

PROSPECTUS

7,814,064 Shares



Common Stock

This prospectus relates to the resale from time to time of up to 7,814,064 shares of our common stock that we may issue to the selling stockholder named herein. On September 15, 2009, we entered into a common stock purchase agreement with Kingsbridge Capital Limited, or Kingsbridge, pursuant to which we may issue to Kingsbridge up to 7,814,064 shares of our common stock. We are not required to sell any shares of common stock to Kingsbridge under the common stock purchase agreement. To the extent that we do elect to sell any shares of our common stock to Kingsbridge pursuant to the common stock purchase agreement, this prospectus may be used by the selling stockholder named under the section titled “Selling Stockholder” to resell such shares. The selling stockholder may resell shares under this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholder may resell its shares of our common stock in the section titled “Plan of Distribution”. Kingsbridge is an “underwriter” within the meaning of the Securities Act of 1933, as amended, with respect to any shares resold under this prospectus by the selling stockholder. We will not be paying any underwriting discounts or commissions in this offering nor will we receive any of the proceeds from any sale of shares by the selling stockholder.

Our common stock is listed on The Nasdaq Global Select Market under the symbol “NBIX”. On November 16, 2009, the last reported sale price for our common stock was \$2.17. You are encouraged to obtain current market quotations for shares of our common stock.

Investing in our common stock involves a high degree of risk. See “Risk Factors” on page 4.

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

The date of this prospectus is November 17, 2009.

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ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus and any related prospectus supplement or incorporated by reference in this prospectus. We have not, and the selling stockholder has not, authorized anyone to provide you with different information. No one is making offers to sell or seeking offers to buy our common stock in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus is accurate only as of the date on the front of this prospectus and that any information we have incorporated by reference or included in any prospectus supplement is accurate only as of the date given in the document incorporated by reference or the prospectus supplement, as applicable, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere or incorporated by reference into this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in our common stock. You should read this entire prospectus carefully, including the section entitled “Risk Factors”, any prospectus supplement, and the documents that we incorporate by reference into this prospectus and any prospectus supplement, before making an investment decision.

NEUROCRINE BIOSCIENCES, INC.

We discover, develop and intend to commercialize drugs for the treatment of neurological and endocrine-related diseases and disorders. Our product candidates address some of the largest pharmaceutical markets in the world, including endometriosis, anxiety, depression, pain, diabetes, benign prostatic hyperplasia, irritable bowel syndrome, and other neurological and endocrine related diseases and disorders. We currently have eight programs in various stages of research and development, including six programs in clinical development. While we independently develop many of our product candidates, we are in a collaboration for two of our programs. Our lead clinical development program, elagolix, is a drug candidate for the treatment of endometriosis.

We were originally incorporated in California in January 1992 and were reincorporated in the state of Delaware in May 1996. Our corporate offices are located at 12780 El Camino Real, San Diego, California 92130. Our telephone number is (858) 617-7600. Our website address is www.neurocrine.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

Unless otherwise specified or required by context, references in this prospectus to “we,” “us,” “our” and “Neurocrine” refer to Neurocrine Biosciences, Inc. and our subsidiaries on a consolidated basis.

COMMITTED EQUITY FINANCING FACILITY WITH KINGSBRIDGE

On September 15, 2009, we entered into a committed equity financing facility, or CEFF, with Kingsbridge, pursuant to which Kingsbridge committed to purchase, subject to certain conditions, up to the lesser of \$75 million or 7,814,064 shares of our common stock. In connection with the CEFF, we entered into a common stock purchase agreement and registration rights agreement with Kingsbridge, both dated September 15, 2009.

The common stock purchase agreement entitles us to sell and obligates Kingsbridge to purchase, from time to time over a period of three years, shares of our common stock for cash consideration, subject to certain conditions and restrictions. We are not obligated to sell any shares to Kingsbridge under the common stock purchase agreement. The shares of common stock that may be issued to Kingsbridge under the common stock purchase agreement will be issued pursuant to an exemption from registration under the Securities Act of 1933, as amended. Pursuant to the registration rights agreement, we have filed a registration statement of which this prospectus is a part, covering the possible resale by Kingsbridge of any shares that we may issue to Kingsbridge under the common stock purchase agreement. Through this prospectus, the selling stockholder may offer to the public for resale shares of our common stock that we may issue to Kingsbridge pursuant to the common stock purchase agreement.

