#### DEUTSCHE BANK AKTIENGESELLSCHAFT

Form 424B2 June 09, 2016

#### **Pricing Supplement**

To underlying supplement No. 1 dated August 17, 2015,

Pricing Supplement No. 2707B

product supplement B dated July 31, 2015,

Registration Statement No. 333-206013

prospectus supplement dated July 31, 2015 and

Rule 424(b)(2)

prospectus dated April 27, 2016

#### **Deutsche Bank**

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement and the accompanying underlying supplement, product supplement, prospectus supplement and prospectus do not constitute an offer to sell nor do they seek an offer to buy the notes in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated June 8, 2016

Structured

**Deutsche Bank AG** 

Investments

\$ Capped Absolute Return Knock-Out Notes Linked to the SPDR® S&P® Bank ETF due

June 12, 2019

#### General

The notes are designed for investors who seek a return at maturity linked to the performance of the SPDR® S&P® Bank ETF (the "Underlying"). A Knock-Out Event will occur if the closing price of the Underlying is less than the Knock-Out Price (62.00% of the Initial Price) on any day from, but excluding, the Trade Date to, but including, the Final Valuation Date. If a Knock-Out Event has not occurred and the Final Price is greater than or equal to the Initial Price, investors will receive at maturity a return on the notes equal to the greater of (a) the Contingent Minimum Return of 15.00% and (b) the Underlying Return, subject to the Maximum Return of 30.00%. If a Knock-Out Event has not occurred and the Final Price is less than the Initial Price, investors will receive at maturity a return on the notes equal to the greater of (a) the Contingent Minimum Return and (b) the absolute value of the negative Underlying Return. However, if a Knock-Out Event has occurred, investors will receive at maturity a return on the notes that reflects the Underlying Return, whether positive, zero or negative, subject to the Maximum Return. If a Knock-Out Event occurs and the Underlying Return is negative, for each \$1,000 Face Amount of notes, investors will lose 1.00% of the Face Amount for every 1.00% by which the Final Price is less than the Initial Price. The notes do not pay any coupons or dividends. While investors may potentially receive a higher return on the notes of up to 38.00% if the Final Price is less than the Initial Price, investors will lose some or all of their investment if a Knock-Out Event occurs and the Final Price is less than the Initial Price. Any payment on the notes is subject to the credit of the Issuer.

·Senior unsecured obligations of Deutsche Bank AG due June 12, 2019

Minimum purchase of \$10,000. Minimum denominations of \$1,000 (the "Face Amount") and integral multiples thereof.

The notes are expected to price on or about June 8, 2016 (the "Trade Date") and are expected to settle on or about June 13, 2016 (the "Settlement Date").

#### **Key Terms**

Issuer: Deutsche Bank AG, London Branch

Underlying: SPDR® S&P® Bank ETF (Ticker: KBE)

Issue Price: 100% of the Face Amount

Knock-Out A Knock-Out Event occurs if, on any day during the Monitoring Period, the closing price of the

Event: Underlying is less than the Knock-Out Price.

Monitoring

Period: The period from, but excluding, the Trade Date to, and including, the Final Valuation Date

Knock-Out

Price: 62.00% of the Initial Price

Maximum

Return:

30.00%

• If a Knock-Out Event *has not* occurred (meaning the closing price of the Underlying is greater than or equal to the Knock-Out Price on all days during the Monitoring Period) and the Final Price is greater than or equal to the Initial Price, you will receive a cash payment at maturity per \$1,000 Face Amount of notes calculated as follows:

\$1,000 + (\$1,000 x the *greater of* (a) Contingent Minimum Return and (b) Underlying Return, subject to Maximum Return)

Payment at Maturity:

• If a Knock-Out Event has not occurred (meaning the closing price of the Underlying is greater than or equal to the Knock-Out Price on all days during the Monitoring Period) and the Final Price is less than the Initial Price, you will receive a cash payment at maturity per \$1,000 Face Amount of notes calculated as follows:

\$1,000 + (\$1,000 x the greater of (a) Contingent Minimum Return and (b) Absolute Return)

• If a Knock-Out Event *has* occurred (meaning the closing price of the Underlying is less than the Knock-Out Price on at least one day during the Monitoring Period), you will receive a cash payment at maturity per \$1,000 Face Amount of notes calculated as follows:

\$1,000 + (\$1,000 x the lesser of (i) Underlying Return and (ii) Maximum Return)

If a Knock-Out Event has occurred and the Underlying Return is negative, for each \$1,000 Face Amount of notes, you will lose 1.00% of the Face Amount for every 1.00% by which the Final Price is less than the Initial Price. In this circumstance, you will lose some or all of your investment at maturity. Any payment at maturity is subject to the credit of the Issuer.

(Key Terms continued on next page)

Investing in the notes involves a number of risks. See "Risk Factors" beginning on page 7 of the accompanying product supplement, page PS-5 of the accompanying prospectus supplement and page 13 of the accompanying prospectus and "Selected Risk Considerations" beginning on page 9 of this pricing supplement.

The Issuer's estimated value of the notes on the Trade Date is approximately \$900.80 to \$928.00 per \$1,000 Face Amount of notes, which is less than the Issue Price. Please see "Issuer's Estimated Value of the Notes" on page 3 of this pricing supplement for additional information.

By acquiring the notes, you will be bound by, and deemed irrevocably to consent to, the imposition of any Resolution Measure (as defined below) by the competent resolution authority, which may include the write down of all, or a portion, of any payment on the notes or the conversion of the notes into ordinary shares or other instruments of ownership. If any Resolution Measure becomes applicable to us, you may lose some or all of your investment in the notes. Please see "Resolution Measures and Deemed Agreement" on page 4 of this pricing supplement for more information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the notes or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying underlying supplement, product supplement, prospectus supplement or prospectus. Any representation to the contrary is a criminal offense.

#### **Price to Public**<sup>(1)</sup> Fees<sup>(1)(2)</sup> **Proceeds to Issuer**

**Per Note** \$1,000.00 \$20.00 \$980.00 **Total** \$ \$

(1) JPMorgan Chase Bank, N.A. and J.P. Morgan Securities LLC, which we refer to as JPMS LLC, or one of its affiliates will act as placement agents for the notes. The placement agents will forgo fees for sales to fiduciary accounts. The total fees represent the amount that the placement agents receive from sales to accounts other than such fiduciary accounts. The placement agents will receive a fee from the Issuer that will not exceed \$20.00 per \$1,000 Face Amount of notes.

(2) Please see "Supplemental Plan of Distribution" in this pricing supplement for more information about fees.

The notes are not deposits or savings accounts and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other U.S. or foreign governmental agency or instrumentality.

#### **JPMorgan**

#### **Placement Agent**

June , 2016

(Key Terms continued from previous page)

The performance of the Underlying from the Initial Price to the Final Price, calculated as

Underlying

follows:

Return:

Final Price - Initial Price

**Initial Price** 

The Underlying Return may be positive, zero or negative.

Absolute Return:

The absolute value of the Underlying Return. For example, if the Underlying Return is -5.00%,

the Absolute Return will equal 5.00%.

**Initial Price:** 

The Closing Price of the Underlying on the Trade Date

Final Price:

The Closing Price of the Underlying on the Final Valuation Date

**Closing Price:** 

The closing price of one share of the Underlying on the relevant date of calculation multiplied by

the then-current Share Adjustment Factor, as determined by the calculation agent

Share Adjustment

Initially 1.0, subject to adjustment for certain actions affecting the Underlying. See "Description

Factor:

of Securities — Anti-Dilution Adjustments for Funds" in the accompanying product supplement.

Trade Date<sup>2</sup>:

June 8, 2016

Settlement Date<sup>2</sup>:

June 13, 2016

Final Valuation

Date<sup>1, 2</sup>:

June 7, 2019

Maturity Date<sup>1, 2</sup>:

June 12, 2019

Listing:

The notes will not be listed on any securities exchange.

CUSIP/ISIN:

25152R3Q4 / US25152R3Q44

<sup>&</sup>lt;sup>1</sup> Subject to adjustment as described under "Description of Securities — Adjustments to Valuation Dates and Payment Dates" in the accompanying product supplement.

<sup>&</sup>lt;sup>2</sup> In the event that we make any changes to the expected Trade Date or Settlement Date, the Final Valuation Date and Maturity Date may be changed so that the stated term of the notes remains the same.

#### **Issuer's Estimated Value of the Notes**

The Issuer's estimated value of the notes is equal to the sum of our valuations of the following two components of the notes: (i) a bond and (ii) an embedded derivative(s). The value of the bond component of the notes is calculated based on the present value of the stream of cash payments associated with a conventional bond with a principal amount equal to the Face Amount of notes, discounted at an internal funding rate, which is determined primarily based on our market-based yield curve, adjusted to account for our funding needs and objectives for the period matching the term of the notes. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the notes, reduces the economic terms of the notes to you and is expected to adversely affect the price at which you may be able to sell the notes in any secondary market. The value of the embedded derivative(s) is calculated based on our internal pricing models using relevant parameter inputs such as expected interest and dividend rates and mid-market levels of price and volatility of the assets underlying the notes or any futures, options or swaps related to such underlying assets. Our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect.

The Issuer's estimated value of the notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the notes. The difference between the Issue Price and the Issuer's estimated value of the notes on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the notes through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge.

The Issuer's estimated value of the notes on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your notes in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the notes from you in secondary market transactions, if at all, would generally be lower than both the Issue Price and the Issuer's estimated value of the notes on the Trade Date. Our purchase price, if any, in secondary market transactions will be based on the estimated value of the notes determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the notes and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our notes for use on customer account statements would generally be determined on the same basis. However, during the period of approximately six months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the notes on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

#### **Resolution Measures and Deemed Agreement**

On May 15, 2014, the European Parliament and the Council of the European Union adopted a directive establishing a framework for the recovery and resolution of credit institutions and investment firms (commonly referred to as the "Bank Recovery and Resolution Directive"). The Bank Recovery and Resolution Directive required each member state of the European Union to adopt and publish by December 31, 2014 the laws, regulations and administrative provisions necessary to comply with the Bank Recovery and Resolution Directive. Germany adopted the Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, or the "Resolution Act"), which became effective on January 1, 2015. The Bank Recovery and Resolution Directive and the Resolution Act provided national resolution authorities with a set of resolution powers to intervene in the event that a bank is failing or likely to fail and certain other conditions are met. From January 1, 2016, the power to initiate resolution measures applicable to significant banking groups (such as Deutsche Bank Group) in the European Banking Union has been transferred to the European Single Resolution Board which, based on the European Union regulation establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund (the "SRM Regulation"), works in close cooperation with the European Central Bank, the European Commission and the national resolution authorities. Pursuant to the SRM Regulation, the Resolution Act and other applicable rules and regulations, the notes may be subject to any Resolution Measure by the competent resolution authority if we become, or are deemed by the competent supervisory authority to have become, "non-viable" (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. By acquiring the notes, you will be bound by and deemed irrevocably to consent to the provisions set forth in the accompanying prospectus, which we have summarized below.

By acquiring the notes, you will be bound by and deemed irrevocably to consent to the imposition of any Resolution Measure by the competent resolution authority. Under the relevant resolution laws and regulations as applicable to us from time to time, the notes may be subject to the powers exercised by the competent resolution authority to: (i) write down, including to zero, any payment (or delivery obligations) on the notes; (ii) convert the notes into ordinary shares of (a) the Issuer, (b) any group entity or (c) any bridge bank or other instruments of ownership of such entities qualifying as common equity tier 1 capital; and/or (iii) apply any other resolution measure including, but not limited to, any transfer of the notes to another entity, the amendment, modification or variation of the terms and conditions of the notes or the cancellation of the notes. We refer to each of these measures as a "Resolution Measure." A "group entity" refers to an entity that is included in the corporate group subject to a Resolution Measure. A "bridge bank" refers to a newly chartered German bank that would receive some or all of our assets, liabilities and material contracts, including those attributable to our branches and subsidiaries, in a resolution proceeding.

Furthermore, by acquiring the notes, you:

·are deemed irrevocably to have agreed, and you will agree: (i) to be bound by, to acknowledge and to accept any Resolution Measure and any amendment, modification or variation of the terms and conditions of the notes to give effect to any Resolution Measure; (ii) that you will have no claim or other right against us arising out of any Resolution Measure; and (iii) that the imposition of any Resolution Measure will not constitute a default or an event of default under the notes, under the senior indenture dated November 22, 2006 among us, Law Debenture Trust

Company of New York, as trustee, and Deutsche Bank Trust Company Americas, as issuing agent, paying agent, authenticating agent and registrar, as amended and supplemented from time to time (the "**Indenture**"), or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act of 1939, as amended (the "**Trust Indenture Act**");

waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the paying agent, the issuing agent and the registrar (each, an "**indenture agent**") for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the notes; and

will be deemed irrevocably to have: (i) consented to the imposition of any Resolution Measure as it may be imposed without any prior notice by the competent resolution authority of its decision to exercise such power with respect to the notes; (ii) authorized, directed and requested The Depository Trust Company ("DTC") and any direct participant in DTC or other intermediary through which you hold such notes to take any and all necessary action, if required, to implement the imposition of any Resolution Measure with respect to the notes as it may be imposed, without any further action or direction on your part or on the part of the trustee or the indenture agents; and (iii) acknowledged and accepted that the Resolution Measure provisions described herein and in the "Resolution Measures" section of the accompanying prospectus are exhaustive on the matters described herein and therein to the exclusion of any other agreements, arrangements or understandings between you and the Issuer relating to the terms and conditions of the notes.

This is only a summary, for more information please see the accompanying prospectus dated April 27, 2016, including the risk factors beginning on page 13 of such prospectus.

