

[QuickLinks](#) -- Click here to rapidly navigate through this document

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of
the Securities Exchange Act of 1934 (Amendment No.)

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under Rule 14a-12

Incyte Corporation

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 - Fee computed on table below per Exchange Act Rules 14a-6(i)(4) and 0-11.
 - (1) Title of each class of securities to which transaction applies:

 - (2) Aggregate number of securities to which transaction applies:

 - (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

 - (4) Proposed maximum aggregate value of transaction:

 - (5) Total fee paid:

 - Fee paid previously with preliminary materials.
 - Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.
 - (1) Amount Previously Paid:

 - (2) Form, Schedule or Registration Statement No.:

 - (3) Filing Party:

 - (4) Date Filed:

-



Incyte Corporation
Experimental Station
Route 141 & Henry Clay Road, Building E336
Wilmington, DE 19880
(302) 498-6700

• , 2009

Dear Stockholder:

You are cordially invited to attend the Special Meeting of Stockholders of Incyte Corporation that will be held on • , 2009, at • a.m., Eastern Standard Time, at the Hotel du Pont, 11th and Market Streets, Wilmington, Delaware 19801.

The formal notice of the Special Meeting and the Proxy Statement have been made a part of this invitation.

After reading the Proxy Statement, please mark, date, sign and return, at an early date, the enclosed proxy in the enclosed prepaid envelope, to ensure that your shares will be represented. **Your shares cannot be voted unless you sign, date and return the enclosed proxy, submit your proxy by telephone or the internet, or attend the Special Meeting in person.**

Sincerely yours,

A handwritten signature in black ink, appearing to read "R. U. De Schutter", written in a cursive style.

Richard U. De Schutter
Chairman of the Board

INCYTE CORPORATION

Notice of Special Meeting of Stockholders

to be held • , 2009

To the Stockholders of Incyte Corporation:

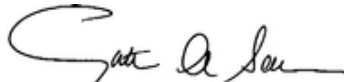
The Special Meeting of Stockholders of Incyte Corporation, a Delaware corporation (the "Company"), will be held at the Hotel du Pont, 11th and Market Streets, Wilmington, Delaware 19801, on • , 2009, at • a.m., Eastern Standard Time, for the following purposes:

1. To consider and vote upon a proposal to amend the Company's Restated Certificate of Incorporation to increase the number of shares of Common Stock authorized for issuance from 200,000,000 shares to 400,000,000 shares; and
2. To consider and vote upon a proposal to adjourn the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation.

Stockholders of record as of the close of business on • , 2009 are entitled to notice of and to vote at the Special Meeting and any postponement or adjournment thereof.

It is important that your shares be represented at this meeting. Even if you plan to attend the meeting, we hope that you will vote as soon as possible. Voting now will ensure your representation at the Special Meeting regardless of whether you attend in person. Please review the instructions on page 2 of the attached Proxy Statement regarding your voting options. This will not limit your right to attend or vote at the meeting.

By Order of the Board of Directors



Patricia A. Schreck
Secretary

• , 2009

INCYTE CORPORATION
Experimental Station
Route 141 & Henry Clay Road, Building E336
Wilmington, DE 19880

PROXY STATEMENT

This Proxy Statement is furnished in connection with the solicitation by the Board of Directors of Incyte Corporation, a Delaware corporation ("we," "us," "our," "Incyte" or the "Company"), of proxies in the accompanying form to be used at the Special Meeting of Stockholders of the Company to be held at the Hotel du Pont, 11th and Market Streets, Wilmington, Delaware 19801, on • , 2009, at • a.m., Eastern Standard Time, and any postponement or adjournment thereof.

This Proxy Statement and the accompanying form of proxy are being mailed to stockholders on or about • , 2009.

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF
PROXY MATERIALS FOR THE SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON • , 2009.**

The Proxy Statement is available at •

For information on how to obtain directions to attend the Special Meeting, please see "Questions and Answers about the Proxy Materials and the Special Meeting."

**QUESTIONS AND ANSWERS ABOUT
THE PROXY MATERIALS AND THE SPECIAL MEETING**

What proposals will be voted on at the Special Meeting?