For a period of 36 months from the first trading day following the effectiveness of the registration statement of which this prospectus is a part, we may, from time to time, at our sole discretion, and subject to certain conditions that we must satisfy, “draw down” funds under the CEFF by selling shares of our common stock to Kingsbridge. The purchase price of these shares will be at a discount of up to 10 percent from the volume weighted average price of our common stock for each of the eight trading days following our election to draw down under the CEFF. The discount on each of these eight trading days will be determined as follows:

VWAP*	PERCENT OF VWAP	(APPLICABLE DISCOUNT)
Greater than \$9.40 per share	95%	(5)%
Greater than or equal to \$6.61 per share but less than or equal to \$9.40 per share	94%	(6)%
Greater than or equal to \$4.86 per share but less than or equal to \$6.60 per share	92%	(8)%
Greater than or equal to \$1.00 per share but less than or equal to \$4.85 per share	90%	(10)%

* As set forth in the common stock purchase agreement, “VWAP” means the volume weighted average price (the aggregate sales price of all trades of our common stock during each trading day divided by the total number of shares of common stock traded during that trading day) of our common stock during any trading day as reported by Bloomberg L.P. using the AQR function. The VWAP and corresponding discount will be determined for each of the eight trading days during a draw down pricing period.

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During the eight trading day pricing period for a draw down, if the VWAP for any trading day is less than the greater of: (i) 85% of the closing price of our common stock on the trading day immediately preceding the commencement of the draw down pricing period, (ii) \$1.00 or (iii) the price specified by us in the draw down notice, the VWAP for that trading day will not be used in calculating the number of shares to be issued in connection with that draw down, and the draw down amount for that pricing period will be reduced by one-eighth of the draw down amount initially specified. If trading in our common stock is suspended for any reason for more than three consecutive or non-consecutive hours during trading hours on any trading day during a draw down pricing period, that trading day will be disregarded in calculating the number of shares to be issued in connection with that draw down, and the draw down amount for that pricing period will be reduced by one-eighth of the draw down amount initially specified. In addition, if we deliver a “blackout” notice to Kingsbridge suspending the use of this prospectus and prohibiting Kingsbridge from selling shares under this prospectus on the date that we deliver a draw down notice or during the eight trading day pricing period thereafter, each trading day during the pricing period after delivery of the blackout notice will be disregarded in calculating the number of shares to be issued in that draw down, and the draw down amount for that pricing period will be reduced by one-eighth of the draw down amount initially specified for each trading day that is disregarded.

The maximum number of shares of common stock that we can issue pursuant to the CEFF is 7,814,064 shares. We intend to exercise our right to draw down amounts under the CEFF, if and to the extent available, at such times as we have a need for additional capital and when we believe that sales of stock under the CEFF provide an appropriate means of raising capital.

Our ability to require Kingsbridge to purchase our common stock is subject to various limitations. We can make draw downs to a maximum of the lesser of (i) \$15 million and (ii) the greater of (x) up to 1.75% of our market capitalization as of the date of delivery of the draw down notice once per calendar quarter and up to 1.25% of our market capitalization as of the date of delivery of the draw down notice for any additional draw downs during such calendar quarter and (y) up to the lesser of (a) 2.75% of our market capitalization as of the date of delivery of the draw down notice and (b) a number of shares determined by a formula based in part on the average trading volume and trading price of our common stock prior to the delivery of the draw down notice issued by us with respect to that pricing period. In no event can we require Kingsbridge to purchase shares in any draw down pricing period having an aggregate purchase price in excess of \$15 million. Unless we and Kingsbridge agree otherwise, a minimum of three trading days must elapse between the expiration of any draw down pricing period and the beginning of the next succeeding draw down pricing period.

During the term of the CEFF, without the prior written consent of Kingsbridge, we may not issue securities that are, or may become, convertible or exchangeable into shares of common stock where the purchase, conversion or exchange price for that common stock is determined using any floating discount or other post-issuance adjustable discount to the market price of the common stock, including pursuant to an equity line financing that is substantially similar to the arrangement provided for in the CEFF. If we or Kingsbridge terminate the CEFF under specified circumstances prior to the expiration of its 36 month term, we will additionally be prohibited from issuing such securities for a period of three months following such termination.