#### **Additional Terms Specific to the Notes**

You should read this pricing supplement together with underlying supplement No. 1 dated August 17, 2015, product supplement B dated July 31, 2015, the prospectus supplement dated July 31, 2015 relating to our Series A global notes of which these notes are a part and the prospectus dated April 27, 2016. When you read the accompanying underlying supplement, product supplement and prospectus supplement, please note that all references in such supplements to the prospectus dated July 31, 2015, or to any sections therein, should refer instead to the accompanying prospectus dated April 27, 2016 or to the corresponding sections of such prospectus, as applicable, unless otherwise specified or the context otherwise requires. You may access these documents on the website of the Securities and Exchange Commission (the "SEC") at.www.sec.gov as follows (or if such address has changed, by reviewing our filings for the relevant date on the SEC website):

Underlying supplement No. 1 dated August 17, 2015:

http://www.sec.gov/Archives/edgar/data/1159508/000095010315006546/crt dp58829-424b2.pdf

Product supplement B dated July 31, 2015:

http://www.sec.gov/Archives/edgar/data/1159508/000095010315006059/crt dp58181-424b2.pdf

Prospectus supplement dated July 31, 2015:

http://www.sec.gov/Archives/edgar/data/1159508/000095010315006048/crt-dp58161 424b2.pdf

Prospectus dated April 27, 2016:

http://www.sec.gov/Archives/edgar/data/1159508/000119312516559607/d181910d424b21.pdf

Our Central Index Key, or CIK, on the SEC website is 0001159508. As used in this pricing supplement, "we," "us" or "our" refers to Deutsche Bank AG, including, as the context requires, acting through one of its branches.

This pricing supplement, together with the documents listed above, contains the terms of the notes and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in this

pricing supplement and in "Risk Factors" in the accompanying underlying supplement, product supplement, prospectus supplement and prospectus, as the notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before deciding to invest in the notes.

You may revoke your offer to purchase the notes at any time prior to the time at which we accept such offer by notifying the applicable agent. We reserve the right to change the terms of, or reject any offer to purchase, the notes prior to their issuance. We will notify you in the event of any changes to the terms of the notes and you will be asked to accept such changes in connection with your purchase of any notes. You may also choose to reject such changes, in which case we may reject your offer to purchase the notes.

## What Are the Possible Payments on the Notes at Maturity, Assuming a Range of Hypothetical Performances for the Underlying?

The following table illustrates a range of hypothetical payments at maturity on the notes. The table and the hypothetical examples below reflect the Maximum Return of 30.00%, the Contingent Minimum Return of 15.00% and the Knock-Out Price of 62.00% of the Initial Price. The actual Initial Price and Knock-Out Price will be determined on the Trade Date. The table and hypothetical examples set forth below are for illustrative purposes only. The actual return applicable to a purchaser of the notes will be based on whether or not a Knock-Out Event occurs, which will depend on whether the closing price of the Underlying is less than the Knock-Out Price on any day during the Monitoring Period, and the Underlying Return, which will be based on the performance of the Underlying as measured on the Final Valuation Date. The numbers appearing in the table and examples below may have been rounded for ease of analysis. You should consider carefully whether the notes are suitable to your investment goals.

	A Knock-Out Event <u>Has Not</u> Occurred During the Monitoring Period		A Knock-Out Event <u>Has</u> Occurred During the Monitoring Period		
Hypothetical Underlying Return (%)	Hypothetical Return on the Notes (%)	Hypothetical Payment at Maturity (\$)	Hypothetical Return on the Notes (%)	Hypothetical Payment at Maturity (\$)	
100.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
90.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
80.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
70.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
60.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
50.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
40.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
30.00%	30.00%	\$1,300.00	30.00%	\$1,300.00	
20.00%	20.00%	\$1,200.00	20.00%	\$1,200.00	
15.00%	15.00%	\$1,150.00	15.00%	\$1,150.00	
10.00%	15.00%	\$1,150.00	10.00%	\$1,100.00	
5.00%	15.00%	\$1,150.00	5.00%	\$1,050.00	
0.00%	15.00%	\$1,150.00	0.00%	\$1,000.00	
-5.00%	15.00%	\$1,150.00	-5.00%	\$950.00	
-10.00%	15.00%	\$1,150.00	-10.00%	\$900.00	
-15.00%	15.00%	\$1,150.00	-15.00%	\$850.00	
-20.00%	20.00%	\$1,200.00	-20.00%	\$800.00	
-30.00%	30.00%	\$1,300.00	-30.00%	\$700.00	

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-38.00%	38.00%	\$1,380.00	-38.00%	\$620.00
-40.00%	N/A	N/A	-40.00%	\$600.00
-50.00%	N/A	N/A	-50.00%	\$500.00
-60.00%	N/A	N/A	-60.00%	\$400.00
-70.00%	N/A	N/A	-70.00%	\$300.00
-80.00%	N/A	N/A	-80.00%	\$200.00
-90.00%	N/A	N/A	-90.00%	\$100.00
-100.00%	N/A	N/A	-100.00%	\$0.00

N/A: Not applicable because a Knock-Out Event would have occurred.

#### **Hypothetical Examples of Amounts Payable at Maturity**

The following hypothetical examples illustrate how the payments on the notes at maturity set forth in the table above are calculated.

**Example 1: A Knock-Out Event has not occurred and the Final Price is greater than the Initial Price, resulting in an Underlying Return of 40.00%.** Because the closing price of the Underlying on all days during the Monitoring Period, including the Final Valuation Date, was greater than or equal to the Knock-Out Price, a Knock-Out Event has not occurred. Because the Final Price is greater than the Initial Price and the Underlying Return is greater than both the Contingent Minimum Return and the Maximum Return, the investor receives the Maximum Return on the notes. Accordingly, the investor receives a Payment at Maturity of \$1,300.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *greater* of (a) Contingent Minimum Return and (b) Underlying Return, subject to Maximum Return)

 $1,000 + (1,000 \times 30.00\%) = 1,300.00$ 

**Example 2: A Knock-Out Event has not occurred and the Final Price is greater than the Initial Price, resulting in an Underlying Return of 20.00%.** Because the closing price of the Underlying on all days during the Monitoring Period, including the Final Valuation Date, was greater than or equal to the Knock-Out Price, a Knock-Out Event has not occurred. Because the Final Price is greater than the Initial Price and the Underlying Return is less than the Maximum Return but greater than the Contingent Minimum Return, the investor receives a Payment at Maturity of \$1,200.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *greater* of (a) Contingent Minimum Return and (b) Underlying Return, subject to Maximum Return)

 $1,000 + (1,000 \times 20.00\%) = 1,200.00$ 

**Example 3: A Knock-Out Event has not occurred and the Final Price is greater than the Initial Price, resulting in an Underlying Return of 5.00%.** Because the closing price of the Underlying on all days during the Monitoring Period, including the Final Valuation Date, was greater than or equal to the Knock-Out Price, a Knock-Out Event has not occurred. Because the Final Price is greater than the Initial Price and the Underlying Return is less than the Contingent Minimum Return, the investor receives the Contingent Minimum Return. Accordingly, the investor receives a Payment at Maturity of \$1,150.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *greater* of (a) Contingent Minimum Return and (b) Underlying Return, subject to Maximum Return)

 $1,000 + (1,000 \times 15.00\%) = 1,150.00$ 

Example 4: A Knock-Out Event has not occurred and the Final Price is less than the Initial Price, resulting in an Underlying Return of -10.00%. Because the closing price of the Underlying on all days during the Monitoring Period, including the Final Valuation Date, was greater than or equal to the Knock-Out Price, a Knock-Out Event has not occurred. Because the Final Price is less than the Initial Price and the Contingent Minimum Return is greater than the absolute value of the negative Underlying Return, the investor receives the Contingent Minimum Return. Accordingly, the investor receives a Payment at Maturity of \$1,150.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the greater of (a) Contingent Minimum Return and (b) Absolute Return)

 $1.000 + (1.000 \times 15.00\%) = 1.150.00$ 

Example 5: A Knock-Out Event has occurred and the Final Price is less than the Initial Price, resulting in an Underlying Return of -20.00%. Because the closing price of the Underlying on all days during the Monitoring Period, including the Final Valuation Date, was greater than or equal to the Knock-Out Price, a Knock-Out Event has not occurred. Because the Final Price is less than the Initial Price and the absolute value of the negative Underlying Return is greater than the Contingent Minimum Return, the investor receives the absolute value of the negative Underlying Return. Accordingly, the investor receives a Payment at Maturity of \$1,200.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *greater of* (a) Contingent Minimum Return and (b) Absolute Return)

 $1,000 + (1,000 \times |-20.00\%|) = 1,200.00$ 

Example 6: A Knock-Out Event has occurred and the Final Price is less than the Initial Price, resulting in an Underlying Return of -50.00%. Because the closing price of the Underlying on at least one day during the Monitoring Period was less than the Knock-Out Price, a Knock-Out Event has occurred. Because a Knock-Out Event has occurred and the Underlying Return is less than the Maximum Return, the investor receives a Payment at Maturity of \$500.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *lesser of* (i) Underlying Return and (ii) Maximum Return)

 $$1,000 + ($1,000 \times -50.00\%) = $500.00$ 

**Example 7: A Knock-Out Event has occurred and the Final Price is greater than the Initial Price, resulting in an Underlying Return of 5.00%.** Because the closing price of the Underlying on at least one day during the Monitoring Period was less than the Knock-Out Price, a Knock-Out Event has occurred. Because a Knock-Out Event has occurred and the Underlying Return is less than the Maximum Return, the investor receives a Payment at Maturity of \$1,050.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *lesser of* (i) Underlying Return and (ii) Maximum Return)

 $1,000 + (1,000 \times 5.00\%) = 1,050.00$ 

Example 8: A Knock-Out Event has occurred and the Final Price is greater than the Initial Price, resulting in an Underlying Return of 40.00%. Because the closing price of the Underlying on at least one day during the Monitoring Period was less than the Knock-Out Price, a Knock-Out Event has occurred. Because a Knock-Out Event has occurred and the Underlying Return is greater than the Maximum Return, the investor receives the Maximum Return on the notes. Accordingly, the investor receives a Payment at Maturity of \$1,300.00 per \$1,000 Face Amount of notes, calculated as follows:

\$1,000 + (\$1,000 x the *lesser of* (i) Underlying Return and (ii) Maximum Return)

 $1,000 + (1,000 \times 30.00\%) = 1,300.00$ 

#### **Selected Purchase Considerations**

**CAPPED APPRECIATION POTENTIAL** — The notes are linked to the performance of the Underlying and, subject of the occurrence of a Knock-Out Event, provide the opportunity to receive at maturity a return on the notes equal to at least the Contingent Minimum Return and to participate in any increase in the price of the Underlying on an

unleveraged basis, subject to the Maximum Return of 30.00%. Any payment on the notes is subject to our ability to satisfy our obligations as they become due.

POTENTIAL TO RECEIVE THE ABSOLUTE RETURN OF THE UNDERLYING IF A KNOCK-OUT EVENT HAS NOT OCCURRED — If a Knock-Out Event has not occurred and the Final Price is less than the I

**EVENT HAS NOT OCCURRED** — If a Knock-Out Event has not occurred and the Final Price is less than the Initial Price, you will receive at maturity a return on the notes equal to the *greater of* (a) the Contingent Minimum Return and (b) the absolute value of the negative Underlying Return, up to a return on the notes of 30.00%, which is equal to the percentage difference from the Initial Price to the Knock-Out Price. While investors may potentially receive a higher return on the notes of up to 38.00% if the Final Price is less than the Initial Price, investors will lose some or all of their investment if a Knock-Out Event occurs.

**LIMITED PROTECTION AGAINST LOSS** — A Knock-Out Event will occur if the closing price of the Underlying is less than the Knock-Out Price on any day during the Monitoring Period. You will receive at maturity a return on the notes equal to the *greater* of (a) the Contingent Minimum Return and (b) the absolute value of the negative · Underlying Return only if a Knock-Out Event has not occurred and the Final Price is less than the Initial Price. However, if a Knock-Out Event has occurred and the Underlying Return is negative, for each \$1,000 Face Amount of notes, you will lose 1.00% of the Face Amount for every 1.00% by which the Final Price is less than the Initial Price. In this circumstance, you will lose some or all of your investment in the notes.

RETURN LINKED TO THE PERFORMANCE OF THE SPDR® S&P® BANK ETF — The return on the notes, which may be positive, zero or negative, is linked to the performance of the SPDR® S&P® Bank ETF as described herein. The SPDR® S&P® Bank ETF is an investment portfolio maintained and managed by SSGA Funds Management, Inc. ("SSFM"), the investment advisor to the Underlying (the "Underlying Advisor"). The SPDR&P® Bank ETF seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the S&P® Banks Select Industry® Index (the "Tracked Index"). The Tracked Index is a modified equally weighted index that is designed to measure the performance of the bank sub-industry portion of the S&P® Total Market Index (the "S&P TMI"). This is only a summary of the SPDRS&P® Bank ETF. For more information on the SPDR® S&P® Bank ETF, please see the section entitled "The SPDR S&P® Bank ETF" in this pricing supplement.

TAX CONSEQUENCES — In the opinion of our special tax counsel, Davis Polk & Wardwell LLP, which is based on prevailing market conditions, it is more likely than not that the notes will be treated for U.S. federal income tax purposes as prepaid financial contracts that are not debt. Generally, if this treatment is respected, (i) you should not recognize taxable income or loss prior to the maturity or other taxable disposition of your notes and (ii) subject to the potential application of the "constructive ownership" regime discussed below, the gain or loss on your notes should be capital gain or loss and should be long-term capital gain or loss if you have held the notes for more than one year. The Internal Revenue Service (the "IRS") or a court might not agree with this treatment, however, in which case the timing and character of income or loss on your notes could be materially and adversely affected.