Two proposals will be voted on at the Special Meeting:

- To amend the Company's Restated Certificate of Incorporation to increase the number of shares of Common Stock authorized for issuance from 200,000,000 shares to 400,000,000 shares; and
- To approve the adjournment of the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation.

What are the Board's recommendations?

Our Board recommends that you vote:

- "FOR" the amendment of the Company's Restated Certificate of Incorporation to increase the number of shares of Common Stock authorized for issuance from 200,000,000 shares to 400,000,000 shares; and
- "FOR" the approval of the adjournment of the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation.

Who is entitled to vote?

Stockholders of record at the close of business on • , 2009, the Record Date, may vote at the Special Meeting. Each stockholder is entitled to one vote for each share of our Common Stock held as of the Record Date.

What is the difference between holding shares as a stockholder of record and as a beneficial owner?

Stockholder of Record. If your shares are registered directly in your name with our transfer agent, BNY Mellon Shareowner Services, you are considered, with respect to those shares, the "stockholder of record." The Proxy Statement and proxy card have been sent directly to you by Incyte.

Beneficial Owner. If your shares are held in a stock brokerage account or by a bank or other nominee, you are considered the "beneficial owner" of shares held in street name. The Proxy Statement has been forwarded to you by your broker, bank or nominee who is considered, with respect to those shares, the stockholder of record. As the beneficial owner, you have the right to direct your broker, bank or nominee how to vote your shares by using the voting instruction form included in the mailing.

How do I vote?

You may vote using any of the following methods:

- **By Mail** – Stockholders of record may submit proxies by completing, signing and dating each proxy card received and returning it in the prepaid envelope. Sign your name exactly as it appears on the proxy. If you return your signed proxy but do not indicate your voting preferences, your shares will be voted on your behalf "FOR" the amendment of the Company's Restated Certificate of Incorporation to increase the number of shares of Common Stock authorized for issuance from 200,000,000 shares to 400,000,000 shares and "FOR" the approval of the adjournment of the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation. Stockholders who hold shares beneficially in street name may provide voting instructions by mail by completing, signing and dating the voting instruction forms provided by their brokers, banks or other nominees.
- **By Telephone** – Stockholders of record may submit proxies by following the telephone voting instructions on each proxy card. Most stockholders who hold shares beneficially in street name may provide voting instructions by telephone by calling the number specified on the voting instruction form provided by their brokers, banks or nominees. Please check the voting instruction form for telephone voting availability. Please be aware that if you submit voting instructions by telephone, you may incur costs such as telephone access charges for which you will be responsible. The telephone voting facilities will close at 11:59 p.m., Eastern Standard Time, the day before the meeting date.
- **By Internet** – Stockholders of record with internet access may submit proxies by following the internet voting instructions on their proxy cards. Most stockholders who hold shares beneficially in street name may provide voting instructions by accessing the website specified on the voting instruction form provided by their brokers, banks or nominees. Please check the voting instruction form for internet voting availability. Please be aware that if you vote over the internet, you may incur costs such as internet access charges for which you will be responsible. The internet voting facilities will close at 11:59 p.m., Eastern Standard Time, the day before the meeting date.
- **In Person at the Special Meeting** – Shares held in your name as the stockholder of record may be voted at the Special Meeting. Shares held beneficially in street name may be voted in person only if you obtain a legal proxy from the broker, bank or nominee that holds your shares giving you the right to vote the shares. You may obtain directions to the Special Meeting by contacting the

Company's Investor Relations Department at (302) 498-6700. *Even if you plan to attend the Special Meeting, we recommend that you also submit your proxy or voting instructions or vote by telephone or the internet so that your vote will be counted if you later decide not to attend the meeting.*

Can I change my vote or revoke my proxy?

You may change your vote or revoke your proxy at any time prior to the vote at the Special Meeting. If you submitted your proxy by mail, you must file with the Secretary of the Company a written notice of revocation or deliver, prior to the vote at the Special Meeting, a valid, later-dated proxy. If you submitted your proxy by telephone or the internet, you may change your vote or revoke your proxy with a later telephone or internet proxy, as the case may be. Attendance at the Special Meeting will not have the effect of revoking a proxy unless you give written notice of revocation to the Secretary before the proxy is exercised or you vote by written ballot at the Special Meeting.

How are votes counted?

