THERMO FISHER SCIENTIFIC INC. Form 424B5
July 18, 2017
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The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated July 18, 2017

PROSPECTUS SUPPLEMENT

(To prospectus dated August 1, 2016)

Thermo Fisher Scientific Inc.

Floating Rate Senior Notes due

- % Senior Notes due
- % Senior Notes due
- % Senior Notes due

(the floating rate notes), We are offering aggregate principal amount of Floating Rate Senior Notes due aggregate principal amount of % Senior Notes due (the aggregate principal notes), % Senior Notes due aggregate principal amount of % Senior amount of (the notes) and notes and, together with the notes and the notes, the fixed rate notes and Notes due the fixed rate notes, together with the floating rate notes, the *notes*). The floating rate notes will bear interest at a rate equivalent to the 3-month EURIBOR plus % per annum; provided that the minimum interest rate will be zero. We

will pay interest on the floating rate notes on , , and of each year, beginning on , 2017. We will pay interest on the fixed rate notes on of each year, beginning on , 2018. The floating rate notes will mature on , , the notes will mature on , , the notes will mature on . . .

We may redeem some or all of the fixed rate notes at any time at the applicable redemption prices described in this prospectus supplement. The floating rate notes are not redeemable prior to maturity except as described below. In the event that we do not consummate the Patheon Acquisition (as defined herein) on or prior to February 15, 2018 or the Purchase Agreement (as defined herein) is terminated at any time prior to such date, we will be required to redeem all of the notes on a special mandatory redemption date at a redemption price equal to 101% of the aggregate principal amount of the notes, plus accrued and unpaid interest to, but excluding, the special mandatory redemption date. See Description of the Notes Special Mandatory Redemption. If a Change of Control Triggering Event as described in this prospectus supplement occurs, we may be required to offer to purchase the notes from the holders. In addition, we may redeem the notes in whole but not in part, at any time at our option, in the event of certain developments affecting U.S. taxation. There is no sinking fund for the notes.

The notes will be our general unsecured senior obligations and rank equally with our existing and future unsecured senior indebtedness.

Investing in the notes involves risks. See Risk Factors beginning on page S-10.

Per Floating					
	Rate				
	Note Per	Not e Per	NotePer	Note	Total
Public offering prices	%	%	%	%	
Underwriting discounts		%	%	%	
Proceeds, before expenses, to us	%	%	%	%	

Interest on the notes will accrue from , 2017.

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

We intend to apply to list the notes on the New York Stock Exchange. The listing application will be subject to approval by the New York Stock Exchange. Upon such listing, we will use commercially reasonable best efforts to maintain such listing and satisfy the requirements for such continued listing as long as the notes are outstanding.

The underwriters expect to deliver the notes through the book-entry system of Clearstream Banking, S.A., and Euroclear Bank SA/NV against payment on or about , 2017.

Goldman Sachs & Co. LLC BofA Merrill Lynch Barclays HSBC

The date of this prospectus supplement is , 2017

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is the prospectus supplement, which describes the specific terms of this offering. The second part is the prospectus, which describes more general information, some of which may not apply to this offering. You should read this prospectus supplement, any related free writing prospectus that we provide to you and the accompanying prospectus, together with the additional information described under the heading Where You Can Find More Information and Incorporation By Reference elsewhere in this prospectus supplement.

In this prospectus supplement, except as otherwise indicated or unless the context otherwise requires, Thermo Fisher, the company, we, us and our refer to Thermo Fisher Scientific Inc. and its consolidated subsidiaries. If the informatiset forth in this prospectus supplement differs in any way from the information set forth in the accompanying prospectus, you should rely on the information set forth in this prospectus supplement.

References in this prospectus supplement to U.S. dollars, U.S. \$\\$ or \$\\$ are to the currency of the United States of America and references to and euro are to the single currency introduced at the third stage of the European Economic and Monetary Union pursuant to the Treaty establishing the European Community, as amended.

This prospectus supplement, any related free writing prospectus that we provide to you and the accompanying prospectus may be used only for the purpose for which they have been prepared. No one is authorized to give information other than that contained in or incorporated by reference into this prospectus supplement, any related free writing prospectus that we provide to you and the accompanying prospectus. We have not, and the underwriters have not, authorized any other person to provide you with different information. Neither we nor any of the underwriters or their affiliates take any responsibility for, nor can we or any of the underwriters or their affiliates provide any assurance as to the reliability of, any information that others may give you.

You should assume that the information appearing in this prospectus supplement, any related free writing prospectus that we provide to you, the accompanying prospectus and the documents incorporated by reference is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates. Neither this prospectus supplement, any related free writing prospectus that we provide to you nor the accompanying prospectus constitutes an offer, or a solicitation on our behalf or on behalf of the underwriters, to subscribe for and purchase any of the securities and may not be used for or in connection with an offer or solicitation by anyone in any jurisdiction in which such an offer or solicitation is not authorized or to any person to whom it is unlawful to make such an offer or solicitation.