Even if the treatment of the notes as prepaid financial contracts is respected, purchasing a note could be treated as entering into a "constructive ownership transaction" within the meaning of Section 1260 of the Internal Revenue Code ("Section 1260"). In that case, all or a portion of any long-term capital gain you would otherwise recognize upon the taxable disposition of the note would be recharacterized as ordinary income to the extent such gain exceeded the "net underlying long-term capital gain" as defined in Section 1260. Any long-term capital gain recharacterized as ordinary income would be treated as accruing at a constant rate over the period you held the note, and you would be subject to

a notional interest charge in respect of the deemed tax liability on the income treated as accruing in prior tax years. Due to the lack of direct legal authority, our special tax counsel is unable to opine as to whether or how Section 1260 applies to the notes.

In 2007, the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. The notice focuses in particular on whether beneficial owners of these instruments should be required to accrue income over the term of their investment. It also asks for comments on a number of related topics, including the character of income or loss with respect to these instruments; the relevance of factors such as the nature of the underlying property to which the instruments are linked; the degree, if any, to which income (including any mandated accruals) realized by non-U.S. persons should be subject to withholding tax; and whether these instruments are or should be subject to the "constructive ownership" regime discussed above. While the notice requests comments on appropriate transition rules and effective dates, any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the notes, possibly with retroactive effect.

Withholding under legislation commonly referred to as "FATCA" might (if the notes were recharacterized as debt instruments) apply to amounts treated as interest paid with respect to the notes, as well as to the payment of gross proceeds of a taxable disposition, including redemption at maturity, of a note. However, under a recent IRS notice, this regime will not apply to payments of gross proceeds (other than any amount treated as interest) with respect to

dispositions occurring before January 1, 2019. You should consult your tax adviser regarding the potential application of FATCA to the notes.

Non-U.S. holders should note that, notwithstanding anything to the contrary in the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences," recently promulgated Treasury regulations imposing a withholding tax on certain "dividend equivalents" under certain "equity linked instruments" will not apply to the notes.

You should review carefully the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences." The preceding discussion, when read in combination with that section, constitutes the full opinion of our special tax counsel regarding the material U.S. federal income tax consequences of owning and disposing of the notes.

Under current law, the United Kingdom will not impose withholding tax on payments made with respect to the notes.

For a discussion of certain German tax considerations relating to the notes, you should refer to the section in the accompanying prospectus supplement entitled "Taxation by Germany of Non-Resident Holders."

You should consult your tax adviser regarding the U.S. federal tax consequences of an investment in the notes (including possible alternative treatments, the potential application of the "constructive ownership" regime and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

#### **Selected Risk Considerations**

An investment in the notes involves significant risks. Investing in the notes is not equivalent to investing directly in the shares of the Underlying or any of the component securities held by the Underlying. In addition to these selected risk considerations, you should review the "Risk Factors" sections of the accompanying product supplement, prospectus supplement and prospectus.

•YOUR INVESTMENT IN THE NOTES MAY RESULT IN A LOSS — The notes do not guarantee any return of your investment. The return on the notes at maturity is based on whether or not a Knock-Out Event occurs and the Underlying Return. If the closing price of the Underlying is less than the Knock-Out Price on any day during the Monitoring Period, a Knock-Out Event occurs and your investment will be fully exposed to any decline in the price of the Underlying during the term of the notes. If a Knock-Out Event has occurred and the Underlying Return is

negative, you will not receive the *greater of* (a) the Contingent Minimum Return and (b) the Absolute Return and, for each \$1,000 Face Amount of notes, you will lose 1.00% of the Face Amount for every 1.00% by which the Final Price is less than the Initial Price. In this circumstance, you will lose some or all of your investment in the notes. Any payment on the notes is subject to our ability to satisfy our obligations as they become due.

THE RETURN ON THE NOTES IS LIMITED — If a Knock-Out Event does not occur and the Final Price is greater than the Initial Price, you will receive at maturity a return on the notes reflecting the *greater of* (a) the Contingent Minimum Return and (b) the Underlying Return, subject to the Maximum Return of 30.00%. If a Knock-Out Event does not occur and the Final Price is less than the Initial Price, you will receive at maturity a return on the notes reflecting the *greater of* (a) the Contingent Minimum Return and (b) the absolute value of the negative Underlying Return. In this circumstance, because the Absolute Return feature applies only if a Knock-Out Event *has not* occurred (meaning the closing price of the Underlying is greater than or equal to the Knock-Out Price on **all** days during the Monitoring Period, including the Final Valuation Date), your positive return will be limited to 38.00%, which is equal to the percentage difference from the Initial Price to the Knock-Out Price. If a Knock-Out Event occurs (meaning the closing price of the Underlying is less than the Knock-Out Price on **at least one** day during the Monitoring Period), you will be fully exposed to the Underlying Return (whether positive or negative), subject to the Maximum Return of 30.00%. Therefore, regardless of whether a Knock-Out Event occurs, the return on the notes is limited.

#### YOU WILL NOT BENEFIT FROM THE ABSOLUTE RETURN FEATURE IF A KNOCK-OUT EVENT

OCCURS — The notes are subject to daily closing price monitoring. As a result, if the closing price of the Underlying on any day during the Monitoring Period is less than the Knock-Out Price, you will not receive the Absolute Return and your investment will be fully exposed to any decline in the price of the Underlying during the term of the notes. You will be subject to this potential loss of your investment even if the Underlying subsequently increases such that the Final Price is greater than or equal to the Knock-Out Price. If a Knock-Out Event occurs, because the closing price of the Underlying needed to have decreased to a price less than the Knock-Out Price on at least one day during the Monitoring Period in order for such Knock-Out Event to have occurred, you will not receive a positive return on the notes unless the price of the Underlying subsequently increases substantially such that the Final Price is equal to or greater than the Initial Price.

THE NOTES DO NOT PAY ANY COUPONS — Unlike ordinary debt securities, the notes do not pay any coupons and do not guarantee any return of your investment at maturity.

THE NOTES ARE SUBJECT TO THE CREDIT OF DEUTSCHE BANK AG — The notes are senior unsecured obligations of Deutsche Bank AG and are not, either directly or indirectly, an obligation of any third party. Any payment(s) to be made on the notes depends on the ability of Deutsche Bank AG to satisfy its obligations as they become due. An actual or anticipated downgrade in Deutsche Bank AG's credit rating or increase in the credit spreads charged by the market for taking Deutsche Bank AG's credit risk will likely have an adverse effect on the value of the notes. As a result, the actual and perceived creditworthiness of Deutsche Bank AG will affect the value of the notes and, in the event Deutsche Bank AG were to default on its obligations or become subject to a Resolution Measure, you might not receive any amount(s) owed to you under the terms of the notes and you could lose your entire investment.

# THE NOTES MAY BE WRITTEN DOWN, BE CONVERTED INTO ORDINARY SHARES OR OTHER INSTRUMENTS OF OWNERSHIP OR BECOME SUBJECT TO OTHER RESOLUTION MEASURES. YOU MAY LOSE SOME OR ALL OF YOUR INVESTMENT IF ANY SUCH MEASURE BECOMES

APPLICABLE TO US — Pursuant to the SRM Regulation, the Resolution Act and other applicable rules and regulations described above under "Resolution Measures and Deemed Agreement," the notes are subject to the powers exercised by the competent resolution authority to impose Resolution Measures on us, which may include: writing down, including to zero, any claim for payment on the notes; converting the notes into ordinary shares of (i) the Issuer, (ii) any group entity or (iii) any bridge bank or other instruments of ownership of such entities qualifying as common equity tier 1 capital; or applying any other resolution measure including, but not limited to, transferring the notes to another entity, amending, modifying or varying the terms and conditions of the notes or cancelling the notes. The competent resolution authority may apply Resolution Measures individually or in any combination.

The German law on the mechanism for the resolution of banks of November 2, 2015 (Abwicklungsmechanismusgesetz, or the "Resolution Mechanism Act") provides that, in a German insolvency proceeding of the Issuer, certain specifically defined senior unsecured debt instruments would rank junior to, without constituting subordinated debt, all other outstanding unsecured unsubordinated obligations of the Issuer and be satisfied only if all such other senior unsecured obligations of the Issuer have been paid in full. This prioritization would also be given effect if Resolution Measures are imposed on the Issuer, so that obligations under debt instruments that rank junior in insolvency as described above would be written down or converted into common equity tier 1 instruments before any other senior unsecured obligations of the Issuer are written down or converted. A large portion of our liabilities consist of senior unsecured obligations that either fall outside the statutory definition of debt instruments that rank junior to other senior unsecured obligations according to the Resolution Mechanism Act or are expressly exempted from such definition.

Among those unsecured unsubordinated obligations that are expressly exempted are money market instruments and senior unsecured debt instruments whose terms provide that (i) the repayment or the amount of the repayment depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued or is settled in a way other than by monetary payment, or (ii) the payment of interest or the amount of the interest payments depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued unless the payment of interest or the amount of the interest payments solely depends on a fixed or floating reference interest rate and is settled by monetary payment. This order of priority introduced by the Resolution Mechanism Act would apply in German insolvency proceedings instituted, or when Resolution Measures are imposed, on or after January 1, 2017 with effect for debt instruments of the Issuer outstanding at that time. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the competent regulatory authority or court would determine which of our senior

debt securities issued under the prospectus have the terms described in clauses (i) or (ii) above, referred to herein as the "Structured Debt Securities," and which do not, referred to herein as the "Non-Structured Debt Securities." We expect the notes offered herein to be classified as Structured Debt Securities, but the competent regulatory authority or court may classify the notes differently. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the Structured Debt Securities are expected to be among the unsecured unsubordinated obligations that would bear losses after the Non-Structured Debt Securities as described above.

Nevertheless, you may lose some or all of your investment in the notes if a Resolution Measure becomes applicable to us. Imposition of a Resolution Measure would likely occur if we become, or are deemed by the competent supervisory authority to have become, "non-viable" (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. The Bank Recovery and Resolution Directive and the Resolution Act are intended to eliminate the need for public support of troubled banks, and you should be aware that public support, if any, would only potentially be used by the competent supervisory authority as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution tools, including the bail-in tool.

By acquiring the notes, you would have no claim or other right against us arising out of any Resolution Measure and we would have no obligation to make payments under the notes following the imposition of a Resolution Measure. In particular, the imposition of any Resolution Measure will not constitute a default or an event of default under the notes, under the Indenture or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act.

Furthermore, because the notes are subject to any Resolution Measure, secondary market trading in the notes may not follow the trading behavior associated with similar types of securities issued by other financial institutions which may be or have been subject to a Resolution Measure.

In addition, by your acquisition of the notes, you waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the indenture agents for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the notes. Accordingly, you may have limited or circumscribed rights to challenge any decision of the competent resolution authority to impose any Resolution Measure.

THE ISSUER'S ESTIMATED VALUE OF THE NOTES ON THE TRADE DATE WILL BE LESS THAN THE ISSUE PRICE OF THE NOTES — The Issuer's estimated value of the notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the notes. The difference between the Issue Price and the Issuer's estimated value of the notes on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the notes through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge. The Issuer's estimated value of the notes is determined by reference to an internal funding rate and our pricing models. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the notes, reduces the economic terms of the notes to you and is expected to adversely affect the price at which you may be able to sell the notes in any secondary market. In addition, our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. If at any time a third party dealer were to quote a price to purchase your notes or otherwise value your notes, that price or value may differ materially from the estimated value of the notes determined by reference to our internal funding rate and pricing models. This difference is due to, among other things, any difference in funding rates, pricing models or assumptions used by any dealer who may purchase the notes in the secondary market.

INVESTING IN THE NOTES IS NOT THE SAME AS INVESTING IN THE SHARES OF THE UNDERLYING OR THE COMPONENT SECURITIES HELD BY THE UNDERLYING — The return on your notes may not reflect the return you would have realized if you had directly invested in the shares of the Underlying or the component securities held by the Underlying.

IF THE PRICE OF THE UNDERLYING CHANGES, THE VALUE OF YOUR NOTES MAY NOT CHANGE IN THE SAME MANNER — Your notes may trade quite differently from the shares of the Underlying and the prices of the component securities held by the Underlying may not result in comparable changes in the value of your notes.

**NO DIVIDEND PAYMENTS OR VOTING RIGHTS** — As a holder of the notes, you will not have any voting rights or rights to receive cash dividends or other distributions or other rights that holders of the component securities held by the Underlying or holders of shares of the Underlying would have.

## THE POLICIES OF THE UNDERLYING ADVISOR AND CHANGES THAT AFFECT THE UNDERLYING OR THE TRACKED INDEX COULD ADVERSELY AFFECT THE VALUE OF THE

NOTES — The policies of the Underlying Advisor concerning the calculation of the Underlying's net asset value ("NAV"), additions, deletions or substitutions of securities or other assets or financial measures held by the Underlying, substitution of the Tracked Index and the manner in which changes affecting how the Tracked Index is calculated are reflected in the Underlying could adversely affect the price of the shares of the Underlying and, therefore, the value of, and your return on, the notes could also be adversely affected if the Underlying Advisor changes these policies, for example, by changing the manner in which it calculates the Underlying's NAV, or if the Underlying Advisor discontinues or suspends calculation or publication of the Underlying's NAV, in which case it may become difficult to determine the value of the notes. If events such as these occur or if the Closing Price of the Underlying is not available on the Final Valuation Date because of a market disruption event or for any other reason, the calculation agent, in certain circumstances, may determine the Closing Price of the Underlying on the Final Valuation Date and the Payment at Maturity in a manner it considers appropriate in its sole discretion.

