of New York & New Jersey, Refunding RB:	6,185	7 262 022	
5.00%, 11/01/28 Consolidated, 153rd Series, 5.00%, 7/15/24	2,010	7,362,933 2,252,848	
State of New York Dormitory Authority, RB, Mental Health Services (AGM):	2,010	2,232,848	
5.00%, 8/15/18 (c)	30	33,910	
5.00%, 8/15/18 (c)	10	11,303	
5.00%, 2/15/22	3,950	4,424,514	
2nd Series, 5.00%, 8/15/18 (c)	10	11,303	
21.4 501103, 510076, 0/12/10 (0)		11,000	
		116,123,280	
North Carolina 0.4%		110,123,280	
County of Gaston North Carolina Industrial Facilities & Pollution Control Financing			
Authority, RB, Exempt Facilities, National Gypsum Co. Project, AMT, 5.75%, 8/01/35	1,105	1,105,984	
Audiority, RB, Exempt Lacinties, National Cypsum Co. Hoject, Airi 1, 5.75 %, 6/6/1/55	Par	1,103,704	
Municipal Bonds	(000)	Value	
North Carolina (concluded)	(***)		
North Carolina Medical Care Commission, Refunding RB, WakeMed, Series A,			
5.00%, 10/01/31	\$ 1,500	\$ 1,661,355	
		2,767,339	
Ohio 1.1%		2,707,007	
State of Ohio Turnpike Commission, RB, Junior Lien, Infrastructure Projects, Series A-1,			
5.25%, 2/15/31	6,000	6,922,500	
Oregon 1.7%	-,		
Klamath County School District, GO:			
•			

5.00%, 6/15/30	1,000	1,140,910	
5.00%, 6/15/31	1,000	1,137,050	
Oregon State Facilities Authority, Refunding RB, Series A:			
5.00%, 11/15/29	1,000	1,146,260	
Reed College Project, 5.00%, 7/01/29	1,835	2,101,626	
State of Oregon, GO, Series H, 5.00%, 5/01/36	2,000	2,276,680	
Umatilla County School District No. 16R Pendleton, GO, Series A, 5.00%, 6/15/32	2,000	2,324,100	
		10,126,626	
Pennsylvania 6.6%		10,120,020	
City of Philadelphia Pennsylvania, ARB, Series A, AMT, 5.00%, 6/15/20	2.895	3,120,405	
City of Pittsburgh Pennsylvania, GO, Refunding, Series B (AGM), 5.25%, 9/01/17	9,630	10,265,676	
County of Allegheny Pennsylvania, GO, Refunding, Series C-68, 5.00%, 11/01/25	2,515	2,926,504	
County of Allegheny Pennsylvania, GO, Series C-67:	2,313	2,720,304	
5.00%, 11/01/25	2,700	3,152,439	
5.00%, 11/01/26	2,375	2,744,954	
Delaware River JT Toll Bridge Commission, Refunding RB, 5.00%, 7/01/31	400	460,188	
Pennsylvania Economic Development Financing Authority, RB, AMT, 5.00%, 12/31/30	5,100	5,584,296	
Pennsylvania Turnpike Commission, RB, Sub-Series B, 5.25%, 12/01/31	4,000	4,440,720	
South Fork Municipal Authority, Refunding RB, Conemaugh Valley Memorial Hospital,	4,000	7,770,720	
Series A (AGC), 6.00%, 7/01/20 (c)	6,225	7,621,952	
Sches A (AGC), 0.00 //, 1/01/20 (C)	0,223	7,021,932	
		40,317,134	
Puerto Rico 1.8%			
Puerto Rico Housing Finance Authority, Refunding RB, M/F Housing, Subordinate, Capital			
Fund Modernization, 5.13%, 12/01/27	10,000	10,706,600	
Rhode Island 2.0%			
Narragansett Bay Commission, Refunding RB, Series B, 5.00%, 9/01/32	4,150	4,817,652	
Providence Redevelopment Agency, Refunding RB, Series A, 5.00%, 4/01/29	1,000	1,088,020	
Rhode Island Clean Water Finance Agency, RB, 5.00%, 10/01/32	1,435	1,656,334	
Rhode Island Health & Educational Building Corp., RB, City of Newport Issue Financing			
Program, Series C, 5.00%, 5/15/30	2,305	2,589,414	
Rhode Island Health & Educational Building Corp., Refunding RB, 5.00%, 9/01/32	2,000	2,308,960	
		12,460,380	
South Dakota 0.2%		, ,	
South Dakota Health & Educational Facilities Authority, Refunding RB, Regional Health,			
5.00%, 9/01/25	1,000	1,115,300	
	1,000	1,110,000	

See Notes to Financial Statements.

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BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

		Par	
Municipal Bonds	(	000)	Value
Tennessee 1.3%			
County of Memphis-Shelby Tennessee Sports Authority, Inc., Refunding RB, Memphis			
Arena Project:			
Series A, 5.00%, 11/01/23		,695	\$ 3,055,241
Series B, 5.00%, 11/01/22	1	,000	1,136,450
Knox County Health Educational & Housing Facility Board Tennessee, Refunding RB,			
Eastowne Village Project, 4.00%, 6/01/31 (b)	3	,490	3,734,858
			7,926,549
Texas 8.0%			
City of Grapevine Texas, GO, 5.00%, 2/15/33	5	,685	6,461,059
City of Houston Texas, Refunding ARB, Series A:			
Senior Lien, 5.25%, 7/01/29	4	,055	4,495,333
Subordinate Lien, AMT, 5.00%, 7/01/25	1	,500	1,698,915
Subordinate Lien, AMT, 5.00%, 7/01/32	1	,010	1,109,980
Dallas-Fort Worth International Airport Facilities Improvement Corp., ARB, Series			
2001-A-1, AMT, 6.15%, 1/01/16	4	,000	4,018,960
Dallas/Fort Worth International Airport, Refunding RB, AMT:			
Series E, 5.00%, 11/01/26		,185	2,494,920
Series E, 5.00%, 11/01/27	4	,960	5,638,776
Series F, 5.00%, 11/01/31	6	,345	7,041,047
Love Field Airport Modernization Corp., RB, Southwest Airlines Co. Project, AMT,			
5.00%, 11/01/28		,000	1,117,450
Red River Education Financing Corp., RB, 5.00%, 3/15/33		,340	1,514,642
San Jacinto River Authority, RB, Special Project (AGM), 5.25%, 10/01/25		,910	3,307,011
Socorro ISD, GO, Refunding, School Building (PSF-GTD), 5.00%, 8/15/32	2	,500	2,868,700
Via Metropolitan Transit Authority, Refunding RB:			
5.25%, 8/01/28		,585	1,802,827
5.25%, 8/01/29		,720	1,943,256
5.25%, 8/01/33	3	,000	3,345,990
			48,858,866
U.S. Virgin Islands 1.9%			
Virgin Islands Public Finance Authority, Refunding RB:			
Series A, 5.25%, 10/01/24	5	,000	6,124,000
Series C, 5.00%, 10/01/30	5	,000	5,512,850
			11,636,850
Vermont 1.0%			
University of Vermont & State Agricultural College, Refunding RB, 4.00%, 10/01/30	5	,565	5,938,467
West Virginia 1.0%			
West Virginia Hospital Finance Authority, Refunding RB, Charleston Area Medical Center,			
Inc., Series A, 5.13%, 9/01/23	4	,000	4,427,040
West Virginia University, RB, West Virginia University Project, Series B, 5.00%, 10/01/30	1	,500	1,694,505
			6,121,545
Wisconsin 2.5%			0,121,6 18
Public Finance Authority, Refunding RB, AMT:			
National Gypsum Co., 5.25%, 4/01/30	2	,410	2,456,778
Wisconsin Airport Facilities, Senior Obligated Group, Series B, 5.25%, 7/01/28		,765	5,310,259
WPPI Energy, Refunding RB, Supply System, Series A:			
5.00%, 7/01/31	1	,600	1,827,232
5.00%, 7/01/32		,275	1,449,560
		Par	
Municipal Bonds	(	000)	Value
Wisconsin (concluded)			
WPPI Energy, Refunding RB, Supply System, Series A (concluded):			
5.00%, 7/01/33	\$ 3	,500	\$ 3,936,205

		14,980,034	
Total Municipal Bonds 138.2%		839,355,677	
•			
Municipal Bonds Transferred to			
Tender Option Bond Trusts (f)			
Illinois 1.6%			
Du Page & Will Counties Community School District No. 204, GO, School Building, Series			
A (NPFGC), 5.25%, 12/30/22	8,650	9,473,809	
Louisiana 2.4%			
State of Louisiana, GO, Series A, 5.00%, 8/01/24	12,000	14,421,960	
Massachusetts 1.9%			
Massachusetts Development Finance Agency, Refunding RB, Partners Healthcare, Series L,			
5.00%, 7/01/31	10,175	11,521,132	
Minnesota 1.9%	-,	,- , -	
State of Minnesota, GO, State Various Purposes, Series A, 4.00%, 8/01/29	10,525	11,791,547	
New York 7.9%	10,020	11,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
City of New York New York, GO, Refunding, Series E, 5.00%, 8/01/27	3,507	4,012,504	
City of New York New York, GO, Series I, 5.00%, 3/01/27	7,009	8,008,270	
City of New York New York Municipal Water Finance Authority, Refunding RB, Water &	7,007	0,000,270	
Sewer System, Series A, 4.75%, 6/15/30	8.000	8,611,920	
	4,001	4,673,228	
Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/25	4,001	4,073,228	
New York State Urban Development Corp., RB, Personal Income Tax, Series A-1,	5.501	6 242 721	
5.00%, 3/15/32	5,501	6,242,721	
Port Authority of New York & New Jersey, ARB, Consolidated, 169th Series, 5.00%,			
10/15/26	5,530	6,209,803	
Port Authority of New York & New Jersey, RB, 178th Series, AMT, 5.00%, 12/01/32	4,009	4,457,809	
Sales Tax Asset Receivable Corp., Refunding RB, Fiscal 2015, Series A, 5.00%, 10/15/31	5,010	5,943,163	
		48,159,418	
Total Municipal Bonds Transferred to		,,	
Tender Option Bond Trusts 15.7%		95,367,866	
Total Long-Term Investments		33,307,000	
(Cost \$876,512,408) 153.9%		934,723,543	
(Cost \$670,512,400) 133.570		754,725,545	
	CI		
Short-Term Securities	Shares	1.056.010	
FFI Institutional Tax-Exempt Fund, 0.02% (g)(h)	1,356,943	1,356,943	
Total Short-Term Securities			
(Cost \$1,356,943) 0.2%		1,356,943	
Total Investments (Cost \$877,869,351) 154.1%		936,080,486	
Other Assets Less Liabilities 1.9%		11,399,295	
Liability for TOB Trust Certificates, Including Interest			
Expense and Fees Payable (8.7%)		(52,939,472)	
VMTP Shares, at Liquidation Value (47.3%)		(287,100,000)	
Not Assets Applicable to Common Shares 100 0%		\$ 607 440 200	
Net Assets Applicable to Common Shares 100.0%		\$ 607,440,309	

See Notes to Financial Statements.

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#### Schedule of Investments (concluded)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

#### Notes to Schedule of Investments

- (a) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (b) Variable rate security. Rate shown is as of report date.
- (c) U.S. Government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (d) Issuer filed for bankruptcy and/or is in default of principal and/or interest payments.
- (e) Non-income producing security.
- (f) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing. See Note 3 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts.
- (g) During the year ended April 30, 2015, investments in issuers considered to be an affiliate of the Fund for purposes of Section 2(a)(3) of the 1940 Act were as follows:

	Shares Held		Shares Held	
	at April 30,	Net	at April 30,	
Affiliate	2014	Activity	2015	Income
FFI Institutional Tax-Exempt Fund	25,184,531	(23,827,588)	1,356,943	\$ 4,098

(h) Represents the current yield as of report date.

As of April 30, 2015, financial futures contracts outstanding were as follows:

Contracts				Notional	Unrealized
Short	Issue	Exchange	Expiration	Value	Depreciation
(609)	10-Year U.S. Treasury Note	Chicago Board of Trade	June 2015	\$ 78,180,375	\$ (688,283)

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial statement purposes. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The categorization of a value determined for investment and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily

an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices in active markets/exchanges for identical assets or liabilities that the Fund has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund s own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund s policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Fund s policy regarding valuation of investments and derivative financial instruments, refer to Note 2 of the Notes to Financial Statements.

As of April 30, 2015, the following tables summarize the Fund s investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments <sup>1</sup>		\$ 934,723,543		\$ 934,723,543
Short-Term Securities	\$ 1,356,943			1,356,943
Total	\$ 1,356,943	\$ 934,723,543		\$ 936,080,486

<sup>1</sup> See above Schedule of Investments for values in each state or political subdivision.

	Level 1	Level 2	Level 3	7	Total
Derivative Financial Instruments <sup>2</sup>					
Liabilities:					
Interest rate contracts	\$ (688,283)			\$	(688,283)

<sup>&</sup>lt;sup>2</sup> Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation (depreciation) on the instrument.

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial statement purposes. As of April 30, 2015, such assets and/or

liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 864,000			\$ 864,000
Liabilities:				
TOB Trust Certificates		\$ (52,931,848)		(52,931,848)
VMTP Shares		(287,100,000)		(287,100,000)
Total	\$ 864,000	\$ (340,031,848)		\$ (339,167,848)

During the year ended April 30, 2015, there were no transfers between levels.

See Notes to Financial Statements.

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## Schedule of Investments April 30, 2015

BlackRock MuniVest Fund II, Inc. (MVT)

(Percentages shown are based on Net Assets)

		Par	
Municipal Bonds		(000)	Value
Alabama 1.9%			
County of Jefferson Alabama, RB, Limited Obligation School, Series A, 5.25%, 1/01/19 County of Jefferson Alabama Sewer, Refunding RB:	\$	1,490	\$ 1,497,421
Senior Lien, Series A (AGM), 5.00%, 10/01/44		805	874,448
Sub-Lien, Series D, 6.00%, 10/01/42		3,575	4,013,116
			( 204 005
Alaska 0.9%			6,384,985
Northern Tobacco Securitization Corp., Refunding RB, Tobacco Settlement, Asset-Backed,			
Series A:			
4.63%, 6/01/23		1,265	1,265,177
5.00%, 6/01/46		2,250	1,767,083
			2.022.260
Arizona 0.2%			3,032,260
County of Maricopa Arizona IDA, RB, Arizona Charter Schools Project, Series A, 6.75%,			
7/01/29		860	809,165
California 12.6%			
California Health Facilities Financing Authority, RB:		2 200	2.511.510
St. Joseph Health System, Series A, 5.75%, 7/01/39		2,200	2,541,748
Sutter Health, Series B, 6.00%, 8/15/42 California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System,		3,170	3,786,660
Series A, 5.00%, 7/01/33		890	1,007,747
California Municipal Finance Authority, RB, Senior, Caritas Affordable Housing, Inc. Projects,			-,,
S/F Housing, Series A:			
5.25%, 8/15/39		145	158,236
5.25%, 8/15/49 California Dellation Control Figure in Authority DB Describe December (Changel Side) LB		370	403,019
California Pollution Control Financing Authority, RB, Poseidon Resources (Channel Side) LP Desalination Project, AMT, 5.00%, 11/21/45 (a)		1,495	1,612,911
City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles		1,193	1,012,711
International Airport, Series A:			
5.25%, 5/15/39		800	905,592
Senior, 5.00%, 5/15/40		5,930	6,735,057
City of Stockton California Public Financing Authority, RB, Delta Water Supply Project, Series A, 6.25%, 10/01/40		360	433,390
San Marcos Unified School District, GO, CAB, Election of 2010, Series B, 0.00%, 8/01/42 (b)		2,000	601,120
State of California, GO, Various Purposes:		•	·
6.00%, 3/01/33		2,525	3,028,258
6.50%, 4/01/33	1	14,925	17,792,689
State of California Public Works Board, LRB, Various Capital Projects: Series I, 5.00%, 11/01/38		775	864,683
Sub-Series I-1, 6.38%, 11/01/34		1,185	1,441,481
Tobacco Securitization Authority of Southern California, Refunding RB, Tobacco Settlement,		1,100	1,111,101
Asset-Backed, Senior Series A-1, 4.75%, 6/01/25		965	965,019
			42,277,610
Colorado 0.4%			
Colorado Health Facilities Authority, RB, Catholic Health Initiatives, Series D, 6.25%, 10/01/33		1,060	1,213,456
Connecticut 1.9%		1,000	1,213,430
Connecticut State Health & Educational Facility Authority, RB, Ascension Health Senior			
Credit, Series A, 5.00%, 11/15/40		1,375	1,522,331
Connecticut State Health & Educational Facility Authority, Refunding RB, Wesleyan		2 205	2.052.552
University, Series G, 5.00%, 7/01/35		3,385	3,852,773
Municipal Bonds		Par (000)	Value
Connecticut (concluded)		(000)	, aruc
Mohegan Tribe of Indians of Connecticut, Refunding RB, Public Improvement, Priority			
Distribution, 6.25%, 1/01/31		950	949,962

		6,325,066	
Delaware 1.7%			
County of Sussex Delaware, RB, NRG Energy, Inc., Indian River Power LLC Project,			
6.00%, 10/01/40	1,125	1,294,931	
Delaware State EDA, RB, Exempt Facilities, Indian River Power LLC Project, 5.38%, 10/01/45	4,065	4,428,736	
		5,723,667	
District of Columbia 2.8%		3,723,007	
District of Columbia, Refunding RB, Kipp Charter School, Series A, 6.00%, 7/01/43	240	279,149	
Metropolitan Washington Airports Authority, Refunding RB:	240	279,149	
	( 500	2.066.919	
Dulles Toll Road, CAB, 2nd Senior Lien, Series B (AGC), 0.00%, 10/01/33 (b)	6,590	2,966,818	
Dulles Toll Road, 1st Senior Lien, Series A, 5.25%, 10/01/44	1,500	1,677,150	
Dulles Toll Road, CAB, 2nd Senior Lien, Series B (AGC), 0.00%, 10/01/34 (b)	4,830	2,050,866	
Dulles Toll Road, CAB, 2nd Senior Lien, Series B (AGC), 0.00%, 10/01/35 (b)	6,515	2,589,973	
		9,563,956	
Florida 2.9%			
Collier County Health Facilities Authority, Refunding RB, Series A, 5.00%, 5/01/45	850	929,781	
County of Miami-Dade Florida Aviation, Refunding ARB, Miami International Airport, Series		,	
A-1, 5.38%, 10/01/41	1.165	1.323.533	
Mid-Bay Bridge Authority, RB, Springing Lien, Series A, 7.25%, 10/01/40	3,015	3,959,841	
Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37	1,110	932,877	
Village Community Development District No. 10, Special Assessment Bonds, 5.13%, 5/01/43	2,395	2,679,646	
mage community be recommend bisance from 10, opening issues, enter 10, or our re-	2,0,0	2,072,010	
		0.025.650	
		9,825,678	
Georgia 2.5%			
City of Atlanta Georgia Water & Wastewater, Refunding RB, 5.00%, 11/01/40	850	959,888	
County of Gainesville Georgia & Hall Hospital Authority, Refunding RB, Northeast Georgia			
Health System, Inc. Project, Series A, 5.50%, 8/15/54	515	591,905	
DeKalb Private Hospital Authority, Refunding RB, Children s Healthcare, 5.25%, 11/15/39	130	149,291	
Metropolitan Atlanta Rapid Transit Authority, RB, Sales Tax, 3rd Indenture, Series A,			
5.00%, 7/01/39	3,465	3,897,259	
Municipal Electric Authority of Georgia, Refunding RB:			
Series W, 6.60%, 1/01/18	2,220	2,369,495	
Series X, 6.50%, 1/01/20	450	503,248	
		8,471,086	
Hawaii 0.5%		0,471,000	
State of Hawaii Harbor System, RB, Series A, 5.25%, 7/01/30	1.355	1,540,608	
	1,333	1,340,000	
Illinois 23.3%			
City of Chicago Illinois, GARB, O Hare International Airport, 3rd Lien, Series C, 6.50%,	5 0/5	7 101 107	
1/01/41	5,865	7,101,107	

See Notes to Financial Statements.

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## Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)

(Percentages shown are based on Net Assets)

	Par	
Municipal Bonds	(000)	Value
Illinois (concluded)	· ´	
City of Chicago Illinois, GO, Refunding, Project, Series A:		
5.25%, 1/01/32	\$ 4,555	\$ 4,586,202
5.00%, 1/01/34	3,200	3,108,992
City of Chicago Illinois, Refunding RB, Sales Tax, Series A, 5.25%, 1/01/38	820	890,430
City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32	800	803,440
City of Chicago Illinois Board of Education, GO, Series A, 5.25%, 12/01/41	4,455	4,312,217
City of Chicago Illinois Transit Authority, RB, Sales Tax Receipts, 5.25%, 12/01/40	1,050	1,159,169
City of Chicago Illinois Waterworks, Refunding RB, 2nd Lien:		
Project, 5.00%, 11/01/42	3,280	3,550,436
(AGM), 5.25%, 11/01/33	1,325	1,451,670
County of Cook Illinois Community College District No. 508, GO, City College of Chicago,	905	010 (22
5.50%, 12/01/38	805	919,632
Illinois Finance Authority, RB: Advocate Health Care Network, Series D, 6.50%, 11/01/18 (c)	5,000	5,928,300
Community Rehabilitation Providers Facilities, Series A, 6.50%, 7/01/22	275	275,388
Illinois Finance Authority, Refunding RB, Central Dupage Health, Series B, 5.50%, 11/01/39	1,610	1,857,489
Illinois State Toll Highway Authority, RB:	1,010	1,037,407
Senior, Series C, 5.00%, 1/01/36	2,615	2,927,466
Senior, Series C, 5.00%, 1/01/37	2,800	3,127,264
Series A, 5.00%, 1/01/38	2,315	2,568,053
Metropolitan Pier & Exposition Authority, Refunding RB, McCormick Place Expansion	,-	,,
Project:		
Series B (AGM), 5.00%, 6/15/50	4,315	4,505,766
Series B-2, 5.00%, 6/15/50	2,500	2,585,425
Railsplitter Tobacco Settlement Authority, RB:		
5.50%, 6/01/23	440	515,016
6.00%, 6/01/28	1,140	1,342,749
Regional Transportation Authority, RB:		
Series A (AMBAC), 7.20%, 11/01/20	930	1,081,664
Series A (NPFGC), 6.70%, 11/01/21	5,310	6,190,239
Series C (NPFGC), 7.75%, 6/01/20	2,160	2,516,594
State of Illinois, GO:	1.540	1 502 927
5.00%, 2/01/39 Service A 5.00%, 4/01/25	1,540	1,592,837
Series A, 5.00%, 4/01/35 Series A, 5.00%, 4/01/38	3,000 3,640	3,117,120 3,757,536
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34	630	704,258
University of Illinois, RB, Auxiliary Facilities System, Series A:	030	704,236
5.00%, 4/01/39	810	897,796
5.00%, 4/01/44	985	1,090,178
Village of Hodgkins Illinois, RB, Metropolitan Biosolids Management LLC Project, AMT,		-,-,-,-,-
6.00%, 11/01/23	2,800	2,804,760
Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project,		
6.00%, 1/01/25	1,250	1,250,513
		78,519,706
Indiana 4.3%		
City of Valparaiso Indiana, RB, Exempt Facilities, Pratt Paper LLC Project, AMT:		
6.75%, 1/01/34	790	959,866
7.00%, 1/01/44	1,905	2,328,672
Indiana Finance Authority, RB, Series A:		
CWA Authority Project, 1st Lien, 5.25%, 10/01/38	3,280	3,758,093
W 14 18 1	Par	***
Municipal Bonds	(000)	Value
Indiana (concluded)		
Indiana Finance Authority, RB, Series A (concluded):	450	470.205
Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/44	450	479,295
Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/48	1,430	1,521,048
Sisters of St. Francis Health Services, 5.25%, 11/01/39 Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31	840 2,795	938,935 3,173,192
indiana pinance Additionty, retunding RD, Farrytew ficalli System, Series A, 3.73%, 5/01/31	2,193	3,173,192

Indianapolis Local Public Improvement Bond Bank, RB, Series A, 5.00%, 1/15/40	1,270	1,403,083	
		14,562,184	
Iowa 2.6%			
Iowa Finance Authority, Refunding RB, Midwestern Disaster Area, Iowa Fertilizer Co. Project:			
5.00%, 12/01/19	960	1,036,963	
5.50%, 12/01/22	2,340	2,497,178	
5.25%, 12/01/25	460	513,098	
Iowa Student Loan Liquidity Corp., Refunding RB, Student Loan, Senior Series A-1, AMT,			
5.15%, 12/01/22	1,425	1,519,592	
Iowa Tobacco Settlement Authority, Refunding RB, Asset-Backed, Series C, 5.63%, 6/01/46	3,785	3,358,733	
		8,925,564	
Kentucky 0.6%			
Kentucky Economic Development Finance Authority, RB, Catholic Health Initiatives, Series A,			
5.25%, 1/01/45	995	1,097,813	
Kentucky Public Transportation Infrastructure Authority, RB, Downtown Crossing Project,			
Convertible CAB, 1st Tier, Series C, 0.00%, 7/01/43 (d)	1,200	831,984	
		1,929,797	
Louisiana 2.8%			
Louisiana Local Government Environmental Facilities & Community Development Authority,			
RB, Westlake Chemical Corp. Project, Series A-1, 6.50%, 11/01/35	3,320	3,967,666	
Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, Series A:			
5.50%, 5/15/30	1,020	1,160,464	
5.25%, 5/15/31	870	977,419	
5.25%, 5/15/32	1,110	1,267,453	
5.25%, 5/15/33	1,205	1,346,732	
5.25%, 5/15/35	505	572,524	
		9,292,258	
Maryland 1.3%		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Maryland Community Development Administration, Refunding, HRB, Residential, Series D,			
AMT, 4.90%, 9/01/42	1,500	1,516,440	
Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35	435	468,564	
Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25	1,160	1,286,092	
Maryland Health & Higher Educational Facilities Authority, RB, University of Maryland	1,100	1,200,002	
Medical System, Series B (NPFGC), 7.00%, 7/01/22	840	1,009,445	
2,000,000,000,000	0.0	1,000,	
		4 200 541	
		4,280,541	

See Notes to Financial Statements.