The issuance of our common stock under the CEFF will have no effect on the rights or privileges of existing holders of common stock except that the voting and percentage ownership interests of each stockholder will be reduced as a result of any such issuance. Although the number of shares of common stock that stockholders presently own will not decrease, these shares will represent a smaller percentage of our total shares that will be outstanding after any issuances of shares of common stock to Kingsbridge. If we draw down amounts under the CEFF when our share price is decreasing, we will need to issue more shares to raise the same amount than if we were to issue shares when our stock price is higher. Such issuances will have a dilutive effect and may further decrease our stock price.

Kingsbridge agreed in the common stock purchase agreement that during the term of the CEFF, neither Kingsbridge nor any of its affiliates, nor any entity managed or controlled by it, will enter into, execute, or cause or assist any other person to enter into or execute, any short sale of any of our securities, including our common stock, or engage, through related parties or otherwise, in derivative transactions directly related to shares of our common stock, except during the term of a draw down pricing period with respect to the shares that Kingsbridge purchased pursuant to the CEFF during that draw down pricing period. Subject to the foregoing restrictions, Kingsbridge has the right during any draw down pricing period to sell shares of our common stock equal in number to the aggregate number of shares of common stock purchased pursuant to the applicable draw down.

In order for Kingsbridge to be obligated to buy any shares of our common stock pursuant to a draw down, the following conditions, none of which is in the control of Kingsbridge, must be met as of the date we deliver a draw down notice to notify Kingsbridge of our election to sell shares pursuant to the CEFF, and the date upon which each settlement of the purchase and sale of our common stock occurs with respect to such draw down, except as indicated below:

- Each of our representations and warranties in the common stock purchase agreement must be true and correct in all material respects as of the date when made as though made at that time, except for representations and warranties that are expressly made as of a particular date.
- We must have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the common stock purchase agreement and the registration rights agreement to be performed, satisfied or complied with by us.

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- We must have complied in all respects with all applicable federal, state and local governmental laws, rules, regulations and ordinances in connection with the execution, delivery and performance of the common stock purchase agreement and the consummation of the transactions contemplated by it, except for such failures to comply as would not have a material adverse effect on the business, operations, properties or financial condition of us and our subsidiaries as a whole or prohibit or otherwise interfere with our ability to perform any of our obligations under the common stock purchase agreement or registration rights agreement.
- The registration statement, of which this prospectus is a part, must be effective when the draw down notice is delivered and must remain effective on each trading day during the pricing period.
- We must not have knowledge of any event that could reasonably be expected to have the effect of causing the registration statement, of which this prospectus is a part, to be suspended or otherwise ineffective.
- Trading in our common stock must not have been suspended by the Securities and Exchange Commission, or the SEC, the Nasdaq Global Select Market or the Financial Industry Regulatory Authority and trading in securities generally on the Nasdaq Global Select Market must not have been suspended or limited.
- There must not be any statute, rule, regulation, order, decree, writ, ruling or injunction enacted, entered, promulgated, endorsed or, to our knowledge, threatened by any court or governmental authority which prohibits the consummation of or would materially modify or delay any of the transactions contemplated by the common stock purchase agreement.
- There must not be any action, suit or proceeding before any arbitrator or any governmental authority that is pending, and, to our knowledge, there must not be any investigation by any governmental authority threatened, against us, any of our subsidiaries or any of our or our subsidiaries' officers, directors or affiliates seeking to enjoin, prevent or change the transactions contemplated by the common stock purchase agreement or seeking material damages in connection with such transactions.
- We must have sufficient shares of common stock, calculated using the closing trade price of the common stock as of the trading day immediately preceding the date we notify Kingsbridge of our election to sell shares to Kingsbridge pursuant to the CEFF, registered under the registration statement of which this prospectus is a part to issue and sell such shares in accordance with such draw down.
- We must not be more than 30 days in arrears in respect of fees and expenses payable by us in accordance with the common stock purchase agreement for which we have received written invoices at least 10 days prior to delivering the draw down notice, which include registration and filing fees, printing expenses, administrative expenses and certain legal and accounting fees, as well as certain fees of counsel for the selling stockholder incurred in the preparation and negotiation of the CEFF agreements and the registration statement of which this prospectus forms a part.
- Kingsbridge must have received an opinion from our outside legal counsel on or prior to the date we first deliver a draw down notice to Kingsbridge.

There is no guarantee that we will be able to meet the foregoing conditions or that we will be able to draw down any portion of the amounts available under the CEFF.