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STABILIZATION

IN CONNECTION WITH THE ISSUE OF THE NOTES, GOLDMAN SACHS & CO. LLC (IN THIS CAPACITY, THE STABILIZING MANAGER) (OR ANY PERSON ACTING ON ITS BEHALF) MAY OVER-ALLOT NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL. HOWEVER, STABILIZATION MAY NOT NECESSARILY OCCUR. ANY STABILIZATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE FINAL TERMS OF THE OFFER OF THE NOTES IS MADE, AND, IF BEGUN, MAY CEASE AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES.

ANY STABILIZATION ACTION OR OVER-ALLOTMENT MUST BE CARRIED OUT IN ACCORDANCE WITH APPLICABLE LAWS AND RULES.

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NOTICE TO PROSPECTIVE INVESTORS IN THE EUROPEAN ECONOMIC AREA

This prospectus supplement and the accompanying prospectus have been prepared on the basis that any offer of the notes in any member state of the European Economic Area that has implemented the Prospectus Directive (each, a Relevant Member State) will be made pursuant to an exemption under the Prospectus Directive, as implemented in that Relevant Member State, from the requirement to publish a prospectus for offers of the notes. Accordingly, any person making or intending to make any offer in that Relevant Member State of notes which are the subject of the offering contemplated by this prospectus supplement and the accompanying prospectus may only do so in circumstances in which no obligation arises for us or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither we nor the underwriters have authorized, nor do we or they authorize, the making of any offer of the notes in circumstances in which an obligation arises for us or the underwriters to publish a prospectus for such offer. Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

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NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM

This prospectus supplement and the accompanying prospectus are only being distributed to, and are only directed at, persons in the United Kingdom that are qualified investors within the meaning of Article 2(1)(e) of the Prospectus Directive and that are also (1) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the Order) or (2) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a Relevant Person). This prospectus supplement and the accompanying prospectus and their contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other persons in the United Kingdom. Any person in the United Kingdom that is not a Relevant Person should not act or rely on this prospectus supplement and/or the accompanying prospectus or any of their contents.

This prospectus supplement and the accompanying prospectus have not been approved for the purposes of Section 21 of the UK Financial Services and Markets Act 2000 (FSMA) by a person authorized under FSMA. This prospectus supplement and the accompanying prospectus are being distributed and communicated to persons in the United Kingdom only in circumstances in which Section 21(1) of FSMA does not apply.

The notes are not being offered or sold to any person in the United Kingdom except in circumstances which will not result in an offer of securities to the public in the United Kingdom within the meaning of Part VI of FSMA.

The notes are offered globally for sale only in those jurisdictions in the United States, Europe, Asia and elsewhere where it is lawful to make such offers. The distribution of this prospectus supplement and the accompanying prospectus and the offering or sale of the notes in some jurisdictions may be restricted by law. Persons outside the United States who receive this prospectus supplement and the accompanying prospectus should inform themselves about and observe any applicable restrictions. This prospectus supplement and the accompanying prospectus may not be used for or in connection with an offer or solicitation by any person in any jurisdiction in which that offer or solicitation is not authorized or to any person to whom it is unlawful to make that offer or solicitation.

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SPECIAL NOTE ABOUT FORWARD-LOOKING STATEMENTS

This prospectus supplement contains or incorporates by reference certain statements that are, or may be deemed to be, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). Any statements contained in or incorporated by reference into this prospectus supplement or the accompanying prospectus that are not statements of historical fact may be deemed to be forward-looking statements, including without limitation statements regarding: projections of revenue, expenses, earnings, margins, tax rates, tax provisions, cash flows, pension and benefit obligations and funding requirements, our liquidity position; cost reductions, restructuring activities, new product and service developments, competitive strengths or market position, acquisitions or divestitures; growth, declines and other trends in markets we sell into; new or modified laws, regulations and accounting pronouncements; outstanding claims, legal proceedings, tax audits and assessments and other contingent liabilities; foreign currency exchange rates and fluctuations in those rates; general economic and capital markets conditions; the timing of any of the foregoing; assumptions underlying any of the foregoing; and any other statements that address events or developments that we intend or believe will or may occur in the future. Without limiting the foregoing, the words believes, estimates, and similar expressions are intended anticipates, expects, seeks, plans, identify forward-looking statements, although not all forward-looking statements are accompanied by such words. Forward-looking statements also include, without limitation, statements relating to our agreement to acquire Patheon N.V. (Patheon), our expectations regarding, and our ability to complete, the financing necessary to consummate the Patheon Acquisition, the satisfaction of conditions precedent to, and the consummation of, our acquisition of Patheon, and our ability to secure regulatory approvals, in each case, including the timing thereof. While we may elect to update forward-looking statements in the future, we specifically disclaim any obligation to do so, even if our estimates change, and you should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of this prospectus supplement.