You may vote "FOR," vote "AGAINST" or "ABSTAIN." If you provide specific instructions, your shares will be voted as you instruct. If you sign your proxy card or voting instruction form with no further instructions, your shares will be voted in accordance with the recommendations of the Board ("FOR" the amendment of the Company's Restated Certificate of Incorporation to increase the number of shares of Common Stock authorized for issuance from 200,000,000 shares to 400,000,000 shares and "FOR" the approval of the adjournment of the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation).

What vote is required to approve each item?

Proposal 1 requires the affirmative "FOR" vote of the holders of a majority of the shares outstanding as of the Record Date. Proposal 2 requires the affirmative "FOR" vote of the holders of a majority of the shares present at the Special Meeting in person or by proxy and entitled to vote. Abstentions will have the same effect as votes "AGAINST" Proposal 1 and Proposal 2.

If you hold shares beneficially in street name and do not provide your broker or nominee with voting instructions, your shares may constitute "broker non-votes." Generally, broker non-votes occur on a matter when a broker is not permitted to vote on that matter without instructions from the beneficial owner and instructions are not given. Broker non-votes have the same effect as votes "AGAINST" Proposal 1. For Proposal 2, shares that constitute broker non-votes are not considered entitled to vote on the proposal, and will not affect the outcome of Proposal 2.

What constitutes a quorum?

The presence at the Special Meeting, in person or by proxy, of the holders of a majority of the shares of Common Stock outstanding on the Record Date will constitute a quorum. As of the close of business on the Record Date, there were • shares of our Common Stock outstanding. Both abstentions and broker non-votes are counted for the purpose of determining the presence of a quorum.

What is "householding" and how does it affect me?

We have adopted a process for mailing the Proxy Statement called "householding," which has been approved by the Securities and Exchange Commission. Householding means that stockholders who share the same last name and address will receive only one copy of the Proxy Statement, unless we receive contrary instructions from any stockholder at that address. We will continue to mail a proxy card to each stockholder of record.

If you prefer to receive multiple copies of the Proxy Statement at the same address, additional copies will be provided to you upon request. If you are a stockholder of record, you may contact us by writing to Investor Relations Department, Incyte Corporation, Experimental Station, Route 141 & Henry Clay Road, Building E336, Wilmington, Delaware 19880 or by calling (302) 498-6700 and asking for Investor Relations. Eligible stockholders of record receiving multiple copies of the Proxy Statement can request householding by contacting us in the same manner. We have undertaken householding to reduce printing costs and postage fees, and we encourage you to participate.

If you are a beneficial owner, you may request additional copies of the Proxy Statement or you may request householding by notifying your broker, bank or nominee.

How are proxies solicited?

Our employees, officers and directors may solicit proxies. We will reimburse brokerage houses and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy and solicitation material to the owners of our Common Stock.

PROPOSAL 1

PROPOSAL TO AMEND THE COMPANY'S RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK

The Board of Directors has adopted, subject to stockholder approval, an amendment to the Company's Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock from 200,000,000 to 400,000,000. The Board of Directors recommends that the Company's stockholders approve this amendment.

As of October 12, 2009 the Company had 118,540,444 shares of Common Stock outstanding. An additional 22,768,083 shares were reserved for future issuance under the Company's stockholder approved equity compensation plans, of which 17,986,213 shares were reserved for issuance upon exercise of outstanding options to purchase shares of Common Stock and 4,781,870 shares were reserved and available for future grant or purchase. As of October 12, 2009, an additional 19,381,557 shares of Common Stock were reserved for issuance upon conversion of the Company's outstanding 3¹/₂% Convertible Senior Notes due 2011, 3¹/₂% Convertible Subordinated Notes due 2011 and Convertible Subordinated Notes issued to Pfizer Inc. On September 30, 2009, the Company completed the sale of its 4.75% Convertible Senior Notes due 2015. The number of shares of Common Stock into which the 4.75% Convertible Senior Notes due 2015, or 2015 Notes, are convertible exceeds the number of shares of Common Stock available for issuance, as described in more detail below.