## THE PERFORMANCE OF THE UNDERLYING, PARTICULARLY DURING PERIODS OF MARKET VOLATILITY, MAY NOT MATCH THE PERFORMANCE OF THE TRACKED INDEX OR ITS NET

ASSET VALUE PER SHARE — The performance of the Underlying may not match the performance of the Tracked Index due to a number of factors. For instance, the Underlying may not hold all or substantially all of the securities included in the Tracked Index and the Underlying Advisor may invest a portion of the Underlying's assets in securities not included in the Tracked Index. Therefore, the performance of the Underlying is generally linked, in part, to assets other than the securities included in the Tracked Index. Additionally, the performance of the Underlying will reflect transaction costs and fees that are not included in the calculation of the Tracked Index.

In addition, because the shares of the Underlying are traded on a securities exchange and are subject to supply and demand, the performance of one share of the Underlying may differ from the performance of the Tracked Index or the Underlying's NAV per share. Furthermore, during periods of market volatility, securities or other assets held by the Underlying may become unavailable in the secondary market due to reduced liquidity or suspensions of, or limitations on, trading, making it difficult for market participants to accurately calculate the NAV per share of the Underlying and/or create, redeem or hedge shares of the Underlying. In such circumstances, the prices at which market participants are willing to buy and sell shares of the Underlying may be significantly lower than the Underlying's NAV and the liquidity of the shares of the Underlying may be materially and adversely affected. Consequently, the performance of the Underlying may deviate significantly from the performance of the Tracked Index or the Underlying's NAV per share. These circumstances may or may not constitute market disruption events and, in either case, your return on the notes may be determined based on the price of the Underlying when it deviates significantly from the performance of the Tracked Index or the Underlying's NAV per share. If this occurs, the value of, and your return on, the notes may be materially and adversely affected.

#### THE EOUITY SECURITIES INCLUDED IN THE TRACKED INDEX ARE CONCENTRATED IN THE

BANKING SECTOR — The Underlying seeks to track the performance of the S&Banks Select Industry® Index. Each of the equity securities included in the Tracked Index has been issued by a company whose primary line of business is directly associated with the banking industry. Because the value of the notes is determined based on the performance of the Underlying Shares, an investment in these notes will be concentrated in this sector. As a result, the value of the notes may be subject to greater volatility and may be more adversely affected by a single economic, political or regulatory occurrence affecting this sector than a different investment linked to notes of a more broadly diversified group of issuers. The performance of companies in the banking sector may be affected by governmental regulation that may limit the amount and types of loans and other financial commitments that banks can make, the interest rates and fees they can charge and the amount of capital they must maintain. Profitability is largely dependent on the availability and cost of capital funds, and can fluctuate significantly when interest rates change. Credit losses resulting from financial difficulties of borrowers can negatively impact the banking sector. Banks may also be subject to severe price competition. The regional banking industry is highly competitive, and thus, failure to maintain or increase market share may adversely affect profitability.

# ANTI-DILUTION PROTECTION IS LIMITED AND THE CALCULATION AGENT MAY MAKE ADJUSTMENTS IN ADDITION TO, OR THAT DIFFER FROM, THOSE SET FORTH IN THE

ACCOMPANYING PRODUCT SUPPLEMENT — The calculation agent will make adjustments to the Share Adjustment Factor, which will initially be set at 1.0, for certain events affecting the shares of the Underlying. The calculation agent is not required, however, to make such adjustments in response to all events that could affect the shares of the Underlying. If such an event occurs that does not require the calculation agent to make an adjustment, the value of the notes may be materially and adversely affected. In addition, you should be aware that the calculation agent may, at its sole discretion, make adjustments to the Share Adjustment Factor or any other terms of the notes that are in addition to, or that differ from, those described in the accompanying product supplement to reflect changes occurring in relation to the Underlying in circumstances where the calculation agent determines that it is appropriate to reflect those changes to ensure an equitable result. Any alterations to the specified anti-dilution adjustments described in the accompanying product supplement may be materially adverse to investors in the notes. You should read "Description of Securities — Anti-Dilution Adjustments for Funds" in the accompanying product supplement in order to understand the adjustments that may be made to the notes.

•THERE IS NO AFFILIATION BETWEEN THE UNDERLYING OR THE UNDERLYING STOCK ISSUERS AND US AND WE HAVE NOT PARTICIPATED IN THE PREPARATION OF, OR VERIFIED,

#### ANY INFORMATION ABOUT ANY OF THE UNDERLYING STOCKS OR UNDERLYING STOCK

ISSUERS — We are not affiliated with the Underlying or the issuers of the component stocks held by the Underlying or underlying the Tracked Index (such stocks, "Underlying Stocks," and the issuers of Underlying Stocks, "Underlying Stock Issuers"). However, we or our affiliates may currently, or from time to time in the future, engage in business with the Underlying Stock Issuers, including extending loans to, making equity investments in, acting as underwriter in connection with future offerings of the Underlying Stocks by, or providing advisory services (including merger and acquisition advisory services) to, such Underlying Stock Issuers. In the course of this business, we or our affiliates may acquire non-public information about the Underlying Stock Issuers and we will not disclose any such information to you. Nevertheless, neither we nor our affiliates have participated in the preparation of, or verified, any information about any of the Underlying Stocks or Underlying Stock Issuers. You, as an investor in the notes, should make your own investigation into the Underlying, Underlying Stocks and the Underlying Stock Issuers. Neither the Underlying nor any of the Underlying Stock Issuers is involved in this offering in any way and none of them has any obligation of any sort with respect to your notes. The Underlying has no obligation to take your interests into consideration for any reason, including when taking any actions that would require the calculation agent to adjust the Share Adjustment Factor, which may adversely affect the value of your notes.

PAST PERFORMANCE OF THE UNDERLYING IS NO GUIDE TO FUTURE PERFORMANCE — The actual performance of the Underlying over the term of the notes may bear little relation to the historical closing prices of the Underlying

and/or the hypothetical return examples set forth elsewhere in this pricing supplement. We cannot predict the future performance of the Underlying or whether the performance of the Underlying will result in the return of any of your investment.

ASSUMING NO CHANGES IN MARKET CONDITIONS AND OTHER RELEVANT FACTORS, THE PRICE YOU MAY RECEIVE FOR YOUR NOTES IN SECONDARY MARKET TRANSACTIONS WOULD GENERALLY BE LOWER THAN BOTH THE ISSUE PRICE AND THE ISSUER'S ESTIMATED **VALUE OF THE NOTES ON THE TRADE DATE** — While the payment(s) on the notes described in this pricing supplement is based on the full Face Amount of notes, the Issuer's estimated value of the notes on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the notes. The Issuer's estimated value of the notes on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your notes in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the notes from you in secondary market transactions, if at all, would generally be lower than both the Issue ·Price and the Issuer's estimated value of the notes on the Trade Date. Our purchase price, if any, in secondary market transactions would be based on the estimated value of the notes determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the notes and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our notes for use on customer account statements would generally be determined on the same basis. However, during the period of approximately six months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the notes on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

In addition to the factors discussed above, the value of the notes and our purchase price in secondary market transactions after the Trade Date, if any, will vary based on many economic and market factors, including our creditworthiness, and cannot be predicted with accuracy. These changes may adversely affect the value of your notes, including the price you may receive in any secondary market transactions. Any sale prior to the Maturity Date could result in a substantial loss to you. The notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your notes to maturity.

THE NOTES WILL NOT BE LISTED AND THERE WILL LIKELY BE LIMITED LIQUIDITY — The notes will not be listed on any securities exchange. There may be little or no secondary market for the notes. We or our affiliates intend to act as market makers for the notes but are not required to do so and may cease such market making activities at any time. Even if there is a secondary market, it may not provide enough liquidity to allow you to sell the notes when you wish to do so or at a price advantageous to you. Because we do not expect other dealers to make a secondary market for the notes, the price at which you may be able to sell your notes is likely to depend on the price, if any, at which we or our affiliates are willing to buy the notes. If, at any time, we or our affiliates do not act as market makers, it is likely that there would be little or no secondary market in the notes. If you have to sell your notes prior to maturity, you may not be able to do so or you may have to sell them at a substantial loss, even in cases where the price of the Underlying has increased since the Trade Date.

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MANY ECONOMIC AND MARKET FACTORS WILL AFFECT THE VALUE OF THE NOTES — While we expect that, generally, the price of the Underlying will affect the value of the notes more than any other single factor, the value of the notes prior to maturity will also be affected by a number of other factors that may either offset or magnify each other, including:

magnify each other, including:
whether the closing price of the Underlying on any day during the Monitoring Period is less than the Knock-Out Price, thereby causing a Knock-Out Event;
the expected volatility of the Underlying;
the time remaining to the maturity of the notes;
the market prices and dividend rates of the shares of the Underlying and of the component securities held by the Underlying;
the composition of the Underlying;
the occurrence of certain events affecting the Underlying that may or may not require an anti-dilution adjustment;
interest rates and yields in the markets generally;
geopolitical conditions and economic, financial, political, regulatory or judicial events that affect the Underlying, the Tracked Index or the markets generally;
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supply and demand for the notes; and

our creditworthiness, including actual or anticipated downgrades in our credit ratings.

During the term of the notes, it is possible that their value may decline significantly due to the factors described above even if the price of the Underlying remains unchanged from the Initial Price, and any sale prior to the Maturity Date could result in a substantial loss to you. You must hold the notes to maturity to receive the stated payout from the Issuer.

### TRADING AND OTHER TRANSACTIONS BY US, JPMORGAN CHASE & CO. OR OUR OR ITS AFFILIATES IN THE EQUITY AND EQUITY DERIVATIVE MARKETS MAY IMPAIR THE VALUE OF

**THE NOTES** — We or our affiliates expect to hedge our exposure from the notes by entering into equity and equity derivative transactions, such as over-the-counter options, futures or exchange-traded instruments. We, JPMorgan Chase & Co. or our or its affiliates may also engage in trading in instruments linked or related to the Underlying on a regular basis as part of our or their general broker-dealer and other businesses, for proprietary accounts, for other accounts under management or to facilitate transactions for customers, including block transactions. Such trading and hedging activities may adversely affect the price of the Underlying and, therefore, make it less likely that you will receive a positive return on your investment in the notes. It is possible that we, JPMorgan Chase & Co. or our or its affiliates could receive substantial returns from these hedging and trading activities while the value of the notes declines. We, JPMorgan Chase & Co. or our or its affiliates may also issue or underwrite other securities or financial or derivative instruments with returns linked or related to the Underlying. To the extent we, JPMorgan Chase & Co. or our or its affiliates serve as issuer, agent or underwriter for such securities or financial or derivative instruments, our, JPMorgan Chase & Co.'s or our or its affiliates' interests with respect to such products may be adverse to those of the holders of the notes. Introducing competing products into the marketplace in this manner could adversely affect the price of the Underlying and the value of the notes. Any of the foregoing activities described in this paragraph may reflect trading strategies that differ from, or are in direct opposition to, investors' trading and investment strategies related to the notes.

WE, JPMORGAN CHASE & CO. OR OUR OR ITS AFFILIATES MAY PUBLISH RESEARCH, EXPRESS OPINIONS OR PROVIDE RECOMMENDATIONS THAT ARE INCONSISTENT WITH INVESTING IN OR HOLDING THE NOTES. ANY SUCH RESEARCH, OPINIONS OR RECOMMENDATIONS COULD ADVERSELY AFFECT THE PRICE OF THE UNDERLYING AND THE VALUE OF THE NOTES — We,

JPMorgan Chase & Co. or our or its affiliates may publish research from time to time on financial markets and other matters that could adversely affect the price of the Underlying and the value of the notes or express opinions or provide recommendations that are inconsistent with purchasing or holding the notes. Any research, opinions or recommendations expressed by us, JPMorgan Chase & Co. or our or its affiliates may not be consistent with each other and may be modified from time to time without notice. You should make your own independent investigation of the merits of investing in the notes and the Underlying.

•POTENTIAL CONFLICTS OF INTEREST — We and our affiliates play a variety of roles in connection with the issuance of the notes, including acting as calculation agent, hedging our obligations under the notes and determining the Issuer's estimated value of the notes on the Trade Date and the price, if any, at which we or our affiliates would be willing to purchase the notes from you in secondary market transactions. In performing these roles, our economic

interests and those of our affiliates are potentially adverse to your interests as an investor in the notes. The calculation agent will determine, among other things, all values, prices and levels required to be determined for the purposes of the notes on any relevant date or time. The calculation agent also has some discretion about certain adjustments to the Share Adjustment Factor and will be responsible for determining whether a market disruption event has occurred as well as, in some circumstances, the prices or levels related to the Underlying that affect whether a Knock-Out Event has occurred. Any determination by the calculation agent could adversely affect the return on the notes.

#### THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE NOTES ARE

**UNCERTAIN** — There is no direct legal authority regarding the proper U.S. federal income tax treatment of the notes, and we do not plan to request a ruling from the IRS. Consequently, significant aspects of the tax treatment of the notes are uncertain, and the IRS or a court might not agree with the treatment of the notes as prepaid financial contracts that are not debt. If the IRS were successful in asserting an alternative treatment for the notes, the tax consequences of ownership and disposition of the notes could be materially and adversely affected.

Even if the treatment of the notes as prepaid financial contracts is respected, purchasing a note could be treated as entering into a "constructive ownership transaction." In that case, all or a portion of any long-term capital gain you would otherwise recognize on the taxable disposition of the note would be recharacterized as ordinary income to the extent such gain exceeded the "net underlying long-term capital gain," and a notional interest charge would apply with respect to the deemed tax liability that would have been incurred if such income had accrued at a constant rate over the period you held the note.