A number of important factors could cause our results to differ materially from those indicated by such forward-looking statements, including those detailed under the heading Risk Factors below and in the documents incorporated herein by reference.

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SUMMARY

The following summary highlights information contained elsewhere in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein. It may not contain all of the information that you should consider before investing in the notes. For a more complete discussion of the information you should consider before investing in the notes, you should carefully read this entire prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein.

Our Company

Thermo Fisher is the world leader in serving science. Our mission is to enable our customers to make the world healthier, cleaner and safer. We help our customers accelerate life sciences research, solve complex analytical challenges, improve patient diagnostics and increase laboratory productivity.

Thermo Fisher had approximately 55,000 employees and served more than 400,000 customers within pharmaceutical and biotech companies, hospitals and clinical diagnostic labs, universities, research institutions and government agencies, as well as environmental, industrial quality and process control settings, as of February 28, 2017.

We serve our customers through our premier brands, Thermo Scientific, Applied Biosystems, Invitrogen, Fisher Scientific and Unity Lab Services:

The Thermo Scientific brand offers customers in research, diagnostics, industrial, and applied markets a complete range of high-end analytical instruments as well as laboratory equipment, software, services, consumables and reagents. Our portfolio of products includes innovative technologies for mass spectrometry, chromatography, elemental analysis, molecular spectroscopy, sample preparation, informatics, chemical research and analysis, cell culture, bioprocess production, cellular, protein and molecular biology research, allergy testing, drugs-of-abuse testing, therapeutic drug monitoring testing, microbiology, anatomical pathology, as well as environmental monitoring and process control.

The Applied Biosystems brand offers customers in research, clinical and applied markets integrated instrument systems, reagents, and software for genetic analysis. Our portfolio includes innovative technologies for genetic sequencing and real-time, digital and end point polymerase chain reaction, that are used to determine meaningful genetic information in applications such as cancer diagnostics, human identification testing, and animal health, as well as inherited and infectious disease.

The Invitrogen brand offers life science customers a broad range of consumables and instruments that accelerate research and ensure consistency of results. Our portfolio of products includes innovative solutions for cellular analysis and biology, flow cytometry, cell culture, protein expression, synthetic biology, molecular biology and protein biology.

Fisher Scientific is our channels brand, offering customers a complete portfolio of laboratory equipment, chemicals, supplies and services used in scientific research, healthcare, safety, and education markets. These products are offered through an extensive network of direct sales professionals, industry-specific catalogs, e-commerce

capabilities and supply-chain management services. We also offer a range of biopharma services for clinical trials management and biospecimen storage.

Unity Lab Services is our services brand, offering a complete portfolio of services from enterprise level engagements to individual instruments and laboratory equipment, regardless of the original manufacturer. Through our network of world-class service and support personnel, we provide services that are designed to help our customers improve productivity, reduce costs, and drive decisions with better data.

We continuously increase our depth of capabilities in technologies, software and services, and leverage our extensive global channels to address our customers emerging needs. Our goal is to make our customers more productive in an increasingly competitive business environment, and to allow them to solve their challenges, from complex research to improved patient care, environmental and process monitoring, and consumer safety.

Thermo Fisher is a Delaware corporation and was incorporated in 1956. The company completed its initial public offering in 1967 and was listed on the New York Stock Exchange in 1980. The company s principal executive offices are located at 168 Third Avenue, Waltham, Massachusetts 02451, and its telephone number is (781) 622-1000.

Patheon Acquisition

In May 2017, we announced that we had entered into a purchase agreement (the *Purchase Agreement*) and commenced a tender offer to acquire all of the issued and outstanding shares of Patheon for \$35.00 per share in cash. The transaction represents a purchase price of approximately \$7.2 billion in the aggregate, which includes the assumption and repayment of approximately \$2.0 billion of net debt (the *Patheon Acquisition*). The Patheon Acquisition will provide entry into the contract development and manufacturing organization (*CDMO*) market and add a complementary service to our existing portfolio. Revenues of Patheon were approximately \$1.9 billion for the year ended October 31, 2016. The transaction is expected to close by December 31, 2017, subject to the satisfaction of customary closing conditions, including applicable regulatory approvals, the adoption of certain resolutions relating to the Patheon Acquisition at an Extraordinary General Meeting of Patheon s shareholders, and completion of the tender offer.