The Board of Directors believes that it is advisable and in the best interests of the Company and our stockholders to increase the number of authorized shares of Common Stock. In connection with the sale of the 2015 Notes, we agreed to use our reasonable efforts to obtain the approval of our stockholders to increase the number of shares of Common Stock we are authorized to issue, and to reserve sufficient shares of Common Stock for issuance upon the conversion of all of the 2015 Notes. The proposed increase in the number of authorized shares of Common Stock will make available a sufficient number of shares of the Common Stock to effect the conversion into Common Stock of all of our outstanding convertible notes.

As of October 12, 2009, we have reserved 39,121,429 shares of Common Stock for issuance upon conversion of the 2015 Notes. The maximum number of shares of Common Stock that may be issued upon conversion of the 2015 Notes in connection with a "make-whole fundamental change" described in the indenture relating to the 2015 Notes is 58,139,520. This number may be adjusted from time to time under the terms of the 2015 Notes and the indenture relating to the 2015 Notes. Until we have sufficient shares of Common Stock authorized and available for issuance upon conversion of the 2015 Notes, we will issue a combination of shares of Common Stock and shares of our Series A Preferred Stock upon conversion of the 2015 Notes. Under the terms of the indenture relating to the 2015 Notes, we may not, until there are sufficient shares of Common Stock reserved for issuance under the 2015 Notes, use any shares of our Common Stock that become available as a result of repurchases of our existing convertible notes or Common Stock for any transaction or obligation other than to satisfy our conversion obligations under the 2015 Notes.

If we have not established a sufficient reserve of shares of Common Stock by January 1, 2010, the 2015 Notes will accrue additional interest at the rate of 5.25% per annum (for a total interest rate of 10% per annum) from and after January 1, 2010. If we have not established a sufficient reserve by June 30, 2010, the additional interest accruing on the 2015 Notes will increase from the rate of 5.25% per annum to the rate of 10.25% per annum (for a total interest rate of 15% per annum) from and after June 30, 2010, and such additional interest will increase by an additional 5% per annum on each June 30 thereafter. In each case, such additional interest will accrue until a reserve of shares of Common Stock sufficient to effect the conversion of all outstanding 2015 Notes has been established. In addition, if certain tender or other exchange offers occur before we are able to establish a sufficient reserve of shares of Common Stock for the 2015 Notes, as a result of which a third party or group acquires beneficial ownership of more than 50%

of the voting power of our common equity, then the interest rate on the 2015 Notes will increase to 15% (or remain at any higher rate then in effect as a result of our inability to establish a sufficient reserve of shares of Common Stock as described above), with an additional 5% increase in the interest rate on each anniversary of that occurrence, until we have established a sufficient reserve of shares of Common Stock.

We have no current plans to issue the additional shares of Common Stock that would be authorized by this proposed amendment other than to establish a sufficient reserve of shares of Common Stock for issuance upon the conversion of all of the 2015 Notes. The Board of Directors, however, believes that having authorized Common Stock remaining available, after having reserved a sufficient number of shares of Common Stock to effect the conversion of all of our outstanding convertible notes, will enable us to respond to potential business opportunities and to pursue important objectives that may not be anticipated. The Board of Directors also believes that the availability of such shares will provide us with the flexibility to issue Common Stock for proper corporate purposes that may be identified by the Board of Directors from time to time, such as strategic business relationships, financings or acquisitions. Further, the Board of Directors believes the availability of additional shares of Common Stock will enable us to attract and retain talented directors, officers, employees and consultants through the grant of stock options and other stock-based incentives. We do not currently have any agreements with respect to future acquisitions or investments; however, we from time to time review acquisition or investment opportunities in complementary businesses, products or technologies. The issuance of additional shares of Common Stock may have a dilutive effect on earnings per share and, for a person who does not purchase additional shares to maintain his or her pro rata interest, on a stockholder's percentage voting power.

The authorized shares of Common Stock in excess of those issued, or reserved for issuance, will be available for issuance at such times and for such corporate purposes as the Board of Directors may deem advisable without further action by our stockholders, except as may be required by applicable laws or the rules of any stock exchange or stock market on which the securities may be listed or traded. Upon issuance, such shares will have the same rights as the outstanding shares of Common Stock. Holders of Common Stock do not have preemptive rights.