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## Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)

(Percentages shown are based on Net Assets)

	Par		
Municipal Bonds	(000)	Value	
Massachusetts 3.3%			
Massachusetts Development Finance Agency, Refunding RB, Covanta Energy Project, Series C, AMT, 5.25%, 11/01/42 (a)	\$ 2,205	\$ 2,277,192	
Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare			
System, Series J1, 5.00%, 7/01/39	990	1,110,542	
Massachusetts HFA, RB, AMT: M/F Housing, Series A, 5.20%, 12/01/37	2 920	2 972 946	
S/F Housing, Series 130, 5.00%, 12/01/32	2,830 2,720	2,872,846 2,772,632	
Massachusetts HFA, Refunding RB, Series F, AMT, 5.70%, 6/01/40	1,995	2,104,446	
11.1, 2010 11.1, 1010 11.1, 2010 11, 11.11, 211 010, 010 11 10	1,770	2,10 ,, 110	
		11,137,658	
Michigan 6.3%		11,137,030	
City of Detroit Michigan Sewage Disposal System, Refunding RB, Senior Lien, Series A,			
5.25%, 7/01/39	4,425	4,752,317	
Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital,			
5.50%, 5/15/36	1,380	1,547,836	
Michigan Finance Authority, Refunding RB, Detroit Water & Sewage Department Project,			
Senior Lien, Series C-1, 5.00%, 7/01/44  Michigan State Hospital Finance Authority, Refunding RB, Series A:	880	926,482	
Henry Ford Health System, 5.25%, 11/15/46	5,080	5,315,559	
McLaren Health Care, 5.75%, 5/15/18 (c)	7,560	8,611,974	
1710 Later French Care, 5.75 76, 5/15/10 (c)	7,300	0,011,774	
		21,154,168	
Mississippi 1.5%		21,134,100	
County of Lowndes Mississippi, Refunding RB, Solid Waste Disposal & Pollution Control,			
Weyerhaeuser Co. Project, Series A, 6.80%, 4/01/22	3,000	3,776,880	
University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%,			
9/01/36	1,065	1,206,123	
		4,983,003	
Missouri 0.2%			
Bi-State Development Agency of the Missouri-Illinois Metropolitan District, Refunding RB,	277	202.245	
Combined Lien, Series A, 5.00%, 10/01/44	255	283,315	
State of Missouri Health & Educational Facilities Authority, Refunding RB, St. Louis College of Pharmacy Project, 5.50%, 5/01/43	245	268,025	
of Final fracty 1 Toject, 5.50 %, 5/01/45	243	200,023	
		551 240	
Nebraska 0.9%		551,340	
Central Plains Energy Project Nebraska, RB, Gas Project No. 3:			
5.00%, 9/01/42	1,445	1,573,374	
5.25%, 9/01/37	825	922,754	
County of Hall Nebraska School District No. 2, GO, Grand Island Public Schools, 5.00%,			
12/15/39	410	463,808	
		2,959,936	
New Jersey 5.1%			
Casino Reinvestment Development Authority, Refunding RB:	1.025	1 007 076	
5.25%, 11/01/39 5.25%, 11/01/44	1,025 800	1,087,976 853,632	
New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT, 5.25%, 9/15/29	1,955	2,141,878	
New Jersey EDA, Refunding, Special Assessment Bonds, Kapkowski Road Landfill Project,	1,755	2,1.1,070	
5.75%, 4/01/31	2,240	2,610,138	
New Jersey Housing & Mortgage Finance Agency, RB, S/F Housing, Series AA, 6.38%,			
10/01/28	420	436,380	
Month of Donale	Par	¥7-1	
Municipal Bonds New Jersey (concluded)	(000)	Value	
New Jersey (concluded) New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/43	1,985	2,180,185	
Tion sersey state Tumpire Authority, KD, Series A, 5.00 /0, 1/01/45	1,703	2,100,100	

New Jersey Transportation Trust Fund Authority, RB:			
Transportation Program, Series AA, 5.00%, 6/15/44	3,495	3,632,388	
Transportation System, Series A, 5.50%, 6/15/41	1,635	1,791,143	
Transportation System, Series B, 5.25%, 6/15/36	2,460	2,592,668	
Transportation bystem, series B, 5.25 %, of 15/50	2,400	2,372,000	
		17.226.200	
New York 15.8%		17,326,388	
City of New York New York Industrial Development Agency, ARB, British Airways PLC			
Project, AMT, 7.63%, 12/01/32	1,920	1,931,904	
City of New York New York Industrial Development Agency, RB, Special Needs Facilities	•		
Pooled Program, Series C-1, 6.50%, 7/01/17	500	500,250	
City of New York New York Transitional Finance Authority, RB:		,	
Fiscal 2009, Series S-3, 5.25%, 1/15/39	6,700	7,496,563	
Future Tax Secured Bonds, Fiscal 2012, Sub-Series E-1, 5.00%, 2/01/42	2,460	2,768,213	
Counties of New York Tobacco Trust IV, Refunding RB, Settlement Pass-Through Turbo,			
Series A, 6.25%, 6/01/41 (a)	1,800	1,830,456	
Metropolitan Transportation Authority, RB, Series C, 6.50%, 11/15/28	9,405	11,160,913	
New York Liberty Development Corp., RB, 1 World Trade Center Port Authority Consolidated,			
5.25%, 12/15/43	10,735	12,287,066	
New York Liberty Development Corp., Refunding RB:			
2nd Priority, Bank of America Tower at One Bryant Park Project, Class 3, 6.38%, 7/15/49	1,220	1,390,556	
3 World Trade Center Project, Class 1, 5.00%, 11/15/44 (a)	4,520	4,707,896	
3 World Trade Center Project, Class 2, 5.15%, 11/15/34 (a)	340	370,053	
3 World Trade Center Project, Class 2, 5.38%, 11/15/40 (a)	850	932,391	
New York State Dormitory Authority, Refunding RB, General Purpose, Series A,			
5.00%, 6/15/31	1,790	2,063,960	
Port Authority of New York & New Jersey, ARB, Special Project, JFK International Air			
Terminal LLC Project, Series 8:			
6.00%, 12/01/36	1,165	1,370,343	
6.00%, 12/01/42	1,250	1,470,325	
Westchester County Industrial Development Agency, RB, Special Needs Facilities Pooled			
Program, Series E-1, 6.50%, 7/01/17	700	700,763	
Westchester Tobacco Asset Securitization, Refunding RB, 5.13%, 6/01/45	2,300	2,122,417	
		53,104,069	
North Carolina 1.8%		, ,	
County of Gaston North Carolina Industrial Facilities & Pollution Control Financing Authority,			
RB, Exempt Facilities, National Gypsum Co. Project, AMT, 5.75%, 8/01/35	1,675	1,676,491	
North Carolina Medical Care Commission, RB, Health Care Facilities, Duke University Health			
System, Series A, 5.00%, 6/01/42	1,400	1,569,302	
North Carolina Medical Care Commission, Refunding RB:			
1st Mortgage, Retirement Facilities Whitestone Project, Series A, 7.75%, 3/01/41	595	672,707	
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See Notes to Financial Statements.

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## Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)

(Percentages shown are based on Net Assets)

Municipal Bonds North Carolina (concluded)	Par (000)	Value
North Carolina (concluded)  North Carolina Medical Care Commission, Refunding RB (concluded):		
Carolina Village Project, 6.00%, 4/01/38	\$ 2,000	\$ 2,117,700
Carolina + mage 110ject, 010076, 1701760	Ψ 2,000	÷ 2,117,700
		6,036,200
Ohio 0.5%		0,030,200
County of Franklin Ohio, RB, Health Care Facilities Improvement, OPRS Communities		
Obligation Group, Series A, 6.13%, 7/01/40	660	727,604
State of Ohio, RB, Portsmouth Bypass Project, AMT, 5.00%, 6/30/53	810	850,119
		1,577,723
Pennsylvania 1.9%		
City of Philadelphia Pennsylvania Hospitals & Higher Education Facilities Authority, RB,		
Temple University Health System, Series A, 5.63%, 7/01/42	1,230	1,303,775
Pennsylvania Economic Development Financing Authority, RB:	1.000	2 120 (14
Aqua Pennsylvania, Inc. Project, Series B, 5.00%, 11/15/40	1,890	2,129,614
PA Bridges Finco LP, 5.00%, 12/31/38 Pennsylvania Economic Development Financing Authority, Refunding RB, National Gypson	590	637,165
Co., AMT, 5.50%, 11/01/44	1,035	1,062,810
Pennsylvania Turnpike Commission, RB, Series A, 5.00%, 12/01/44	1,105	1,231,346
,	1,100	-,2,0.0
		6,364,710
Rhode Island 0.8%		0,304,710
Tobacco Settlement Financing Corp., Refunding RB, Series B, 4.50%, 6/01/45	2,645	2,593,581
South Carolina 3.2%	_,-,-	_,_,_,_,
South Carolina State Ports Authority, RB, 5.25%, 7/01/40	3,280	3,642,801
State of South Carolina Public Service Authority, RB, Santee Cooper, Series A, 5.50%,		
12/01/54	6,180	7,052,060
		10,694,861
Tennessee 0.3%		
City of Chattanooga Tennessee Health Educational & Housing Facility Board, RB, Catholic		
Health Initiatives, Series A, 5.25%, 1/01/45	995	1,097,813
Texas 7.6%  Process Divor Authority, Defunding DR. Tayos Hillity Co. Series A. AMT. 7.700/. 4/01/22		
Brazos River Authority, Refunding RB, Texas Utility Co., Series A, AMT, 7.70%, 4/01/33 (e)(f)	1,500	97,500
Central Texas Regional Mobility Authority, Refunding RB, Senior Lien, 6.25%, 1/01/46	2,140	2,492,137
City of Dallas Texas Waterworks & Sewer System, Refunding RB, 5.00%, 10/01/35	510	585,659
City of Houston Texas Airport System, Refunding ARB, United Airlines, Inc. Terminal E		
Project, AMT, 5.00%, 7/01/29	965	1,023,344
Clifton Higher Education Finance Corp., RB, Idea Public Schools, 6.00%, 8/15/43	745	892,227
County of Harris Texas Cultural Education Facilities Finance Corp., RB, 1st Mortgage, Brazos		
Presbyterian Homes, Inc. Project, Series B, 7.00%, 1/01/48	455	524,861
County of Harris Texas Health Facilities Development Corp., Refunding RB, Memorial	2,000	2 429 000
Hermann Healthcare System, Series B, 7.25%, 12/01/18 (c) Fort Bend County Industrial Development Corp., RB, NRG Energy Project, Series B, 4.75%,	2,000	2,428,000
11/01/42	1,475	1,543,469
	Par	1,0 10, 107
Municipal Bonds	(000)	Value
Texas (concluded)	. ,	
North Texas Tollway Authority, Refunding RB, Series A:		
5.00%, 1/01/35	1,150	1,268,576
5.00%, 1/01/38	925	1,011,719
1st Tier, 6.25%, 1/01/39	7,000	8,031,240
Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien:	2,000	2.414.720
LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40  NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39	2,000 2,775	2,414,720 3,291,039
1312 Problems 1 artifets EEC, North Farrant Express Managed Lanes Floject, 0.00%, 12/51/59	4,113	5,271,057

		25,604,491	
Utah 0.9%			
City of Riverton Utah, RB, IHC Health Services, Inc., 5.00%, 8/15/41	2,780	3,052,746	
Virginia 2.7%			
County of Fairfax Virginia EDA, Refunding RB, Goodwin House, Inc.:			
5.13%, 10/01/37	500	515,395	
5.13%, 10/01/42	3,440	3,537,077	
Virginia Small Business Financing Authority, RB, Senior Lien, Elizabeth River Crossings			
OpCo LLC Project, AMT:			
5.25%, 1/01/32	1,615	1,771,816	
6.00%, 1/01/37	2,915	3,366,388	
		9,190,676	
Washington 2.0%		3,130,070	
Washington Health Care Facilities Authority, RB, Catholic Health Initiatives, Series A,			
5.75%. 1/01/45	2,290	2,657,202	
Washington Health Care Facilities Authority, Refunding RB, Catholic Health Initiatives,	2,270	2,037,202	
Series D, 6.38%, 10/01/36	3,700	4,252,225	
Series D, 0.36 %, 10/01/30	3,700	7,232,223	
		6,909,427	
Wisconsin 3.3%			
State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36	7,100	8,308,704	
State of Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior			
Credit Group, Series E, 5.00%, 11/15/33	2,465	2,741,425	
		11,050,129	
Total Municipal Bonds 121.3%		408,066,506	
•			
Municipal Bonds Transferred to			
Tender Option Bond Trusts (g)			
California 6.3%			
Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/19	3,271	3,844,892	
California Educational Facilities Authority, RB, University of Southern California, Series B,			
5.25%, 10/01/39 (h)	2,610	2,923,200	
City & County of San Francisco California Public Utilities Commission, RB, Water Revenue,			
Series B, 5.00%, 11/01/39	9,480	10,743,210	
Los Angeles Community College District California, GO, Election of 2001, Series A (AGM),			
5.00%, 8/01/17	2,290	2,506,863	

See Notes to Financial Statements.

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## Schedule of Investments (continued)

BlackRock MuniVest Fund II, Inc. (MVT)

(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to Tender Option Bond Trusts (g) California (concluded)	Par (000)	Value
California (concluded) San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	\$ 1,077	\$ 1,242,098
		21,260,263
Colorado 0.7% Colorado Health Facilities Authority, Refunding RB, Catholic Health Initiatives, Series A,		
5.50%, 7/01/34 (h)  Connecticut 1.9%	2,129	2,426,507
Connecticut State Health & Educational Facility Authority, RB, Yale University, Series Z-3, 5.05%, 7/01/42	6,000	6,478,380
Florida 1.9%		
County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34 Illinois 1.0%	5,679	6,481,028
State of Illinois Toll Highway Authority, RB, Senior Priority, Series B, 5.50%, 1/01/33  Maryland 0.7%	2,999	3,289,909
State of Maryland Transportation Authority, RB, Transportation Facilities Project (AGM), 5.00%, 7/01/41	2,290	2,524,794
Massachusetts 0.8%	2.266	2.524.102
Massachusetts School Building Authority, RB, Senior, Series B, 5.00%, 10/15/41  New Hampshire 0.7%	2,266	2,534,123
New Hampshire Health & Education Facilities Authority, RB, Dartmouth College, 5.25%, 6/01/39 (h)	2,009	2,280,975
New York 5.4% City of New York New York Municipal Water Finance Authority, Refunding RB, Water & Sewer System, 2nd General Resolution:		
Series DD, 5.00%, 6/15/37	6,299	6,927,200
Series FF-2, 5.50%, 6/15/40	1,575	1,810,688
Hudson Yards Infrastructure Corp., RB, Fiscal 2012, Series A, 5.75%, 2/15/47 (h)	1,610	1,851,753
New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project, 5.75%, 11/15/51 (h)	6,440	7,451,659
		18,041,300
North Carolina 2.0%		,,
North Carolina Capital Facilities Finance Agency, Refunding RB, Duke University Project, Series A, 5.00%, 10/01/41	6,239	6,583,434
Ohio 5.4%		
Ohio Higher Educational Facility Commission, RB, Cleveland Clinic Health, Series A, 5.25%, 1/01/33	2,400	2,605,632
Municipal Bonds Transferred to	Par	Value
Tender Option Bond Trusts (g) Ohio (concluded)	(000)	value
State of Ohio, Refunding RB, Cleveland Clinic Health System Obligated Group, Series A, 5.50%, 1/01/39	13,843	15,548,433
		18,154,065
South Carolina 1.7%		
State of South Carolina Public Service Authority, Refunding RB, Santee Cooper, Series A, 5.50%, 1/01/38 (h)	4,995	5,638,806
Texas 3.0%  City of San Antonio Tayas Public Sarvice Roard, PR. Flectric & Cas Systems, Junior Lien		
City of San Antonio Texas Public Service Board, RB, Electric & Gas Systems, Junior Lien, 5.00%, 2/01/43	2,520	2,794,453
County of Harris Texas Metropolitan Transit Authority, Refunding RB, Series A, 5.00%, 11/01/41	3,400	3,774,238
Texas Department of Housing & Community Affairs, RB, S/F Mortgage, Series B, AMT, 5.25%, 9/01/32	1,391	1,419,942
University of Texas, Refunding RB, Financing System, Series B, 5.00%, 8/15/43	1,830	2,089,039
W. 11. 4. 546		10,077,672

Washington 5.4%

Control Direct Sound Decional Transit Authority, DD, Souice A.			
Central Puget Sound Regional Transit Authority, RB, Series A: 5.00%, 11/01/34	5,000	5 421 475	
		5,431,475	
5.00%, 11/01/36	4,000	4,345,180	
(AGM), 5.00%, 11/01/32	7,693	8,366,455	
		18,143,110	
Wisconsin 0.8%			
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community			
Health, Inc., Obligated Group, Series C, 5.25%, 4/01/39 (h)	2,499	2,730,782	
Total Municipal Bonds Transferred to	·		
Tender Option Bond Trusts 37.7%		126,645,148	
Total Long-Term Investments		-,,-	
(Cost \$482,658,196) 159.0%		534.711.654	
(		22 1,1 2 2,02 1	
Short-Term Securities	Shares		
FFI Institutional Tax-Exempt Fund, 0.02% (i)(j)	783,716	783,716	
Total Short-Term Securities	705,710	765,710	
(Cost \$783,716) 0.2%		783,716	
		,	
Total Investments (Cost \$483,441,912) 159.2% Other Assets Less Liabilities 2.2%		535,495,370	
· · · · · · · · · · · · · · · · · · ·		7,277,855	
Liability for TOB Trust Certificates, Including Interest		(66,450,005)	
Expense and Fees Payable (19.8%)		(66,452,827)	
VMTP Shares, at Liquidation Value (41.6%)		(140,000,000)	

#### Notes to Schedule of Investments

Net Assets Applicable to Common Shares 100.0%

(a) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration to qualified institutional investors.

\$ 336,320,398

- (b) Zero-coupon bond.
- (c) U.S. Government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (d) Represents a step-up bond that pays an initial coupon rate for the first period and then a higher coupon rate for the following periods. Rate shown is as of report date.

See Notes to Financial Statements.

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#### Schedule of Investments (concluded)

BlackRock MuniVest Fund II, Inc. (MVT)

- (e) Non-income producing security.
- (f) Issuer filed for bankruptcy and/or is in default of principal and/or interest payments.
- (g) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing. See Note 3 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts.
- (h) All or a portion of security is subject to a recourse agreement, which may require the Fund to pay the liquidity provider in the event there is a shortfall between the TOB Trust Certificates and proceeds received from the sale of the security contributed to the TOB Trust or in the event of a default on the security. In the case of a shortfall or default, the aggregate maximum potential amount the Fund could ultimately be required to pay under the agreements, which expire from October 1, 2016 to November 15, 2019, is \$13,391,269.
- (i) During the year ended April 30, 2015, investments in issuers considered to be an affiliate of the Fund for purposes of Section 2(a)(3) of the 1940 Act were as follows:

	Shares Held		Shares Held	
	at April 30,	Net	at April 30,	
Affiliate	2014	Activity	2015	Income
FFI Institutional Tax-Exempt Fund	1,726,061	(942,345)	783,716	\$ 2,175

(j) Represents the current yield as of report date.

As of April 30, 2015, financial futures contracts outstanding were as follows:

#### Contracts

				Notionai	Unrealized	
Short	Issue	Exchange	Expiration	Value	Depreciation	
(166)	10-Year U.S. Treasury Note	Chicago Board of Trade	June 2015	\$ 21,310,250	\$ (286,074)	

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial statement purposes. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices in active markets/exchanges for identical assets or liabilities that the Fund has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund s own assumptions used in determining the fair value of investments and derivative financial instruments)

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund s policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. For information about the Fund s policy regarding valuation of investments and derivative financial instruments, refer to Note 2 of the Notes to Financial Statements.

As of April 30, 2015, the following tables summarize the Fund s investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments <sup>1</sup>		\$ 534,711,654		\$ 534,711,654
Short-Term Securities	\$ 783,716			783,716
Total	\$ 783,716	\$ 534,711,654		\$ 535,495,370

<sup>1</sup> See above Schedule of Investments for values in each state or political subdivision.

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments <sup>2</sup>				
Liabilities:				
Interest rate contracts	\$ (286,074)			\$ (286,074)

<sup>2</sup> Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation (depreciation) on the instrument.
The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial statement purposes. As of April 30, 2015, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 236,000			\$ 236,000
Liabilities:				
TOB Trust Certificates		\$ (66,439,492)		(66,439,492)
VMTP Shares		(140,000,000)		(140,000,000)
Total	\$ 236,000	\$ (206,439,492)		\$ (206,203,492)

During the year ended April 30, 2015, there were no transfers between levels.

See Notes to Financial Statements.

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## Statements of Assets and Liabilities

April 30, 2015	BlackRock MuniAssets Fund, Inc. (MUA)	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)
Assets				
Investments at value unaffiliated	\$ 557,214,035	\$ 578,654,844	\$ 383,410,645	\$ 277,965,484
Investments at value affiliated	961,095	1,577,185	1,340,347	681,480
Cash pledged for financial futures contracts	280,000	439,000	189,000	131,000
Interest receivable	9,685,571	7,550,960	5,653,861	4,029,712
Investments sold receivable	873,662	1,255,986	35,000	75,000
Variation margin receivable on financial futures contracts	27,704	44,041	18,704	12,938
Deferred offering costs	14.50	212,791	20.120	27.627
Prepaid expenses	16,725	80,677	29,139	27,627
Total assets	569,058,792	589,815,484	390,676,696	282,923,241
Accrued Liabilities				
Income dividends payable Common Shares	2,237,478	1,788,707	1,250,790	875,767
Investments purchased payable	, , , ,	6,335,205	,,	,
Investment advisory fees payable	257,439	241,053	177,261	128,294
Interest expense and fees payable	16,029	17,755	10,434	8,590
Officer s and Directors fees payable	5,877	4,551	3,098	2,291
Bank overdraft				36,043
Other accrued expenses payable	135,078	131,824	105,691	89,928
Total accrued liabilities	2,651,901	8,519,095	1,547,274	1,140,913
Other Liabilities				
TOB Trust Certificates	61,065,965	76,093,825	56,783,700	43,568,059
VRDP Shares, at liquidation value of \$100,000 per share <sup>3,4</sup> VMTP Shares, at liquidation value of \$100,000 per share <sup>3,4</sup>		142,500,000	83,700,000	55,000,000
Total other liabilities	61,065,965	218,593,825	140,483,700	98,568,059
Total liabilities	63,717,866	227,112,920	142,030,974	99,708,972
Net Assets Applicable to Common Shareholders	\$ 505,340,926	\$ 362,702,564	\$ 248,645,722	\$ 183,214,269
Net Assets Applicable to Common Shareholders Consist of				
Paid-in capital <sup>5,6,7</sup>	\$ 480,163,630	\$ 316,086,151	\$ 210,641,316	\$ 155,395,939
Undistributed net investment income	1,216,905	6,578,502	2,787,827	2,664,406
Accumulated net realized loss	(6,875,993)			(2,278,995)
Net unrealized appreciation (depreciation)	30,836,384	51,985,706	37,062,828	27,432,919
Net Assets Applicable to Common Shareholders	\$ 505,340,926	\$ 362,702,564	\$ 248,645,722	\$ 183,214,269
Net asset value, per Common Share	\$ 14.12	\$ 12.27	\$ 17.59	\$ 16.21
<sup>1</sup> Investments at cost unaffiliated	\$ 526,023,352	\$ 526,294,866	\$ 346,121,595	\$ 250,374,330
2 Investments at cost affiliated	\$ 961,095	\$ 1,577,185	\$ 1,340,347	\$ 681,480
<sup>3</sup> Preferred Shares outstanding, par value \$0.10 per share	,	1,425	837	550
<sup>4</sup> Preferred Shares authorized, including Auction Market Rate Preferred Shares ( AMPS	S )	8,905	5,837	4,030
5 Par Value per Common Share	\$ 0.10		\$ 0.10	\$ 0.10
6 Common Shares outstanding	35,795,571			

See Notes to Financial Statements.