As described above under "Tax Consequences," in 2007 the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid"

forward contracts" and similar instruments. Any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the notes, possibly with retroactive effect. You should review carefully the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences," and consult your tax adviser regarding the U.S. federal tax consequences of an investment in the notes (including possible alternative treatments, the potential application of the "constructive ownership" regime and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

#### **Use of Proceeds and Hedging**

Part of the net proceeds we receive from the sale of the notes will be used in connection with hedging our obligations under the notes through one or more of our affiliates. The hedging or trading activities of our affiliates on or prior to the Trade Date or during the Monitoring Period (including on the Final Valuation Date) could adversely affect the price of the Underlying and, as a result, could decrease the amount you may receive on the notes at maturity.

#### The SPDR® S&P® Bank ETF

We have derived all information contained in this pricing supplement regarding The SPDR® S&P® Bank ETF, including, without limitation, its make-up, method of calculation and changes in its components, from publicly available information. We have not participated in the preparation of, or verified, such information. Such information reflects the policies of, and is subject to change by SPDR® Series Trust (the "**Trust**") and SSFM. The Underlying is an investment portfolio maintained and managed by SSFM, the investment advisor to the Underlying.

The Trust is a registered investment company that consists of numerous separate investment portfolios, including the Underlying. Information provided to or filed with the SEC by the Trust pursuant to the Securities Act of 1933, as amended, or the Investment Company Act of 1940, as amended, can be located by reference to SEC file numbers 333-57793 and 811-08839, respectively, through the SEC's website at.http://www.sec.gov. For additional information regarding the Trust, SSFM and the Underlying, please see the prospectus for The Select Industry SPDR® ETFs.

The SPDR® S&P® Bank ETF seeks to provide investment results that, before fees and expenses, correspond generally to the total return performance of the S&P® Banks Select Industry® Index. In seeking to track the performance of the Tracked Index, the Underlying employs a sampling strategy, which means that the Underlying is not required to purchase all of the securities represented in the Tracked Index. Instead, the Underlying may purchase a subset of the securities represented in the Tracked Index in an effort to hold a portfolio of securities with generally the same risk and return characteristics of the Tracked Index. Under normal market conditions, the Underlying generally invests substantially all, but at least 80%, of its total assets in the securities composing the Tracked Index. The Underlying is an exchange traded fund that trades on the NYSE Arca under the ticker symbol "KBE."

The Tracked Index is a modified equally weighted index that is designed to measure the performance of the bank sub-industry portion of the S&P TMI. The S&P TMI offers broad market exposure to companies of all market capitalization, including all common equities listed on the NYSE (including NYSE Arca), the NYSE MKT, the NASDAQ Global Select Market, the NASDAQ Select Market and the NASDAQ Capital Market. Only U.S. companies are eligible for inclusion in the S&P TMI. The companies included in the Tracked Index are selected on the basis of being classified under the Global Industry Classification Standard (GICS) as Asset Management &Custody Banks, Diversified Banks, Regional Banks, Other Diversified Financial Services and Thrifts & Mortgage Finance companies as well as meeting float-adjusted liquidity ratio and float-adjusted market capitalization requirements. The Tracked Index is reported by Bloomberg under the ticker symbol "SPSIBK." This is only a summary of the S&P® Banks Select Industry® Index. For information regarding the composition, calculation methodology and adjustment policy for the S&P® Banks Select Industry® Index, please see the section entitled "The S&P Select Industry Indices" in the accompanying underlying supplement No. 1 dated August 17, 2015.

#### **Historical Information**

The following graph sets forth the historical performance of the SPDR® S&P® Bank ETF based on its daily closing prices from June 7, 2011 through June 7, 2016. The closing price of the Underlying on June 7, 2016 was \$33.16. The graph below shows a hypothetical Knock-Out Price equal to 62.00% of \$33.16, which was the closing price of the Underlying on June 7, 2016. The actual Initial Price and Knock-Out Price will be determined on the Trade Date. We obtained the historical closing prices of the Underlying below from Bloomberg L.P. and we have not participated in the preparation of, or verified, such information.

The historical closing prices of the Underlying should not be taken as an indication of future performance and no assurance can be given as to the closing price of the Underlying on any day during the Monitoring Period (including on the Final Valuation Date). We cannot give you assurance that the performance of the Underlying will result in the return of any of your initial investment.

#### **Supplemental Plan of Distribution**

JPMorgan Chase Bank, N.A. and JPMS LLC or one of its affiliates will act as placement agents for the notes. The placement agents will receive a fee from the Issuer that will not exceed \$20.00 per \$1,000 Face Amount of notes, but will forgo any fees for sales to certain fiduciary accounts. See "Plan of Distribution (Conflicts of Interest)" in the accompanying product supplement.

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sentation. You should read the financial statement data in conjunction with the discussion in Management s Discussion and Analysis of Financial Condition and Results of Operations and the financial statements and notes thereto included elsewhere in this filing. Our historical results are not necessarily indicative of results to be expected for any future period.

#### Year Ended June 30,

	2000	2001	2002	2003	2004
		(in thousan	ds, except per	share data)	
Statements of Operations Data:					
Revenues:					
Product sales	\$ 259	\$ 5,997	\$14,991	\$ 19,518	\$43,605
Other revenues	126				
	385	5,997	14,991	19,518	43,605
Cost and expenses:		,	,	,	,
Cost of product sales	503	1,905	3,557	6,983	11,460
Research and development	4,048	4,873	6,772	6,670	9,108
Selling, General and administrative	6,282	9,542	12,823	18,117	24,833
2					
	10,833	16,320	23,152	31,770	45,401
Loss from operations	(10,448)	(10,323)	(8,161)	(12,252)	(1,796)
Interest income, net	656	1,309	1,257	574	275

Loss before income tax Income taxes	(9,792) 13	(9,014)	(6,904)	(11,678)	(1,521)
Net loss	\$ (9,805)	\$ (9,014)	\$ (6,904)	\$(11,678)	\$ (1,521)
Net loss per common share-basic and	Φ (0.00)	¢ (0.70)	¢ (0.40)	¢ (0.92)	¢ (0.10)
diluted	\$ (0.89)	\$ (0.70)	\$ (0.49)	\$ (0.82)	\$ (0.10)
Shares used in computing basic and					
diluted net loss per common share	11,071	12,884	14,084	14,175	14,869
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As	of	.]	une	30	
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	2000	2001	2002	2003	2004			
	(in thousands)							
<b>Balance Sheet Data:</b>								
Current assets:								
Cash and cash equivalents	\$ 4,736	\$ 1,843	\$ 2,024	\$ 3,065	\$ 45,326			
Marketable securities	4,972	15,080	18,437	13,625	68,777			
Accounts receivable, net	30	3,347	4,286	2,815	4,733			
Inventory	639	1,811	2,099	2,080	6,785			
Other current assets		1,085	<u>776</u>	<u>779</u>	2,336			
Total current assets	10,606	23,166	27,622	22,364	127,957			
Marketable securities - noncurrent.	,	14,424	3,720	913	908			
Property, plant, and equipment, net	446	1,503	1,785	1,889	1,527			
Patent fees, net	959	1,025	1,198	1,323	1,785			
Goodwill	449	359	359	359	359			
Total assets	\$12,460	\$40,477	\$34,684	\$26,848	\$132,536			
Current liabilities Accounts payable	401	1,612	1,770	2,685	6,490			
Accrued compensation payable	137	209	510	2,029	2,891			
Accrued clinical study and research costs	214	148	152	603	1,002			
Other accrued liabilities	152	70	2	102	214			
Due to customers	409	135	-	102	211			
Allowance for sales returns	107	205	226	337	100			
Deferred income	64							
Total current liabilities	1,377	2,379	2,660	5,756	10,697			
Long-term liabilities				650	100			
Total shareholders equity	11,083	38,098	32,024	20,442	121,739			

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### ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the Selected Financial Data and the accompanying financial statements and the related notes included elsewhere in this filing.

#### Overview

We are a specialty pharmaceutical company engaged in the discovery, development and commercialization of innovative therapeutic products to treat the unmet medical needs of patients with debilitating conditions and life-threatening diseases. Our current commercial and therapeutic focus is in nephrology utilizing Hectorol®, our novel vitamin D hormone therapy, to treat secondary hyperparathyroidism in patients with moderate to severe chronic kidney disease and end-stage renal disease. Secondary hyperparathyroidism is a disease characterized by excessive secretion of parathyroid hormone which, if left untreated, can eventually result in cardiovascular disease, reduced immune system function, muscle weakness and bone disease, including mineral loss and fractures. Many patients with moderate to severe chronic kidney disease and most end-stage renal disease patients suffer from this disease. Hectorol®, a safe and effective vitamin D pro-hormone therapy in the management of secondary hyperparathyroidism in moderate to severe chronic kidney disease and end-stage renal disease, reduces elevated levels of parathyroid hormone while maintaining consistent levels of vitamin D with a low incidence of adverse events. Vitamin D therapies are currently used to treat patients with a variety of diseases, including kidney disease, osteoporosis and psoriasis, and research has shown that they may be useful in treating certain cancers such as prostate, breast and colon. Our principal clinical development programs focus on chronic kidney disease and hyperproliferative disorders such as cancer and psoriasis.

From our inception in 1984, we have generated revenues primarily from the sale of our products, and from our inception substantially all of our resources have been dedicated to:

the development, patenting, pre-clinical testing, and clinical trials of Hectorol® Capsules and Hectorol® Injection;

the development of manufacturing processes for Hectorol® Capsules and Hectorol® Injection;

pursuing U.S. regulatory approvals of Hectorol® Capsules and Hectorol® Injection;

the sales and marketing associated with the launch of Hectorol® Capsules and Hectorol® Injection; and

research and development and pre-clinical testing of other potential product candidates.

Historically we have incurred losses since we began operating. In both the third and fourth fiscal quarters of 2004, we generated profits from operations, however, for the fiscal year ended June 30, 2004 we were unprofitable. As of June 30, 2004 we had an accumulated deficit of approximately \$54.7 million. Our only sources of revenue have been:

from the launch of Hectorol® 2.5 mcg Capsules and Hectorol® Injection;

licensing fees associated with our early stage research collaborations, which licenses have since expired; and

fees from conducting incidental laboratory assay services.

We estimate that total operating expenses will continue to increase in fiscal 2005. Further, development of LR-103, BCI-202 and other product candidates, or expansion of Hectorol<sup>®</sup> into other therapeutic areas, will require significant, time-consuming and costly research and development, pre-clinical testing and extensive clinical trials prior to

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submission of any regulatory application for commercial use. We plan to continue pre-clinical testing of LR-103 and BCI-202 and began Phase I clinical trials on LR-103 in February 2004. The amount and timing of our operating expenses will depend on many factors, including:

the extent to which Hectorol® Capsules and Hectorol® Injection obtain expanded market acceptance;

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the costs of sales and marketing activities associated with Hectorol® Capsules and Hectorol® Injection and commercialization strategies with respect to Hectorol® 0.5 mcg Capsules;

the success of our co-promotion results with Cardinal Health for the Hectorol<sup>®</sup> 0.5 mcg Capsules;

the status of our research and development activities;

the costs involved in preparing, filing, prosecuting, maintaining, protecting and enforcing our patent claims and other proprietary rights;

our ability to maintain our current manufacturing capabilities through relationships with third parties or establish those capabilities internally;

technological and other changes in the competitive landscape; and

evaluation of the commercial viability or potential of product candidates, which could significantly affect future expenditures for sales, marketing and product development.

As a result, we believe that period-to-period comparisons of our financial results are not necessarily meaningful.

On June 14, 2004, we entered into a multi-year co-promotion agreement for the launch and commercialization of Hectorol® 0.5 mcg Capsules with nephrologists in pre-dialysis Stages 3 and 4 chronic kidney disease. Under the terms of the agreement, Cardinal Health PTS, LLC will provide contract sales force and medical communication services to support a specified level of promotion. We will sell Hectorol® 0.5 mcg Capsules through its distribution network and support the promotional effort through its nephrology focused sales force with an additional specified level of investment. For its efforts, Cardinal Health will receive a variable co-promotion fee based on the performance of Hectorol® 0.5 mcg Capsule sales. The fee as a percentage of Hectorol® 0.5 mcg Capsule revenue declines gradually over the term of the agreement. Initial sales of Hectorol® 0.5mcg Capsules are planned for the first quarter of fiscal 2005. Based on the terms of the variable co-promotion fee, Cardinal Health rather than us bears a significant portion of the costs of the product launch. As a result, we do not expect to realize any losses and depending on the success of the launch in 2005, may not realize significant profits in 2005.

#### **Critical Accounting Policies and Estimates**

Our significant accounting policies are described in Note 1 to the Notes to the Financial Statements included elsewhere in this filing. Those financial statements have been prepared in accordance with accounting principles generally accepted in the U.S. The preparation of those financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. On an on-going basis, we evaluate our estimates, including those related to our provision for sales returns and allowances, allowance for doubtful accounts, and our estimate of excess and obsolete inventory. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis of judgments regarding the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Sales Returns and Allowances

Revenue is recognized when product is shipped into the marketplace. When revenue is recognized, we simultaneously record an estimate of various costs, which reduce product sales. These costs include estimates for product returns, chargebacks, rebates, and discounts. Estimates are based on a variety of factors including historical

return experience, rebate and chargeback agreements, inventory levels at our wholesale customers, and estimated sales by our wholesale customers to other third parties who have contracts with us. Actual experience associated with any of these items may differ materially from our estimates. Factors are reviewed that influence our estimates and, if necessary, adjustments are made when we believe that actual product returns, chargebacks, rebates, and discounts may differ from established reserves.