The Board of Directors does not recommend this proposed amendment with the intent to use the ability to issue additional Common Stock to discourage a hostile takeover attempt or delay or prevent changes in control or management of the Company. However, the availability of authorized Common Stock for issuance could render more difficult or discourage a merger, tender offer, proxy contest or other attempt to obtain control of the Company. For example, without further stockholder approval, the Board of Directors could adopt a stockholder rights plan similar to the plan that expired in 2008, which would, under certain circumstances related to an acquisition of shares not approved by the Board of Directors, give holders other than the holder whose acquisition was not approved by the Board the right to acquire additional shares of Common Stock at a low price. The proposed amendment is not in response to any effort on the part of any party to accumulate material amounts of Common Stock or to acquire control of the Company by means of merger, tender offer, proxy contest or otherwise, or to change the Company's management. In addition, the proposal is not part of any plan by management to recommend a series of similar amendments to the Board of Directors and the stockholders.

The text of Paragraph A of Article IV of the Company's Restated Certificate of Incorporation, as it is proposed to be amended pursuant to this proposal, is as follows:

A. Classes of Stock. The total number of shares of all classes of capital stock which the corporation shall have authority to issue is four hundred five million (405,000,000), of which four hundred million (400,000,000) shares of the par value of one-tenth of one cent (\$.001) each shall be Common Stock (the "Common Stock") and five million (5,000,000) shares of the par value of one-tenth of one cent (\$.001) each shall be Preferred Stock (the "Preferred Stock"). The number of authorized shares of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of

the then outstanding shares of Common Stock, without a vote of the holders of the Preferred Stock, or of any series thereof, unless a vote of any such Preferred Stock holders is required pursuant to the provisions established by the Board of Directors of this corporation (the "Board of Directors") in the resolution or resolutions providing for the issue of such Preferred Stock, and if such holders of such Preferred Stock are so entitled to vote thereon, then, except as may otherwise be set forth in this Restated Certificate of Incorporation, the only stockholder approval required shall be the affirmative vote of a majority of the combined voting power of the Common Stock and the Preferred Stock so entitled to vote.

The affirmative vote of the holders of a majority of the shares of the Company's Common Stock outstanding as of the Record Date is required to approve this proposal. If approved by the stockholders, the proposed amendment to the Company's Restated Certificate of Incorporation will become effective upon the filing of a Certificate of Amendment with the Secretary of State of the State of Delaware, which will occur as soon as reasonably practicable.

The Board of Directors recommends a vote "FOR" the amendment to the Company's Restated Certificate of Incorporation to increase the number of authorized shares of Common Stock.

PROPOSAL 2

ADJOURNMENT OF THE SPECIAL MEETING

Our management may move to adjourn the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation. In that event, you will be asked to vote only upon the adjournment, and not on any other proposal.

In this proposal, we are asking you to authorize the holder of any proxy solicited by our Board of Directors to vote in favor of adjourning the Special Meeting and any later adjournments. If our stockholders approve this adjournment proposal, we could adjourn the Special Meeting, and any adjourned session of the Special Meeting, and use the additional time to solicit additional proxies in favor of Proposal 1. Additionally, we may seek to adjourn the Special Meeting if a quorum is not present at the Special Meeting.

No proxy that is specifically marked "AGAINST" Proposal 1 will be voted in favor of the adjournment proposal unless it is specifically marked "FOR" the proposal to adjourn the Special Meeting.

The Board of Directors recommends a vote "FOR" the adjournment of the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of October 13, 2009, as to shares of Common Stock beneficially owned by: (i) each person who is known to us to own beneficially more than 5% of the Common Stock, (ii) each of our directors, (iii) each of our executive officers identified under "Executive Compensation—Summary Compensation Table" in our proxy statement for our 2009 annual meeting and (iv) all of our directors and executive officers as a group. Ownership information is based upon information furnished by the respective individuals or entities, as the case may be. Unless otherwise indicated below, the address of each beneficial owner listed on the table is c/o Incyte Corporation, Experimental Station, Route 141 & Henry Clay Road, Building E336, Wilmington, DE 19880. The percentage of Common Stock beneficially owned is based on 118,540,444 shares outstanding as of September 30, 2009. In addition, shares issuable pursuant to options or convertible securities that may be acquired within 60 days of September 30, 2009 are deemed to be issued and outstanding and have been treated as outstanding in calculating and determining the beneficial ownership and percentage ownership of those persons possessing those securities, but not for any other individuals.