We also entered into a registration rights agreement with Kingsbridge, dated September 15, 2009. Pursuant to the registration rights agreement, we have filed the registration statement, of which this prospectus is a part, with the SEC relating to the resale by Kingsbridge of any shares of common stock purchased by it under the common stock purchase agreement. The effectiveness of this registration statement is a condition precedent to our ability to sell common stock to Kingsbridge under the common stock purchase agreement. We are entitled in certain circumstances, including the existence of certain kinds of material nonpublic information, to deliver a blackout notice to Kingsbridge to suspend the use of this prospectus and prohibit Kingsbridge from selling shares under this prospectus for a period of not more than 30 days. If we deliver a blackout notice in the 15 trading days following the settlement of a draw down or if the registration statement, of which this prospectus is a part, is not effective in circumstances not permitted by the registration rights agreement, then we must pay amounts to Kingsbridge or issue Kingsbridge additional shares in lieu of payment. The payment or issuance would be calculated by means of a varying percentage of an amount based on the number of shares held by Kingsbridge that were purchased pursuant to such draw down and the change in the market price of our common stock between the date the blackout notice is delivered (or the registration statement is not effective) and the date the prospectus again becomes available, provided that any additional shares issued in lieu of payment are registered for resale pursuant to an effective registration statement.

We may terminate the CEFF upon one trading day's notice to Kingsbridge, except that we may not terminate the CEFF during any draw down pricing period. Kingsbridge may, upon one trading day's notice to us, terminate the CEFF if we enter into a transaction prohibited by the common stock purchase agreement without Kingsbridge's prior written consent or if Kingsbridge provides notice to us of a material adverse event relating to our business and the event continues for ten trading days after the notice. Kingsbridge may also terminate the CEFF upon one trading day's notice to us at any time in the event that a registration statement is

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not initially declared effective in accordance with the registration rights agreement. In addition, either we or Kingsbridge may terminate the CEFF upon one day's notice if the other party has breached a material representation, warranty or covenant to the common stock purchase agreement and such breach is not remedied within 10 trading days after notice of such breach is delivered to the breaching party.

The foregoing summary of the CEFF does not purport to be complete and is qualified by reference to the common stock purchase agreement and the registration rights agreement, copies of which have been filed as exhibits to our Current Report on Form 8-K dated September 15, 2009, which is incorporated by reference in the registration statement of which this prospectus is a part.

RISK FACTORS

An investment in our common stock is risky. Prior to making a decision about investing in our common stock, you should carefully consider the specific risks discussed in the sections entitled "Risk Factors" contained in our filings with the SEC that are incorporated by reference in this prospectus and any applicable prospectus supplement. These risks and uncertainties are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of the risks or uncertainties described in our SEC filings or in any applicable prospectus supplement or any additional risks or uncertainties actually occur, our business, results of operations and financial condition could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you might lose all or part of your investment.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains, and the documents incorporated by reference herein and any prospectus supplement hereto may contain, forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include, but are not limited to statements about:

- the progress of clinical trials involving our drug candidates;
- the progress of our research and development programs;
- the benefits to be derived from relationships with our collaborators;
- the receipt of regulatory clearances and approvals; and
- our estimates regarding our capital requirements and our need for additional financing.

In some cases, you can identify forward-looking statements by terms such as "may", "will", "should", "could", "would", "expects", "plans", "anticipates", "believes", "estimates", "projects", "predicts", "potential" and similar expressions intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in greater detail under the heading "Risk Factors" in our SEC filings, and may provide additional information in any applicable prospectus supplement. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement.

You should read this prospectus, the registration statement of which this prospectus is a part, the documents incorporated by reference herein, and any applicable prospectus supplement completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

You should rely only on the information contained, or incorporated by reference, in this prospectus and any applicable prospectus supplement. We have not, and the selling stockholder has not, authorized anyone to provide you with different information. The common stock offered under this prospectus is not being offered in any state where the offer is not permitted. You should not assume that the information provided by this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of this prospectus or the prospectus supplement, as applicable, or that any information incorporated by reference in this prospectus or in any prospectus supplement is accurate as of any date other than the date of the document so incorporated by reference. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

USE OF PROCEEDS

If we issue any shares of our common stock to Kingsbridge under the common stock purchase agreement we will not receive any subsequent proceeds from the resale of such shares by the selling stockholder pursuant to this prospectus.

SELLING STOCKHOLDER

This prospectus may be used for the resale by the selling stockholder, Kingsbridge, of shares of common stock that we may issue pursuant to the common stock purchase agreement we entered into with Kingsbridge on September 15, 2009. We are filing the registration statement, of which this prospectus is a part, pursuant to the provisions of the registration rights agreement we entered into with Kingsbridge on September 15, 2009.