We intend to use all of the net proceeds of this offering to fund a portion of the consideration payable for the Patheon Acquisition, which is estimated to be approximately \$7.2 billion in the aggregate. We currently intend to finance the consideration payable for the Patheon Acquisition, including the repayment of indebtedness of Patheon to be assumed by us, and certain associated costs with approximately \$4.8 billion from issuances of long-term debt, including the notes offered hereby, approximately \$2.0 billion from the future issuance of equity and approximately \$0.4 billion from future issuances of commercial paper under our existing commercial paper programs. We are currently evaluating alternatives for future long-term debt and permanent equity financings and the timing of such transactions is subject to market and other conditions. Pending completion of these permanent financings, we may finance a portion of the consideration payable for the Patheon Acquisition, including the repayment of indebtedness of Patheon to be assumed by us, and the associated costs in the short-term with borrowings under a proposed new term loan credit facility. We also have available, but do not expect to utilize, up to \$7.3 billion of financing under the Bridge Facility described below. This offering is not conditioned on the closing of the Patheon Acquisition, and we cannot assure you that the Patheon Acquisition will be completed. See Use of Proceeds. However, in the event that we do not consummate the Patheon Acquisition on or prior to February 15, 2018 or the Purchase Agreement is terminated at any time prior to such date, we will be required to redeem all of the notes on a special mandatory redemption date at a redemption price equal to 101% of the aggregate principal amount of the notes, plus accrued and unpaid interest to, but excluding, the special mandatory redemption date. See Description of the Notes Special Mandatory Redemption.

In May 2017, we entered into commitment letters for a 364-day unsecured committed bridge credit facility in the principal amount of \$7.3 billion, with Goldman Sachs Bank USA, Goldman Sachs Lending Partners LLC and the additional lenders party thereto (the *Bridge Facility**). The Bridge Facility is expected to contain customary representations and warranties, as well as affirmative and negative covenants. The proceeds of the loans under the Bridge Facility may be used by us to fund, in whole or in part, the Patheon Acquisition, including the repayment of any indebtedness of Patheon and to pay all or a portion of the costs incurred by us or any of our subsidiaries in connection with the Patheon Acquisition, the transactions contemplated by the Purchase

Agreement or the transactions contemplated by the Bridge Facility and its related documents. The commitment under the Bridge Facility will be reduced dollar for dollar by the aggregate net cash proceeds of this offering and any future offering of senior notes, as well as by aggregate commitments received under a proposed new term loan facility and the aggregate net cash proceeds of any future equity issuances or asset sales outside the ordinary course of business by us (in each case, with certain limited exceptions).

Risk Factors

An investment in the notes involves risk. You should carefully consider the information set forth in the section of this prospectus supplement entitled Risk Factors beginning on page S-10, as well as other information included or incorporated by reference in this prospectus supplement and the accompanying prospectus, before deciding whether to invest in the notes.

The Offering

A brief description of the material terms of the offering follows. For a more complete description of the notes offered hereby, see Description of the Notes in this prospectus supplement and Description of Thermo Fisher Debt Securities in the accompanying prospectus.

Issuer	Thermo Fisher Scientific Inc.		
Notes Offered	aggregate principal amount of Floating Rate Senior Notes due .		
	aggregate principal amount of % Senior Notes due .		
	aggregate principal amount of % Senior Notes due .		
	aggregate principal amount of % Senior Notes due .		
Interest	The floating rate notes will bear interest at a rate equivalent to the 3-month EURIBOR plus % per annum; provided that the minimum interest rate will be zero.		
	The notes will bear interest at the rate of % per annum.		
	The notes will bear interest at the rate of % per annum.		
	The notes will bear interest at the rate of % per annum.		
	Interest on the floating rate notes will be paid on and of each year, beginning on , 2017, to the persons in whose names the floating rate notes are registered on the security register at the close of business on the fifteenth calendar day, whether or not a business day, immediately preceding the related floating rate interest payment date.		
	Interest on the fixed rate notes will be paid on of each year, commencing on , 2018, to the persons in whose names the fixed rate notes are registered in the security register on the preceding , whether or not a business day.		
Maturity	The floating rate notes will mature on , .		
	The notes will mature on , .		
	The notes will mature on , .		
	The notes will mature on , .		
Ranking	The notes will be:		
	our general unsecured obligations;		

effectively subordinated in right of payment to all of our future secured indebtedness to the extent of the assets securing such indebtedness;

structurally subordinated to all existing and future indebtedness and other liabilities and commitments (including trade payables and lease obligations) of our subsidiaries, to the extent of the assets of such subsidiaries;

equal in right of payment with all of our existing and future unsecured and unsubordinated indebtedness; and

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senior in right of payment to any of our existing and future indebtedness that is subordinated to the notes.