| Name and Address of Beneficial Owner(1) | Shares Beneficially Owned(1) | Percentage Beneficially Owned |
|---|------------------------------|-------------------------------|
| 5% Stockholders | | |
| Julian C. Baker and Felix J. Baker(2) | 26,331,758 | 19.9% |
| T. Rowe Price Associates, Inc.(3) | 14,657,718 | 12.3 |
| Wellington Management Company, LLP(4) | 9,184,446 | 7.8 |
| Loomis, Sayles & Co., L.P.(5) | 7,912,379 | 6.3 |
| Directors and Named Executive Officers | | |
| Paul A. Friedman(6) | 1,831,228 | 1.5 |
| David C. Hastings(7) | 532,330 | * |
| Brian W. Metcalf(8) | 718,416 | * |
| Patricia A. Schreck(9) | 515,330 | * |
| Paula J. Swain(10) | 598,890 | * |
| Richard U. De Schutter(11) | 242,084 | * |
| Barry M. Ariko(12) | 140,834 | * |
| Julian C. Baker(13) | 26,331,758 | 19.9 |
| Paul A. Brooke(14) | 252,084 | * |
| John F. Niblack(15) | 70,625 | * |
| Roy A. Whitfield(16) | 1,201,335 | 1.0 |
| All directors and executive officers as a group (15 persons)(17) | 33,557,395 | 24.4 |

* Represents less than 1% of our Common Stock.

- (1) To our knowledge, the persons named in the table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws where applicable and the information contained in the notes to this table.
- (2) Pursuant to an agreement with the Company, entities affiliated with Julian C. Baker and Felix J. Baker and the Company agreed that any of the Company's 4.75% Convertible Senior Notes due 2015 (the "4.75% Senior Notes") held by those entities will not be convertible to the extent that those entities, together with any of their affiliates or other persons that may be deemed to form a "group" with those entities within the meaning of Section 13(d) of the Securities Exchange Act of 1934, would beneficially own, for the purposes of Section 13(d) of the Securities Exchange Act of 1934, in excess of 19.999% of the outstanding shares of Common Stock after conversion. According to an amended Schedule 13D filed October 1, 2009 and Forms 4 filed September 28, 2009, without any limitation on the conversion of the 4.75% Senior Notes, Julian C. Baker and Felix J. Baker may be deemed to beneficially own and share dispositive and voting power with respect to 31,430,059 shares, including 18,223,232 shares issuable upon conversion of the 4.75% Senior Notes. Baker/Tisch Investments, L.P. held 423,849 shares, including 233,940 shares issuable upon conversion of the Company's 4.75% Senior Notes; Baker Bros. Investments, L.P. held 144,314 shares; Baker Bros. Investments II, L.P. held 161,547 shares, including 21,412 shares issuable upon conversion of

the Company's 4.75% Senior Notes; 667, L.P. held 6,857,501 shares, including 3,370,501 shares issuable upon conversion of the Company's 4.75% Senior Notes; Baker Brothers Life Sciences, L.P. held 23,130,957 shares, including 14,201,252 shares issuable upon conversion of the Company's 4.75% Senior Notes; 14159, L.P. held 678,481 shares, including 396,127 shares issuable upon conversion of the Company's 4.75% Senior Notes; and FBB Associates held 33,410 shares. Julian C. Baker also has sole voting and dispositive power with respect to 137,917 shares subject to options exercisable within 60 days of September 30, 2009. Julian C. Baker and Felix J. Baker may be deemed to own beneficially the shares held by Baker/Tisch Investments, L.P., Baker Bros. Investments, L.P., Baker Bros. Investments II, L.P., 667, L.P., Baker Brothers Life Sciences, L.P., 14159, L.P. and FBB Associates. The address for Julian C. Baker and Felix J. Baker is 667 Madison Avenue, 21st Floor, New York, New York 10065.