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## Statements of Assets and Liabilities

April 30, 2015	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)	BlackRock MuniVest Fund II, Inc. (MVT)
Assets			
Investments at value unaffiliated	\$ 290,889,286	\$ 934,723,543	\$ 534,711,654
Investments at value affiliated	3,776,544	1,356,943	783,716
Cash pledged for financial futures contracts	183,000	864,000	236,000
Interest receivable	4,177,471	12,677,268	8,541,923
Investments sold receivable Variation margin receivable on financial futures contracts	572,005 18,141	1,086,154 85,644	540,000 23,345
Deferred offering costs	10,141	50,741	25,545
Prepaid expenses	27,920	40,631	31,325
.11.	.,-	.,	- ,-
Total assets	299,644,367	950,884,924	544,867,963
Accrued Liabilities			
Income dividends payable Common Shares	878,156	2,508,405	1,743,943
Investment advisory fees payable	133,429	431,381	224,522
Interest expense and fees payable	5,618	7,624	13,335
Officer s and Directors fees payable	2,388	255,417	4,248
Other accrued expenses payable	94,290	209,940	122,025
Total accrued liabilities	1,113,881	3,412,767	2,108,073
Other Liabilities			
TOB Trust Certificates	21,936,718	52,931,848	66,439,492
VMTP Shares, at liquidation value of \$100,000 per share <sup>3,4</sup>	87,000,000	287,100,000	140,000,000
Total other liabilities	108,936,718	340,031,848	206,439,492
Total liabilities	110,050,599	343,444,615	208,547,565
Net Assets Applicable to Common Shareholders	\$ 189,593,768	\$ 607,440,309	\$ 336,320,398
Net Assets Applicable to Common Shareholders Consist of			
Paid-in capital <sup>5,6,7</sup>	\$ 175,117,812	\$ 543,479,050	\$ 287,577,034
Undistributed net investment income	2,749,831	4,715,865	3,245,721
Undistributed net realized gain (accumulated net realized loss)	(15,207,716)	1,722,542	(6,269,741)
Net unrealized appreciation (depreciation)	26,933,841	57,522,852	51,767,384
Net Assets Applicable to Common Shareholders	\$ 189,593,768	\$ 607,440,309	\$ 336,320,398
Net asset value, per Common Share	\$ 14.57	\$ 15.86	\$ 16.01
<sup>1</sup> Investments at cost unaffiliated	\$ 263,809,651	\$ 876,512,408	\$ 482,658,196
2 Investments at cost affiliated	\$ 3,776,544	\$ 1,356,943	\$ 783,716
<ul> <li>Preferred Shares outstanding, par value \$0.10 per share</li> </ul>	870	2,871	1,400
<sup>4</sup> Preferred Shares authorized, including Auction Market Rate Preferred Shares ( AMPS )	6,230	15,671	8,400
<sup>5</sup> Par Value per Common Share	\$ 0.10	\$ 0.10	\$ 0.10
6 Common Shares outstanding	13,009,717	38,296,266	21,011,367
7 Common Shares authorized	199,993,770	199,984,329	199,991,600

See Notes to Financial Statements.

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# Statements of Operations

Year Ended April 30, 2015	BlackRock MuniAssets Fund, Inc. (MUA)	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)
Investment Income				
Interest affiliated	\$ 30,384,579 2,325	\$ 26,172,423 2,056	\$ 18,260,014 1,766	\$ 13,232,055 855
Total income	30,386,904	26,174,479	18,261,780	13,232,910
Expenses				
Investment advisory	3,141,875	2,905,511	2,139,697	1,552,131
Professional	140,934	108,222	91,162	74,462
Accounting services	83,390	84,328	58,913	46,053
Transfer agent	59,871	45,925	26,666	23,709
Officer and Directors	45,602	33,721	23,076	16,988
Custodian	27,031	28,453	19,288	14,578
Printing	13,617	13,663	11,444	10,285
Registration	13,312	11,200	10,083	10,081
Rating agency	· ·	33,435	33,435	33,435
Miscellaneous	52,410	53,027	45,971	39,574
			- ,	,
T-4-1	2 579 042	2 217 405	2 450 725	1 921 206
Total expenses excluding interest expense, fees and amortization of offering costs	3,578,042	3,317,485	2,459,735	1,821,296
Interest expense, fees and amortization of offering costs <sup>1</sup>	536,788	1,905,897	1,275,183	886,053
Total expenses	4,114,830	5,223,382	3,734,918	2,707,349
Less fees waived by the Manager	(1,272)	(1,376)	(1,264)	(616)
Total expenses after fees waived	4,113,558	5,222,006	3,733,654	2,706,733
Net investment income	26,273,346	20,952,473	14,528,126	10,526,177
Realized and Unrealized Gain (Loss)				
Net realized gain (loss) from:				
Investments	8,214,302	1,537,825	2,581,977	1,846,961
Financial futures contracts	(2,378,110)	(1,212,800)		(851,733)
Financial futures contracts	(2,378,110)	(1,212,800)	(1,232,037)	(651,755)
	5,836,192	325,025	1,349,340	995,228
Net change in unrealized appreciation (depreciation) on:				
Investments	15,117,533	10,305,800	9,807,414	6,422,325
Financial futures contracts	(242,824)	, ,		
Pinanciai futures contracts	(242,024)	(279,548)	(142,981)	(118,183)
	14,874,709	10,026,252	9,664,433	6,304,142
Net realized and unrealized gain	20,710,901	10,351,277	11,013,773	7,299,370
	20,, 10,,01	10,001,277	11,013,773	.,2,,5,0
Net Increase in Net Assets Applicable to Common Shareholders Resulting from Operations	\$ 46,984,247	\$ 31,303,750	\$ 25,541,899	\$ 17,825,547

<sup>&</sup>lt;sup>1</sup> Related to TOB Trusts and/or Preferred Shares.

See Notes to Financial Statements.

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# Statements of Operations

Year Ended April 30, 2015	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	Mun	BlackRock BlackRoc funi Intermediate MuniVes Duration Fund II Fund, Inc. (MUI) (MVT)	
Investment Income				
Interest Interest affiliated	\$ 13,446,918 1,226	\$	38,821,459 4,098	\$ 25,750,810 2,175
Total income	13,448,144		38,825,557	25,752,985
Expenses				
Investment advisory	1,651,398		5,283,037	2,712,510
Professional	81,787		165,003	106,028
Accounting services	48,376		122,299	80,596
Transfer agent	24,797		51,309	34,965
Officer and Directors	17,658		62,572	31,261
Custodian	15,246		44,321	25,561
Printing	10,626		18,580	13,168
Registration	10,021		14,485	10,319
Rating agency	33,435		33,435	33,435
Miscellaneous	33,650		67,059	46,797
Total expenses excluding interest expense, fees and amortization of offering costs	1,926,994		5,862,100	3,094,640
Interest expense, fees and amortization of offering costs <sup>1</sup>	1,102,628		3,461,467	1,948,208
Total expenses	3,029,622		9,323,567	5,042,848
Less fees waived by the Manager	(41,597)		(3,498)	(1,601)
Total expenses after fees waived	2,988,025		9,320,069	5,041,247
Net investment income	10,460,119		29,505,488	20,711,738
Realized and Unrealized Gain (Loss)				
Net realized gain (loss) from:				
Investments	1,048,585		8,018,203	3,950,928
Financial futures contracts	(825,060)		(2,313,403)	(1,581,010)
	223,525		5,704,800	2,369,918
Net change in unrealized appreciation (depreciation) on:				
Investments	5,096,331		5,080,468	10,670,585
Financial futures contracts	(127,125)		(605,819)	(211,957)
	4,969,206		4,474,649	10,458,628
Net realized and unrealized gain	5,192,731		10,179,449	12,828,546
Net Increase in Net Assets Applicable to Common Shareholders Resulting from Operations	\$ 15,652,850	\$	39,684,937	\$ 33,540,284

<sup>&</sup>lt;sup>1</sup> Related to TOB Trusts and/or Preferred Shares.

See Notes to Financial Statements.

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# Statements of Changes in Net Assets

Increase (Decrease) in Net Assets:	BlackRock MuniAssets Fund, Inc. (MUA) Year Ended April 30, 2015 2014		
Operations			
Net investment income	\$ 26,273,346	\$ 27,535,462	
Net realized gain	5,836,192	1,410,873	
Net change in unrealized appreciation (depreciation)	14,874,709	(30,547,191)	
Net increase (decrease) in net assets resulting from operations	46,984,247	(1,600,856)	
Distributions to Shareholders From <sup>1</sup>			
Net investment income	(27,131,929)	(27,002,723)	
Capital Share Transactions			
Reinvestment of distributions	169,233		
Net Assets			
Total increase (decrease) in net assets Beginning of year	20,021,551 485,319,375	(28,603,579) 513,922,954	
End of year	\$ 505,340,926	\$ 485,319,375	
Undistributed net investment income, end of year	\$ 1,216,905	\$ 2,315,804	
	BlackRock MuniEnhanced Fund, Inc. (MEN) Year Ended April 30, 2015 2014		
Increase (Decrease) in Net Assets Applicable to Common Shareholders:	Fund, Ind Year Ende	c. (MEN) d April 30,	
Operations	Fund, Ind Year Ende	c. (MEN) d April 30,	
	Fund, Inv Year Ende 2015	c. (MEN) d April 30, 2014	
Operations	Fund, In Year Ende 2015	c. (MEN) d April 30, 2014	
Operations Net investment income Net realized gain (loss)	Fund, Inv Year Ende 2015 \$ 20,952,473 325,025	c. (MEN) d April 30, 2014 \$ 21,555,402 (2,384,954)	
Operations  Net investment income  Net realized gain (loss)  Net change in unrealized appreciation (depreciation)	Fund, Investment Year Ender 2015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123)	
Operations  Net investment income  Net realized gain (loss)  Net change in unrealized appreciation (depreciation)  Net increase in net assets applicable to Common Shareholders resulting from operations	Fund, Investment Year Ender 2015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123)	
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income  Capital Share Transactions	Fund, Investment Funds 1015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123) 760,325 (21,389,300)	
Operations  Net investment income  Net realized gain (loss)  Net change in unrealized appreciation (depreciation)  Net increase in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income	Fund, Investment Funds 1015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123)	
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income  Capital Share Transactions Reinvestment of common distributions  Net Assets Applicable to Common Shareholders	Fund, Investment Funds 2015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123) 760,325 (21,389,300)	
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income  Capital Share Transactions Reinvestment of common distributions	Fund, Investment Funds 1015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123) 760,325 (21,389,300)	
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income  Capital Share Transactions Reinvestment of common distributions  Net Assets Applicable to Common Shareholders Total increase (decrease) in net assets applicable to Common Shareholders	Fund, Investment Funds 2015  \$ 20,952,473	\$ 21,555,402 (2,384,954) (18,410,123) 760,325 (21,389,300) 248,371	

<sup>1</sup> Distributions for annual periods determined in accordance with federal income tax regulations.

See Notes to Financial Statements.

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# Statements of Changes in Net Assets

Increase (Decrease) in Net Assets Applicable to Common Shareholders:	BlackRock MuniHoldings Fund, Inc. (MHD) Year Ended April 30, 2015 2014		
Operations			
Net investment income	\$ 14,528,126	\$ 14,709,802	
Net realized gain (loss)	1,349,340	(2,609,949)	
Net change in unrealized appreciation (depreciation)	9,664,433	(14,535,796)	
Section 11 control (coll control)	.,,	( ,,,	
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	25,541,899	(2,435,943)	
Distributions to Common Shareholders From <sup>1</sup>			
Net investment income	(15,009,484)	(15,321,048)	
Net realized gain	, , , ,	(209,037)	
Decrease in net assets resulting from distributions to Common Shareholders	(15,009,484)	(15,530,085)	
Capital Share Transactions			
Reinvestment of common distributions		168,146	
		,	
Net Assets Applicable to Common Shareholders	10.500.115	(15.505.000)	
Total increase (decrease) in net assets applicable to Common Shareholders	10,532,415	(17,797,882)	
Beginning of year	238,113,307	255,911,189	
End of year	\$ 248,645,722	\$ 238,113,307	
Undistributed net investment income, end of year	\$ 2,787,827 \$ 3,236,07		
Increase (Decrease) in Net Assets Applicable to Common Shareholders:	BlackRock MuniHoldings Fund II, Inc. (MUH) Year Ended April 30, 2015 2014		
Operations			
Net investment income	\$ 10,526,177	\$ 10,782,371	
Net realized gain (loss)	995,228	(2,361,531)	
Net change in unrealized appreciation (depreciation)	6,304,142	(11,035,014)	
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	17,825,547	(2,614,174)	
Distributions to Common Shareholders From <sup>1</sup>	(11.002.17=)	(11.0(0.740)	
Net investment income	(11,006,412)	(11,262,749)	
Net realized gain		(1,093,587)	
Decrease in net assets resulting from distributions to Common Shareholders	(11,006,412)	(12,356,336)	
Net Assets Applicable to Common Shareholders			
Total increase (decrease) in net assets applicable to Common Shareholders	6,819,135	(14,970,510)	
Beginning of year	176,395,134	191,365,644	

End of year	\$ 183,214,269	\$ 176,395,134
Undistributed net investment income, end of year	\$ 2,664,406	\$ 3,063,134
Distributions for annual periods determined in accordance with federal income tax regulations.		

See Notes to Financial Statements.

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# Statements of Changes in Net Assets

Increase (Decrease) in Net Assets Applicable to Common Shareholders:	BlackRock MuniHoldings Quality Fund, Inc. (MUS) Year Ended April 30, 2015 2014			
Onesettens				
Operations Net investment income	\$ 10,460,119	\$ 10,619,445		
Net realized gain (loss)	223,525	(8,031,093)		
Net change in unrealized appreciation (depreciation)	4,969,206	(6,713,391)		
	, ,	, , ,		
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	15,652,850	(4,125,039)		
Distributions to Common Shareholders From <sup>1</sup>				
Net investment income	(10,537,871)	(10,631,996)		
Net Assets Applicable to Common Shareholders				
Total increase (decrease) in net assets applicable to Common Shareholders	5,114,979	(14,757,035)		
Beginning of year	184,478,789	199,235,824		
End of year	\$ 189,593,768	\$ 184,478,789		
Undistributed net investment income, end of year	\$ 2,749,831	\$ 2,761,533		
	BlackRock Muni Intermediate Duration Fund, Inc. (MUI) Year Ended April 30, 2015 2014			
Increase (Decrease) in Net Assets Applicable to Common Shareholders:	Intern Duration Fun Year Ende	nediate nd, Inc. (MUI) nd April 30,		
Operations	Interm Duration Fun Year Ende 2015	nediate nd, Inc. (MUI) d April 30, 2014		
Operations Net investment income	Interm Duration Fun Year Ende 2015	nediate dd, Inc. (MUI) d April 30, 2014		
Operations Net investment income Net realized gain (loss)	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800	addiate ad, Inc. (MUI) d April 30, 2014 \$ 30,731,598 (1,509,254)		
Operations Net investment income	Interm Duration Fun Year Ende 2015	nediate dd, Inc. (MUI) d April 30, 2014		
Operations Net investment income Net realized gain (loss)	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800	addiate ad, Inc. (MUI) d April 30, 2014 \$ 30,731,598 (1,509,254)		
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649	s 30,731,598 (1,509,254) (30,874,720)		
Operations  Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649	* 30,731,598 (1,509,254) (30,874,720) (1,652,376)		
Operations  Net investment income  Net realized gain (loss)  Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup>	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649  39,684,937	s 30,731,598 (1,509,254) (30,874,720) (1,652,376)		
Operations  Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649  39,684,937	* 30,731,598 (1,509,254) (30,874,720) (1,652,376)		
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income Net realized gain	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649  39,684,937	***sediate**; ad, Inc. (MUI) d April 30, 2014  ***\$ 30,731,598 (1,509,254) (30,874,720) (1,652,376) (32,953,864) (1,979,760)		
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income Net realized gain  Decrease in net assets resulting from distributions to Common Shareholders	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649  39,684,937	* 30,731,598 (1,509,254) (30,874,720) (1,652,376) (32,953,864) (1,979,760)		
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From¹ Net investment income Net realized gain  Decrease in net assets resulting from distributions to Common Shareholders  Net Assets Applicable to Common Shareholders	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649  39,684,937  (31,311,027)  (31,311,027)	*** additional state of the sta		
Operations  Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From <sup>1</sup> Net investment income Net realized gain  Decrease in net assets resulting from distributions to Common Shareholders  Net Assets Applicable to Common Shareholders  Total increase (decrease) in net assets applicable to Common Shareholders	Interm Duration Fun Year Ende 2015  \$ 29,505,488	** 30,731,598 (1,509,254) (30,874,720) (1,652,376) (32,953,864) (1,979,760) (34,933,624) (36,586,000)		
Operations Net investment income Net realized gain (loss) Net change in unrealized appreciation (depreciation)  Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations  Distributions to Common Shareholders From¹ Net investment income Net realized gain  Decrease in net assets resulting from distributions to Common Shareholders  Net Assets Applicable to Common Shareholders  Total increase (decrease) in net assets applicable to Common Shareholders  Beginning of year	Interm Duration Fun Year Ende 2015  \$ 29,505,488 5,704,800 4,474,649  39,684,937  (31,311,027)  (31,311,027)  8,373,910 599,066,399	**30,731,598**(1,509,254)*(30,874,720)**(1,652,376)**(32,953,864)*(1,979,760)**(34,933,624)**(36,586,000)**(35,652,399)**		

See Notes to Financial Statements.

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## Statements of Changes in Net Assets

	Fund II, I Year Ende	MuniVest nc. (MVT) ed April 30,
Increase (Decrease) in Net Assets Applicable to Common Shareholders:	2015	2014
Operations		
Net investment income	\$ 20,711,738	\$ 21,507,539
Net realized gain (loss)	2,369,918	(4,430,969)
Net change in unrealized appreciation (depreciation)	10,458,628	(20,404,052)
Net increase (decrease) in net assets applicable to Common Shareholders resulting from operations	33,540,284	(3,327,482)
Distributions to Common Shareholders From <sup>1</sup>		
Net investment income	(21,785,415)	(22,639,477)
Capital Share Transactions		
Reinvestment of common distributions	419,446	1,115,168
Kemvestment of Common distributions	419,440	1,113,106
Net Assets Applicable to Common Shareholders		
Total increase (decrease) in net assets applicable to Common Shareholders	12,174,315	(24,851,791)
Beginning of year	324,146,083	348,997,874
End of year	\$ 336,320,398	\$ 324,146,083
Undistributed net investment income, end of year	\$ 3,245,721	\$ 4,256,666

 $<sup>^{\,1}</sup>$  Distributions for annual periods determined in accordance with federal income tax regulations.

See Notes to Financial Statements.

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#### Statements of Cash Flows

Year Ended April 30, 2015	BlackRock MuniAssets Fund, Inc. (MUA)	BlackRock MuniEnhanced Fund, Inc. (MEN)	BlackRock MuniHoldings Fund, Inc. (MHD)	BlackRock MuniHoldings Fund II, Inc. (MUH)
Cash Provided by Operating Activities				
Net increase in net assets resulting from operations Adjustments to reconcile net increase in net assets resulting from operations to net cash provided by operating activities:	\$ 46,984,247	\$ 31,303,750	\$ 25,541,899	\$ 17,825,547
(Increase) decrease in interest receivable Increase in variation margin receivable on financial futures contracts	31,266 (27,704)	(4,819) (44,041)	(83,672) (18,704)	(121,154) (12,938)
Decrease in prepaid expenses (Increase) decrease in cash pledged for financial futures contracts	1,223 403,000	628 (145,000)	576 228,000	461 114,000
Increase in investment advisory fees payable	7,678	8,685	5,695	2,516
Increase (decrease) in interest expense and fees payable	1,585	(7,920)	(2,702)	(2,487)
Increase in other accrued expenses payable  Decrease in variation margin payable on financial futures contracts	32,969 (210,940)	24,887 (94,923)	11,506 (113,486)	8,548 (75,517)
Increase in Officer s and Directors fees payable	747	868	680	483
Net realized gain on investments	(8,214,302)	(1,537,825)	(2,581,977)	(1,846,961)
Net unrealized gain on investments  Amortization of premium and accretion of discount on investments	(15,117,533) (141,823)	(10,305,800) (872,297)	(9,807,414) 3,914	(6,422,325) (278,349)
Proceeds from sales of long-term investments	147,973,431	67,987,063	46,417,922	36,211,448
Purchases of long-term investments Net proceeds from sales (purchases) of short-term securities	(133,982,214) (701,392)	(69,090,088) 1,531,291	(40,640,256) (535,581)	(29,736,003) 262,549
Net cash provided by operating activities	37,040,238	18,754,459	18,426,400	15,929,818
Cash Used for Financing Activities				
Proceeds from TOB Trust Certificates Repayments of TOB Trust Certificates	(10,078,540)	3,714,827 (999,989)	(3,454,373)	(4,928,979)
Cash dividends paid to Common Shareholders Increase (decrease) in bank overdraft	(26,961,698)	(21,479,266)	(15,009,484) (1,197)	(11,068,563) 35,189
Amortization of deferred offering costs		9,969	38,654	32,535
Net cash used for financing activities	(37,040,238)	(18,754,459)	(18,426,400)	(15,929,818)
Cash				
Net increase in cash Cash at beginning of year				
Cash at end of year				
Supplemental Disclosure of Cash Flow Information				
Cash paid during the year for interest expense and fees	\$ 535,203	\$ 1,903,848	\$ 1,239,231	\$ 856,005
Non-cash Financing Activities				
Capital shares issued in reinvestment of distributions paid to Common Shareholders	\$ 169,233			

See Notes to Financial Statements.

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#### Statements of Cash Flows

Year Ended April 30, 2015	BlackRock MuniHoldings Quality Fund, Inc. (MUS)	BlackRock Muni Intermediate Duration Fund, Inc. (MUI)	BlackRock MuniVest Fund II, Inc. (MVT)
Cash Provided by Operating Activities			
Net increase in net assets resulting from operations	\$ 15,652,850	\$ 39,684,937	\$ 33,540,284
Adjustments to reconcile net increase in net assets resulting from operations to net cash provided			
by operating activities:			
(Increase) decrease in interest receivable	111,107	(10,053)	(25,665)
Increase in variation margin receivable on financial futures contracts	(18,141)	(85,644)	(23,345)
Decrease in prepaid expenses	582	2,097	1,162
Decrease in cash pledged for financial futures contracts	67,998	119,000	214,000
Increase in investment advisory fees payable	6,262	3,490	7,714
Decrease in interest expense and fees payable	(3,338) 7,539	(15,032)	(3,469)
Increase in other accrued expenses payable  Decrease in variation margin payable on financial futures contracts	(68,766)	46,408 (303,754)	13,759 (138,799)
Increase in Officer s and Directors fees payable	(68,766)	32,801	903
Net realized gain on investments	(1,048,585)	(8,018,203)	(3,950,928)
Net unrealized gain on investments	(5,096,331)	(5,080,468)	(10,670,585)
Amortization of premium and accretion of discount on investments	676,087	4,102,732	431,290
Proceeds from sales of long-term investments	34,662,346	183,129,326	56,924,990
Purchases of long-term investments	(32,372,492)	(189,954,845)	(55,861,739)
Net proceeds from sales of short-term securities	1,171,335	23,827,588	1,242,345
Net cash provided by operating activities	13,748,921	47,480,380	21,701,917
Cash Used for Financing Activities			
Proceeds from TOB Trust Certificates	(2.22.22.)	3,340,000	
Repayments of TOB Trust Certificates	(3,250,531)	(19,478,284)	(275,256)
Cash dividends paid to Common Shareholders	(10,537,871)	(31,425,916)	(21,479,228)
Decrease in bank overdraft	20, 401	02.020	(603)
Amortization of deferred offering costs	39,481	83,820	53,170
Net cash used for financing activities	(13,748,921)	(47,480,380)	(21,701,917)
Cash			
Net increase in cash			
Cash at beginning of year			
Cash at end of year			
Supplemental Disclosure of Cash Flow Information	Φ 1000 10=	ф. 0.202.676	h 1000 70=
Cash paid during the year for interest expense and fees	\$ 1,066,485	\$ 3,392,679	\$ 1,898,507
Non-cash Financing Activities			
Capital shares issued in reinvestment of distributions paid to Common Shareholders			\$ 419,446

See Notes to Financial Statements.