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#### Allowance for Doubtful Accounts

An allowance is maintained for estimated losses resulting from the inability of customers to make required payments. Credit terms are extended on an uncollateralized basis primarily to wholesale drug distributors and independent clinics throughout the U.S. Management specifically analyzes accounts receivable, historical bad debts, customer credit-worthiness, percentage of accounts receivable by aging category, and changes, if any, in customer payment terms when evaluating the adequacy of the allowance for doubtful accounts. If the financial condition of our customers were to deteriorate, resulting in impairment in their ability to make payments, additional allowances may be required. Our actual losses from uncollectible accounts have been immaterial to date.

#### **Excess and Obsolete Inventory**

Inventories are stated at the lower of cost or market, with cost determined on the first-in, first-out method. In evaluating whether inventory is stated at the lower of cost or market, management considers such factors as the amount of inventory on hand, expiration dates, and the estimated time to sell such inventory. As appropriate, provisions are made to reduce inventories to their net realizable value. Cost of inventories that potentially may not sell prior to expiration or are deemed of no commercial value have been written-off when identified.

#### Cost of Inventory

Finished goods inventories are recorded at standard cost and reflect the average actual costs. Hectorol® Injection inventory is manufactured and purchased under a contract with calendar year terms that specifies base price per unit and the volume rebate scale. Based on annual forecasts and the contract terms, the average annual net cost per unit is calculated and recognized for finished goods inventory and cost of product sales. The actual rebate received may differ based upon differences between our forecasted purchases and actual purchases.

#### **Income Taxes**

We currently have significant deferred tax assets, resulting primarily from net operating loss carryforwards and tax credit carryforwards. These deferred tax assets may reduce taxable income in future periods. A valuation allowance is required when it is more likely than not that all or a portion of a deferred tax asset will not be realized. Forming a conclusion that a valuation allowance is not needed is difficult when there are cumulative losses in recent years, as cumulative losses weigh heavily in the overall assessment of the need for a valuation allowance.

We expect to continue to maintain a full valuation allowance on future tax benefits until an appropriate level of profitability is sustained. Achieving sufficient profitability is dependent upon success in our commercial operations, including growth in sales of Hectorol® and our historical performance of achieving and sustaining profitability. At the point in which we would have realized a cumulative profit over a period of three consecutive fiscal years, we would expect to have a sufficient basis for concluding that some or all of the deferred tax assets would be realized and we may reduce some or all of the valuation allowance. We would report any reduction in the valuation allowance as an income tax benefit in our statement of operations.

During any period in which we continue to maintain a full valuation allowance against deferred tax assets, we would generally not report any income tax provision in our statement of operations during a profitable period and would not report any income tax benefit during a loss period. If we reach the point such that we no longer require a valuation allowance on future tax benefits, we would expect subsequent periods would reflect a tax provision in the statement of operations based on the statutory income tax rates.

#### Results of Operations for Fiscal Year Ended June 30, 2004 compared to June 30, 2003

Product sales of Hectorol® (Injection and Capsules) were \$43,604,628 for the year ended June 30, 2004, an increase of \$24,086,354, or 123%, from the year ended June 30, 2003. Sales of Hectorol® Injection were \$38,749,562 for the year ended June 30, 2004, an increase of \$23,627,338, or 156%, from the year ended June 30, 2003. The increase in sales of Hectorol® Injection for fiscal year 2004 was primarily the result of:

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The efforts of an expanded and experienced sales force and contract initiatives with national dialysis companies (approximately \$16.1 million);

A price increase effective July 1, 2003 (approximately \$7.4 million);

The implementation of new and effective marketing programs; and

Manufacturing constraints in the first and second quarters of 2003.

Hectorol® Capsules sales were \$4,855,066 for the year ended June 30, 2004, compared to \$4,396,050 for the year ended June 30, 2003. The increase was due primarily to a price increase implemented in July 2003, a decrease in product returns, and prescription growth.

Gross margin on sales of Hectorol® was \$32,144,668, or 74% of product sales, for the year ended June 30, 2004, compared to \$12,535,099, or 64% of product sales for the year ended June 30, 2003. Gross margins for Hectorol® Injection and Hectorol® Capsules were 73% and 81% respectively, for 2004 compared to 59% and 83%, respectively, for 2003. The increase in gross margins was due to increased sales levels and reductions in manufacturing validation costs primarily for Hectorol® Injection.

Research and development (R&D) expense was \$9,107,472 for the year ended June 30, 2004, an increase of \$2,437,441, or 37%, from the year ended June 30, 2003. The increase in R&D expense was primarily due to purchases of LR-103 active pharmaceutical ingredients for clinical and preclinical research of approximately \$1.0 million, personnel expenses primarily for senior management additions of approximately \$0.5 million, expansion of our clinical support activities of approximately \$0.7 million, and for consulting support of approximately \$0.3 million.

Selling, general and administrative (SG&A) expense was \$24,833,152 for the year ended June 30, 2004, an increase of \$6,715,716, or 37%, from the year ended June 30, 2003. The increase in SG&A expense was primarily due to the planned expansion of our sales organization representing \$2.5 million, marketing promotional programs representing approximately \$1.7 million, consulting and marketing research expenses related to strategic business activities of approximately \$0.7 million, recruitment fees and compensation expense for our board of directors including non-cash stock option expense of approximately \$0.4 million, severance expenses for the former Vice President of Finance of approximately \$0.4 million, an increase in management incentive compensation of approximately \$0.4 million, expenses associated with the recruitment, hiring, and relocation of the new Vice President of Finance of approximately \$0.2 million, and professional legal fees of approximately \$0.2 million principally related to an increase in contractual, personnel and corporate governance activity.

Interest income was \$274,795 for the year ended June 30, 2004, a decrease of \$299,600 from the year ended June 30, 2003. The decrease was primarily due to lower average cash and marketable securities balances for the year ended June 30, 2004, as well as a decline in yield on our investments due to market conditions.

#### Results of Operations for Fiscal Year Ended June 30, 2003 compared to June 30, 2002

Product sales of Hectorol® increased to \$19,518,274 for the year ended June 30, 2003, from \$14,990,749 for the year ended June 30, 2002. This increase resulted from increased sales of Hectorol® Injection offset by a decrease in sales of Hectorol® Capsules. Hectorol® Injection, launched in August 2000, generated sales of \$15,122,224 during the year ended June 30, 2003 compared to \$9,448,115 in the year ended June 30, 2002, reflecting increased market acceptance in spite of our inability to supply Hectorol® Injection for approximately three months between December 2002 and March 2003. Hectorol® Capsule sales were \$4,396,050 for the year ended June 30, 2003, compared to \$5,542,634 for the year ended June 30, 2002. Fiscal year 2002 Hectorol® Capsule revenues benefited from a temporary supply shortage of the competitive drug Rocaltrol between August and December 2001.

Gross margins on product sales were \$12,535,099, or 64% of product sales, for the year ended June 30, 2003 compared to \$11,434,062, or 76% of product sales, for the year ended June 30, 2002. The gross margin on Hectorol® Injection sales was 59% and 71% for the years ended June 30, 2003 and 2002, respectively. The gross margin on Hectorol® Capsule sales was 83% and 85% for the years ended June 30, 2003 and 2002, respectively. Overall gross margins were lower as a percentage of sales in fiscal year 2003 compared to fiscal year 2002 due to an increased cost of Hectorol® Injection supplied by Draxis Pharma Inc. as compared to Akorn, Inc. of approximately 34%, increased spending for quality assurance of approximately \$0.5 million, and costs associated with the validation activities for the Hectorol® Injection manufacturing processes of approximately \$1.1 million.

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R&D expense was \$6,670,031 in the year ended June 30, 2003, compared to \$6,772,553 in the year ended June 30, 2002. The \$102,522 decrease is attributable to a decrease in clinical support staff offset by consulting expenses related to validating computer network systems used in operating clinical software and internal costs to file a supplemental new drug application (NDA) for Hectorol® 0.5mcg Capsules.

SG&A expense was \$18,117,436 for the year ended June 30, 2003, an increase of \$5,294,860 from the year ended June 30, 2002. The increase was primarily due to market research and promotional spending for Hectorol® of approximately \$2.7 million, the personnel expenses related to the recruitment, hiring and relocation of senior management personnel of approximately \$2.0 million, insurance premiums for property, casualty and liability policies of approximately \$0.4 million and legal fees of approximately \$0.3 million.

Interest income decreased \$682,776 to \$574,395 in the year ended June 30, 2003, from \$1,257,171 in the year ended June 30, 2002. The decrease was due to lower average cash and marketable security balances for the year ended June 30, 2003, as well as a decline in yield on our investments.

#### **Research and Development**

Research and development efforts are focused on developing and evaluating the clinical utility of Hectorol<sup>®</sup>, LR-103, and BCI-202 in secondary hyperparathyroidism and hyperproliferative diseases, as well as developing additional products and product candidates. All research and development costs are expensed as incurred, which include, but are not limited to, personnel, lab supplies, preclinical and clinical studies, active ingredients for use in clinical trial drugs, manufacturing costs, sponsored research at other labs, consulting, and research-related overhead. For the years ended June 30, 2004, June 30, 2003, and June 30, 2002, we have spent \$9,107,472, \$6,670,031, and \$6,772,552, respectively, on R&D expenses. The major portion of these expenses were for personnel in research, clinical development, clinical support and regulatory compliance. In addition, we purchased approximately \$1.0 million of LR-103 in 2004 for use in preclinical research and clinical trials.

The expense of research and clinical trial projects has not, on a project basis, been significant in 2004. The addition of new projects and trials and the future development of LR-103 and BCI 202 may have a material impact on our future operations, financial position, and liquidity. The impact of these projects, if any, are difficult to predict due to their early stage of progress and uncertainty.

### **Liquidity and Capital Resources**

We require cash to fund our operations, make capital expenditures and for strategic investments. In May and June 2004, we completed an offering of five millon shares of common stock which resulted in approximately \$101.4 of net proceeds. Our cash and cash equivalents, marketable securities and noncurrent marketable securities balances as of June 30, 2004 were \$45,325,671, \$68,776,698 and \$908,376, respectively, totaling \$115,010,745, an increase of \$97,407,300 from the June 30, 2003 balances. Our cash and investments are invested in highly liquid, interest-bearing, investment grade and government securities in order to preserve principal.

Cash used in operating activities was \$4,120,868 for the year ended June 30, 2004 primarily to fund the net operating loss of \$1,521,161, for inventory purchases of our products and to pay liabilities, principally management bonus compensation related to the fiscal year ended June 30, 2003.

We used \$498,506 in cash for the purchase of capital assets, primarily computer and laboratory equipment. Our cash position was enhanced by \$1,014,932 and \$184,349 primarily from the exercise of stock options and for vehicle sales that were leased back, respectively.

Our cash and investments to-date and our profits in the third and fourth quarters of the fiscal year ended June 30, 2004 have been used to fund our operations and capital needs. We anticipate that annual expenditures for our active pharmaceutical ingredient, contract manufacturing, research projects, development of our current and planned products, regulatory activity, growth of our sales force, expansion of our marketing programs and development of the infrastructures to accommodate the planned growth and development, will increase in future years. Although we believe that our current cash and investments and our planned profits from product sales will be adequate to sustain our operations at least until June 30, 2005, there can be no assurance that we will be able to maintain profitability or positive

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cash flow from operations. We may require additional financing in the future to finance strategic investments, capital acquisitions and anticipated growth and development of existing and new products. As in the past, we plan to finance these activities largely through equity or debt financing and/or strategic or corporate collaborations. There can be no assurance that additional equity or debt financing or corporate collaborations will be available on terms acceptable to us, if at all. Our failure to maintain profitability or to raise additional capital on acceptable terms if and when needed could have a material adverse effect on our business, financial condition and results of operations.

We currently have no internal manufacturing capabilities. We rely on third party contractors to produce our active pharmaceutical ingredient and for the subsequent manufacturing and packaging of finished drug products. We purchase our active pharmaceutical ingredient from a sole supplier, although we are currently in the process of obtaining regulatory approval for an additional supplier. In addition, we rely on one manufacturer for Hectorol® Injection, one supplier to formulate Hectorol® Capsules and another supplier to package Hectorol® Capsules. Although other manufacturers, suppliers, formulators and vendors may be available to provide these goods and services to us, any change in suppliers could cause a delay in manufacturing and a possible loss of sales, which would affect operating results adversely. All of our suppliers have FDA-inspected facilities that are required to operate under current Good Manufacturing Practices regulations established by the FDA. These regulations govern all stages of the drug manufacturing process and are intended to assure that drugs produced will have the identity, strength, quality and purity represented in their labeling for all intended uses. If we were to establish a our own manufacturing facility, we would need additional funds and would have to hire and train additional personnel and comply with the extensive regulations applicable to the facility. We believe that our relationships with our suppliers are good.

We lease approximately 34,000 square feet of office and laboratory space in Middleton, Wisconsin. In June 2004, we entered into a new lease for new and existing space for approximately the same square footage within the current facility. This lease will become effective on our date of occupancy of the new space and has a term of five years. We expect to occupy the new space before the end of calendar year 2004. In conjunction with the construction of the new space, we plan to incur some costs related to leasehold improvements, furniture and computer equipment. The cash required for these planned capital purchases is not expected to have a significant negative impact on the existing cash and investment balances.

At June 30, 2004, we had state tax net operating loss carryforwards of approximately \$46,036,000 and state research and development tax credit carryforwards of approximately \$756,000, which will begin expiring in 2006 and 2012, respectively. We also had federal net operating loss carryforwards of approximately \$50,872,000 and research and development tax credit carryforwards of approximately \$2,394,000, which will begin expiring in 2011 and 2013, respectively.