- (3) According to an amended Schedule 13G filed February 12, 2009, filed by T. Rowe Price Associates, Inc. ("T. Rowe Price"), T. Rowe Price has sole dispositive power with respect to all shares listed in the table and sole voting power with respect to 2,898,000 shares. The shares listed in the table include 5,327,400 shares held by T. Rowe Price New Horizons Fund, Inc., over which it has sole voting power. The number of shares deemed beneficially owned by T. Rowe Price includes 713,108 shares subject to warrants and conversion privileges. The address of the principal place of business of T. Rowe Price and T. Rowe Price New Horizons Fund, Inc. is 100 E. Pratt Street, Baltimore, Maryland 21202.
- (4) According to an amended Schedule 13G filed October 13, 2009, filed by Wellington Management Company, LLP ("Wellington"), Wellington, in its capacity as investment adviser, may be deemed to beneficially own all shares listed in the table, and has shared dispositive power with respect to 9,184,446 shares and shared voting power over 7,906,975 shares. The address of the principal place of business of Wellington is 75 State Street, Boston, Massachusetts 02109.
- (5) According to an amended Schedule 13G filed February 13, 2009, filed by Loomis, Sayles & Co., L.P. ("Loomis"), Loomis, in its capacity as investment adviser, may be deemed to beneficially own and has sole dispositive power with respect to all shares listed in the table, and has sole voting power with respect to 7,074,477 shares and shared voting power over 337,835 shares. Based on a Form 13F filed February 13, 2009 by Loomis, all shares listed in the table represent shares issuable upon the conversion of the Company's 3¹/₂% Subordinated Notes due 2011. The address of the principal place of business of Loomis is One Financial Center, Boston, Massachusetts 02111.
- (6) Includes 1,576,663 shares subject to options exercisable within 60 days of September 30, 2009.
- (7) Includes 525,830 shares subject to options exercisable within 60 days of September 30, 2009.
- (8) Includes 662,830 shares subject to options exercisable within 60 days of September 30, 2009.
- (9) Includes 510,830 shares subject to options exercisable within 60 days of September 30, 2009.
- (10) Includes 580,829 shares subject to options exercisable within 60 days of September 30, 2009.
- (11) Includes 147,084 shares subject to options exercisable within 60 days of September 30, 2009.
- (12) Represents solely 140,834 shares subject to options exercisable within 60 days of September 30, 2009.
- (13) See note (2) above.
- (14) Includes 152,084 shares subject to options exercisable within 60 days of September 30, 2009.
- (15) Represents solely 70,625 shares subject to options exercisable within 60 days of September 30, 2009.
- (16) Includes 230,000 shares subject to options exercisable within 60 days of September 30, 2009.
- (17) Includes shares included pursuant to notes (6), (7), (8), (9), (10), (11), (12), (13), (14), (15) and (16) above and 1,049,850 shares subject to options exercisable within 60 days of September 30, 2009 held by other executive officers of the Company.

STOCKHOLDER PROPOSALS FOR THE 2010 ANNUAL MEETING

To be considered for inclusion in the Company's proxy statement for the Company's 2010 Annual Meeting of Stockholders, stockholder proposals must be received by the Secretary of the Company no later than December 12, 2009. These proposals also must comply with the proxy proposal submission rules of the Securities and Exchange Commission under Rule 14a-8.

A stockholder proposal not included in the Company's proxy statement for the 2010 Annual Meeting will be ineligible for presentation at the meeting unless the stockholder gives timely notice of the proposal in writing to the Secretary of the Company at the principal executive offices of the Company, provides the information required by the Company's Bylaws, and otherwise complies with the provisions of the Company's Bylaws. To be timely, our Bylaws provide that the Company must have received the stockholder's notice not less than 90 days nor more than 120 days prior to the first anniversary of the preceding year's annual meeting of stockholders. However, in the event that no annual meeting was held in the preceding year or the annual meeting is called for a date that is more than 30 days before or more than 60 days after the first anniversary date of the preceding year's annual meeting of stockholders, notice by the stockholder to be timely must be so received by the Secretary of the Company not later than the close of business on the later of (1) the 90th day prior to the date of the meeting and (2) the 10th day following the earlier to occur of the day on which notice of the date of the scheduled annual meeting was mailed or the day on which public announcement of the date of such scheduled annual meeting was first made.

OTHER MATTERS

No other business may be considered at the Special Meeting, or any adjournment thereof, except procedural matters as may be necessary to conduct the meeting. The proxy holders will vote in regard to such procedural matters in their discretion insofar as such proxies are not limited to the contrary.