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## Financial Highlights

BlackRock MuniAssets Fund, Inc. (MUA)

	:	2015	Year 2014			ar Ended Apri 2013		Ended April 30, 2013 20		*		2011
Per Share Operating Performance												
Net asset value, beginning of year	\$	13.56	\$	14.36	\$	13.47	\$	12.14	\$	12.63		
3 · 3 · · · · · · · · · · · · · · · · ·												
Net investment income <sup>1</sup>		0.73		0.77		0.77		0.76		0.73		
Net realized and unrealized gain (loss)		0.79		(0.82)		0.90		1.32		(0.46)		
The rounded and unrounded gain (1888)		0.07		(0.02)		0.50		1.02		(01.0)		
Net increase (decrease) from investment operations		1.32		(0.05)		1.67		2.08		0.27		
The increase (decrease) from investment operations		1.32		(0.03)		1.07		2.00		0.27		
Distributions from net investment income <sup>2</sup>		(0.76)		(0.75)		(0.78)		(0.75)		(0.76)		
Distributions from het investment income-		(0.70)		(0.73)		(0.76)		(0.73)		(0.70)		
N 1 . 1 . 6	Ф	14.10	ф	12.56	ф	14.26	ф	12.47	ф	10.14		
Net asset value, end of year	\$	14.12	\$	13.56	\$	14.36	\$	13.47	\$	12.14		
	_				_		_		_			
Market price, end of year	\$	14.22	\$	12.85	\$	13.96	\$	13.15	\$	11.27		
T ( ) D ( 2												
Total Return <sup>3</sup> Based on net asset value		10.11%		0.47%		12.70%		17.90%		2.31%		
based on het asset value		10.11%		0.47%		12.70%		17.90%		2.31%		
		17.020		(2.06) 64		12 226		22 000		(5.15).6(		
Based on market price		17.02%		(2.06)%		12.22%		23.99%		(5.17)%		
D. C. A. A. A. A. N. A. A. A. A.												
Ratios to Average Net Assets		0.82%		0.82%		0.83%		0.77%		0.78%		
Total expenses		0.82%		0.8270		0.65%		0.7770		0.76%		
		0.020		0.026		0.026		0.776		0.700		
Total expenses after fees waived and paid indirectly		0.82%		0.82%		0.83%		0.77%		0.78%		
Total expenses after fees waived and paid indirectly and excluding interest expense and		0.716		0.700		0.716		0.70%		0.746		
fees <sup>4</sup>		0.71%		0.70%		0.71%		0.70%		0.74%		
Net investment income		5.24%		5.84%		5.52%		6.00%		6.07%		
Supplemental Data Nat assets, and of year (000)	¢ 4	505,341	¢	485,319	¢	513,923	¢.	481,598	¢	433,891		
Net assets, end of year (000)	Ф.	003,341	Þ.	+03,319	Ф	313,923	<b>Ф</b> 4	+01,398	ф.	+33,691		
D ' (000)	¢.	(1.0//	6	71 117	¢.	76 451	ф	(1.510	¢.	00.111		
Borrowings outstanding, end of year (000)	\$	61,066	\$	71,145	\$	76,451	\$	61,510	\$	23,111		
	_				_		_		_			
Asset coverage, end of year per \$1,000 of borrowings	\$	9,275	\$	7,822	\$	7,722	\$	8,830	\$	19,774		
Portfolio turnover rate		22%		19%		19%		28%		24%		

Based on average shares outstanding.

<sup>&</sup>lt;sup>2</sup> Distributions for annual periods determined in accordance with federal income tax regulations.

Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Where applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions.

<sup>4</sup> Interest expense and fees relate to TOB Trusts. See Note 3 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts.

See Notes to Financial Statements.

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# Financial Highlights

BlackRock MuniEnhanced Fund, Inc. (MEN)

		2015		Yea 2014	ar E	Ended Apr 2013	il 3	0, 2012		2011
Per Share Operating Performance Net asset value, beginning of year	\$	11.94	\$	12.63	\$	12.12	\$	10.30	\$	10.90
Net asset value, beginning of year	Ф	11.94	Ф	12.03	Ф	12.12	Ф	10.30	Ф	10.90
Net investment income <sup>1</sup> Net realized and unrealized gain (loss) Distributions to AMPS Shareholders from net investment income		0.71 0.35		0.73 (0.70)		0.71 0.50		0.69 1.82 (0.00) <sup>2</sup>		0.73 (0.62) (0.03)
Net increase from investment operations		1.06		0.03		1.21		2.51		0.08
Distributions to Common Shareholders from net investment income <sup>3</sup>		(0.73)		(0.72)		(0.70)		(0.69)		(0.68)
Net asset value, end of year	\$	12.27	\$	11.94	\$	12.63	\$	12.12	\$	10.30
Market price, end of year	\$	11.67	\$	11.27	\$	12.65	\$	11.66	\$	9.99
Total Return Applicable to Common Shareholders <sup>4</sup>										
Based on net asset value		9.49%		1.06%		10.16%		25.12%		0.78%
Based on market price		10.33%		(4.76)%		14.69%		24.11%		(1.44)%
Ratios to Average Net Assets Applicable to Common Shareholders										
Total expenses		1.44%		1.50%		1.49%		1.70%5		1.24%5
Total expenses after fees waived		1.43%		1.50%		1.49%		1.70%5		1.24%5
Total expenses after fees waived and excluding interest expense, fees and amortization of offering costs <sup>6</sup>		0.91%		0.92%		0.96%7		1.35% <sup>5,7</sup>		1.09%5
Net investment income		5.76%		6.37%		5.65%		6.12%5		6.89%5
Distributions to AMPS Shareholders								0.03%		0.29%
Net investment income to Common Shareholders		5.76%		6.37%		5.65%		6.09%		6.60%
Supplemental Data										
Net assets applicable to Common Shareholders, end of year (000)	\$	362,703	\$	352,878	\$	373,259	\$	357,017	\$	303,264
AMPS outstanding at \$25,000 liquidation preference, end of year (000)									\$	142,575
Asset coverage per AMPS at \$25,000 liquidation preference, end of year									\$	78,179
VRDP Shares outstanding at \$100,000 liquidation value, end of year (000)	\$	142,500	\$	142,500	\$	142,500	\$	142,500		
Asset coverage per VRDP Shares at \$100,000 liquidation value, end of year	\$	354,528	\$	347,633	\$	361,936	\$	350,538		
Borrowings outstanding, end of year (000)	\$	76,094	\$	73,379	\$	81,244	\$	69,282	\$	61,583
Asset coverage, end of year per \$1,000 of borrowings	\$	5,767	\$	5,809	\$	5,594	\$	6,153	\$	5,924
Portfolio turnover rate		12%		16%		12%		22%		9%

1	Based on average Common Shares outstanding.
2	Amount is greater than \$(0.005) per share.
3	Distributions for annual periods determined in accordance with federal income tax regulations.
4	Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Wher applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions.
5	Does not reflect the effect of distributions to AMPS Shareholders.
6	Interest expense, fees and amortization of offering costs related to TOB Trusts and/or VRDP Shares. See Note 3 and Note 9 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts and VRDP Shares, respectively.
7	For the years ended April 30, 2013 and April 30, 2012, the total expense ratio after fees waived and paid indirectly and excluding interest expense, fees, amortization of offering costs, liquidity, and remarketing fees were 0.91% and 0.98%, respectively.
See	Notes to Financial Statements.
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# Financial Highlights

BlackRock MuniHoldings Fund, Inc. (MHD)

	2015	:	Yea 2014	ır E	nded Apr 2013	il 3	0, 2012	2011
Per Share Operating Performance								
Net asset value, beginning of year	\$ 16.85	\$	18.12	\$	17.36	\$	14.67	\$ 15.75
Net investment income <sup>1</sup> Net realized and unrealized gain (loss) Distributions to VMTP Shareholders from net realized gain Distributions to AMPS Shareholders from:	1.03 0.77		1.04 (1.22)		1.07 1.01 (0.01)		1.12 2.67	1.14 (1.01)
Net investment income Net realized gain							(0.01)	(0.03) $(0.00)^2$
Net increase (decrease) from investment operations	1.80		(0.18)		2.07		3.78	0.10
Distributions to Common Shareholders from: <sup>3</sup> Net investment income Net realized gain	(1.06)		(1.08) (0.01)		(1.12) (0.19)		(1.09)	(1.07) (0.11)
Total distributions to Common Shareholders	(1.06)		(1.09)		(1.31)		(1.09)	(1.18)
Net asset value, end of year	\$ 17.59	\$	16.85	\$	18.12	\$	17.36	\$ 14.67
Market price, end of year	\$ 17.25	\$	16.01	\$	18.20	\$	18.08	\$ 14.51
Total Return Applicable to Common Shareholders <sup>4</sup>			(0.15) %		12.202		24.550	0.55%
Based on net asset value	11.22%	(	(0.15)%		12.20%		26.57%	0.57%
Based on market price	14.80%	(	(5.55)%		8.21%		33.28%	(0.21)%
Ratios to Average Net Assets Applicable to Common Shareholders								
Total expenses	1.50%		1.64%		1.60%		1.41%5	1.28%5
Total expenses after fees waived and paid indirectly	1.50%		1.64%		1.60%		1.41%5	1.28%5
Total expenses after fees waived and paid indirectly and excluding interest expense, fees and amortization of offering ${\rm costs}^6$	0.99%		1.04%		1.02%		1.09% <sup>5,7</sup>	1.13%5
Net investment income	5.86%		6.48%		5.92%		6.95%5	7.41%5
Distributions to AMPS Shareholders							0.09%	0.20%
Net investment income to Common Shareholders	5.86%		6.48%		5.92%		6.86%	7.21%
Supplemental Data								
Net assets applicable to Common Shareholders, end of year (000)	\$ 248,646	\$ 2	238,113	\$	255,911	\$	243,989	\$ 205,368
AMPS outstanding at \$25,000 liquidation preference, end of year (000)								\$ 83,700
Asset coverage per AMPS at \$25,000 liquidation preference, end of year								\$ 86,342
VMTP Shares outstanding at \$100,000 liquidation value, end of year (000)	\$ 83,700	\$	83,700	\$	83,700	\$	83,700	
Asset coverage per VMTP Shares at \$100,000 liquidation value, end of year	\$ 397,068	\$ 3	384,484	\$	405,748	\$	391,505	

Borrowings outstanding, end of year (000)	\$ 56,784	\$ 60,238	\$ 69,753	\$ 61,758	\$ 43,488
Asset coverage, end of year per \$1,000 of borrowings	\$ 5,379	\$ 4,953	\$ 4,669	\$ 4,951	\$ 5,722
Portfolio turnover rate	11%	20%	16%	19%	15%

- Based on average Common Shares outstanding.
- Amount is greater than \$(0.005) per share.
- 3 Distributions for annual periods determined in accordance with federal income tax regulations.
- Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Where applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions.
- Does not reflect the effect of distributions to AMPS Shareholders.
- Interest expense, fees and amortization of offering costs related to TOB Trusts and/or VMTP Shares. See Note 3 and Note 9 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts and VMTP Shares, respectively.
- For the year ended April 30, 2012, the total expense ratio after fees waived and paid indirectly and excluding interest expense, fees, amortization of offering costs, liquidity and remarketing fees was 1.05%.

See Notes to Financial Statements.

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# Financial Highlights

 $\begin{array}{c} BlackRock\ MuniHoldings\ Fund\ II,\ Inc.\\ \hline (MUH) \end{array}$ 

	:	2015	Year 2014	ded Apri 2013	, 2012	2011
Per Share Operating Performance						
Net asset value, beginning of year	\$	15.61	\$ 16.93	\$ 16.23	\$ 13.74	\$ 14.65
Net investment income <sup>1</sup> Net realized and unrealized gain (loss) Distributions to VMTP Shareholders from net realized gain Distributions to AMPS Shareholders from:		0.93 0.64	0.95 (1.17)	0.98 0.93 (0.01)	1.03 2.45	1.03 (0.88)
Net investment income Net realized gain					(0.01)	(0.02) $(0.00)^2$
Net increase (decrease) from investment operations		1.57	(0.22)	1.90	3.47	0.13
Distributions to Common Shareholders from: <sup>3</sup> Net investment income Net realized gain		(0.97)	(1.00) (0.10)	(1.04) (0.16)	(0.98)	(0.97) (0.07)
Total distributions to Common Shareholders		(0.97)	(1.10)	(1.20)	(0.98)	(1.04)
Net asset value, end of year	\$	16.21	\$ 15.61	\$ 16.93	\$ 16.23	\$ 13.74
Market price, end of year	\$	15.28	\$ 14.84	\$ 16.75	\$ 16.46	\$ 13.35
Total Return Applicable to Common Shareholders <sup>4</sup> Based on net asset value		10.64%	(0.40)%	11.99%	26.08%	0.92%
based on net asset value		10.04 /6	(0.40) /	11.77/0	20.00 //	0.7270
Based on market price		9.71%	(4.30)%	9.25%	31.60%	(2.14)%
Ratios to Average Net Assets Applicable to Common Shareholders						
Total expenses		1.48%	1.61%	1.59%	1.37%5	1.23%5
Total expenses after fees waived		1.48%	1.61%	1.59%	1.37%5	1.23%5
Total expenses after fees waived and excluding interest expense, fees and amortization of offering ${\rm costs}^6$		1.00%	1.04%	1.03%	1.07% <sup>5,7</sup>	1.07%5
Net investment income		5.76%	6.36%	5.81%	6.81%5	7.18%5
Distributions to AMPS Shareholders					0.05%	0.14%
Net investment income to Common Shareholders		5.76%	6.36%	5.81%	6.76%	7.04%
Supplemental Data						
Net assets applicable Common Shareholders, end of year (000)	\$ 1	183,214	\$ 176,395	\$ 191,366	\$ 182,624	\$ 154,259
AMPS outstanding at \$25,000 liquidation preference, end of year (000)						\$ 55,050
Asset coverage per AMPS at \$25,000 liquidation preference, end of year (000)						\$ 95,056
VMTP Shares outstanding at \$100,000 liquidation value, end of year (000)	\$	55,000	\$ 55,000	\$ 55,000	\$ 55,000	

Asset coverage per VMTP Shares at \$100,000 liquidation value, end of year	\$ 433,117	\$ 420,718	\$ 447,938	\$ 432,044	
Borrowings outstanding, end of year (000)	\$ 43,568	\$ 48,497	\$ 56,354	\$ 48,273	\$ 33,617
Asset coverage, end of year per \$1,000 of borrowings	\$ 5,205	\$ 4,637	\$ 4,396	\$ 4,783	\$ 5,589
Portfolio turnover rate	11%	18%	16%	18%	15%

- Based on average Common Shares outstanding.
- Amount is greater than \$(0.005) per share.
- Distributions for annual periods determined in accordance with federal income tax regulations.
- Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Where applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions.
- <sup>5</sup> Does not reflect the effect of distributions to AMPS Shareholders.
- Interest expense, fees and amortization of offering costs related to TOB Trusts and/or VMTP Shares. See Note 3 and Note 9 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts and VMTP Shares, respectively.
- For the year ended April 30, 2012, the total expense ratio after fees waived and excluding interest expense, fees, amortization of offering costs, liquidity and remarketing fees was 1.03%.

See Notes to Financial Statements.

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# Financial Highlights

 $\begin{array}{c} BlackRock\ MuniHoldings\ Quality\ Fund,\ Inc.\\ \hline (MUS) \end{array}$ 

	2015	Yea 2014	ır E	nded Apr 2013	oril 30, 2012			2011
Per Share Operating Performance								
Net asset value, beginning of year	\$ 14.18	\$ 15.31	\$	14.61	\$	12.48	\$	13.34
Net investment income <sup>1</sup>	0.80	0.82		0.83		0.89		0.91
Net realized and unrealized gain (loss)	0.40	(1.13)		0.83		2.14		(0.85)
Distributions to AMPS Shareholders from net investment income		( /				(0.01)		(0.03)
Net increase (decrease) from investment operations	1.20	(0.31)		1.59		3.02		0.03
Distributions to Common Shareholders from net investment income <sup>2</sup>	(0.81)	(0.82)		(0.89)		(0.89)		(0.89)
Net asset value, end of year	\$ 14.57	\$ 14.18	\$	15.31	\$	14.61	\$	12.48
Market price, end of year	\$ 13.32	\$ 12.88	\$	14.92	\$	14.52	\$	12.31
Total Return Applicable to Common Shareholders <sup>3</sup>	0.00%	(1.05).00		11.06%		24.06%		0.012
Based on net asset value	9.20%	(1.07)%		11.06%		24.96%		0.21%
Based on market price	9.91%	(7.78)%		8.90%		25.90%		(1.60)%
Ratios to Average Net Assets Applicable to Common Shareholders								
Total expenses	1.59%	1.75%		1.80%		1.49%4		1.34%4
Total expenses after fees waived	1.57%	1.67%		1.72%		1.41%4		1.25%4
Total expenses after fees waived and excluding interest expense, fees and amortization of								
offering costs <sup>5</sup>	0.99%	0.99%		1.00%		$1.06\%^{4,6}$		$1.10\%^{4}$
Not investment in some	5 4007	6.000		<b>5</b> 100		6 500/4		7.040/4
Net investment income	5.49%	6.00%		5.48%		6.50%4		7.04%4
Distributions to AMPS Shareholders						0.08%		0.21%
Net investment income to Common Shareholders	5.49%	6.00%		5.48%		6.42%		6.83%
Supplemental Data								
Net assets applicable to Common Shareholders, end of year (000)	\$ 189,594	\$ 184,479	\$	199,236	\$	189,567	\$	161,720
AMPS outstanding at \$25,000 liquidation preference, end of year (000)							\$	87,000
Asset coverage per AMPS at \$25,000 liquidation preference, end of year							\$	71,472
VMTP Shares outstanding at \$100,000 liquidation value, end of year (000)	\$ 87,000	\$ 87,000	\$	87,000	\$	87,000		
Asset coverage per VMTP Shares at \$100,000 liquidation value, end of year	\$ 317,924	\$ 312,045	\$	329,007	\$	317,893		
Borrowings outstanding, end of year (000)	\$ 21,937	\$ 25,187	\$	48,934	\$	41,631	\$	31,665
Asset coverage, end of year per \$1,000 of borrowings	\$ 9,643	\$ 8,324	\$	5,072	\$	5,553	\$	6,107

Portfolio turnover rate 11% 46% 34% 30% 28% Based on average Common Shares outstanding. Distributions for annual periods determined in accordance with federal income tax regulations. Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Where applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions. Does not reflect the effect of distributions to AMPS Shareholders. Interest expense, fees and amortization of offering costs related to TOB Trusts and/or VMTP Shares. See Note 3 and Note 9 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts and VMTP Shares, respectively. For the year ended April 30, 2012, the total expense ratio after fees waived and excluding interest expense, fees, amortization of offering costs, liquidity and remarketing fees was 1.01%. See Notes to Financial Statements.

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# Financial Highlights

 $\label{eq:BlackRock Muni Intermediate Duration Fund, Inc.} BlackRock Muni Intermediate Duration Fund, Inc. \\ (MUI)$ 

	:	2015		Yea 2014		nded Apri 2013		2012		2011
Per Share Operating Performance										
Net asset value, beginning of year	\$	15.64	\$	16.60	\$	16.21	\$	14.45	\$	14.75
Net investment income <sup>1</sup> Net realized and unrealized gain (loss) Distributions to VRDP Shareholders from net realized gain Distributions to AMPS Shareholders from net investment income		0.77 0.27		0.80 (0.85)		0.82 0.58 (0.01)		0.86 1.76		0.95 (0.31) (0.10)
Net increase (decrease) from investment operations		1.04		(0.05)		1.39		2.62		0.54
Distributions to Common Shareholders from: <sup>2</sup> Net investment income Net realized gain		(0.82)		(0.86) (0.05)		(0.87) (0.13)		(0.86)		(0.84)
Total distributions to Common Shareholders		(0.82)		(0.91)		(1.00)		(0.86)		(0.84)
Net asset value, end of year	\$	15.86	\$	15.64	\$	16.60	\$	16.21	\$	14.45
Market price, end of year	\$	14.47	\$	14.55	\$	16.12	\$	16.45	\$	13.65
Total Return Applicable to Common Shareholders <sup>3</sup>										
Based on net asset value		7.27%		0.50%		8.78%		18.74%		3.86%
Based on market price		5.20%	(	(3.73)%		4.09%		27.56%		2.41%
Ratios to Average Net Assets Applicable to Common Shareholders										
Total expenses		1.52%		1.65%		1.91%		1.88%		1.45%4
Total expenses after fees waived and paid indirectly		1.52%		1.65%		1.91%		1.88%		1.43%4
Total expenses after fees waived and paid indirectly and excluding interest expense, fees and amortization of offering ${\rm costs}^5$		0.96%		1.00%		1.35%6		1.65%6		1.30%4
Net investment income		4.82%		5.28%		4.93%		5.58%		6.48%4
Distributions to AMPS Shareholders										0.70%
Net Investment income to Common Shareholders		4.82%		5.28%		4.93%		5.58%		5.78%
Supplemental Data										
Net assets applicable to Common Shareholders, end of year (000)	\$ 6	507,440	\$ :	599,066	\$ (	635,652	\$ (	617,437	\$ :	549,516
VRDP Shares outstanding at \$100,000 liquidation value, end of year (000)							\$ 2	287,100	\$ 2	287,100
Asset coverage per VRDP Shares at \$100,000 liquidation value, end of year							\$ 3	315,060	\$ 2	291,402
VMTP Shares outstanding at \$100,000 liquidation value, end of year (000)	\$ 2	287,100	\$ 2	287,100	\$ 2	287,100				
Asset coverage per VMTP Shares at \$100,000 liquidation value, end of year	\$ 3	311,578	\$ 3	308,661	\$ 3	321,405				

Borrowings outstanding, end of year (000)	\$ 52,932	\$ 69,070	\$ 105,939	\$ 81,430	\$ 66,609
Asset coverage, end of year per \$1,000 of borrowings	\$ 12,476	\$ 9,673	\$ 7,000	\$ 8,582	\$ 9,250
Portfolio turnover rate	18%	22%	16%	27%	21%

- Based on average Common Shares outstanding.
- 2 Distributions for annual periods determined in accordance with federal income tax regulations.
- Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Where applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions.
- <sup>4</sup> Does not reflect the effect of distributions to AMPS Shareholders.
- Interest expense, fees and amortization of offering costs related to TOB Trusts and/or VRDP Shares and/or VMTP Shares. See Note 3 and Note 9 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts, VRDP Shares and VMTP Shares, respectively.
- For the year ended April 30, 2013 and April 30, 2012, the total expense ratio after fees waived and paid indirectly and excluding interest expense, fees, amortization of offering costs, liquidity and remarketing fees 0.98% and 0.99%, respectively.

See Notes to Financial Statements.