As of April 1, 2017:

we and our subsidiaries had approximately \$17.1 billion in outstanding consolidated indebtedness (excluding trade payables, intercompany liabilities and income tax-related liabilities), as well as \$2.4 billion of availability under a multi-currency revolving credit facility;

our subsidiaries had approximately \$3.5 billion of indebtedness (excluding trade payables, intercompany liabilities and income tax-related liabilities) to which the notes would have been structurally subordinated;

Thermo Fisher Scientific Inc. had no secured indebtedness outstanding; and

after giving effect to this offering and assuming the consummation of the pending Patheon Acquisition, including completion of the permanent financings for the Patheon Acquisition described in Patheon Acquisition, Use of Proceeds and Capitalization and the assumption and repayment of Patheon's outstanding indebtedness as of March 31, 2017, our total consolidated indebtedness would have been approximately \$ billion, and our subsidiaries (including Patheon) would have had approximately \$3.5 billion of indebtedness to which the notes would have been structurally subordinated.

Currency of Payment

All payments of principal of, and premium, if any, and interest on, the notes, including any payments made upon any redemption of the notes, will be made in euro. If the euro is unavailable to us due to the imposition of exchange controls or other circumstances beyond our control or if the euro is no longer being used by the then member states of the European Economic and Monetary Union that have adopted the euro as their currency or for the settlement of transactions by public institutions of or within the international banking community, then all payments in respect of the notes will be made in U.S. dollars until the euro is again available to us or so used.

Payment of Additional Amounts

We will, subject to certain exceptions and limitations, pay to the beneficial owners of the notes who are not United States persons, additional amounts as may be necessary so that every net payment of the principal of, and premium, if any, and interest on, such holder s notes after deduction or withholding for or on account of any present or future tax, assessment or other governmental charge imposed upon that holder by the United States (or any political subdivision or taxing authority thereof or therein), will not be less than the amount provided in such holder s notes to be then due and payable.

Special Mandatory

Redemption

In the event that we do not consummate the Patheon Acquisition on or prior to February 15, 2018 or the Purchase Agreement is terminated at any time prior to such date, we will be required to redeem all of the notes on a special mandatory redemption date at a redemption price equal to 101% of the aggregate principal amount of the notes, plus accrued and unpaid interest, if any, to, but excluding, the special mandatory redemption date. See Description of the Notes Special Mandatory Redemption.

Optional Redemption

Except as provided in this prospectus supplement under Description of the Notes Special Mandatory Redemption and Description of the Notes Redemption Upon Tax Event, the floating rate notes are not redeemable prior to maturity.

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At any time and from time to time prior to , in the case of the months prior to their maturity), notes (, in the case of months prior to their maturity) and the notes (, in the months prior to their maturity) (each such date, a par case of the notes (call date), we will have the option to redeem the applicable series of fixed rate notes, in whole at any time or in part from time to time, at a redemption price equal to the greater of (1) 100% of the principal amount of the fixed rate notes to be redeemed and (2) the sum of the present values of the remaining scheduled payments of the fixed rate notes being redeemed that would be due if such fixed rate notes matured on the applicable par call date (not including any portion of the payments of interest accrued but unpaid as of the date of redemption) discounted to the date of redemption on an annual basis (ACTUAL/ACTUAL (ICMA)), using a discount rate equal to the Comparable Bond Rate (as defined herein) plus basis points, in the case of the basis points, in the case of the notes, notes basis points, in the case of the notes, plus, in each case, accrued and unpaid interest thereon, if any, to, but excluding, the date of redemption. In addition, on and after the applicable par call date, we will have the option to redeem the fixed rate notes, in whole at any time or in part from time to time, at a redemption price equal to 100% of the principal amount of the fixed rate notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the date of redemption. See Description of the Notes Optional Redemption.

Redemption for Tax Reasons

We may redeem all, but not less than all, of the notes in the event of certain changes in the tax laws of the United States (or any political subdivision or taxing authority thereof or therein) which would create a material probability that we would be obligated to pay additional amounts as described above under Payment of Additional Amounts. This redemption would be made on at least 15 days but not more than 60 days notice and at a redemption price equal to 100% of the principal amount of the notes, plus any accrued and unpaid interest on the notes to, but not including, the date fixed for redemption. See Description of the Notes Redemption Upon Tax Event.

Purchase of Notes Upon a Change of Control Triggering Event Upon the occurrence of a Change of Control Triggering Event (as defined herein) with respect to any series of notes, we will, in certain circumstances, be required to make an offer to purchase such series of notes at a price equal to 101% of their principal amount, plus accrued and unpaid interest, if any, to, but excluding, the date of repurchase. See Description of the Notes Repurchase Upon a Change of Control.

Use of Proceeds

We intend to use all of the net proceeds of this offering to fund a portion of the consideration payable for the Patheon Acquisition, including the repayment of indebtedness of Patheon to be assumed by us, which is estimated to be approximately \$7.2 billion in the aggregate, and to pay certain costs associated with the Patheon Acquisition. See Use of Proceeds.