Whether you intend to be present at the Special Meeting or not, we urge you to vote by telephone, the internet, or by signing and mailing the enclosed proxy promptly.

By Order of the Board of Directors



Paul A. Friedman
President and Chief Executive Officer

• , 2009

The Board of Directors recommends a vote FOR items 1 and 2.

Please mark your votes as indicated in this example

X

- 1. To amend the Company's Restated Certificate of Incorporation to increase the number of shares of Common Stock authorized for issuance from 200,000,000 shares to 400,000,000 shares.
- 2. To approve the adjournment of the Special Meeting, if necessary, to solicit additional proxies in the event there are insufficient votes at the time of such adjournment to amend the Company's Restated Certificate of Incorporation.

| | FOR | AGAINST | ABSTAIN |
|----|-----------------------|-----------------------|-----------------------|
| 1. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

PLEASE MARK, SIGN, DATE AND MAIL THIS PROXY CARD PROMPTLY, USING THE ENCLOSED ENVELOPE.

Mark Here for Address Change or Comments SEE REVERSE

Signature _____ Signature _____ Date _____

Please sign exactly as name(s) appear on this proxy. If signing as attorney, executor, administrator, trustee or guardian, please give full title as such. If shares are held jointly, each holder should sign.

▲ FOLD AND DETACH HERE ▲

WE ENCOURAGE YOU TO TAKE ADVANTAGE OF INTERNET OR TELEPHONE VOTING, BOTH ARE AVAILABLE 24 HOURS A DAY, 7 DAYS A WEEK.

Internet and telephone voting is available through 11:59 PM Eastern Time the day prior to the special meeting day.

INCYTE CORPORATION

INTERNET

<http://>

Use the Internet to vote your proxy. Have your proxy card in hand when you access the web site.

OR

TELEPHONE

Use any touch-tone telephone to vote your proxy. Have your proxy card in hand when you call.

If you vote your proxy by Internet or by telephone, you do NOT need to mail back your proxy card.

To vote by mail, mark, sign and date your proxy card and return it in the enclosed postage-paid envelope.

Your Internet or telephone vote authorizes the named proxies to vote your shares in the same manner as if you marked, signed and returned your proxy card.

Important notice regarding the Internet availability of proxy materials for the Special Meeting of Stockholders

The Proxy Statement is available at: <http://>

INCYTE CORPORATION

PROXY SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS

For Special Meeting – , 2009

PAUL A. FRIEDMAN, DAVID C. HASTINGS and PATRICIA A. SCHRECK, or any of them, each with the power of substitution, are hereby authorized to represent as proxies and vote with respect to the proposals set forth below and in the discretion of such proxies on all other matters that may be properly presented for action all shares of stock of Incyte Corporation (the "Company") the undersigned is entitled to vote at the Special Meeting of Stockholders of the Company to be held at the Hotel du Pont, 11th and Market Streets, Wilmington, Delaware on , 2009 at a.m., Eastern Standard Time, or at any postponement or adjournment thereof, and instructs said proxies to vote as follows:

Shares represented by this proxy will be voted as directed by the stockholder. If no such directions are indicated, the proxies will have the authority to vote FOR items 1 and 2, and in accordance with the discretion of the proxies on any other matters as may properly come before the special meeting.

(continued and to be signed on reverse side)

Address Change/Comments (Mark the corresponding box on the reverse side)

▲ FOLD AND DETACH HERE ▲

QuickLinks

[INCYTE CORPORATION](#)

[Notice of Special Meeting of Stockholders to be held •, 2009](#)

[INCYTE CORPORATION Experimental Station Route 141 & Henry Clay Road, Building E336 Wilmington, DE 19880](#)

[PROXY STATEMENT](#)

[IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE SPECIAL MEETING OF STOCKHOLDERS TO BE HELD ON •, 2009.](#)

[QUESTIONS AND ANSWERS ABOUT THE PROXY MATERIALS AND THE SPECIAL MEETING](#)

[PROPOSAL 1 PROPOSAL TO AMEND THE COMPANY'S RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF COMMON STOCK](#)

[PROPOSAL 2 ADJOURNMENT OF THE SPECIAL MEETING](#)

[SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT](#)

[STOCKHOLDER PROPOSALS FOR THE 2010 ANNUAL MEETING](#)

[OTHER MATTERS](#)