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# Financial Highlights

BlackRock MuniVest Fund II, Inc. (MVT)

		2015		Yea 2014		2011				
Per Share Operating Performance	\$	15.45	\$	16.69	\$	15.91	\$	13.47	\$	14.41
Net asset value, beginning of year	Ф	13.43	Ф	10.09	Ф	13.91	ф	15.47	Ф	14.41
Net investment income <sup>1</sup> Net realized and unrealized gain (loss) Distributions to AMPS Shareholders from net investment income		0.99 0.61		1.03 (1.19)		1.06 0.82		1.12 2.41 (0.02)		1.14 (0.99) (0.04)
Net increase (decrease) from investment operations		1.60		(0.16)		1.88		3.51		0.11
Distributions to Common Shareholders from net investment income <sup>2</sup>		(1.04)		(1.08)		(1.10)		(1.07)		(1.05)
Net asset value, end of year	\$	16.01	\$	15.45	\$	16.69	\$	15.91	\$	13.47
Market price, end of year	\$	16.26	\$	15.16	\$	17.31	\$	16.75	\$	13.72
Total Return Applicable to Common Shareholders <sup>3</sup>										
Based on net asset value		10.65%		(0.37)%		11.95%		26.86%		0.73%
Based on market price		14.52%		(5.74)%		10.28%		31.13%		(1.04)%
Ratios to Average Net Assets Applicable to Common Shareholders										
Total expenses		1.50%		1.63%		1.66%		1.41%4		1.23%4
Total expenses after fees waived		1.50%		1.63%		1.66%		1.41%4		1.23%4
Total expenses after fees waived and excluding interest expense, fees and amortization of offering ${\rm costs}^5$		0.92%		0.96%		0.96%		1.04% <sup>4,6</sup>		1.07%4
Net investment income		6.17%		6.93%		6.43%		7.57%4		8.14%4
Distributions to AMPS Shareholders								0.15%		0.32%
Net investment income to Common Shareholders		6.17%		6.93%		6.43%		7.42%		7.82%
Supplemental Data										
Net assets applicable to Common Shareholders, end of year (000)	\$	336,320	\$	324,146	\$	348,998	\$	330,941	\$	278,284
AMPS outstanding at \$25,000 liquidation preference, end of year (000)									\$	140,000
Asset coverage per AMPS at \$25,000 liquidation preference, end of year									\$	74,698
VMTP Shares outstanding at \$100,000 liquidation value, end of year (000)	\$	140,000	\$	140,000	\$	140,000	\$	140,000		
Asset coverage per VMTP Shares at \$100,000 liquidation value, end of year	\$	340,229	\$	331,533	\$	349,284	\$	336,386		
Borrowings outstanding, end of year (000)	\$	66,439	\$	66,715	\$	99,386	\$	88,540	\$	62,045
Asset coverage, end of year per \$1,000 of borrowings	\$	6,062	\$	5,859	\$	4,512	\$	4,738	\$	5,485
Portfolio turnover rate		10%		17%		15%		13%		16%

1	Based on average Common Shares outstanding.	
2	Distributions for annual periods determined in accordance with federal income tax regulations.	
3	Total returns based on market price, which can be significantly greater or less than the net asset value, may result in substantially different returns. Where applicable, excludes the effects of any sales charges and assumes the reinvestment of distributions.	
4	Does not reflect the effect of distributions to AMPS Shareholders.	
5	Interest expense, fees and amortization of offering costs related to TOB Trusts and/or VMTP Shares. See Note 3 and Note 9 of the Notes to Financial Statements for details of municipal bonds transferred to TOB Trusts and VMTP Shares, respectively.	
6	For the year ended April 30, 2012, the total expense ratio after fees waived and paid indirectly and excluding interest expense, fees, amortization of offering costs, liquidity and remarketing fees was 0.99%.	3
See	Notes to Financial Statements.	
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### Notes to Financial Statements

#### 1. Organization:

The following are registered under the 1940 Act, as closed-end management investment companies and referred to herein collectively as the Funds:

	Herein Referred		Diversification
Fund Name	To As	Organized	Classification
BlackRock MuniAssets Fund, Inc.	MUA	Maryland	Non-diversified
BlackRock MuniEnhanced Fund, Inc.	MEN	Maryland	Non-diversified
BlackRock MuniHoldings Fund, Inc.	MHD	Maryland	Non-diversified
BlackRock MuniHoldings Fund II, Inc.	MUH	Maryland	Non-diversified
BlackRock MuniHoldings Quality Fund, Inc.	MUS	Maryland	Non-diversified
BlackRock Muni Intermediate Duration Fund, Inc.	MUI	Maryland	Non-diversified
BlackRock MuniVest Fund II. Inc.	MVT	Marvland	Non-diversified

The Board of Directors of the Funds are collectively referred to throughout this report as the Board of Directors or the Board, and the directors thereof are collectively referred to throughout this report as Directors. The Funds determine and make available for publication the NAVs of their Common Shares on a daily basis.

#### 2. Significant Accounting Policies:

The Funds—financial statements are prepared in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP), which may require management to make estimates and assumptions that affect the reported amounts of assets and liabilities in the financial statements and the reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results could differ from those estimates. Each Fund is considered an investment company under U.S. GAAP and follows the accounting and reporting guidance applicable to investment companies. The following is a summary of significant accounting policies followed by the Funds:

Valuation: The Funds investments are valued at fair value as of the close of trading on the New York Stock Exchange (NYSE) (generally 4:00 p.m., Eastern time). U.S. GAAP defines fair value as the price the Funds would receive to sell an asset or pay to transfer a liability in an orderly transaction between market participants at the measurement date. The Funds determine the fair values of their financial instruments at market value using independent dealers or pricing services under policies approved by the Board. The BlackRock Global Valuation Methodologies Committee (the Global Valuation Committee) is the committee formed by management to develop global pricing policies and procedures and to provide oversight of the pricing function for the Funds for all financial instruments.

Municipal investments (including commitments to purchase such investments on a when-issued basis) are valued on the basis of prices provided by dealers or pricing services. In determining the value of a particular investment, pricing services may use certain information with respect to transactions in such investments, quotations from dealers, pricing matrixes, market transactions in comparable investments and information with respect to various relationships between investments. Financial futures contracts traded on exchanges are valued at their last sale price. Investments in open-end registered investment companies are valued at NAV each business day.

In the event that the application of these methods of valuation results in a price for an investment that is deemed not to be representative of the market value of such investment, or if a price is not available, the investment will be valued by the Global Valuation Committee, or its delegate, in accordance with a policy approved by the Board as reflecting fair value ( Fair Value Investments ). When determining the price for Fair Value Investments, the Global Valuation Committee, or its delegate, seeks to determine the price that each Fund might reasonably expect to receive or pay from the current sale or purchase of that asset or liability in an arm s-length transaction. Fair value determinations shall be based upon all available factors that the Global Valuation Committee, or its delegate, deems relevant consistent with the principles of fair value measurement. The pricing of all Fair Value Investments is subsequently reported to the Board or a committee thereof on a quarterly basis.

Segregation and Collateralization: In cases where a Fund enters into certain investments (e.g., financial futures contracts), or certain borrowings (e.g., TOB transactions) that would be senior securities for 1940 Act purposes, the Funds may segregate or designate on their books and records cash or liquid securities having a market value at least equal to the amount of the Funds future obligations under such investments or borrowings. Doing so allows the investment or borrowing to be excluded from treatment as a senior security. Furthermore, if required by an exchange or counterparty agreement, the Funds may be required to deliver/deposit cash and/or securities to/with an exchange, or broker-dealer or custodian as collateral for certain investments or obligations.

Investment Transactions and Investment Income: For financial reporting purposes, investment transactions are recorded on the dates the transactions are entered into (the trade dates). Realized gains and losses on investment transactions are determined on the identified cost basis. Interest income, including amortization and accretion of premiums and discounts on debt securities, is recognized on the accrual basis.

Distributions: Distributions from net investment income are declared monthly and paid monthly. Distributions of capital gains are recorded on the ex-dividend date. The character and timing of distributions are determined in accordance with federal income tax regulations, which may differ from U.S. GAAP. Distributions to Preferred Shareholders are accrued and determined as described in Note 9.

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Deferred Compensation Plan: Under the Deferred Compensation Plan (the Plan ) approved by each Fund s Board, the independent Directors (Independent Directors ) may defer a portion of their annual complex-wide compensation. Deferred amounts earn an approximate return as though equivalent dollar amounts had been invested in common shares of certain other BlackRock Closed-End Funds selected by the Independent Directors. This has the same economic effect for the Independent Directors as if the Independent Directors had invested the deferred amounts directly in certain other BlackRock Closed-End Funds.

The Plan is not funded and obligations thereunder represent general unsecured claims against the general assets of each Fund. Deferred compensation liabilities are included in officer s and directors fees payable in the Statements of Assets and Liabilities and will remain as a liability of the Funds until such amounts are distributed in accordance with the Plan.

Recent Accounting Standard: In April 2015, the Financial Accounting Standards Board issued guidance to simplify the presentation of debt issuance costs in financial statements. Under the new guidance, a Fund is required to present such costs in the Statements of Assets and Liabilities as a direct deduction from the carrying value of the related debt liability rather than as an asset.

The standard is effective for financial statements with fiscal years beginning after December 15, 2015 and interim periods within those fiscal years. Management is evaluating the impact, if any, of this guidance on the Funds financial statements and disclosures.

Other: Expenses directly related to a Fund are charged to that Fund. Other operating expenses shared by several funds are prorated among those funds on the basis of relative net assets or other appropriate methods.

The Funds have an arrangement with the custodian whereby fees may be reduced by credits earned on uninvested cash balances, which, if applicable, are shown as fees paid indirectly in the Statements of Operations. The custodian imposes fees on overdrawn cash balances, which can be offset by accumulated credits earned or may result in additional custody charges.

#### 3. Securities and Other Investments:

Zero-Coupon Bonds: The Funds may invest in zero-coupon bonds, which are normally issued at a significant discount from face value and do not provide for periodic interest payments. Zero-coupon bonds may experience greater volatility in market value than other debt obligations of similar maturity which provide for regular interest payments.

Forward Commitments and When-Issued Delayed Delivery Securities: The Funds may purchase securities on a when-issued basis and may purchase or sell securities on a forward commitment basis. Settlement of such transactions normally occurs within a month or more after the purchase or sale commitment is made. The Funds may purchase securities under such conditions with the intention of actually acquiring them, but may enter into a separate agreement to sell the securities before the settlement date. Since the value of securities purchased may fluctuate prior to settlement, the Funds may be required to pay more at settlement than the security is worth. In addition, the Funds are not entitled to any of the interest earned prior to settlement. When purchasing a security on a delayed delivery basis, the Funds assume the rights and risks of ownership of the security, including the risk of price and yield fluctuations. In the event of default by the counterparty, the Funds maximum amount of loss is the unrealized appreciation of unsettled when-issued transactions, which is shown in the Schedules of Investments.

Municipal Bonds Transferred to TOB Trusts: The Funds leverage their assets through the use of TOB transactions. The Funds transfer municipal bonds into a special purpose trust (a TOB Trust ). A TOB Trust typically issues two classes of beneficial interests: short-term floating rate interests ( TOB Trust Certificates ), which are sold to third party investors, and residual inverse floating rate interests ( TOB Residuals ), which are generally issued to the participating funds that contributed the municipal bonds to the TOB Trust.

Other funds managed by the investment advisor may also contribute municipal bonds to a TOB Trust into which a Fund has contributed bonds. If multiple BlackRock-advised funds participate in the same TOB Trust, the economic rights and obligations under the TOB Residual will be shared among the funds ratably in proportion to their participation in the TOB Trust.

The municipal bonds transferred to a TOB Trust typically are high grade municipal bonds. In certain cases, when municipal bonds transferred are lower grade municipal bonds, the TOB transaction includes a credit enhancement feature that provides for the timely payment of principal and interest on the bonds to the TOB Trust by a credit enhancement provider in the event of default of the municipal bond. The TOB Trust would be responsible for the payment of the credit enhancement fee and the Funds, as TOB Residual holders, would be responsible for reimbursement of any payments of principal and interest made by the credit enhancement provider. The municipal bonds transferred to TOB Trusts with a credit enhancement are identified in the Schedules of Investments including the maximum potential amounts owed by the Funds.

The TOB Residuals held by a Fund generally provide the Fund with the right to cause the holders of a proportional share of the TOB Trust Certificates to tender their certificates to the TOB Trust at par plus accrued interest. Thereafter, that Fund may withdraw a corresponding share of the municipal bonds from the TOB Trust.

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The TOB Trust may be collapsed without the consent of a Fund, upon the occurrence of tender option termination events ( TOTEs ) or mandatory termination events ( MTEs ), as defined in the TOB Trust agreements. TOTEs include the bankruptcy or default of the issuer of the municipal bonds held in the TOB Trust, a substantial downgrade in the credit quality of the issuer of the municipal bonds held in the TOB Trust, failure of any scheduled payment of principal or interest on the municipal bonds, and a judgment or ruling that interest on the municipal bond is subject to federal income taxation. MTEs may include, among other things, a failed remarketing of the TOB Trust Certificates, the inability of the TOB Trust to obtain renewal of the liquidity support agreement and a substantial decline in the market value of the municipal bonds held in the TOB Trust. Upon the occurrence of a TOTE or an MTE, the TOB Trust would be liquidated with the proceeds applied first to any accrued fees owed to the trustee of the TOB Trust, the remarketing agent and the Liquidity Provider (defined below). In the case of an MTE, after the payment of fees, the TOB Trust Certificate holders would be paid before the TOB Residual holders (i.e., the Funds). In contrast, in the case of a TOTE, after payment of fees, the TOB Trust Certificate holders and the TOB Residual holders would be paid pro rata in proportion to the respective face values of their certificates. During the year ended April 30, 2015, no TOB Trusts in which the Funds participated were terminated without the consent of the Funds.

TOB Trusts are typically supported by a liquidity facility provided by a third party bank or other financial institution (the Liquidity Provider ) that allows the holders of the TOB Trust Certificates to tender their certificates in exchange for payment of par plus accrued interest on any business day, subject to the non-occurrence of TOTES (as described above). Depending on the structure of the TOB Trust, the Liquidity Provider may purchase the tendered TOB Trust Certificates. The Liquidity Provider is not obligated to advance such a loan. Any loans made by the Liquidity Provider will be secured by the purchased TOB Trust Certificates held by the TOB Trust. Tendered TOB Trust Certificates are supported by a remarketing agent. However, the remarketing agent is not anticipated to purchase tendered TOB Trust Certificates for its own account in the event of a failed remarketing, which may increase the likelihood that a TOB Trust will need to be collapsed and liquidated in order to purchase the tendered TOB Trust Certificates.

The Funds may invest in TOB Trusts on either a non-recourse or recourse basis. When a Fund invests in TOB Trusts on a non-recourse basis, and the Liquidity Provider is required to make a payment under the liquidity facility, the Liquidity Provider will typically liquidate all or a portion of the municipal bonds held in the TOB Trust and then fund the balance, if any, of the amount owed under the liquidity facility over the liquidation proceeds (the Liquidation Shortfall ). If a Fund invests in a TOB Trust on a recourse basis, the Fund will typically enter into a reimbursement agreement with the Liquidity Provider where the Fund is required to reimburse the Liquidity Provider the amount of any Liquidation Shortfall. As a result, a Fund investing in a recourse TOB Trust will bear the risk of loss with respect to any Liquidation Shortfall. If multiple funds participate in any such TOB Trust, these losses will be shared ratably, including the maximum potential amounts owed by the Funds at April 30, 2015, in proportion to their participation in the TOB Trust. The recourse TOB Trusts are identified in the Schedules of Investments including the maximum potential amounts owed by the Funds.

Should short-term interest rates rise, the Funds investments in TOB transactions may adversely affect the Funds net investment income and dividends to Common Shareholders. Also, fluctuations in the market value of municipal bonds deposited into the TOB Trust may adversely affect the Funds NAVs per share.

While the Funds investment policies and restrictions expressly permit investments in inverse floating rate securities, such as TOB Residuals, they generally do not allow the Funds to borrow money for purposes of making investments. The Funds management believes that the Funds restrictions on borrowings do not apply to the secured borrowings.

Each Fund s transfer of the municipal bonds to a TOB Trust is considered a secured borrowing for financial reporting purposes. The cash received by the TOB Trust from the sale of the TOB Trust Certificates, less certain transaction expenses, is paid to a Fund. The Funds typically invest the cash received in additional municipal bonds. The municipal bonds deposited into a TOB Trust are presented in the Funds Schedules of Investments and the TOB Trust Certificates are shown in Other Liabilities in the Statements of Assets and Liabilities. Any loans by the TOB Trust to purchase tendered TOB Trust Certificates would be shown as Loan for TOB Trust Certificates.

The carrying amount of the Funds payable to the holder of the TOB Trust Certificates or the Liquidity Provider, as reported in the Statements of Assets and Liabilities as TOB Trust Certificates approximates its fair value.

Interest income, including amortization and accretion of premiums and discounts, from the underlying municipal bonds is recorded by the Funds on an accrual basis. Interest expense incurred on the TOB transaction and other expenses related to remarketing, administration, trustee, liquidity and other services to a TOB Trust are shown as interest expense, fees and amortization of offering costs in the Statements of Operations. Fees paid upon creation of the TOB Trust are recorded as debt issuance costs and are amortized to interest expense, fees and amortization of offering costs in the Statements of Operations to the expected maturity of the TOB Trust. In connection with the restructurings of the TOB Trusts to comply with the Volcker Rule, the non-recurring, legal and restructuring fees are recorded as interest expense, fees and amortization of deferred

offering costs in the Statements of Operations. The TOB Trust Certificates have interest rates that generally reset weekly and their holders have the option to tender such certificates to the TOB Trust for redemption at par and any accrued interest at each reset date. At April 30, 2015, the aggregate value of the underlying municipal bonds

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transferred to the TOB Trusts, the related liability for TOB Trust Certificates and the range of interest rates on the liability for TOB Trust Certificates were as follows:

	Underly	ing	
	Munici	pal Liability for	
	Bond	·	Range of
	Transferr TOB Tr		Interest Rates
MUA	\$ 112,555	2,669 \$ 61,065,965	0.11% - 0.46%
MEN	\$ 146,63	9,118 \$ 76,093,825	0.11% - 0.39%
MHD	\$ 102,15	3,312 \$ 56,783,700	0.11% - 0.36%
MUH	\$ 77,65	5,827 \$ 43,568,059	0.11% - 0.36%
MUS	\$ 43,84	4,053 \$ 21,936,718	0.11% - 0.31%
MUI	\$ 95,36	7,866 \$ 52,931,848	0.11% - 0.38%
MVT	\$ 126,64	5,148 \$ 66,439,492	0.11% - 0.36%

For the year ended April 30, 2015, the Funds average TOB Trust Certificates outstanding and the daily weighted average interest rate, including fees, were as follows:

	Average TOB Trust	Daily Weighted
	Certificates	Average
	Outstanding	Interest Rate
MUA	\$ 70,178,070	0.75%
MEN	\$ 74,720,978	0.63%
MHD	\$ 57,259,980	0.62%
MUH	\$ 44,246,684	0.62%
MUS	\$ 22,845,205	0.67%
MUI	\$ 60,872,049	0.60%
MVT	\$ 66.567.922	0.61%

### 4. Derivative Financial Instruments:

The Funds engage in various portfolio investment strategies using derivative contracts both to increase the returns of the Funds and/or to economically manage their exposure to certain risks such as interest rate risk. These contracts may be transacted on an exchange.

Financial Futures Contracts: The Funds invest in long and/or short positions in financial futures contracts and options on financial futures contracts to gain exposure to, or economically hedge against, changes in interest rates (interest rate risk). Financial futures contracts are agreements between the Funds and a counterparty to buy or sell a specific quantity of an underlying instrument at a specified price and at a specified date. Depending on the terms of the particular contract, financial futures contracts are settled either through physical delivery of the underlying instrument on the settlement date or by payment of a cash settlement amount on the settlement date.

Upon entering into a financial futures contract, the Funds are required to deposit initial margin with the broker in the form of cash or securities in an amount that varies depending on a contract size and risk profile. The initial margin deposit must then be maintained at an established level over the life of the contract. Securities deposited as initial margin are designated on the Schedules of Investments and cash deposited, if any, is recorded on the Statements of Assets and Liabilities as cash pledged for financial futures contracts. Pursuant to the contract, the Funds agree to receive from or pay to the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as variation margin. Variation margin is recorded by the Funds as unrealized appreciation (depreciation) and, if applicable, as a receivable or payable for variation margin in the Statements of Assets and Liabilities.

When the contract is closed, the Funds record a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed. The use of financial futures contracts involves the risk of an imperfect correlation in the movements in the price of financial futures contracts, interest rates and the underlying assets.

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Interest rate contracts

The following is a summary of the Funds derivative financial instruments categorized by risk exposure:

### Fair Values of Derivative Financial Instruments as of April 30, 2015

		Value Derivative Liabilities									
	Statements of Assets and Liabilities Location	MUA	MEN	MHD	MUH						
Interest rate contracts	Net unrealized depreciation <sup>1</sup>	\$ (354,299)	\$ (374,272)	\$ (226,222)	\$ (158,235)						
			Dei	Value rivative Liabili	ties						
	Statements of Assets and Liabilities Location		MUS	MUI	MVT						

Includes cumulative depreciation on financial futures contracts as reported in the Schedules of Investments. Only current day s variation margin is reported within the Statements of Assets and Liabilities.

\$ (145,794) \$ (688,283) \$ (286,074)

Net unrealized depreciation1

### The Effect of Derivative Financial Instruments in the Statements of Operations

		Year 1	Ended April 30	, 2015								
		Net Realized	Loss From		Net Change in	Unrealized Ap	preciation (De	epreciation) on				
	MUA	MEN	MHD	MUH	MUA	MEN	MHD	MUH				
Interest rate contracts:												
Financial futures contracts	\$ (2,378,110)	\$ (1,212,800)	\$ (1,232,637)	\$ (851,733)	\$ (242,824)	\$ (279,548)	\$ (142,981)	\$ (118,183)				
	MUS	MUI	MVT		MUS	MUI	MVT					
Interest rate contracts:												
Financial futures contracts	\$ (825,060)	\$ (2,313,403)	\$ (1,581,010)		\$ (127,125)	\$ (605,819)	\$ (211,957)					
For the year ended April 30, 2015, the average quarterly balances of outstanding derivative financial instruments were as follows:												

	MUA	MEN	MHD	MUH	MUS	MUI	MVT				
Financial futures contracts:											
Average notional value of contracts - short	\$ 48,336,883	\$ 37,344,975	\$ 26,119,438	\$ 19,109,031	\$ 22,680,039	\$ 75,320,770	\$ 34,460,516				
Counterparty Credit Risk: A derivative contract may suffer a mark-to-market loss if the value of the contract decreases due to an unfavorable											
change in the market rates or values of the un	derlying instru	ment. Losses	can also occur	if the counter	party does not	perform under	r the contract.				

With exchange-traded futures, there is less counterparty credit risk to the Funds since the exchange or clearinghouse, as counterparty to such instruments, guarantees against a possible default. The clearinghouse stands between the buyer and the seller of the contract; therefore, credit risk is limited to failure of the clearinghouse. While offset rights may exist under applicable law, a Fund does not have a contractual right of offset against a clearing broker or clearinghouse in the event of a default (including the bankruptcy or insolvency) of the clearing broker or clearinghouse. Additionally, credit risk exists in exchange traded futures with respect to initial and variation margin that is held in a clearing broker s customer accounts. While clearing brokers are required to segregate customer margin from their own assets, in the event that a clearing broker becomes insolvent or goes into bankruptcy and at that time there is a shortfall in the aggregate amount of margin held by the clearing broker for all its clients, typically the shortfall would be allocated on a pro rata basis across all the clearing broker s customers, potentially resulting in losses to the Funds.

### 5. Investment Advisory Agreement and Other Transactions with Affiliates:

The PNC Financial Services Group, Inc. is the largest stockholder and an affiliate of BlackRock, Inc. (BlackRock) for 1940 Act purposes.

Each Fund entered into an Investment Advisory Agreement with BlackRock Advisors, LLC (the Manager), the Funds investment advisor, an indirect, wholly owned subsidiary of BlackRock, to provide investment advisory and administration services. The Manager is responsible for the

management of each Fund s portfolio and provides the necessary personnel, facilities, equipment and certain other services to the operations of each Fund. For such services, each Fund pays the Manager a monthly fee based on a percentage of each Fund s average daily net assets, at the following annual rates:

	MUA	MEN	MHD	MUH	MUS	MUI	MVT
Investment advisory fee	0.55%	0.50%	0.55%	0.55%	0.55%	0.55%	0.50%

Average daily net assets are the average daily value of each Fund s total assets minus its total accrued liabilities.