The selling stockholder may from time to time offer and sell pursuant to this prospectus any or all of the shares that it acquires under the common stock purchase agreement.

The following table presents information regarding Kingsbridge, as the selling stockholder, and the shares that it may offer and sell from time to time under this prospectus. This table is prepared based on information supplied to us by the selling stockholder, and reflects holdings as of September 1, 2009. As used in this prospectus, the term “selling stockholder” includes Kingsbridge and any donees, pledges, transferees or other successors in interest selling shares received after the date of this prospectus from the selling stockholder as a gift, pledge, or other non-sale related transfer. The number of shares in the column “Number of Shares Being Offered” represents all of the shares that the selling stockholder may offer under this prospectus. The selling stockholder may sell some, all or none of its shares. We do not know how long the selling stockholder will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the shares.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended. The percentage of shares of common stock beneficially owned prior to the offering shown in the table below is based both on an aggregate of 39,089,868 shares of our common stock outstanding on September 1, 2009, and on the assumption that all shares of common stock issuable under the common stock purchase agreement with Kingsbridge are outstanding as of that date.

Stockholders	Shares of Common Stock Beneficially Owned Prior to Offering		Number of Shares Being Offered	Shares of Common Stock Beneficially Owned After Offering	
	Number	Percent		Number	Percent
Kingsbridge Capital Limited (1)	7,814,064(2)	16.66%	7,814,064	0	0%

- (1) The business address of Kingsbridge Capital Limited is P.O. Box 1075, Elizabeth House, 9 Castle Street, St. Helier, Jersey, JE42QP, Channel Islands.
- (2) Consists of 7,814,064 shares of common stock, the maximum number of shares of common stock issuable under the common stock purchase agreement we entered into with Kingsbridge on September 15, 2009. For the purposes hereof, we assume the issuance of all 7,814,064 shares. Adam Gurney, Antony Gardner-Hillman and Maria O’Donoghue have shared voting and investment control of the securities held by Kingsbridge.

PLAN OF DISTRIBUTION

To the extent that we issue shares to Kingsbridge under the CEFF, the selling stockholder may offer such shares for resale under this prospectus. Except as described below, to our knowledge, the selling stockholder has not entered into any agreement, arrangement or understanding with any particular broker or market maker with respect to the shares of common stock offered hereby, nor, except as described below, do we know the identity of the brokers or market makers that will participate in the resale of the shares.

The selling stockholder may decide not to sell any shares. The selling stockholder may from time to time offer some or all of the shares of common stock through brokers, dealers or agents who may receive compensation in the form of discounts, concessions or commissions from the selling stockholder and/or the purchasers of the shares of common stock for whom they may act as agent. In effecting sales, broker-dealers that are engaged by the selling stockholder may arrange for other broker-dealers to participate. Kingsbridge is an “underwriter” within the meaning of the Securities Act of 1933, as amended, or the Securities Act. Any brokers, dealers or agents who participate in the distribution of the shares of common stock by the selling stockholder may also be deemed to be “underwriters,” and any profits on the sale of the shares of common stock by them and any discounts, commissions or concessions received by any such brokers, dealers or agents may be deemed to be underwriting discounts and commissions under the Securities Act. To the extent the selling stockholder may be deemed to be an underwriter, the selling stockholder will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited

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to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

The selling stockholder will act independently of us in making decisions with respect to the timing, manner and size of each sale by it. Such sales may be made on the Nasdaq Global Select Market, on the over-the-counter market, otherwise, or in a combination of such methods of sale, at then prevailing market prices, at prices related to prevailing market prices or at negotiated prices. The shares of common stock may be sold by the selling stockholder according to one or more of the following methods:

- a block trade in which the broker or dealer so engaged will attempt to sell the shares of common stock as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this prospectus;
- an over-the-counter distribution in accordance with the rules of Nasdaq;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- privately negotiated transactions;
- a combination of such methods of sale; and
- any other method permitted pursuant to applicable law.

Any shares covered by this prospectus which qualify for sale pursuant to Rule 144 of the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus. In addition, the selling stockholder may transfer the shares by other means not described in this prospectus.