Form and Denomination

The notes will be issued in the form of one or more fully-registered global securities, without coupons, in denominations of 100,000 and integral multiples of 1,000 in excess thereof. These global securities will be deposited with a common

depositary on behalf of Clearstream Banking, S.A. (*Clearstream*), and Euroclear Bank SA/NV (*Euroclear*) or its nominee. Beneficial interests in the global securities will be shown on, and transfers will be effected only

through, records maintained by Clearstream and Euroclear. Except in the limited circumstances described under Description of the Notes Book-Entry, Delivery and Form, notes will not be issued in certificated form or exchanged for interests in

global securities.

Additional Notes We may from time to time, without consent of the holders of the notes, issue

additional notes of any series offered hereby having the same terms and conditions (except for the issue date, offering price and, if applicable, the first interest payment date) as the notes of such series. Additional notes issued in this manner will form a

single series with the applicable outstanding series of notes.

Risk Factors An investment in the notes involves risk. You should carefully consider the

information set forth in the section of this prospectus supplement entitled Risk Factors beginning on page S-10, as well as other information included or incorporated by reference in this prospectus supplement and the accompanying

prospectus, before deciding whether to invest in the notes.

Listing We intend to apply to list the notes on the New York Stock Exchange. The listing

application will be subject to approval by the New York Stock Exchange. Upon such listing, we will use commercially reasonable best efforts to maintain such listing and satisfy the requirements for such continued listing as long as the notes

are outstanding.

Trustee The Bank of New York Mellon Trust Company, N.A.

Paying Agent The Bank of New York Mellon, London Branch.

Calculation Agent The Bank of New York Mellon, London Branch.

Governing Law The indenture and the notes will be governed by the laws of the State of New York.

Summary Consolidated Financial Data

The following table presents summary consolidated financial data as of and for the periods indicated. The statement of income data for each of the fiscal years in the three-year period ended December 31, 2016 and the balance sheet data as of December 31, 2016 and 2015 have been derived from the audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on February 28, 2017, as updated by the Current Report on Form 8-K filed with the SEC on May 5, 2017 (collectively, the 2016 Form 10-K), which are incorporated herein by reference. The balance sheet data as of December 31, 2014 have been derived from our audited consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015, filed with the SEC on February 25, 2016, which is not incorporated herein by reference. The statement of income data for each of the three-month periods ended April 1, 2017 and April 2, 2016 and the balance sheet data as of April 1, 2017 have been derived from the unaudited consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarter ended April 1, 2017, filed with the SEC on May 5, 2017 (the First Ouarter 2017 Form 10-O), which is incorporated herein by reference. The balance sheet data as of April 2, 2016 have been derived from our unaudited consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarter ended April 2, 2016, filed with the SEC on May 6, 2016, which is not incorporated herein by reference. In the opinion of management, our unaudited summary consolidated financial data reflect all adjustments of a normal recurring nature necessary for a fair statement of such financial data. In the opinion of management, our interim financial statements have been prepared on the same basis as our audited consolidated financial statements. Interim results are not necessarily indicative of results of operations for the full year. You should read the following table in conjunction with the information contained in our Management s Discussion and Analysis of Financial Condition and Results of Operations and our audited consolidated financial statements and related notes in our 2016 Form 10-K and the information contained in our Management s Discussion and Analysis of Financial Condition and Results of Operations and our unaudited consolidated financial statements and related notes in our First Quarter 2017 Form 10-Q.

	Three Months Ended April 1, April 2,		Fiscal Year Ended December 31,		ember 31,
	2017(a)	2016(b)	2016(c)	2015(d)	2014(e)
	(unau	dited)		(audited)	
		(In millions	s except per sh		
Statement of Income Data:					
Revenues	\$4,765.0	\$4,294.8	\$ 18,274.1	\$ 16,965.4	\$ 16,889.6
Operating Income	622.4	517.9	2,449.2	2,336.2	2,503.0
Income from Continuing Operations	551.4	402.3	2,025.3	1,980.3	1,895.5
Net Income	551.4	402.2	2,021.8	1,975.4	1,894.4
Earnings per Share from Continuing					
Operations:					
Basic	1.41	1.02	5.13	4.97	4.76
Diluted	1.40	1.01	5.10	4.93	4.71
Earnings per Share:					
Basic	1.41	1.02	5.12	4.96	4.76
Diluted	1.40	1.01	5.09	4.92	4.71

	As	As of		As of December 31,		
	April 1, 2017(a) (unau	April 2, 2016(b) dited)	2016(c)	2015(d) (audited)	` '	
			(In millions)			
Balance Sheet Data:						
Working Capital	\$ 1,945.2	\$ 216.2	\$ 2,155.2	\$ 1,594.9	\$ 1,190.0	
Total Assets	46,213.6	42,952.7	45,907.5	40,834.3	42,852.1	
Long-term Obligations	15,188.4	11,653.0	15,372.4	11,420.2	12,351.6	
Shareholders Equity	21,795.2	20,924.7	21,539.3	21,350.2	20,548.1	

The caption restructuring and other costs/income in the notes below includes amounts charged to cost of revenues, primarily for the sale of inventories revalued at the date of the acquisition, and charges/credits to selling, general and administrative expense primarily for significant acquisition transaction costs.