The Manager, for MUS, voluntarily agreed to waive its investment advisory fee on the proceeds of Preferred Shares and TOB Trusts that exceed 35% of total assets minus the sum of its accrued liabilities. This amount is included in fees waived by the Manager in the Statements of Operations. For the year ended April 30, 2015 the waiver was \$40,591.

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The Manager voluntarily agreed to waive its investment advisory fees by the amount of investment advisory fees each Fund pays to the Manager indirectly through its investment in affiliated money market funds. However, the Manager does not waive its investment advisory fees by the amount of investment advisory fees paid in connection with each Fund s investments in other affiliated investment companies, if any. These amounts are included in fees waived by the Manager in the Statements of Operations. For the year ended April 30, 2015, the amounts waived were as follows:

	MUA	MEN	MHD	MUH	MUS	MUI	MVT
Amounts waived	\$ 1.272	\$ 1.376	\$ 1.264	\$ 616	\$ 1.006	\$ 3,498	\$ 1.601

Prior to July 1, 2014, BlackRock Investment Management, LLC (BIM), an affiliate of the Manager, served as a sub-advisor to each of the Funds pursuant to sub-advisory agreements with the Manager, and received for its services a monthly fee from the Manager at an annual rate equal to a percentage of the investment advisory fees paid by each Fund to the Manager under the Investment Advisory Agreements. Effective July 1, 2014, the sub-advisory agreements between the Manager and BIM, with respect to each Fund, expired.

Certain officers and/or directors of the Funds are officers and/or directors of BlackRock or its affiliates. The Funds reimburse the Manager for a portion of the compensation paid to the Funds Chief Compliance Officer, which is included in officer and directors in the Statements of Operations.

The Funds may purchase securities from, or sell securities to, an affiliated fund provided the affiliation is due solely to having a common investment advisor, common officers, or common trustees. For the year ended April 30, 2015, the purchase transactions with an affiliated fund in compliance with Rule 17a-7 under the 1940 Act for MUA were \$1,650,198.

#### 6. Purchases and Sales:

For the year ended April 30, 2015, purchases and sales of investments excluding short-term securities, were as follows:

	MUA	MEN	MHD	MUH	MUS	MUI	MVT
Purchases	\$ 123,424,290	\$ 75,425,293	\$ 40,640,256	\$ 29,736,003	\$ 32,372,492	\$ 169,883,646	\$ 55,861,739
Sales	\$ 141,690,498	\$ 69,243,049	\$ 43,202,652	\$ 35,280,838	\$ 35,234,351	\$ 184,000,480	\$ 57,444,990

#### 7. Income Tax Information:

It is the Funds policy to comply with the requirements of the Internal Revenue Code of 1986, as amended, applicable to regulated investment companies, and to distribute substantially all of their taxable income to their shareholders. Therefore, no federal income tax provision is required.

The Funds file U.S. federal and various state and local tax returns. No income tax returns are currently under examination. The statute of limitations on the Funds U.S. federal tax returns remains open for each of the four years ended April 30, 2015. The statutes of limitations on the Funds state and local tax returns may remain open for an additional year depending upon the jurisdiction.

Management has analyzed tax laws and regulations and their application to the Funds as of April 30, 2015, inclusive of the open tax return years, and does not believe there are any uncertain tax positions that require recognition of a tax liability in the Funds financial statements.

U.S. GAAP requires that certain components of net assets be adjusted to reflect permanent differences between financial and tax reporting. These reclassifications have no effect on net assets or net asset values per share. As of April 30, 2015, the following permanent differences attributable to amortization methods on fixed income securities and non-deductible expenses were reclassified to the following accounts:

	MUA	MEN	MHD	MUH	MUS	MUI	MVT
Paid-in capital		\$ (9,970)	\$ (38,654)	\$ (32,535)	\$ (39,481)	\$ (83,821)	\$ (53,170)

Undistributed net investment income	\$ (240,316)	\$ 216,064	\$ 33,111	\$ 81,507	\$ 66,050	\$ (33,864)	\$ 62,732
Accumulated net realized gain (loss)	\$ 240,316	\$ (206,094)	\$ 5,543	\$ (48,972)	\$ (26,569)	\$ 117,685	\$ (9,562)

The tax character of distributions paid was as follows:

		MUA	MEN	MHD	MUH	MUS	MUI	MVT
Tax-exempt income <sup>1</sup>	4/30/15	\$ 26,838,857	\$ 22,880,735	\$ 15,882,185	\$ 11,579,652	\$ 11,444,657	\$ 34,245,623	\$ 22,951,698
_	4/30/14	26,837,760	22,842,187	16,193,850	11,813,581	11,552,557	35,584,757	24,120,086
Ordinary income <sup>2</sup>	4/30/15	293,072	13,467	25	237	348	64,307	312,815
	4/30/14	164,963	105	227,602	548,988	10,387	628,513	17,371
Long-term capital gains	4/30/14			9,111	604,877		1,878,099	
Total	4/30/15	\$ 27,131,929	\$ 22,894,202	\$ 15,882,210	\$ 11,579,889	\$ 11,445,005	\$ 34,309,930	\$ 23,264,513
	4/30/14	\$ 27,002,723	\$ 22,842,292	\$ 16,430,563	\$ 12,967,446	\$ 11,562,944	\$ 38,091,369	\$ 24,137,457

<sup>&</sup>lt;sup>1</sup> The Funds designate these amounts paid during the fiscal year ended April 30, 2015, as exempt-interest dividends.

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Ordinary income consists primarily of taxable income recognized from market discount and net short-term capital gains. Additionally, all ordinary income distributions are comprised of interest related dividends for non-U.S. residents and are eligible for exemption from U.S. withholding tax for nonresident aliens and foreign corporations.

As of April 30, 2015, the tax components of accumulated net earnings were as follows:

		MUA	MEN	MHD	MUH	MUS	MUI	MVT
Undistributed tax-exempt								
income	\$	636,422	\$ 5,443,816	\$ 2,361,631	\$ 1,949,617	\$ 2,568,612	\$ 3,398,754	\$ 2,513,016
Undistributed ordinary income		201,283		226,491	78,978		81,336	90,724
Undistributed long-term capital								
gains							4,594,019	
Capital loss carryforwards	(	7,135,190)	(10,190,751)	(1,091,220)	(1,389,726)	(14,851,290)		(4,980,650)
Net unrealized gains <sup>3</sup>	3	1,474,781	51,363,348	36,507,504	27,179,461	26,758,634	55,887,150	51,120,274
Total	\$ 2	5,177,296	\$ 46,616,413	\$ 38,004,406	\$ 27,818,330	\$ 14,475,956	\$ 63,961,259	\$ 48,743,364

As of April 30, 2015, the Funds had capital loss carryforwards available to offset future realized capital gains through the indicated expiration dates as follows:

Expires April 30,	MUA	MEN	MHD	MUH	MUS	MVT
2016	\$ 898,916	\$ 2,450,150				\$ 2,741,816
2017	3,645,754	3,540,378			\$ 494,294	
2018	396,366	1,225,298			6,614,798	
2019	2,194,154	732,655				
No expiration date <sup>4</sup>		2,242,270	\$ 1,091,220	\$ 1,389,726	7,742,198	2,238,834
Total	\$ 7,135,190	\$ 10,190,751	\$ 1,091,220	\$ 1,389,726	\$ 14,851,290	\$ 4,980,650

<sup>&</sup>lt;sup>4</sup> Must be utilized prior to losses subject to expiration.

During the year ended April 30, 2015, the Funds listed below utilized the following amounts of their respective capital loss carryforward:

MUA \$4,900,167 MUI \$447,981

As of April 30, 2015, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

	MUA	MEN	MHD	MUH	MUS	MUI	MVT
Tax cost	\$ 465,598,599	\$ 452,697,831	\$ 291,459,788	\$ 207,899,444	\$ 245,968,092	\$ 827,011,676	\$ 417,327,503
Gross unrealized appreciation	\$ 49,844,307	\$ 53,458,583	\$ 38,124,309	\$ 27,964,242	\$ 27,149,440	\$ 59,667,072	\$ 54,394,838
Gross unrealized depreciation	(18,333,741)	(2,018,210)	(1,616,805)	(784,781)	(388,420)	(3,530,110)	(2,666,463)

The differences between book-basis and tax-basis net unrealized gains were attributable primarily to the tax deferral of losses on wash sales and straddles, amortization and accretion methods of premiums and discounts on fixed income securities, the accrual of income on securities in default, the realization for tax purposes of unrealized gains (losses) on certain futures contracts, the deferral of compensation to Directors and the treatment of residual interests in TOB Trusts.

Net unrealized appreciation \$ 31,510,566 \$ 51,440,373 \$ 36,507,504 \$ 27,179,461 \$ 26,761,020 \$ 56,136,962 \$ 51,728,375

#### 8. Principal Risks:

The Funds invest a substantial amount of their assets in issuers located in a single state or limited number of states. Investment percentages in specific states or U.S. territories are presented in the Schedules of investments.

Many municipalities insure repayment of their bonds, which may reduce the potential for loss due to credit risk. The market value of these bonds may fluctuate for other reasons, including market perception of the value of such insurance, and there is no guarantee that the insurer will meet its obligation.

In the normal course of business, the Funds invest in securities and enter into transactions where risks exist due to fluctuations in the market (market risk) or failure of the issuer of a security to meet all its obligations (issuer credit risk). The value of securities held by the Funds may decline in response to certain events, including those directly involving the issuers whose securities are owned by the Funds; conditions affecting the general economy; overall market changes; local, regional or global political, social or economic instability; and currency, interest rate and price fluctuations. Similar to issuer credit risk, the Funds may be exposed to counterparty credit risk, or the risk that an entity with which the Funds have unsettled or open transactions may fail to or be unable to perform on its commitments. The Funds manage counterparty credit risk by entering into transactions only with counterparties that they believe have the financial resources to honor their obligations and by monitoring the financial stability of those counterparties. Financial assets, which potentially expose the Funds to market, issuer and counterparty credit risks, consist principally of financial instruments and receivables due from counterparties. The extent of the Funds exposure to market, issuer and counterparty credit risks with respect to these financial assets is generally approximated by their value recorded in the Statements of Assets and Liabilities, less any collateral held by the Funds.

As of April 30, 2015, MUA invested a significant portion of its assets in securities in the Health sector; MEN and MUS invested a significant portion of their assets in securities in the County/City/Special District/School District sector; and MEN, MHD, MUH, MUS, MUI and MVT invested a significant portion of their assets in securities in the Transportation sector. Changes in economic conditions affecting such sectors would have a greater impact on the Funds and could affect the value, income and/or liquidity of positions in such securities.

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The Funds may hold a significant amount of bonds subject to calls by the issuers at defined dates and prices. When bonds are called by issuers and the Funds reinvest the proceeds received, such investments may be in securities with lower yields than the bonds originally held, and correspondingly, could adversely impact the yield and total return performance of a Fund.

The Funds invest a significant portion of their assets in fixed-income securities and/or use derivatives tied to the fixed-income markets. Changes in market interest rates or economic conditions may affect the value and/or liquidity of such investments. Interest rate risk is the risk that prices of bonds and other fixed-income securities will increase as interest rates fall and decrease as interest rates rise. The Funds may be subject to a greater risk of rising interest rates due to the current period of historically low rates.

On December 10, 2013, regulators published final rules implementing section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Volcker Rule ), which prohibit banking entities from engaging in proprietary trading of certain instruments and limit such entities investments in, and relationships with, covered funds as defined in the Volcker Rule. The Volcker Rule precludes banking entities and their affiliates from sponsoring TOB Trusts as such Trusts have been structured prior to the effective date of the Volcker Rule. Banking entities subject to the Volcker Rule are required to fully comply by July 21, 2015, with respect to investments in and relationships with TOB Trusts that were not in place prior to December 31, 2013, and by July 21, 2016, with respect to investments in and relationships with TOB Trusts that were in place prior to December 31, 2013. As a result, TOB Trusts may need to be restructured or unwound.

In response to the restrictions imposed by the Volcker Rule, market participants have developed a new structure for TOB Trusts designed to ensure that no banking entity is sponsoring the TOB Trust for purposes of the Volcker Rule. Specifically, a Fund will establish, structure and sponsor the TOB Trusts in which it holds TOB Residuals. In such a structure, certain responsibilities that previously belonged to the sponsor bank will be performed by, or on behalf of, the Funds. The Funds may utilize service providers in meeting these responsibilities. Service providers to a TOB Trust, such as administrators, liquidity providers, trustees, and remarketing agents, would be acting at the direction of, and as agent of, the Funds as the TOB Residual holder. This structure remains untested. It is possible that regulators could take positions that could limit the market for such newly structured TOB Trust transactions or the Funds—ability to hold TOB Residuals. Under the new TOB Trust structure, the Funds will have certain additional duties and responsibilities, which may give rise to certain additional risks including, but not limited to, compliance, securities law and operational risks.

The SEC and various federal banking and housing agencies recently adopted credit risk retention rules for securitizations (the Risk Retention Rules ), which take effect in December 2016. The Risk Retention Rules would require the sponsor of a TOB Trust to retain at least 5% of the credit risk of the underlying assets supporting the TOB Trust s Municipal Bonds. The Risk Retention Rules may adversely affect the Funds ability to engage in TOB Trust transactions or increase the costs of such transactions in certain circumstances.

There can be no assurance that the Funds can successfully enter into restructured TOB Trust transactions in order to refinance their existing TOB Residual holdings prior to the compliance date for the Volcker Rule, which may require that the Funds unwind existing TOB Trusts. There can be no assurance that alternative forms of leverage will be available to the Funds and any alternative forms of leverage may be more or less advantageous to the Funds than existing TOB leverage.

TOB Trust transactions constitute an important component of the municipal bond market. Accordingly, implementation of the Volcker Rule may adversely impact the municipal market, including through reduced demand for and liquidity of municipal bonds and increased financing costs for municipal issuers. Any such developments could adversely affect the Funds. The ultimate impact of these rules on the TOB market and the overall municipal market is not yet certain.

### 9. Capital Share Transactions:

Each Fund is authorized to issue 200 million shares, all of which were initially classified as Common Shares. The par value for each Fund s Common Shares is \$0.10. The par value for each Funds Preferred Shares outstanding is \$0.10. The Board is authorized, however, to issue Preferred Shares without approval of Common Shareholders.

Common Shares

For the years shown, shares issued and outstanding increased by the following amounts as a result of dividend reinvestment:

Year Ended April 30,	MUA MEN MHD	MVT
2015	11,892	26,032
2014	20,577 9,784	75,746

Shares issued and outstanding remained constant for MUH, MUS and MUI for the year ended April 30, 2015 and the year ended April 30, 2014.

### Preferred Shares

Each Fund s Preferred Shares rank prior to the Fund s Common Shares as to the payment of dividends by the Fund and distribution of assets upon dissolution or liquidation of the Fund. The 1940 Act prohibits the declaration of any dividend on the Fund s Common Shares or the repurchase of the Fund s

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Common Shares if the Fund fails to maintain the asset coverage of at least 200% of the liquidation preference of the outstanding Preferred Shares. In addition, pursuant to the Preferred Shares governing instruments, the Fund is restricted from declaring and paying dividends on classes of shares ranking junior to or on parity with the Preferred Shares or repurchasing such shares if the Fund fails to declare and pay dividends on the Preferred Shares, redeem any Preferred Shares required to be redeemed under the Preferred Shares governing instruments or comply with the basic maintenance amount requirement of the agencies rating the Preferred Shares.

The holders of Preferred Shares have voting rights equal to the holders of Common Shares (one vote per share) and will vote together with holders of Common Shares (one vote per share) as a single class. However, the holders of Preferred Shares, voting as a separate class, are also entitled to elect two Directors for each Fund. In addition, the 1940 Act requires that along with approval by shareholders that might otherwise be required, the approval of the holders of a majority of any outstanding Preferred Shares, voting separately as a class would be required to (a) adopt any plan of reorganization that would adversely affect the Preferred Shares, (b) change a Fund s sub-classification as a closed-end investment company or change its fundamental investment restrictions or (c) change its business so as to cease to be an investment company.

#### **VRDP Shares**

MEN has issued Series W-7 VRDP Shares, \$100,000 liquidation value per share, in a privately negotiated offering. The VRDP Shares were offered to qualified institutional buyers as defined pursuant to Rule 144A under the Securities Act of 1933, as amended, (the Securities Act) and include a liquidity feature, pursuant to a liquidity agreement, that allows the holders of VRDP Shares to have their shares purchased by the liquidity provider in the event of a failed remarketing. MEN is required to redeem the VRDP Shares owned by the liquidity provider after six months of continuous, unsuccessful remarketing. Upon the occurrence of the first unsuccessful remarketing, if any, MEN is required to segregate liquid assets to fund the redemption. The VRDP Shares are subject to certain restrictions on transfer. MUI redeemed all its VRDP Shares on December 21, 2012.

As of the year ended April 30, 2015, the VRDP Shares outstanding were as follows:

	Issue Date	Shares Issued	Aggregate Principal	Maturity Date
MEN	5/19/11	1,425	\$ 142,500,000	6/01/41

MEN entered into a fee agreement with the liquidity provider that may require a per annum liquidity fee payable to the liquidity provider. These fees, if applicable, are shown as liquidity fees in the Statements of Operations.

The fee agreement between MEN and the liquidity provider was scheduled to expire on July 9, 2015 unless renewed or terminated in advance. On June 16, 2015, the fee agreement was extended to July 7, 2016.

In the event the fee agreement is not renewed or is terminated in advance, and the Fund does not enter into a fee agreement with an alternate liquidity provider, the VRDP Shares will be subject to mandatory purchase by the liquidity provider prior to the termination of the fee agreement. The Fund is required to redeem any VRDP Shares purchased by the liquidity provider six months after the purchase date. Immediately after the purchase of any VRDP Shares by the liquidity provider, the Fund is required to begin to segregate liquid assets with the Fund s custodian to fund the redemption. There is no assurance the Fund will replace such redeemed VRDP Shares with any other preferred shares or other form of leverage.

MEN is required to redeem its VRDP Shares on the maturity date, unless earlier redeemed or repurchased. Six months prior to the maturity date, MEN is required to begin to segregate liquid assets with the Fund s custodian to fund the redemption. In addition, MEN is required to redeem certain of its outstanding VRDP Shares if it fails to maintain certain asset coverage, basic maintenance amount or leverage requirements.

Subject to certain conditions, the VRDP Shares may be redeemed, in whole or in part, at any time at the option of MEN. The redemption price per VRDP Share is equal to the liquidation value per share plus any outstanding unpaid dividends. In the event of an optional redemption of the VRDP Shares prior to the initial termination date of the fee agreement, MEN must pay the respective liquidity provider fees on such redeemed VRDP Shares for the remaining term of the fee agreement up to the initial termination date.

Dividends on the VRDP Shares are payable monthly at a variable rate set weekly by the remarketing agent. Such dividend rates are generally based upon a spread over a base rate and cannot exceed a maximum rate. In the event of a failed remarketing, the dividend rate of the VRDP Shares will be reset to a maximum rate. The maximum rate is determined based on, among other things, the long-term preferred share rating

assigned to the VRDP Shares and the length of time that the VRDP Shares fail to be remarketed. At the date of issuance, the VRDP Shares were assigned a long-term rating of Aaa from Moody s and AAA from Fitch. Subsequent to the issuance of the VRDP Shares, Moody s completed a review of its methodology for rating securities issued by registered closed-end funds. As of April 30, 2015, the VRDP Shares were assigned a long-term rating of Aa1 from Moody s under its new ratings methodology. The VRDP Shares continue to be assigned a long-term rating of AAA from Fitch.

For financial reporting purposes, the VRDP Shares are considered debt of the issuer; therefore, the liquidation value, which approximates fair value, of the VRDP Shares is recorded as a liability in the Statements of Assets and Liabilities. Unpaid dividends are included in interest expense and fees payable in the Statements of Assets and Liabilities, and the dividends accrued and paid on the VRDP Shares are included as a component of interest expense, fees

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and amortization of offering costs in the Statements of Operations. The VRDP Shares are treated as equity for tax purposes. Dividends paid to holders of the VRDP Shares are generally classified as tax-exempt income for tax-reporting purposes.

MEN may incur remarketing fees of 0.10% on the aggregate principal amount of all the VRDP Shares, which, if any, are included in remarketing fees on Preferred Shares in the Statements of Operations. During the year ended April 30, 2015, none of the VRDP Shares were tendered for remarketing.

For the year ended April 30, 2015, the average annualized dividend rate for MEN s VRDP Shares was 0.99%.

On June 20, 2012, MEN commenced a three-year term ending June 24, 2015 (special rate period) with respect to its VRDP Shares. The implementation of the special rate period resulted in a mandatory tender of the VRDP Shares prior to the commencement of the special rate period. The mandatory tender event was not the result of a failed remarketing.

The liquidity and fee agreements remain in effect for the duration of the special rate period and the VRDP shares are still subject to mandatory redemption by the VRDP Funds on maturity date. The VRDP Shares will not be remarketed or subject to optional or mandatory tender events during such time. During the special rate period, MEN is required to maintain the same asset coverage, basic maintenance amount and leverage requirements for the VRDP Shares. MEN will not pay any liquidity and remarketing fees during the special rate period and instead will pay dividends monthly based on the sum of Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Index and a percentage per annum based on the long-term ratings assigned to the VRDP Shares. The short-term ratings were withdrawn by Moody s, Fitch and/or S&P. Short-term ratings may be re-assigned upon the termination of the special rate period when the VRDP Shares revert back to remarketable securities.

If MEN redeems the VRDP Shares on a date that is one year or more before the end of the special rate period and the VRDP Shares are rated above A1/A by Moody s and Fitch respectively, then such redemption is subject to a redemption premium payable to the holder of the VRDP Shares based on the time remaining in the special rate period, subject to certain exceptions for redemptions that are required to maintain minimum asset coverage requirements. After June 24, 2015, the holder of the VRDP Shares and MEN may mutually agree to extend the special rate period. On June 16, 2015, the special rate period was extended to June 22, 2016. If the special rate period is not extended, the VRDP Shares will revert back to remarketable securities and will be remarketed and available for purchase by qualified institutional investors.

For the year ended April 30, 2015, VRDP Shares issued and outstanding of MEN remained constant.

#### VMTP Shares

MHD, MUH, MUS, MUI and MVT (collectively, the  $\,$  VMTP Funds  $\,$ ), have issued Series W-7 VMTP Shares, \$100,000 liquidation value per share, in a privately negotiated offering and sale of VMTP Shares exempt from registration under the Securities Act.

On December 7, 2012, MUI issued Series W-7 VMTP Shares, \$100,000 liquidation value per share with a maturity date of January 4, 2016. Total proceeds received of \$287,100,000 in a private offering of VMTP Shares were used to redeem all of MUI s existing VRDP Shares on December 21, 2012. The fee agreement for MUI s VRDP Shares with the liquidity provider, which was for a two year term and was scheduled to expire on December 28, 2012, was terminated upon issuance of the VMTP Shares. Any such liquidity fees incurred by MUI through the date of issuance of the VMTP Shares are shown as liquidity fees in the Statements of Operations.

As of the year ended April 30, 2015, the VMTP Shares outstanding of each Fund were as follows:

					Term
	Issue Date	Shares Issued	Aggı	egate Principal	Date
MHD	12/16/11	837	\$	83,700,000	12/31/15
MUH	12/16/11	550	\$	55,000,000	12/31/15
MUS	12/16/11	870	\$	87,000,000	12/31/15
MUI	12/07/12	2,871	\$	287,100,000	1/04/16
MVT	12/16/11	1.400	\$	140.000.000	12/31/15

Each VMTP Fund is required to redeem its VMTP Shares on the term date, unless earlier redeemed or repurchased or unless extended. During the period, the term dates for MHD, MUH, MUS and MVT were extended until December 31, 2015. There is no assurance that the term of a

Fund s VMTP Shares will be extended further or that a Fund s VMTP Shares will be replaced with any other preferred shares or other form of leverage upon the redemption or repurchase of the VMTP Shares. Six months prior to term date, each VMTP Fund is required to begin to segregate liquid assets with the Fund s custodian to fund the redemption. In addition, each VMTP Fund is required to redeem certain of its outstanding VMTP Shares if it fails to maintain certain asset coverage, basic maintenance amount or leverage requirements.