Any broker-dealer participating in such transactions as agent may receive commissions from Kingsbridge (and, if they act as agent for the purchaser of such shares, from such purchaser). Broker-dealers may agree with Kingsbridge to sell a specified number of shares at a stipulated price per share, and, to the extent such a broker-dealer is unable to do so acting as agent for Kingsbridge, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to Kingsbridge. Broker-dealers who acquire shares as principal may thereafter resell such shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) on the Nasdaq Global Select Market, on the over-the-counter market, in privately-negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such shares commissions computed as described above. To the extent required under the Securities Act, an amendment to this prospectus or a supplemental prospectus will be filed, disclosing:

- the name of any such broker-dealers;
- the number of shares involved;
- the price at which such shares are to be sold;
- the commission paid or discounts or concessions allowed to such broker-dealers, where applicable;
- that such broker-dealers did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, as supplemented; and
- other facts material to the transaction.

Underwriters and purchasers that are deemed underwriters under the Securities Act may engage in transactions that stabilize, maintain or otherwise affect the price of the securities, including the entry of stabilizing bids or syndicate covering transactions or the imposition of penalty bids. Kingsbridge and any other persons participating in the sale or distribution of the shares will be subject to the applicable provisions of the Exchange Act and the rules and regulations thereunder including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of, purchases by the selling stockholder or other persons or entities. Under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to special exceptions or exemptions. Regulation M may restrict the ability of any person engaged in the distribution of the securities to engage in market-making and certain other activities with respect to those securities. The anti-manipulation

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rules under the Exchange Act may apply to sales of the securities in the market. All of these limitations may affect the marketability of the shares and the ability of any person to engage in market-making activities with respect to the securities.

We have agreed to pay the expenses of registering the shares of common stock under the Securities Act, including registration and filing fees, printing expenses, administrative expenses and certain legal and accounting fees, as well as certain fees of counsel for the selling stockholder incurred in the preparation and negotiation of the CEFF agreements and the registration statement of which this prospectus forms a part. The selling stockholder will bear all discounts, commissions or other amounts payable to underwriters, dealers or agents, as well as transfer taxes and certain other expenses associated with its sale of securities.

Under the terms of the Kingsbridge common stock purchase agreement and the registration rights agreement, we have agreed to indemnify the selling stockholder and certain other persons against certain liabilities in connection with the offering of the shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute toward amounts required to be paid in respect of such liabilities.

At any time a particular offer of the shares of common stock is made by the selling stockholder, a revised prospectus or prospectus supplement, if required, will be distributed. Such prospectus supplement or post-effective amendment will be filed with the SEC, to reflect the disclosure of required additional information with respect to the distribution of the shares of common stock. We may suspend the sale of shares by the selling stockholder pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

LEGAL MATTERS

The validity of the common stock being offered by this prospectus will be passed upon for us by Cooley Godward Kronish LLP, San Diego, California. The selling stockholder and any underwriters will be advised about the other issues relating to any offering by their own legal counsel.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008, and the effectiveness of our internal control over financial reporting as of December 31, 2008, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and we file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement under the Securities Act of 1933, as amended, with respect to the shares of our common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits which are part of the registration statement. For further information with respect to us and the shares of our common stock offered by this prospectus, we refer you to the registration statement and the exhibits filed as part of the registration statement. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public from the SEC's website at www.sec.gov. We maintain a website at www.neurocrine.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the following documents we filed with the SEC pursuant to Section 13 of the Securities Exchange Act of 1934, as amended, or the Exchange Act:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2008 (including information specifically incorporated by reference into our Form 10-K from our Proxy Statement for our 2009 Annual Meeting of Stockholders);
- Quarterly Reports on Form 10-Q for the quarters ended March 31, June 30 and September 30, 2009;

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- Current Reports on Form 8-K filed on January 16, May 5, September 1, September 15 and October 1, 2009 (excluding any portion of such Current Reports which are furnished and not filed with the SEC);
- Description of our common stock contained in our registration statement on Form S-1, filed on May 17, 1996, including any amendment or reports filed for the purpose of updating such description (Registration No. 333-03172); and
- All documents filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and before the last offering of common stock under this prospectus (excluding any portion of such documents which are furnished and not filed with the SEC).

You may access our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, Proxy Statement, and amendments, if any, to those documents filed or furnished pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act with the SEC free of charge at the SEC's website or our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not part of this prospectus.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Neurocrine Biosciences, Inc.
12780 El Camino Real
San Diego, CA 92130
(858) 617-7600
Attn: Investor Relations