- (a) Reflects \$86.0 million of pre-tax charges for restructuring and other costs and the repurchase of \$500.0 million of our common stock.
- (b) Reflects \$90.0 million of pre-tax charges for restructuring and other costs and the repurchase of \$1.0 billion of our common stock. Also reflects the acquisitions of Affymetrix, Inc. in March 2016.
- (c) Reflects \$395.0 million of pre-tax charges for restructuring and other costs and the repurchase of \$1.25 billion of our common stock. Also reflects the acquisitions of Affymetrix, Inc. in March 2016 and FEI Company in September 2016.
- (d) Reflects \$171.0 million of pre-tax charges for restructuring and other costs and the repurchase of \$500.0 million of our common stock.

- (ii)

 To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement;
- (iii)

 To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement;

- That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3)

 To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b)

 The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Not applicable.

(d) Not applicable.

(e) Not applicable.

(f) Not applicable.

(g) Not applicable.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to provisions described in Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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- (i) The undersigned registrant hereby undertakes that:
 - For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective;
 - For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial *bona fide* offering thereof.
- (j) Not applicable.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Plymouth, State of Minnesota, on June 16, 2004.

VITAL IMAGES, INC.

/s/ GREGORY S. FURNESS

Gregory S. Furness

Chief Financial Officer and Vice President Finance (Principal Financial Officer and Principal Accounting Officer)

Each person whose signature appears below hereby constitutes and appoints Jay D. Miller and Gregory S. Furness, or either of them, such person's true and lawful attorney-in-fact and agent with full power of substitution and resubstitution for such person and in such person's name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-3 of Vital Images, Inc. and any or all amendments (including post-effective amendments) to the Registration Statement, and to file the same, with all exhibits hereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JAY D. MILLER* Jay D. Miller	President, Chief Executive Officer and Director (Principal Executive Officer)	June 16, 2004
/s/ GREGORY S. FURNESS	Chief Financial Officer, Vice President Finance, Treasurer and Secretary (Principal Financial Officer and Principal Accounting Officer)	June 16, 2004
Gregory S. Furness /s/ DOUGLAS M. PIHL*	Director and Chairman of the Board	June 16, 2004
Douglas M. Pihl /s/ VINCENT J. ARGIRO*	Chief Technology Officer, Founder and Director	June 16, 2004
Vincent J. Argiro, Ph.D. /s/ JAMES B. HICKEY, JR.*	— Director	June 16, 2004
James B. Hickey, Jr. /s/ RICHARD W. PERKINS*		
Richard W. Perkins /s/ SVEN A. WEHRWEIN*	- Director	June 16, 2004
Sven A. Wehrwein	Director	June 16, 2004
Michael W. Vannier * /s/ GREGORY S. FURNESS	Director	June 16, 2004
By Gregory S. Furness, as Attorney-in-Fact	II-5	