Subject to certain conditions, a Fund s VMTP Shares may be redeemed, in whole or in part, at any time at the option of the Fund. The redemption price per VMTP Share is equal to the liquidation value per share plus any outstanding unpaid dividends and applicable redemption premium. If the Fund redeems the VMTP Shares on a date that is one year or more prior to the term date and the VMTP Shares are rated above A1/A+ by Moody s and Fitch, respectively, then such redemption is subject to a prescribed redemption premium (up to 3% of the liquidation preference) payable to the holder of the VMTP Shares based on the time remaining to the term date, subject to certain exceptions for redemptions that are required to maintain minimum asset coverage requirements. The

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VMTP Shares are subject to certain restrictions on transfer, and a Fund may also be required to register the VMTP Shares for sale under the Securities Act under certain circumstances. In addition, amendments to the VMTP governing document generally require the consent of the holders of VMTP Shares.

Dividends on the VMTP Shares are declared daily and payable monthly at a variable rate set weekly at a fixed rate spread to the SIFMA Municipal Swap Index. The fixed spread is determined based on the long-term preferred share rating assigned to the VMTP Shares by Moody s and Fitch. At the date of issuance, the VMTP Shares were assigned long-term ratings of Aaa from Moody s and AAA from Fitch. Subsequent to the issuance of the VMTP Shares, Moody s completed a review of its methodology for rating securities issued by registered closed-end funds. As of April 30, 2015, the VMTP Shares were assigned a long-term rating of Aa1 from Moody s under its new rating methodology. The VMTP Shares continue to be assigned a long-term rating of AAA from Fitch. The dividend rate on the VMTP Shares is subject to a step-up spread if the Funds fail to comply with certain provisions, including, among other things, the timely payment of dividends, redemptions or gross-up payments, and maintaining certain asset coverage and leverage requirements.

For the year ended April 30, 2015, the average annualized dividend rates for the VMTP Shares were as follows:

	MHD	MUH	MUS	MUI	MVT
Rate	1.04%	1.04%	1.04%	1.04%	1.06%

For financial reporting purposes, the VMTP Shares are considered debt of the issuer; therefore the liquidation value, which approximates fair value, of the VMTP Shares is recorded as a liability in the Statements of Assets and Liabilities. Unpaid dividends are included in interest expense and fees payable in the Statements of Assets and Liabilities, and the dividends accrued and paid on the VMTP Shares are included as a component of interest expense, fees and amortization of offering costs in the Statements of Operations. The VMTP Shares are treated as equity for tax purposes. Dividends paid to holders of the VMTP Shares are generally classified as tax-exempt income for tax-reporting purposes.

For the year ended April 30, 2015, VMTP Shares issued and outstanding of each VMTP Fund remained constant.

Offering Costs: The Funds, with the exception of MUA, incurred costs in connection with the issuance of VRDP Shares and/or VMTP Shares. For VRDP Shares, these costs were recorded as a deferred charge and will be amortized over the 30-year life of the VRDP Shares with the exception of upfront fees paid to the liquidity provider which were amortized over the life of the liquidity agreement. For VMTP Shares, these costs were recorded as a deferred charge and will be amortized over the 3-year life of the VMTP Shares. Amortization of these costs is included in interest expense, fees and amortization of offering costs in the Statements of Operations.

MUI s offering costs that were recorded as a deferred charge and amortized over the 30-year life of the VRDP Shares were accelerated and charged to expense immediately upon redemption of MUI s VRDP Shares. Costs incurred in connection with the issuance of MUI s VMTP Shares will be recorded as a deferred charge and amortized over the three-year life of the VMTP Shares.

#### **10. Subsequent Events:**

Management s evaluation of the impact of all subsequent events on the Funds financial statements was completed through the date the financial statements were issued and the following items were noted:

The Funds paid a net investment income dividend in the following amounts per share on June 1, 2015 to Shareholders of record on May 15, 2015:

			Common
			Dividend
			Per Share
MUA			\$ 0.0625
MEN			\$ 0.0605

MHD	\$ 0.0885
MUH	\$ 0.0775
MUS	\$ 0.0675
MUI	\$ 0.0655
MVT	\$ 0.0830

Additionally, the Funds declared a net investment income dividend on June 1, 2015 payable to Common Shareholders of record on June 15, 2015 for the same amounts noted above.

The dividends declared on Preferred Shares for the period May 1, 2015 to May 31, 2015 were as follows:

			Dividends
	Preferred		
	Shares	Series	Declared
MEN	VRDP Shares	W-7	\$ 127,859
MHD	VMTP Shares	W-7	\$ 78,656
MUH	VMTP Shares	W-7	\$ 51,685
MUS	VMTP Shares	W-7	\$ 81,757
MUI	VMTP Shares	W-7	\$ 269,795
MVT	VMTP Shares	W-7	\$ 131,562

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In order to comply with the Volcker Rule, certain TOB Trusts were restructured and the respective TOB Trusts are no longer sponsored by a banking entity. As of June 22, 2015, the following information relates to the restructured TOB Trusts:

	Underlying Municipal Bonds Transferred to restructured TOB Trusts	Liability for TOB Trust Certificates associated with the restructured TOB Trusts
MEN	\$ 9,214,188	\$ 4,765,000
MHD	\$ 1,907,325	\$ 1,290,000
MUH	\$ 1,397,227	\$ 945,000
MUI	\$ 33,337,695	\$ 19,356,855
MVT	\$ 2,794,453	\$ 1,890,000

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## Report of Independent Registered Public Accounting Firm

To the Shareholders and Boards of Directors of

BlackRock MuniAssets Fund, Inc.,

BlackRock MuniEnhanced Fund, Inc.,

BlackRock MuniHoldings Fund, Inc.,

BlackRock MuniHoldings Fund II, Inc.,

BlackRock MuniHoldings Quality Fund, Inc.,

BlackRock Muni Intermediate Duration Fund, Inc., and

#### BlackRock MuniVest Fund II, Inc.:

We have audited the accompanying statements of assets and liabilities of BlackRock MuniAssets Fund, Inc., BlackRock MuniEnhanced Fund, Inc., BlackRock MuniHoldings Fund, Inc., BlackRock MuniHoldings Fund, Inc., BlackRock MuniHoldings Quality Fund, Inc., BlackRock Muni Intermediate Duration Fund, Inc., and BlackRock MuniVest Fund II, Inc. (collectively, the Funds), including the schedules of investments, as of April 30, 2015, and the related statements of operations and cash flows for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended. These financial statements and financial highlights are the responsibility of the Funds management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits.

We conducted our audits in accordance with the standards of the Public Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement. The Funds are not required to have, nor were we engaged to perform, an audit of their internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Funds internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. Our procedures included confirmation of securities owned as of April 30, 2015, by correspondence with the custodians and brokers; where replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements and financial highlights referred to above present fairly, in all material respects, the financial positions of BlackRock MuniAssets Fund, Inc., BlackRock MuniEnhanced Fund, Inc., BlackRock MuniHoldings Fund, Inc., BlackRock MuniHoldings Fund, Inc., BlackRock MuniHoldings Quality Fund, Inc., BlackRock Muni Intermediate Duration Fund, Inc., and BlackRock MuniVest Fund II, Inc., as of April 30, 2015, the results of their operations and their cash flows for the year then ended, the changes in their net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended, in conformity with accounting principles generally accepted in the United States of America.

Deloitte & Touche LLP

Boston, Massachusetts

June 22, 2015

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## Automatic Dividend Reinvestment Plan

Pursuant to each Fund s Dividend Reinvestment Plan (the Reinvestment Plan ), Common Shareholders are automatically enrolled to have all distributions of dividends and capital gains reinvested by Computershare Trust Company, N.A. (the Reinvestment Plan Agent ) in the respective Fund s shares pursuant to the Reinvestment Plan. Shareholders who do not participate in the Reinvestment Plan will receive all distributions in cash paid by check and mailed directly to the shareholders of record (or if the shares are held in street name or other nominee name, then to the nominee) by the Reinvestment Plan Agent, which serves as agent for the shareholders in administering the Reinvestment Plan.

After MUA, MEN, MHD, MUH, MUS, MUI and MVT declare a dividend or determine to make a capital gain distribution, the Reinvestment Plan Agent will acquire shares for the participants accounts, depending upon the following circumstances, either (i) through receipt of unissued but authorized shares from the Funds (newly issued shares) or (ii) by purchase of outstanding shares on the open market or on the Fund sprimary exchange (open-market purchases). If, on the dividend payment date, the net asset value per share (NAV) is equal to or less than the market price per share plus estimated brokerage commissions (such condition often referred to as a market premium), the Reinvestment Plan Agent will invest the dividend amount in newly issued shares acquired on behalf of the participants. The number of newly issued shares to be credited to each participant saccount will be determined by dividing the dollar amount of the dividend by the NAV on the date the shares are issued. However, if the NAV is less than 95% of the market price on the dividend payment date, the dollar amount of the dividend will be divided by 95% of the market price on the dividend payment date, the NAV is greater than the market price per share plus estimated brokerage commissions (such condition often referred to as a market discount), the Reinvestment Plan Agent will invest the dividend amount in shares acquired on behalf of the participants in open-market purchases. If the Reinvestment Plan Agent is unable to invest the full dividend amount in open-market purchases, or if the market discount shifts to a market premium during the purchase period, the Reinvestment Plan Agent will invest any un-invested portion in newly issued shares. Investments in newly issued shares made in this manner would be made pursuant to the same process described above and the date of issue for such newly issued shares will substitute for the dividend payment date.

Participation in the Reinvestment Plan is completely voluntary and may be terminated or resumed at any time without penalty by notice if received and processed by the Reinvestment Plan Agent prior to the dividend record date. Additionally, the Reinvestment Plan Agent seeks to process notices received after the record date but prior to the payable date and such notices often will become effective by the payable date. Where late notices are not processed by the applicable payable date, such termination or resumption will be effective with respect to any subsequently declared dividend or other distribution.

The Reinvestment Plan Agent s fees for the handling of the reinvestment of distributions will be paid by each Fund. However, each participant will pay a pro rata share of brokerage commissions incurred with respect to the Reinvestment Plan Agent s open market purchases in connection with the reinvestment of all distributions. The automatic reinvestment of all distributions will not relieve participants of any federal income tax that may be payable on such dividends or distributions.

Each Fund reserves the right to amend or terminate the Reinvestment Plan. There is no direct service charge to participants in the Reinvestment Plan; however, each Fund reserves the right to amend the Reinvestment Plan to include a service charge payable by the participants. Participants in MEN and MUI that request a sale of shares are subject to a \$2.50 sales fee and a \$0.15 per share fee. Per share fees include any applicable brokerage commissions the Reinvestment Plan Agent is required to pay. Participants in MUA, MHD, MUH, MUS and MVT that request a sale of shares are subject to a \$0.02 per share sold brokerage commission. All correspondence concerning the Reinvestment Plan should be directed to Computershare Trust Company, N.A. through the internet at http://www.computershare.com/blackrock, or in writing to Computershare, P.O. Box 30170, College Station, TX 77842-3170, Telephone: (800) 699-1236. Overnight correspondence should be directed to the Reinvestment Plan Agent at Computershare, 211 Quality Circle, Suite 210, College Station, TX 77845.

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# Officers and Directors

	Position(s)	Length of Time		Number of BlackRock- Advised Registered Investment Companies ( RICs ) Consisting Investment	of
Name, Address <sup>1</sup> and Year of Birth	Held with Funds	Served as a Director <sup>3</sup>	Principal Occupation(s) During Past Five Years	Portfolios ( Portfolios ) Overse	Public e <b>D</b> irectorships
Independent Directo	rs <sup>2</sup>		• • • • • • • • • • • • • • • • • • • •	,	•
Richard E. Cavanagh	Chair of the Board and Director	Since 2007	Trustee, Aircraft Finance Trust from 1999 to 2009; Director, The Guardian Life Insurance Company of America since 1998; Director, Arch Chemical (chemical and allied products) from 1999 to 2011; Trustee, Educational Testing Service from 1997 to 2009 and Chairman thereof from 2005 to 2009; Senior Advisor, The Fremont Group since 2008 and	76 RICs consisting of 76 Portfolios	None
1946			Director thereof since 1996; Faculty Member/Adjunct Lecturer, Harvard University since 2007; President and Chief Executive Officer, The Conference Board, Inc. (global business research organization) from 1995 to 2007.		
Karen P. Robards	Vice Chairperson	Since	Partner of Robards & Company, LLC (financial advisory firm) since 1987; Co-founder and Director of the Cooke	76 RICs consisting of	(medical devices);
1950	of the Board, Chairperson of the Audit Committee and Director	2007	Center for Learning and Development (a not-for-profit organization) since 1987; Investment Banker at Morgan Stanley from 1976 to 1987.	76 Portfolios	Greenhill & Co., Inc.; Care Investment Trust, Inc. (health care real estate investment
	und Briefier				trust) from 2007 to 2010
Michael J. Castellano	Director and Member of	Since	Chief Financial Officer of Lazard Group LLC from 2001 to 2011; Chief Financial Officer of Lazard Ltd from 2004 to 2011 Print Control of the Public Control	76 RICs consisting of	None
1046	the Audit Committee	2011	2011; Director, Support Our Aging Religious (non-profit) from 2009 to June 2015; Director, National Advisory Board of Church Management at Villanova University since 2010; Trustee, Domestic Church Media Foundation since 2012; Director, Circle Plack Lea (fine point technology company)	76 Portfolios	
1946 Frank J. Fabozzi <sup>4</sup>	Director and	Since	Director, CircleBlack Inc. (financial technology company). since 2015.  Editor of and Consultant for The Journal of Portfolio	109 RICs consisting	None
Train J. Tabozzi	Member of the Audit	2007	Management since 2006; Professor of Finance, EDHEC Business School since 2011; Visiting Professor, Princeton	of	Tronc
1040	Committee	2007	University from 2013 to 2014; Professor in the Practice of Finance and Becton Fellow, Yale University School of Management from 2006 to 2011.	235 Portfolios	
1948 Kathleen F. Feldstein	Director	Since	President of Economics Studies, Inc. (private economic consulting firm) since 1987; Chair, Board of Trustees,	76 RICs consisting of	The McClatchy Company
		2007	McLean Hospital from 2000 to 2008 and Trustee Emeritus thereof since 2008; Member of the Board of Partners Community Healthcare, Inc. from 2005 to 2009; Member of the Corporation of Partners HealthCare since 1995; Trustee,	76 Portfolios	(publishing)
1941			Museum of Fine Arts, Boston since 1992; Member of the Visiting Committee to the Harvard University Art Museum since 2003; Director, Catholic Charities of Boston since 2009.		
James T. Flynn	Director and Member of	Since	Chief Financial Officer of JPMorgan & Co., Inc. from 1990 to 1995.	76 RICs consisting of	None
	the Audit Committee	2007		76 Portfolios	
1939 Jerrold B. Harris	Director	Since	Trustee, Ursinus College from 2000 to 2012; Director, Waterfowl Chesapeake (conservation) since 2014; Director,	76 RICs consisting of	BlackRock Capital Investment Corp.
		2007	Ducks Unlimited, Inc. (conservation) since 2013; Director, Troemner LLC (scientific equipment) since 2000; Director of Delta Waterfowl Foundation from 2010 to 2012; President	76 Portfolios	(business development company)

1942 and Chief Executive Officer, VWR Scientific Products Corporation from 1990 to 1999.

Dean, Columbia Business School since 2004; Faculty R. Glenn Hubbard Director Since 76 RICs consisting of ADP (data and 2007 member, Columbia Business School since 1988. information

services); 76 Portfolios Metropolitan Life

Insurance Company

1958 (insurance)

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## Officers and Directors (continued)

Name, Address <sup>1</sup> and Year of Birth	Position(s)  Held with Funds	Length of Time Served as a Director <sup>3</sup>	Principal Occupation(s) During Past Five Years	BlackRock- Advised Registered Investment Companies ( RICs ) Consisting of Investment Portfolios ( Portfolios ) Oversed	Public
Independent Director (concluded)	S-2				
W. Carl Kester	Director and Member of the Audit Committee	Since 2007	George Fisher Baker Jr. Professor of Business Administration, Harvard Business School since 2008, Deputy Dean for Academic Affairs from 2006 to 2010, Chairman of the Finance Unit, from 2005 to 2006, Senior Associate Dean	76 RICs consisting of 76 Portfolios	None
1951			and Chairman of the MBA Program from 1999 to 2005; Member of the faculty of Harvard Business School since 1981.		

- <sup>1</sup> The address of each Director and Officer is c/o BlackRock, Inc., 55 East 52nd Street, New York, NY 10055.
- <sup>2</sup> Independent Directors serve until their resignation, removal or death, or until December 31 of the year in which they turn 74. The maximum age limitation may be waived as to any Director by action of a majority of the Directors upon finding of good cause thereof. The Board of Directors has unanimously approved further extending the mandatory retirement age for Mr. James T. Flynn until December 31, 2015, which the Board of Directors believes is in the best interest of shareholders.

Number of

- <sup>3</sup> Date shown is the earliest date a person has served for the Funds covered by this annual report. Following the combination of Merrill Lynch Investment Managers, L.P. (MLIM) and BlackRock, Inc. (BlackRock) in September 2006, the various legacy MLIM and legacy BlackRock fund boards were realigned and consolidated into three new fund boards in 2007. As a result, although the chart shows certain Directors as joining the Funds board in 2007, those Directors first became members of the boards of other legacy MLIM or legacy BlackRock funds as follows: Richard E. Cavanagh, 1994; Frank J. Fabozzi, 1988; Kathleen F. Feldstein, 2005; James T. Flynn, 1996; Jerrold B. Harris, 1999; R. Glenn Hubbard, 2004; W. Carl Kester, 1995 and Karen P. Robards, 1998.
- <sup>4</sup> For purposes of this chart, RICs refers to investment companies registered under the 1940 Act and Portfolios refers to the investment programs of the BlackRock-advised funds. The Closed-End Complex is comprised of 76 RICs. Mr. Perlowski, Dr. Fabozzi and Ms. Novick are also board members of a complex of BlackRock registered open-end funds. Mr. Perlowski is also a board member of the BlackRock Equity-Bond Complex, and Ms. Novick and Dr. Fabozzi are also board members of the BlackRock Equity-Liquidity Complex.

Interested Directors <sup>5</sup>					
Barbara G. Novick	Director	Since	Vice Chairman of BlackRock since 2006; Chair of BlackRock s Government Relations Steering Committee since	109 RICs consisting e of 235 Portfolios	None
1960		2014	2009; Head of the Global Client Group of BlackRock, Inc. from 1988 to 2008.		
John M. Perlowski	Director	Since	Managing Director of BlackRock since 2009; Head of BlackRock Global Fund Services since 2009; Managing	104 RICs consisting of 174 Portfolios	None
1964		2014	Director and Chief Operating Officer of the Global Product Group at Goldman Sachs Asset Management, L.P. from 2003 to 2009; Treasurer of Goldman Sachs Mutual Funds from 2003 to 2009 and Senior Vice President thereof from 2007 to 2009; Director of Goldman Sachs Offshore Funds from 2002 to 2009; Director of Family Resource Network (charitable foundation) since 2009.		

<sup>&</sup>lt;sup>5</sup> Mr. Perlowski and Ms. Novick are both interested persons, as defined in the 1940 Act, of the Funds based on their positions with BlackRock and its affiliate. Mr. Perlowski and Ms. Novick are also board members of a complex of BlackRock registered open-end funds. Mr. Perlowski is a board member of the BlackRock Equity-Bond Complex and Ms. Novick is a board member of the BlackRock Equity-Liquidity Complex. Interested Directors serve until their resignation, removal or death, or until December 31 of the year in which they turn 72. The maximum age limitation may be waived as to any Director by action of a majority of the Directors upon a finding of good cause thereof.

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# Officers and Directors (concluded)

Name, Address <sup>1</sup> and Year of Birth Officers <sup>2</sup>	Position(s) Held with the Funds	Length of Time Served	Principal Occupation(s) During Past Five Years
John M. Perlowski	President and Chief Executive Officer	Since 2011	Managing Director of BlackRock since 2009; Head of BlackRock Global Fund Services since 2009; Managing Director and Chief Operating Officer of the Global Product Group at Goldman Sachs Asset Management, L.P. from 2003 to 2009; Treasurer of Goldman Sachs Mutual Funds from 2003 to 2009 and Senior Vice President thereof from 2007 to 2009; Director of Goldman Sachs Offshore Funds from 2002 to 2009; Director of Family Resource Network (charitable foundation) since 2009.
1964 Robert W. Crothers	Vice President	Since 2012	Director of BlackRock since 2011; Vice President of BlackRock from 2008 to 2010.
1981 Neal Andrews	Chief Financial Officer	Since 2007	Managing Director of BlackRock since 2006; Senior Vice President and Line of Business Head of Fund Accounting and Administration at PNC Global Investment Servicing (U.S.) Inc. from 1992 to 2006.
1966 Jay Fife	Treasurer	Since 2007	Managing Director of BlackRock since 2007; Director of BlackRock in 2006; Assistant Treasurer of the MLIM and Fund Asset Management, L.P. advised funds from 2005 to 2006; Director of MLIM Fund Services Group from 2001 to 2006.
1970 Charles Park	Chief Compliance Officer	Since 2014	Anti-Money Laundering Compliance Officer for the BlackRock-advised Funds in the Equity-Bond Complex, the Equity-Liquidity Complex and the Closed-End Complex from 2014 to 2015; Chief Compliance Officer of BlackRock Advisors, LLC and the BlackRock-advised Funds in the Equity-Bond Complex, the Equity-Liquidity Complex and the Closed-End Complex since 2014; Principal of and Chief Compliance
1967 Janey Ahn	Secretary	Since 2012	Officer for iShares® Delaware Trust Sponsor LLC since 2012 and BlackRock Fund Advisors (BFA) since 2006; Chief Compliance Officer for the BFA-advised iShares exchange traded funds since 2006; Chief Compliance Officer for BlackRock Asset Management International Inc. since 2012. Director of BlackRock since 2009; Vice President of BlackRock from 2008 to 2009; Assistant Secretary of the Funds from 2008 to 2012.
1975	<sup>1</sup> The addre	ess of each Dir	ector and Officer is c/o BlackRock Inc. 55 Fast 52nd Street. New York, NY 10055

<sup>&</sup>lt;sup>1</sup> The address of each Director and Officer is c/o BlackRock, Inc., 55 East 52nd Street, New York, NY 10055.

Effective December 31, 2014, Paul L. Audet and Henry Gabbay resigned as Directors of the Funds. Effective December 31, 2014, Barbara G. Novick and John M. Perlowski were appointed to serve as Directors of the Funds.

Investment Advisor	Custodian	VRDP Tender and Paying Agent	<b>Accounting Agent</b>	Legal Counsel
BlackRock Advisors, LLC Wilmington, DE	State Street Bank and Trust Company Boston, MA 02110	and VMTP Redemption and Paying Agent	State Street Bank and Trust Company Boston, MA 02110	Skadden, Arps, Slate, Meagher & Flom LLP Boston, MA 02116

<sup>&</sup>lt;sup>2</sup> Officers of the Funds serve at the pleasure of the Board.

19809

The Bank of New York Mellon New York, NY 10289

Transfer Agent Computershare Trust Company, N.A. Canton, MA 02021 **VRDP Remarketing Agent** Citigroup Global Markets Inc.<sup>3</sup> New York, NY 10179

Independent Registered Public Accounting Firm Deloitte & Touche LLP Boston, MA 02116 **Address of the Funds** 100 Bellevue Parkway Wilmington, DE 19809

VRDP Liquidity Provider

Citibank, N.A.<sup>3</sup> New York, NY 10179

<sup>3</sup> For MEN.

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## **Additional Information**

#### **Fund Certification**

The Funds are listed for trading on the NYSE and have filed with the NYSE their annual chief executive officer certification regarding compliance with the NYSE s listing standards. Each Fund filed with the SEC the certification of its chief executive officer and chief financial officer required by section 302 of the Sarbanes-Oxley Act.

#### **Dividend Policy**

Each Fund s dividend policy is to distribute all or a portion of its net investment income to its shareholders on a monthly basis. In order to provide shareholders with a more stable level of distributions, the Funds may at times pay out less than the entire amount of net investment income earned in any particular month and may at times in any particular month pay out such accumulated but undistributed income in addition to net investment income earned in that month. As a result, the distributions paid by the Funds for any particular month may be more or less than the amount of net investment income earned by the Funds during such month. The Funds current accumulated but undistributed net investment income, if any, is disclosed in the Statements of Assets and Liabilities, which comprises part of the financial information included in this report.

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# Additional Information (continued)

#### **General Information**

The Funds do not make available copies of their Statements of Additional Information because the Funds—shares are not continuously offered, which means that the Statement of Additional Information of each Fund has not been updated after completion of the respective Fund—s offerings and the information contained in each Fund—s Statement of Additional Information may have become outdated.