#### **Contractual Obligations and Commitments**

As outlined in Note 6 of the Notes to Financial Statements included in this annual report on Form 10-K, we have entered into various contractual obligations and commercial commitments. The following table summarizes these contractual obligations as of June 30, 2004:

	Total	Less Than 1 Year	2-3 Years	4-5 Years	More Than 5 Years
Purchase Commitment (1) Operating Lease	\$ 9,042,714	\$ 9,042,714	\$	\$	\$
Obligations (2)	5,032,481 123,998	1,061,824 55,876	2,103,499 68,122	1,602,494	264,664

Capital Lease Obligations

(3)

Total \$14,199,193 \$10,160,414 \$2,171,621 \$1,602,494 \$264,464

- (1) Purchase commitments for purchases of the active pharmaceutical ingredients used in Hectorol® production and clinical and preclinical research, commitments for the manufacture of Hectorol® Injection and Hectorol® Capsules, and other service commitments, including consulting contracts, in the ongoing operations of the company.
- (2) Represents primarily office and laboratory facilities in Middleton, Wisconsin and operating leases, primarily for fleet vehicles used by field personnel.
- (3) Represents fleet vehicles used by field personnel that were sold and leased back.

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#### **Recent Accounting Pronouncements**

In December 2003, the Financial Accounting Standards Board (FASB) issued Interpretation 46R (FIN 46R), a revision to Interpretation 46 (FIN 46), *Consolidation of Variable Interest Entities*. FIN 46R clarifies some of the provisions of FIN 46 and exempts certain entities from its requirements. FIN 46R is effective at the end of the first interim reporting period ending after March 15, 2004. Entities that have adopted FIN 46 prior to this effective date can continue to apply the provisions of FIN 46 until the effective date of FIN 46R or the early adoption of FIN 46R. The adoption of FIN 46R had no impact on our financial statements.

In March 2004, the FASB ratified the recognition and measurement guidance and certain disclosure requirements for impaired securities as described in Emerging Issues Task Force (EITF) Issue No. 03-1, The Meaning of Other-Than-Temporary Impairment and its Application to Certain Investments. The recognition and measurement guidance will be applied to other-than-temporary impairment evaluations in reporting periods beginning with our first fiscal quarter 2005. We do not believe the adoption of the recognition and measurement guidance in EITF Issue No. 03-1 will have a material impact on our financial statements.

### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our sales from inception to date have been made solely to U.S. customers and, as a result, we have not had any exposure to factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets. However, in future periods, we expect to sell in foreign markets, including Europe and Asia. Because our sales are made in U.S. dollars, a strengthening of the U.S. dollar could make our products less competitive in foreign markets.

As of June 30, 2004, we held \$68,776,698 of short-term marketable securities and \$908,376 of long-term marketable securities. The investments have been made for investment (as opposed to trading) purposes. Interest rate risk with respect to our investments is not significant because all such investments are U.S. dollar denominated and are:

short-term investments, which are by their nature less sensitive to interest rate movements, or

less than \$1 million of our investments have maturities in excess of one year and those securities are expected to be held to maturity, thereby eliminating the risks associated with interest rate changes.

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## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

## BONE CARE INTERNATIONAL, INC.

### INDEX TO FINANCIAL STATEMENTS

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Statements of Operations for the Years Ended June 30, 2002, 2003 and 2004	40
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Statements of Cash Flows for the Years Ended June 30, 2002, 2003 and 2004	42
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#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of Bone Care International, Inc.:

We have audited the accompanying balance sheets of Bone Care International, Inc. as of June 30, 2004 and 2003, and the related statements of operations, shareholders—equity, and cash flows for each of the three years in the period ended June 30, 2004. Our audits also included the financial statement schedule included in Item 15. These financial statements and financial statement schedule are the responsibility of the Company—s management. Our responsibility is to express an opinion on the financial statements and financial statement schedule 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of Bone Care International, Inc. as of June 30, 2004 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2004, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

Deloitte & Touche LLP

Milwaukee, Wisconsin September 8, 2004

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## BONE CARE INTERNATIONAL, INC. BALANCE SHEETS As of June 30, 2003 and 2004

ASSETS	2003	2004
Current assets: Cash and cash equivalents Marketable securities Accounts receivable, net Inventory	\$ 3,065,218 13,624,826 2,814,753 2,080,604	\$ 45,325,671 68,776,698 4,732,698 6,785,288
Other current assets	778,725	2,336,362
Total current assets Marketable securities - noncurrent Property, plant, and equipment, net Patent fees, net Goodwill	22,364,126 913,401 1,889,000 1,322,670 359,165	127,956,717 908,376 1,526,638 1,785,045 359,165
	\$ 26,848,362	\$132,535,941
LIABILITIES AND SHAREHOLDERS EQUITY Current liabilities: Accounts payable Accrued compensation payable Accrued clinical study and research costs Other accrued liabilities Allowance for sales returns	\$ 2,684,838 2,028,783 603,048 102,601 336,620	\$ 6,490,488 2,890,728 1,001,818 214,010 100,000
Total current liabilities Long-term liabilities Commitments and Contingencies (Note 6) Shareholders equity: Preferred stock authorized 2,000,000 shares of \$.001 par value; none issued Common stock authorized 28,000,000 shares of no par value; issued and outstanding 14,218,522 and 19,395,585 shares as of	5,755,890 649,880	10,697,044 100,388
June 30, 2003 and 2004, respectively Unearned compensation	73,640,801	178,868,933 (2,411,054)
Accumulated deficit	(53,198,209)	(54,719,370)

Total shareholders	equity	20,442,592	121,738,509
		\$ 26,848,362	\$132,535,941

The accompanying notes to the financial statements are an integral part of these statements.

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## BONE CARE INTERNATIONAL, INC.

## STATEMENTS OF OPERATIONS

## Years Ended June 30, 2002, 2003 and 2004

	2002	2003	2004
Product sales Cost and expenses:	\$14,990,749	\$ 19,518,274	\$43,604,628
Cost of product sales	3,556,687	6,983,175	11,459,960
Research and development	6,772,552	6,670,031	9,107,472
Selling, general and administrative	12,822,576	18,117,436	24,833,152
	23,151,815	31,770,642	45,400,584
Loss from operations Interest income, net	(8,161,066) 1,257,171	(12,252,368) 574,395	(1,795,956) 274,795
Loss before income tax Income taxes	(6,903,895)	(11,677,973)	(1,521,161)
Net loss	\$ (6,903,895)	\$(11,677,973)	\$ (1,521,161)
Net loss per common share basic and diluted	\$ (0.49)	\$ (0.82)	\$ (0.10)
Shares used in computing basic and diluted net loss per common share	14,084,313	14,174,594	14,868,525

The accompanying notes to the financial statements are an integral part of these statements.

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## BONE CARE INTERNATIONAL, INC.

## STATEMENTS OF SHAREHOLDERS EQUITY

Years Ended June 30, 2002, 2003, and 2004

					Accumulated Other	i
			Unearned	AccumulatedC	Comprehensiv Income	ve
	Shares	Common Stock	Compensation	Deficit	(loss)	Total
Balance at June 30, 2001 Net loss for the year ended June 30,	13,955,372	\$ 72,634,080	\$	\$(34,616,341)	\$ 80,366	\$ 38,098,105
2002 Unrealized loss on securities during				(6,903,895)		(6,903,895)
the period					(26,409)	(26,409)
Comprehensive loss Issuance of shares						(6,930,304)
under stock option plan	201,400	856,075				856,075
Balance at June 30, 2002 Net loss for the	14,156,772	73,490,155		(41,520,236)	53,957	32,023,876
year ended June 30, 2003 Unrealized loss on				(11,677,973)		(11,677,973)
securities during the period					(53,957)	(53,957)
Comprehensive loss Issuance of shares						(11,731,930)
under stock option plan Issuance of stock	61,600	150,646				150,646
awards	150					

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Balance at June 30, 2003 Net loss for the	14,218,522	73,640,801		(53,198,209)	20,442,592
year ended June 30, 2004 Issuance of				(1,521,161)	(1,521,161)
restricted stock units to executives Recognition of restricted stock		2,428,800	(2,428,800)		
compensation expense Acceleration of			17,746		17,746
stock option vesting Issuance of		350,500			350,500
of offering costs Issuance of shares	5,000,000	101,433,258			101,433,258
under stock option plan Issuance of stock	177,013	1,014,932			1,014,932
awards	50	642			 642
Balance at June 30, 2004	19,395,585	\$178,868,933	\$(2,411,054)	\$(54,719,370)	\$ \$121,738,509

The accompanying notes to the financial statements are an integral part of these statements.

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## BONE CARE INTERNATIONAL, INC.

## STATEMENTS OF CASH FLOWS

## Years Ended June 30, 2002, 2003, and 2004

	2002	2003	2004
Cash flows from operating activities: Net loss Adjustments to reconcile net loss to net	\$(6,903,895)	\$(11,677,973)	\$ (1,521,161)
cash used in operating activities			
Depreciation of fixed assets	720,138	771,790	824,083
Amortization of patents	177,720	152,451	179,475
Inventory write-off	165,817	11,144	199
Loss on disposal of fixed assets	4,041		800
Loss on write-off of patents		63,167	
Equity based compensation expense Changes in assets and liabilities			368,888
(Increase) decrease in accounts receivable	(938,269)	1,470,816	(1,917,945)
(Increase) decrease in inventory	(454,712)	7,721	(4,704,883)
(Increase) decrease in other current assets	309,507	(3,129)	(1,557,637)
Increase in accounts payable	157,122	915,173	3,805,650
Increase in current liabilities	102,231	2,070,479	1,321,664
Increase (decrease) in long term liabilities Increase (decrease) in allowance for sales		649,880	(649,880)
returns	21,100	110,520	(236,620)
Net cash used in operating activities	(6,639,200)	(5,457,961)	(4,087,367)
Cash flows from investing activities: Maturities of marketable securities Purchase of marketable securities Proceeds from the sale of property, plant,	7,320,964	7,564,508	17,375,000 (72,521,847)
and equipment			35,985
Purchase of property, plant and equipment	(1,006,059)	(875,905)	(498,506)
Patent Fees	(350,649)	(340,039)	(641,850)
Net cash (used) provided in investing activities	5,964,256	6,348,564	(56,251,218)
Cash flows from financing activities: Proceeds from issuance of common stock, net			101,433,258

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Proceeds from exercise of stock options Proceeds from capital lease obligation from sale-leaseback Repayment of capital lease obligation from sale-leaseback	856,075	150,646	1,014,932 184,349 (33,501)
Net cash provided by financing activities	856,075	150,646	102,599,038
Net increase in cash and cash equivalents Cash and Cash Equivalents at beginning of year	181,131 1,842,838	1,041,249 2,023,969	42,260,453 3,065,218
Cash and Cash Equivalents at end of year	\$ 2,023,969	\$ 3,065,218	\$ 45,325,671

The accompanying notes to the financial statements are an integral part of these statements.

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#### BONE CARE INTERNATIONAL, INC.

#### NOTES TO FINANCIAL STATEMENTS

Years Ended June 30, 2002, 2003 and 2004

#### (1) Summary of Significant Accounting Policies

#### Description of Business

Bone Care International, Inc. (Bone Care, we, or the Company) is a specialty pharmaceutical company engaged in the discovery, development and commercialization of innovative therapeutic products to treat the unmet medical needs of patients with debilitating conditions and life-threatening diseases. Our current commercial and therapeutic focus is in nephrology utilizing Hectorol®, our novel vitamin D hormone therapy, to treat secondary hyperparathyroidism in patients with moderate to severe chronic kidney disease and end-stage renal disease. Vitamin D therapies are currently used to treat patients with a variety of diseases, including kidney disease, osteoporosis and psoriasis, and research has shown that they may be useful in treating certain cancers such as prostate, breast and colon. In June 1999, we received approval from the U.S. Food and Drug Administration for Hectorol® 2.5 mcg Capsules, and in April 2000 we received approval for Hectorol® Injection, for the treatment of secondary hyperparathyroidism in end-stage renal disease. In April 2004, we received approval from the U.S. Food and Drug Administration for Hectorol® 0.5 mcg Capsules for the treatment of secondary hyperparathyroidism in moderate to severe chronic kidney disease.

#### Revenue Recognition

We record sales and the related costs of Hectorol® Capsules and Hectorol® Injection based on shipments to customers reduced by the estimated future returns and allowances. Revenue is recognized at the time of shipment as risk of loss has transferred to the customer, delivery has occurred, and collectibility is reasonably certain. Customers have a right to return product in accordance with our returns policy. In accordance with Statement of Financial Accounting Standards (SFAS) No. 48, Revenue Recognition When Right of Return Exists, our June 30, 2003 and June 30, 2004 balance sheets include an accrual of \$336,620 and \$100,000, respectively, for the estimated amount of future returns, based on historical experience related to Hectorol® Capsules and Hectorol® Injection.

#### Segments

Our current commercial focus is in nephrology utilizing Hectorol®, our novel vitamin D hormone therapy, to treat secondary hyperparathyroidism in patients with moderate to severe chronic kidney disease and end-stage renal disease. We currently derive our revenues from two products, Hectorol® Injection and Hectorol® 2.5 mcg Capsules. Hectorol® 0.5 mcg Capsules were approved by the FDA in April 2004. As of June 30, 2004 no product sales for Hectorol® 0.5 mcg Capsules have been recognized. Revenue performance by product is as follows:

### Years Ended June 30.

	2002	2003	2004
Hectorol® Injection	\$ 9,448,115	\$15,122,224	\$38,749,562
	5,542,634	4,396,050	4,855,066

Hectorol® Capsules 2.5mcg

\$14,990,749

\$19,518,274

\$43,604,628

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#### BONE CARE INTERNATIONAL, INC.