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Exhibit No.	Description of Exhibit	Page
2.1	Acquisition Agreement and Plan of Reorganization by and among Vital Images, Inc., HInnovation Acquisition, Inc., HInnovation, Inc. and Hui Hu and JMS Co. Ltd. dated as of January 8, 2004 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on February 26, 2004 (File No. 0-22229)).	
3.1	Articles of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to the Company's registration statement on Form 10 (File No. 0-22229)).	
3.2	By-laws of the Company (incorporated by reference to Exhibit 3.2 to the Company's registration statement on Form 10 (File No. 0-22229)).	
4.1	Form of common stock certificate of the Company (incorporated by reference to Exhibit 4.3 to the Company's registration statement on Form 10 (File No. 0-22229)).	
4.2	Rights Agreement, dated effective as of May 1, 1997, between the Company and American Stock Transfer and Trust Company, which includes as Exhibit B the form of Rights Certificate (incorporated by reference to Exhibit 4.4 to the Company's registration statement on Form 10 (File No. 0-22229)).	
4.3	Certificate of Designation, Preferences and Rights of Series A Junior Preferred Stock of the Company (incorporated by reference to Exhibit 4.5 to the Company's registration statement on Form 10 (File No. 0-22229)).	
5.1	Opinion of Winthrop & Weinstine, P.A.	
10.1	Form of Distribution Agreement, effective as of May 2, 1997, between Bio-Vascular, Inc. (now known as Synovis Life Technologies, Inc.) ("Bio-Vascular") and the Company (incorporated by reference to Exhibit 10.1 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.2	Form of Employee Benefits Agreement, effective as of May 2, 1997, between Bio-Vascular and the Company* (incorporated by reference to Exhibit 10.2 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.3	Form of Tax Sharing Agreement, effective as of May 2, 1997, between Bio-Vascular and the Company (incorporated by reference to Exhibit 10.3 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.4	Form of Transition Services Agreement, effective as of May 2, 1997, between Bio-Vascular and the Company (incorporated by reference to Exhibit 10.4 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.5	Incentive Stock Option Adjustment Plan* (incorporated by reference to Exhibit 10.5 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.6	1995 Stock Incentive Adjustment Plan* (incorporated by reference to Exhibit 10.9 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.7	Employee Stock Purchase Plan* (incorporated by reference to Exhibit 10.10 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.8	1997 Stock Option and Incentive Plan* (incorporated by reference to Exhibit 10.11 to the Company's registration statement on Form 10 (File No. 0-22229)).	
10.9	1997 Director Stock Option Plan* (incorporated by reference to Exhibit 10.12 to the Company's registration statement on Form 10 (File No. 0-22229)).	

10.10	Lease Agreement dated October 19, 1999 between St. Paul Properties, Inc. and the Company (incorporated by reference to Exhibit 10.27 to the Company's Form 10-Q for the quarter ended September 30, 1999 (File No. 0-22229)).
10.11	Vital Images, Inc. and Toshiba America Medical Systems, Inc. Reseller Agreement** (incorporated by reference to Exhibit 10.27 to the Company's Form 10-Q for the quarter ended September 30, 2000 (File No. 0-22229)).
10.12	Form of Change in Control Agreement between the Company and Gregory S. Furness* (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-22229)).
10.13	Form of Change in Control Agreement between the Company and Vincent J. Argiro, Ph.D., Steven P. Canakes and Jay D. Miller* (incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K for the year ended December 31, 2000 (File No. 0-22229)).
10.14	Technology License Agreement between PointDX, Inc. and Vital Images, Inc.** (incorporated by reference to Exhibit 10.32 to the Company's Form 10-Q for the quarter ended September 30, 2001 (File No. 0-22229)).
10.15	Development and License Agreement between Vital Images, Inc. and Surgical Navigation Technologies, Inc. (incorporated by reference to Exhibit 10.34 to the Company's Annual Report on Form 10-K for the year ended December 31, 2001 (File No. 0-22229)).
10.16	Marketing and Distribution Agreement between Vital Images, Inc. and Toshiba Corporation, Medical Systems Company** (incorporated by reference to Exhibit 10.35 to the Company's Form 10-Q for the quarter ended March 31, 2002 (File No. 0-22229)).
10.17	Marketing and Distribution Agreement between Vital Images, Inc. and Toshiba Corporation, Medical Systems Company** (incorporated by reference to Exhibit 10.37 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002) (confidential treatment has been requested for portions of this exhibit).
10.18	Product Distribution Agreement between Vital Images, Inc. and R2 Technology, Inc.** (incorporated by reference to Exhibit 10.38 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.19	Employment Agreement dated February 9, 2002 between the Company and Jay D. Miller* (incorporated by reference to Exhibit 10.39 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.20	Form of Change in Control Agreement between the Company and Jay D. Miller* (incorporated by reference to Exhibit 10.40 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.21	Non-qualified Stock Option Agreement dated December 28, 2002 between the Company and Jay D. Miller* (incorporated by reference to Exhibit 10.41 to the Company's Annual Report on Form 10-K for the year ended December 31, 2002 (File No. 0-22229)).
10.22	Value Added Reseller Agreement between Vital Images, Inc. and McKesson Information Solutions LLC** (incorporated by reference to Exhibit 10.43 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22229)).

10.23	Marketing and Distribution Agreement between Vital Images, Inc. and Toshiba Corporation, Medical Systems Company** (incorporated by reference to Exhibit 10.44 to the Company's Annual Report on Form 10-K for the year ended December 31, 2003 (File No. 0-22229)).
10.24	Lease agreement dated March 26, 2004 between Pondview Plaza Corporation and Vital Images, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004 (File No. 0-22229)).
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Winthrop & Weinstine, P.A. (contained in the opinion filed as Exhibit 5.1)
24.1	Powers of Attorney (contained on the signature page of this Registration Statement)

Indicates a management contract or compensatory plan or arrangement.

Portions of such exhibit are treated as confidential pursuant to a request for that confidential treatment filed with the Commission by Vital Images.

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