During the period, there were no material changes in the Funds investment objectives or policies or to the Funds charters or by-laws that would delay or prevent a change of control of the Funds that were not approved by the shareholders or in the principal risk factors associated with investment in the Funds. There have been no changes in the persons who are primarily responsible for the day-to-day management of the Funds portfolios.

Quarterly performance, semi-annual and annual reports, current net asset value and other information regarding the Funds may be found on BlackRock s website, which can be accessed at http://www.blackrock.com. This reference to BlackRock s website is intended to allow investors public access to information regarding the Funds and does not, and is not intended to, incorporate BlackRock s website in this report.

#### Electronic Delivery

Shareholders can sign up for e-mail notifications of quarterly statements, annual and semi-annual reports by enrolling in the electronic delivery program. Electronic copies of shareholder reports are available on BlackRock s website.

To enroll in electronic delivery:

Shareholders Who Hold Accounts with Investment Advisors, Banks or Brokerages:

Please contact your financial advisor. Please note that not all investment advisors, banks or brokerages may offer this service.

### Householding

The Funds will mail only one copy of shareholder documents, including annual and semi-annual reports and proxy statements, to shareholders with multiple accounts at the same address. This practice is commonly called householding and is intended to reduce expenses and eliminate duplicate mailings of shareholder documents. Mailings of your shareholder documents may be householded indefinitely unless you instruct us otherwise. If you do not want the mailing of these documents to be combined with those for other members of your household, please call the Funds at (800) 882-0052.

Availability of Quarterly Schedule of Investments

The Funds file their complete schedule of portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-Q. The Funds Forms N-Q are available on the SEC s website at http://www.sec.gov and may also be reviewed and copied at the SEC s Public Reference Room in Washington, D.C. Information on how to access documents on the SEC s website without charge may be obtained by calling (800) SEC-0330. The Funds Forms N-Q may also be obtained upon request and without charge by calling (800) 882-0052.

Availability of Proxy Voting Policies and Procedures

A description of the policies and procedures that the Funds use to determine how to vote proxies relating to portfolio securities is available upon request and without charge (1) by calling (800) 882-0052; (2) at http://www.blackrock.com; and (3) on the SEC s website at http://www.sec.gov.

Availability of Proxy Voting Record

Information about how the Funds voted proxies relating to securities held in the Funds portfolios during the most recent 12-month period ended June 30 is available upon request and without charge (1) at http://www.blackrock.com; or by calling (800) 882-0052 and (2) on the SEC s website at http://www.sec.gov.

Availability of Fund Updates

BlackRock will update performance and certain other data for the Funds on a monthly basis on its website in the Closed-end Funds section of http://www.blackrock.com as well as certain other material information as necessary from time to time. Investors and others are advised to check the website for updated performance information and the release of other material information about the Funds. This reference to BlackRock s website is intended to allow investors public access to information regarding the Funds and does not, and is not intended to, incorporate BlackRock s website in this report.

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# Additional Information (concluded)

#### **Shelf Offering Program**

From time-to-time, each Fund may seek to raise additional equity capital through an equity shelf program (a Shelf Offering). In a Shelf Offering, the Fund may, subject to market conditions, raise additional equity capital by issuing new Common Shares from time to time in varying amounts at a net price at or above the Fund s net asset value (NAV) per Common Share (calculated within 48 hours of pricing). While any such Shelf Offering may allow a Fund to pursue additional investment opportunities without the need to sell existing portfolio investments, it could also entail risks including that the issuance of additional Common Shares may limit the extent to which the Common Shares are able to trade at a premium to NAV in the secondary market. The Funds have not filed a registration statement with respect to any Shelf Offerings. This report is not an offer to sell Fund Common Shares and is not a solicitation of an offer to buy Fund Common Shares. If the Fund files a registration statement with respect to any Shelf Offering, the prospectus contained therein will contain more complete information about the Fund and should be read carefully before investing.

#### BlackRock Privacy Principles

BlackRock is committed to maintaining the privacy of its current and former fund investors and individual clients (collectively, Clients) and to safeguarding their non-public personal information. The following information is provided to help you understand what personal information BlackRock collects, how we protect that information and why in certain cases we share such information with select parties.

If you are located in a jurisdiction where specific laws, rules or regulations require BlackRock to provide you with additional or different privacy-related rights beyond what is set forth below, then BlackRock will comply with those specific laws, rules or regulations.

BlackRock obtains or verifies personal non-public information from and about you from different sources, including the following:
(i) information we receive from you or, if applicable, your financial intermediary, on applications, forms or other documents; (ii) information about your transactions with us, our affiliates, or others; (iii) information we receive from a consumer reporting agency; and (iv) from visits to our websites.

BlackRock does not sell or disclose to non-affiliated third parties any non-public personal information about its Clients, except as permitted by law or as is necessary to respond to regulatory requests or to service Client accounts. These non-affiliated third parties are required to protect the confidentiality and security of this information and to use it only for its intended purpose.

We may share information with our affiliates to service your account or to provide you with information about other BlackRock products or services that may be of interest to you. In addition, BlackRock restricts access to non-public personal information about its Clients to those BlackRock employees with a legitimate business need for the information. BlackRock maintains physical, electronic and procedural safeguards that are designed to protect the non-public personal information of its Clients, including procedures relating to the proper storage and disposal of such information.

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This report is intended for current holders. It is not a prospectus. Past performance results shown in this report should not be considered a representation of future performance. Certain of the Funds have leveraged their Common Shares, which creates risks for Common Shareholders, including the likelihood of greater volatility of net asset value and market price of the Common Shares, and the risk that fluctuations in short-term interest rates may reduce the Common Shares—yield. Statements and other information herein are as dated and are subject to change.

CEMUNI7-4/15-AR

- Item 2 Code of Ethics The registrant (or the Fund ) has adopted a code of ethics, as of the end of the period covered by this report, applicable to the registrant s principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. During the period covered by this report, the code of ethics was amended to update certain information and to make other non-material changes. During the period covered by this report, there have been no waivers granted under the code of ethics. A copy of the code of ethics is available without charge at www.blackrock.com.
- Item 3 Audit Committee Financial Expert The registrant s board of directors (the board of directors ), has determined that (i) the registrant has the following audit committee financial experts serving on its audit committee and (ii) each audit committee financial expert is independent:

Michael Castellano

Frank J. Fabozzi

James T. Flynn

W. Carl Kester

Karen P. Robards

The registrant s board of directors has determined that W. Carl Kester and Karen P. Robards qualify as financial experts pursuant to Item 3(c)(4) of Form N-CSR.

Prof. Kester has a thorough understanding of generally accepted accounting principles, financial statements and internal control over financial reporting as well as audit committee functions. Prof. Kester has been involved in providing valuation and other financial consulting services to corporate clients since 1978. Prof. Kester s financial consulting services present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the registrant s financial statements.

Ms. Robards has a thorough understanding of generally accepted accounting principles, financial statements and internal control over financial reporting as well as audit committee functions. Ms. Robards has been President of Robards & Company, a financial advisory firm, since 1987. Ms. Robards was formerly an investment banker for more than 10 years where she was responsible for evaluating and assessing the performance of companies based on their financial results. Ms. Robards has over 30 years of experience analyzing financial statements. She also is a member of the audit committee of one publicly held company and a non-profit organization.

Under applicable securities laws, a person determined to be an audit committee financial expert will not be deemed an expert for any purpose, including without limitation for the purposes of Section 11 of the Securities Act of 1933, as a result of being designated or identified as an audit committee financial expert. The designation or identification as an audit committee financial expert does not impose on such person any duties, obligations, or liabilities greater than the duties, obligations, and liabilities imposed on such person as a member of the audit committee and board of directors in the absence of such designation or identification. The designation or identification of a person as an audit committee financial expert does not affect the duties, obligations, or liability of any other member of the audit committee or board of directors.

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## Item 4 Principal Accountant Fees and Services

The following table presents fees billed by Deloitte & Touche LLP ( D&T ) in each of the last two fiscal years for the services rendered to the Fund:

	(a) Audit Fees		(b) Audit-Related Fees <sup>1</sup>		(c) Tax Fees <sup>2</sup>		(d) All Other Fees <sup>3</sup>	
	<b>Current</b>				<b>Current</b>		<b>Current</b>	
		<b>Previous</b>	<b>Current</b>	<b>Previous</b>		<b>Previous</b>		
	<u>Fiscal</u>	<u>Fiscal</u>		<b>Fiscal</b>	<b>Fiscal</b>	<b>Fiscal</b>	<u>Fiscal</u>	<b>Previous</b>
	<b>Year</b>	<u>Year</u>	Fiscal Year	<u>Year</u>	<b>Year</b>	<b>Year</b>	<b>Year</b>	Fiscal Year
<b>Entity Name</b>	<b>End</b>	<b>End</b>	<b>End</b>	<b>End</b>	<b>End</b>	<u>End</u>	<b>End</b>	<b>End</b>
BlackRock								
MuniHoldings	\$35,863	\$35,863	\$0	\$0	\$13,362	\$13,100	\$0	\$0
Fund, Inc.								

The following table presents fees billed by D&T that were required to be approved by the registrant s audit committee (the Committee ) for services that relate directly to the operations or financial reporting of the Fund and that are rendered on behalf of BlackRock Advisors, LLC ( Investment Adviser or BlackRock ) and entities controlling, controlled by, or under common control with BlackRock (not including any sub-adviser whose role is primarily portfolio management and is subcontracted with or overseen by another investment adviser) that provide ongoing services to the Fund ( Fund Service Providers ):

	Current Fiscal Year End	Previous Fiscal Year End
(b) Audit-Related Fees <sup>1</sup>	\$0	\$0
(c) Tax Fees <sup>2</sup>	\$0	\$0
(d) All Other Fees <sup>3</sup>	\$2,391,000	\$2,555,000

<sup>&</sup>lt;sup>1</sup> The nature of the services includes assurance and related services reasonably related to the performance of the audit of financial statements not included in Audit Fees.

### (e)(1) Audit Committee Pre-Approval Policies and Procedures:

The Committee has adopted policies and procedures with regard to the pre-approval of services. Audit, audit-related and tax compliance services provided to the registrant on an annual basis require specific pre-approval by the Committee. The Committee also must approve other non-audit services provided to the registrant and those non-audit services provided to the Investment Adviser and Fund Service Providers that relate directly to the operations and the financial reporting of the registrant. Certain of these non-audit services that the Committee believes are (a) consistent with the SEC s auditor independence rules and (b) routine and recurring services that will not impair the independence of the independent accountants may be approved by the Committee without consideration on a specific case-by-case basis (general pre-approval). The term of any general pre-approval is 12 months from the date of the pre-approval, unless the Committee provides for a different period. Tax or other non-audit services provided to the registrant which have a direct impact on the operations or financial reporting of the registrant will only be deemed pre-approved provided that any individual project does not exceed \$10,000 attributable to the registrant or \$50,000 per project. For

<sup>&</sup>lt;sup>2</sup> The nature of the services includes tax compliance, tax advice and tax planning.

<sup>&</sup>lt;sup>3</sup> Aggregate fees borne by BlackRock in connection with the review of compliance procedures and attestation thereto performed by D&T with respect to all of the registered closed-end funds and some of the registered open-end funds advised by BlackRock.

this purpose, multiple projects will be aggregated to determine if they exceed the previously mentioned cost levels.

Any proposed services exceeding the pre-approved cost levels will require specific pre-approval by the Committee, as will any other services not subject to general pre-approval (e.g.,

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unanticipated but permissible services). The Committee is informed of each service approved subject to general pre-approval at the next regularly scheduled in-person board meeting. At this meeting, an analysis of such services is presented to the Committee for ratification. The Committee may delegate to the Committee Chairman the authority to approve the provision of and fees for any specific engagement of permitted non-audit services, including services exceeding pre-approved cost levels.

- (e)(2) None of the services described in each of Items 4(b) through (d) were approved by the Committee pursuant to the de minimis exception in paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X.
- (f) Not Applicable
- (g) The aggregate non-audit fees paid to the accountant for services rendered by the accountant to the registrant, the Investment Adviser and the Fund Service Providers were:

	<b>Current Fiscal</b>	<b>Previous Fiscal</b>
Entity Name	Year End	Year End
BlackRock MuniHoldings Fund Inc	\$13,362	\$13,100

Additionally, SSAE 16 Review (Formerly, SAS No. 70) fees for the current and previous fiscal years of \$2,391,000 and \$2,555,000, respectively, were billed by D&T to the Investment Adviser.

(h) The Committee has considered and determined that the provision of non-audit services that were rendered to the Investment Adviser, and the Fund Service Providers that were not pre-approved pursuant to paragraph (c)(7)(ii) of Rule 2-01 of Regulation S-X is compatible with maintaining the principal accountant s independence.

#### Item 5 Audit Committee of Listed Registrants

(a) The following individuals are members of the registrant s separately-designated standing audit committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934 (15 U.S.C. 78c(a)(58)(A)):

Michael Castellano

Frank J. Fabozzi

James T. Flynn

W. Carl Kester

Karen P. Robards

(b) Not Applicable

## Item 6 Investments

(a) The registrant s Schedule of Investments is included as part of the Report to Stockholders filed under Item 1 of this Form.

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(b) Not Applicable due to no such divestments during the semi-annual period covered since the previous Form N-CSR filing.

Item 7 Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies The board of directors has delegated the voting of proxies for the Fund s portfolio securities to the Investment Adviser pursuant to the Investment Adviser's proxy voting guidelines. Under these guidelines, the Investment Adviser will vote proxies related to Fund securities in the best interests of the Fund and its stockholders. From time to time, a vote may present a conflict between the interests of the Fund s stockholders, on the one hand, and those of the Investment Adviser, or any affiliated person of the Fund or the Investment Adviser, on the other. In such event, provided that the Investment Adviser's Equity Investment Policy Oversight Committee, or a sub-committee thereof (the Oversight Committee ) is aware of the real or potential conflict or material non-routine matter and if the Oversight Committee does not reasonably believe it is able to follow its general voting guidelines (or if the particular proxy matter is not addressed in the guidelines) and vote impartially, the Oversight Committee may retain an independent fiduciary to advise the Oversight Committee on how to vote or to cast votes on behalf of the Investment Adviser s clients. If the Investment Adviser determines not to retain an independent fiduciary, or does not desire to follow the advice of such independent fiduciary, the Oversight Committee shall determine how to vote the proxy after consulting with the Investment Adviser s Portfolio Management Group and/or the Investment Adviser s Legal and Compliance Department and concluding that the vote cast is in its client s best interest notwithstanding the conflict. A copy of the Fund s Proxy Voting Policy and Procedures are attached as Exhibit 99.PROXYPOL. Information on how the Fund voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is available without charge, (i) at www.blackrock.com and (ii) on the SEC s website at http://www.sec.gov.

Item 8 Portfolio Managers of Closed-End Management Investment Companies as of April 30, 2015.

(a)(1) The registrant is managed by a team of investment professionals comprised of Theodore R. Jaeckel, Jr., CFA, Managing Director at BlackRock and Walter O Connor, Managing Director at BlackRock. Each is a member of BlackRock s municipal tax-exempt management group. Each is jointly responsible for the day-to-day management of the registrant s portfolio, which includes setting the registrant s overall investment strategy, overseeing the management of the registrant and/or selection of its investments. Messrs. Jaeckel and O Connor have been members of the registrant s portfolio management team since 2006 and 2006, respectively.

Biography
Managing Director of BlackRock since 2006; Managing Director of
Merrill Lynch Investment Managers, L.P. ( MLIM ) from 2005 to
2006; Director of MLIM from 1997 to 2005.
Managing Director of BlackRock since 2006; Managing Director of
MLIM from 2003 to 2006; Director of MLIM from 1998 to 2003.

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(a)(2) As of April 30, 2015:

### (ii) Number of Other Accounts Managed

## (iii) Number of Other Accounts and

and Assets by Account Type

Assets for Which Advisory Fee is

				Pe	rformance-Base	ed
	Other	Other Pooled		Other	Other Pooled	
(i) Name of	Registered		Other	Registered		Other
D (61) M	Ŧ	Investment		<b>T</b>	Investment	
Portfolio Manager	Investment	Vehicles	Accounts	Investment	Vehicles	Accounts
	Companies	,		Companies	,	
Theodore R. Jaeckel, Jr.	62	0	0	0	0	0
	\$28.93					
	Billion	\$0	\$0	\$0	\$0	\$0
Walter O Connor	58	0	0	0	0	0
	\$22.44					
	Billion	\$0	\$0	\$0	\$0	\$0

#### (iv) Potential Material Conflicts of Interest

BlackRock has built a professional working environment, firm-wide compliance culture and compliance procedures and systems designed to protect against potential incentives that may favor one account over another. BlackRock has adopted policies and procedures that address the allocation of investment opportunities, execution of portfolio transactions, personal trading by employees and other potential conflicts of interest that are designed to ensure that all client accounts are treated equitably over time. Nevertheless, BlackRock furnishes investment management and advisory services to numerous clients in addition to the Fund, and BlackRock may, consistent with applicable law, make investment recommendations to other clients or accounts (including accounts which are hedge funds or have performance or higher fees paid to BlackRock, or in which portfolio managers have a personal interest in the receipt of such fees), which may be the same as or different from those made to the Fund. In addition, BlackRock, Inc., its affiliates and significant shareholders and any officer, director, shareholder or employee may or may not have an interest in the securities whose purchase and sale BlackRock recommends to the Fund. BlackRock, Inc. or any of its affiliates or significant shareholders, or any officer, director, shareholder, employee or any member of their families may take different actions than those recommended to the Fund by BlackRock with respect to the same securities. Moreover, BlackRock may refrain from rendering any advice or services concerning securities of companies of which any of BlackRock, Inc. s (or its affiliates or significant shareholders ) officers, directors or employees are directors or officers, or companies as to which BlackRock, Inc. or any of its affiliates or significant shareholders or the officers, directors and employees of any of them has any substantial economic interest or possesses material non-public information. Certain portfolio managers also may manage accounts whose investment strategies may at times be opposed to the strategy utilized for a fund. It should also be noted that a portfolio manager may be managing certain hedge fund and/or long only accounts, or may be part of a team managing certain hedge fund and/or long only accounts, subject to incentive fees. Such portfolio managers may therefore be entitled to receive a portion of any incentive fees earned on such accounts. Currently, the portfolio managers of this fund are not entitled to receive a portion of incentive fees of other accounts.

As a fiduciary, BlackRock owes a duty of loyalty to its clients and must treat each client fairly. When BlackRock purchases or sells securities for more than one account, the trades must be allocated in a manner consistent with its fiduciary duties. BlackRock attempts to allocate investments in a fair and equitable manner among client accounts, with no account receiving preferential treatment. To this end, BlackRock, Inc. has adopted policies that are intended to ensure reasonable efficiency in client transactions and provide BlackRock with sufficient

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flexibility to allocate investments in a manner that is consistent with the particular investment discipline and client base, as appropriate.

(a)(3) As of April 30, 2015:

### **Portfolio Manager Compensation Overview**

The discussion below describes the portfolio managers compensation as of April 30, 2015.

BlackRock s financial arrangements with its portfolio managers, its competitive compensation and its career path emphasis at all levels reflect the value senior management places on key resources. Compensation may include a variety of components and may vary from year to year based on a number of factors. The principal components of compensation include a base salary, a performance-based discretionary bonus, participation in various benefits programs and one or more of the incentive compensation programs established by BlackRock.

**Base compensation.** Generally, portfolio managers receive base compensation based on their position with the firm.

## **Discretionary Incentive Compensation**

Discretionary incentive compensation is a function of several components: the performance of BlackRock, Inc., the performance of the portfolio manager s group within BlackRock, the investment performance, including risk-adjusted returns, of the firm s assets under management or supervision by that portfolio manager relative to predetermined benchmarks, and the individual s performance and contribution to the overall performance of these portfolios and BlackRock. In most cases, these benchmarks are the same as the benchmark or benchmarks against which the performance of the Funds or other accounts managed by the portfolio managers are measured. Among other things, BlackRock s Chief Investment Officers make a subjective determination with respect to each portfolio manager s compensation based on the performance of the Funds and other accounts managed by each portfolio manager relative to the various benchmarks. Performance of fixed income funds is measured on a pre-tax and/or after-tax basis over various time periods including 1-, 3- and 5- year periods, as applicable. With respect to these portfolio managers, such benchmarks for the Fund and other accounts are: a combination of market-based indices (e.g., Standard & Poor s Municipal Bond Index), certain customized indices and certain fund industry peer groups.

**Distribution of Discretionary Incentive Compensation.** Discretionary incentive compensation is distributed to portfolio managers in a combination of cash and BlackRock, Inc. restricted stock units which vest ratably over a number of years. For some portfolio managers, discretionary incentive compensation is also distributed in deferred cash awards that notionally track the returns of select BlackRock investment products they manage and that vest ratably over a number of years. The BlackRock, Inc. restricted stock units, upon vesting, will be settled in BlackRock, Inc. common stock. Typically, the cash portion of the discretionary incentive compensation, when combined with base salary, represents more than 60% of total compensation for the portfolio managers. Paying a portion of discretionary incentive compensation in BlackRock, Inc. stock puts compensation earned by a portfolio manager for a given year at risk based on

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BlackRock s ability to sustain and improve its performance over future periods. Providing a portion of discretionary incentive compensation in deferred cash awards that notionally track the BlackRock investment products they manage provides direct alignment with investment product results.

Long-Term Incentive Plan Awards From time to time long-term incentive equity awards are granted to certain key employees to aid in retention, align their interests with long-term shareholder interests and motivate performance. Equity awards are generally granted in the form of BlackRock, Inc. restricted stock units that, once vested, settle in BlackRock, Inc. common stock. The portfolio managers of this Fund have unvested long-term incentive awards.

Deferred Compensation Program A portion of the compensation paid to eligible United States-based BlackRock employees may be voluntarily deferred at their election for defined periods of time into an account that tracks the performance of certain of the firm s investment products. Any portfolio manager who is either a managing director or director at BlackRock with compensation above a specified threshold is eligible to participate in the deferred compensation program.

**Other compensation benefits.** In addition to base salary and discretionary incentive compensation, portfolio managers may be eligible to receive or participate in one or more of the following:

Incentive Savings Plans BlackRock, Inc. has created a variety of incentive savings plans in which BlackRock, Inc. employees are eligible to participate, including a 401(k) plan, the BlackRock Retirement Savings Plan (RSP), and the BlackRock Employee Stock Purchase Plan (ESPP). The employer contribution components of the RSP include a company match equal to 50% of the first 8% of eligible pay contributed to the plan capped at \$5,000 per year, and a company retirement contribution equal to 3-5% of eligible compensation up to the Internal Revenue Service limit (\$265,000 for 2015). The RSP offers a range of investment options, including registered investment companies and collective investment funds managed by the firm. BlackRock, Inc. contributions follow the investment direction set by participants for their own contributions or, absent participant investment direction, are invested into a target date fund that corresponds to, or is closest to, the year in which the participant attains age 65. The ESPP allows for investment in BlackRock, Inc. common stock at a 5% discount on the fair market value of the stock on the purchase date. Annual participation in the ESPP is limited to the purchase of 1,000 shares of common stock or a dollar value of \$25,000 based on its fair market value on the purchase date. All of the eligible portfolio managers are eligible to participate in these plans.

(a)(4) Beneficial Ownership of Securities As of April 30, 2015.

Dollar Range of Equity Securities
of the Fund Beneficially Owned
None
None

(b) Not Applicable

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- Item 9 Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers Not Applicable due to no such purchases during the period covered by this report.
- Item 10 Submission of Matters to a Vote of Security Holders There have been no material changes to these procedures.

### Item 11 Controls and Procedures

- (a) The registrant s principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant s disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the 1940 Act )) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.
- (b) There were no changes in the registrant s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the second fiscal quarter of the period covered by this report that have materially affected, or are reasonably likely to materially affect, the registrant s internal control over financial reporting.

Item 12 Exhibits attached hereto

- (a)(1) Code of Ethics See Item 2
- (a)(2) Certifications Attached hereto
- (a)(3) Not Applicable
- (b) Certifications Attached hereto

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Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock MuniHoldings Fund, Inc.

By: /s/ John M. Perlowski

John M. Perlowski

Chief Executive Officer (principal executive officer) of

BlackRock MuniHoldings Fund, Inc.

Date: July 1, 2015

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ John M. Perlowski

John M. Perlowski

Chief Executive Officer (principal executive officer) of

BlackRock MuniHoldings Fund, Inc.

Date: July 1, 2015

By: /s/ Neal J. Andrews

Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock MuniHoldings Fund, Inc.

Date: July 1, 2015

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