#### **NOTES TO FINANCIAL STATEMENTS (Continued)**

#### Years Ended June 30, 2002, 2003 and 2004

Cash, Cash Equivalents and Marketable Securities

Highly liquid investments with original maturities of ninety days or less at the time of purchase are considered to be cash equivalents. Other highly liquid marketable securities with remaining maturities of one year or less at the balance sheet date are classified as marketable securities. Bone Care classifies its investment securities as held to maturity when management has the positive intent and ability to hold the securities to maturity. All other investment securities are classified as available for sale. Those investments classified as available-for-sale are carried in the balance sheet at fair value, with unrealized gains and losses recorded within accumulated other comprehensive income, net of tax. Those investments classified as held to maturity are carried in the balance sheet at amortized cost, net of unamortized discounts or premiums. Dividends, interest income and amortization of discounts and premiums are recorded in current earnings.

Investments are considered to be impaired when a decline in fair value is judged to be other than temporary. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, the duration and extent to which fair value is less than cost, and our intent and ability to hold the investment. Once a decline in fair value is determined to be other than temporary, an impairment charge is recorded and a new cost basis in the investment is established.

In March 2004, the FASB ratified the recognition and measurement guidance and certain disclosure requirements for impaired securities as described in Emerging Issues Task Force (EITF) Issue No. 03-1, The Meaning of Other-Than-Temporary Impairment and its Application to Certain Investments. The recognition and measurement guidance will be applied to other-than-temporary impairment evaluations in reporting periods beginning with our first fiscal quarter 2005. We do not believe the adoption of the recognition and measurement guidance in EITF Issue No. 03-1 will have a material impact on our financial statements.

#### Accounts Receivable

Accounts receivable is stated net of allowance for doubtful accounts of \$111,200 and \$72,070 at June 30, 2003 and June 30, 2004, respectively.

#### *Inventory*

Inventory is stated at the lower of cost or market; cost is determined by the first-in, first-out method. Inventory consists of:

June 30	)

	2003	2004
Raw materials	\$1,293,329	\$1,659,734
Work-in-process	182,998	89,388
Finished goods	604,277	5,036,166

\$2,080,604 \$6,785,288

We periodically reviews our inventory carrying levels. During fiscal years 2002, 2003 and 2004, we wrote-off \$165,817, \$11,144 and \$199, respectively, of inventory representing amounts, which we estimated would not be sold prior to expiration.

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#### BONE CARE INTERNATIONAL, INC.

#### **NOTES TO FINANCIAL STATEMENTS (Continued)**

Years Ended June 30, 2002, 2003 and 2004

Property, Plant and Equipment

We periodically evaluate the carrying value of property and equipment in accordance with SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If the expected future undiscounted cash flows are less than the carrying amount of the asset, a loss is recognized for the differences between the fair value and the carrying value of the asset. Property, plant and equipment consisted of the following:

	June 30, 2003	June 30, 2004	
Leasehold Improvements Furniture and Fixtures Machinery and Other	\$ 588,632 545,547	\$ 588,632 524,455	
Equipment	3,100,108	3,502,221	
Less: Accumulated	4,234,287	4,615,308	
Depreciation	(2,345,287)	(3,088,670)	
	\$ 1,889,000	\$ 1,526,638	

#### Depreciation and Amortization

Depreciation and amortization are provided for in amounts sufficient to relate the cost of depreciable assets to operations over their estimated service lives. Accelerated methods of depreciation are used for financial statement and income tax reporting purposes for all asset classes except for leasehold improvements, which are depreciated based on straight-line for financial statement reporting and accelerated methods for income tax reporting. The cost of property, plant and equipment are depreciated over the following estimated useful lives:

Asset classification	Estimated useful life		
Machinery, furniture, and fixtures	3 7 years		
Leasehold improvements	Lesser of 5 years or remaining leasehold period		

#### Intangible Assets

Legal costs incurred to register patents are capitalized when incurred and are amortized on a straight line basis over the life of the patent. We continuously evaluate whether events and circumstances have occurred that indicate the remaining estimated useful life of intangibles may warrant revision or that the remaining balance of intangibles may not be recoverable. If the future undiscounted cash flows are less than the carrying value, a loss is recognized for the difference between the fair value and the carrying value of the intangible asset. The cost and accumulated amortization for patents at June 30, 2003 was \$2,454,622 and \$1,131,952, respectively. The cost and accumulated amortization for patents at June 30, 2004 was \$3,096,472 and \$1,311,427, respectively. The average remaining useful life of our patents as of June 30, 2004 was approximately 10.7 years.

The aggregate amounts of anticipated amortization of patent fees for each of the next five fiscal years and thereafter are as follows:

Year			
2005		\$	201,928
2006			200,650
2007			190,611
2008			189,283
2009			169,201
Thereafter		_	833,372
Total		<b>\$</b> 1	1,785,045
	45		

#### BONE CARE INTERNATIONAL, INC.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### Years Ended June 30, 2002, 2003 and 2004

The Company evaluates goodwill in accordance with SFAS No. 142, Goodwill and Other Intangible Assets. Under SFAS No. 142, an assessment of fair value is used to test for impairment of goodwill on an annual basis or when circumstances indicate a possible impairment. The Company performed the annual assessment on June 30, 2002, 2003, and 2004 and found no instances of impairment.

Shipping and Handling Costs

Shipping and handling costs associated with product sales are included in cost of sales.

#### Research and Development Costs

Materials, labor and overhead expenses related to research and development projects are charged to operations as incurred.

#### Stock-based Compensation

Stock-based compensation related to employees and non-employee directors is recognized using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees, and thus there is no compensation expense for options granted with exercise prices equal to the fair value of our common stock on the date of the grant. Restricted stock awards are valued at the fair value of our common stock on the date of grant and reflected in the equity section as part of common stock. Compensation expense is recognized for restricted stock awards on a straight-line basis over the vesting period of the entire award with the balance of unearned compensation reflected in the equity section of the balance sheet.

For disclosure purposes only under SFAS No. 123, *Accounting for Stock-Based Compensation*, the Black-Scholes option pricing model was used to calculate the fair value of stock options using the following weighted-average assumptions:

	2002	2003	2004
Risk-free interest rate	4.1%	3.4%	3.6%
Expected market price volatility factor	0.60	0.62	0.67
Weighted average expected life	6.0 years	6.0 years	6.0 years

No dividends are expected to be paid.

The effect on net loss and net loss per share if we had applied the fair value recognition provisions of SFAS 123, Accounting for Stock-Based Compensation, to the stock options issued under these plans was as follows:

2	002	2003	2004

Net loss as reported	\$(6,	,903,895)	\$(11	,677,973)	\$(1,	521,161)
Compensation expense in reported net income Less pro forma compensation						368,888
expense	(1.	,054,582)	(1	,656,210)	(3,	831,247)
r						
Pro forma net loss Net loss per share basic and diluted:	\$(7,	.958,477)	\$(13	,334,183)	\$(4,	983,520)
As reported	\$	(0.49)	\$	(0.82)	\$	(0.10)
Pro forma	\$	(0.57)	\$	(0.94)	\$	(0.34)
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#### BONE CARE INTERNATIONAL, INC.

#### NOTES TO FINANCIAL STATEMENTS (Continued)

#### Years Ended June 30, 2002, 2003 and 2004

Compensation expense of \$350,500 was recognized for the year-ended June 30, 2004 due to the acceleration of unvested stock options as part of a severance agreement for the former VP Finance and for a retiring Board member. The expense recognized was based on the difference between the option grant price and the fair market value at the respective dates of separation.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company s employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair market value estimate, in management s opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

#### Net Loss Per Share

Net loss per share is based on a weighted average number of shares of common stock of 14,084,313, 14,174,594, and 14,868,525 for the years ended June 30, 2002, 2003 and 2004, respectively. Options to purchase common stock and restricted stock grants have been excluded from the calculation of diluted earnings per share as the impact of these options and restricted stock grants on diluted earnings per share would be antidilutive. The excluded options and restricted stock units totaled 689,133, 1,931,233, and 2,486,135 for the years ended June 30, 2002, 2003 and 2004, respectively.

#### Income Taxes

Income taxes are accounted for under the asset and liability method prescribed by FASB Statement No. 109. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and credit carry forwards. Deferred tax assets and liabilities are measured using enacted rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. The amount of deferred tax assets is reduced to the amount of any tax benefits that Bone Care believes are more likely than not to be realized. Because Bone Care has not yet reached profitability and future profitability cannot be assured, no value has been recorded for deferred tax assets.

#### Fair Value of Financial Instruments

The fair value of financial instruments other than securities, which consisted of cash and cash equivalents, receivables, accounts payable and accrued liabilities, approximated their carrying values at June 30, 2003 and 2004 due to the short-term nature or underlying terms of these instruments. The fair value of marketable securities is based on quoted market prices.

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#### BONE CARE INTERNATIONAL, INC.

#### **NOTES TO FINANCIAL STATEMENTS (Continued)**

#### Years Ended June 30, 2002, 2003 and 2004

#### Concentration of Risk

We currently have no internal manufacturing capabilities. We rely on third-party contractors to produce our active pharmaceutical ingredient and for the subsequent manufacturing and packaging of finished drug products.

We purchase our active pharmaceutical ingredient for Hectorol® from a sole supplier, although we are currently in the process of obtaining regulatory approval for an additional supplier. In addition, we rely on one manufacturer for Hectorol® Injection, one supplier to formulate Hectorol® Capsules and another supplier to package Hectorol® Capsules. Although, we believe that other manufacturers, suppliers, formulators, and vendors may be available to provide these goods and services to us, any change in suppliers could cause an increase in costs, a delay in manufacturing and a possible loss of sales, any of which would affect operating results adversely.

Our customers primarily consist of wholesale distributors of pharmaceutical products. We utilize these wholesale distributors as the principal means of distributing our products to clinics and hospitals. Five individual wholesale distributors comprised 97% of the net accounts receivable balance as of June 30, 2004. These same five wholesale distributors represented 95% of our product sales for the year ended June 30, 2004, with the largest of the five wholesale distributors representing 39% of product sales. As of June 30, 2003 five individual customers comprised 88% of the net accounts receivable balance. These same five customers represented 92% of our product sales for the year ended June 30, 2003, with the largest of the five companies representing 34% of product sales. As of June 30, 2002 five individual customers comprised 62% of the net accounts receivable balance. These same five customers represented 69% of our product sales for the year ended June 30, 2002, with the largest of the five companies representing 27% of product sales.

At June 30, 2004, cash and cash equivalents includes \$22.0 million of commercial paper and a \$10.0 million certificate of deposit, bothfrom a single issuer, as well as, \$10.0 million in a single money market fund.

Our marketable securities at June 30, 2004 consisted of \$40.0 million of commercial paper from four different issuers and a variety of corporate and municipal bonds, with none of the bonds exceeding \$2.0 million from any one issuer. One of the four issuers of this \$40.0 million of commercial paper is the issuer of the \$22.0 million of commercial paper classified as cash and cash equivalents.

#### Advertising Expenses

We expense advertising costs as incurred. Advertising expenses were \$688,758, \$944,362, and \$891,315 for years ended June 30, 2002, 2003 and 2004, respectively.

#### Use of Estimates

In preparing the financial statements in accordance with accounting principles generally accepted in the U.S., management makes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

## Reclassifications

Certain prior period amounts in the financial statements and the notes have been reclassified to conform to the fiscal 2004 presentation.

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#### BONE CARE INTERNATIONAL, INC.

#### **NOTES TO FINANCIAL STATEMENTS (Continued)**

Years Ended June 30, 2002, 2003 and 2004

#### (2) Shareholders Equity

In May 2004, we completed a public offering of 4,500,000 shares of common stock at a price of \$21.75 per share. We received proceeds of \$91,210,758 from the sale of the shares of common stock, net of offering expenses. In June 2004, the underwriters exercised their over-allotment option to acquire 500,000 additional shares of common stock at a price of \$21.75 per share. We received additional proceeds of \$10,222,500 from the sale of the 500,000 shares of common stock, net of offering expenses. Total offering costs were \$7,316,742, which consisted of underwriter fees, legal and audit fees, printing costs, filing fees, and travel costs.

#### (3) Stock Options and Restricted Stock Awards

We have granted options to key employees and directors under three separate programs.

Under the first option program, titled the Bone Care International, Inc., 1996 Stock Option Plan, a total of 1,000,000 shares of common stock were made available. This stock option plan was amended in November 2000 and November 2001 to increase the number of available shares to 2,300,000 of which 78,889 remained available for grant at June 30, 2004. Options granted under this program have an exercise price equal to our common stock trading price on the date of the grant and vest over periods ranging from one to five years. The options will expire 10 years from the grant date, or upon termination of employment.

Under the second option program, titled the Bone Care International, Inc., 2002 Stock Incentive Plan, a total of 750,000 shares of common stock were made available in November 2002 of which 445 remained available for grant at June 30, 2004. Under the 2002 Plan, the Board authorized Compensation Committee may grant to eligible participants non-qualified stock options and incentive stock options to purchase shares of common stock. Options granted under this program have an exercise price equal to our common stock trading price on the date of the grant and vest over a period of three years. The options will expire 10 years from the grant date, or upon termination of employment.

Under the third option program, titled the Bone Care International, Inc., 2003 Stock Incentive Plan, a total of 300,000 shares of common stock were made available in November 2003 of which 144,918 remained available for grant at June 30, 2004. Under the 2003 Plan, the Compensation Committee may grant to eligible participants non-qualified stock options and incentive stock options to purchase shares of common stock and restricted stock awards. Options granted under this program have an exercise price equal to our common stock trading price on the date of the grant and vest over a period of three years. The options will expire 10 years from the grant date, or upon termination of employment. Restricted stock awards are shares of common stock granted subject to a restricted period that is designated by the Compensation Committee.

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## BONE CARE INTERNATIONAL, INC.

## NOTES TO FINANCIAL STATEMENTS (Continued)

Years Ended June 30, 2002, 2003 and 2004

A summary of stock option activity and related information is presented below:

Year ended June 30,				
2002	2003	2004		
Weighted	Weighted			