SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-3

REGISTRATION STATEMENT Under THE SECURITIES ACT OF 1933

INCYTE PHARMACEUTICALS, INC. (Exact name of registrant as specified in its charter)

Delaware

94-3136539

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

3174 Porter Drive Palo Alto, CA 94304 (415) 855-0555

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

> ROY A. WHITFIELD President and Chief Executive Officer INCYTE PHARMACEUTICALS, INC. 3174 Porter Drive Palo Alto, CA 94304 (415) 855-0555

(Name, address, including zip code, and telephone number, including area code, of agent for service) ${}^{\circ}$

Copies to:

STANTON D. WONG SALLY BRAMMELL Pillsbury Madison & Sutro LLP P.O. Box 7880 San Francisco, California 94120

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered $% \left(1\right) =\left(1\right) \left(1\right) \left($ pursuant to dividend or interest reinvestment plans, please check the following box. / /

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. /X/

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

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. / /

CALCULATION OF REGISTRATION FEE

PROPOSED PR0P0SED

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED

AMOUNT TO BE REGISTERED

MAXIMUM OFFERING PRICE PER SHARE(1)

MAXIMUM AGGREGATE OFFERING PRICE(1)

AMOUNT OF REGISTRATION FEE

107,408 shares

\$46.75 \$5,021,324 (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) based upon the average of the high and low prices of the Company's Common Stock on the Nasdaq National Market on September 27, 1996.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

2

INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF ANY OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

SUBJECT TO COMPLETION, DATED OCTOBER 3, 1996

PROSPECTUS

107,408 SHARES

INCYTE

PHARMACEUTICALS, INC.

COMMON STOCK

This Prospectus covers 107,408 shares (the "Shares") of Common Stock, \$.001 par value (the "Common Stock"), of Incyte Pharmaceuticals, Inc. ("Incyte" or the "Company") offered for the account of certain stockholders of the Company (the "Selling Stockholders"). The Shares may be offered by the Selling Stockholders from time to time in transactions (which may include block transactions) on the Nasdaq National Market, in negotiated transactions, through a combination of such methods of sale, or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices, or at negotiated prices. The Selling Stockholders may effect such transactions by selling the Shares to or through broker-dealers, who may receive compensation in the form of discounts, concessions or commissions from the Selling Stockholders and/or the purchasers of the Shares for whom such broker-dealers may act as agents or to whom they may sell as principals, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). The Company will not receive any of the proceeds from the sale of the Shares by the Selling Stockholders. The Company has agreed to bear all expenses of registration of the Shares, but all selling and other expenses incurred by a Selling Stockholder will be borne by that Selling Stockholder.

The Selling Stockholders and any broker-dealers, agents or underwriters that participate with the Selling Stockholders in the distribution of the Shares may be deemed to be "underwriters" within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), and any commissions paid or any discounts or concessions allowed to any such persons, and any profits received on the resale of the Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. See "Selling Stockholders" and "Plan of Distribution."

The Common Stock is traded on the Nasdaq National Market under the symbol "INCY."

THE COMMON STOCK OFFERED HEREBY INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 3.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES
AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION,
NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE
SECURITIES COMMISSION PASSED UPON THE ACCURACY OR
ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION
TO THE CONTRARY IS A CRIMINAL OFFENSE.

No person has been authorized to give any information or to make any representations other than those contained or incorporated by reference in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by the Company. This Prospectus does not constitute an offer to sell or a solicitation of any offer to buy any security other than the shares of Common Stock offered by this Prospectus, nor does it constitute an offer to sell or solicitation of any offer to buy the shares of Common Stock by anyone in any jurisdiction in which such offer or solicitation is not authorized, or in which the person making such offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make such offer or solicitation. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that the information contained herein is correct as of any time subsequent to the date hereof.

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy and information statements, and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy and information statements, and other information filed by the Company can be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C., as well as the regional offices of the Commission located at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois, and 7 World Trade Center, Suite 1300, New York, New York. Copies of such material can be obtained from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. The Commission maintains a World Wide Web site that contains reports, proxy and information statements, and other information that are filed through the Commission's Electronic Data Gathering, Analysis and Retrieval System. This Web site can be accessed at http://www.sec.gov.

The Company has filed with the Commission a Registration Statement on Form S-3 (together with all amendments and exhibits thereto, the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), with respect to the Common Stock offered hereby. This Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto, certain parts of which are omitted in accordance with the rules and regulations of the Commission. For further information with respect to the Company and the Common Stock, reference is made to the Registration Statement and the exhibits and schedules thereto. Statements contained in this Prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, reference is made to the copy of such contract or document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference. Copies of the Registration Statement, including all exhibits thereto, may be obtained from the Commission's principal office in Washington, D.C. upon payment of the fees prescribed by the Commission, or may be examined without charge at the offices of the Commission described above.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents previously filed with the Commission are hereby incorporated by reference into this Prospectus: (i) the Company's Annual Report on Form 10-K for the year ended December 31, 1995, (ii) the Company's Quarterly Reports on Form 10-Q for the quarters ended March 31, 1996 and June 30, 1996, (iii) the Company's Current Report on Form 8-K dated July 22, 1996, and (iv) the description of the Common Stock contained in the Company's Registration Statement on Form 8-A filed under the Exchange Act on October 7, 1993. All documents subsequently filed by the Company pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of the offering to which this Prospectus relates shall be deemed to be incorporated by reference into this Prospectus and to be part of this Prospectus from the date of filing thereof

Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Prospectus and the Registration Statement of which it is a part to the extent that a statement contained herein or in any other subsequently filed document which also is incorporated herein modifies or replaces such statement. Any statement so modified or superseded shall not be deemed, in its unmodified form, to constitute a part of this Prospectus or such Registration Statement. The Company will provide without charge to each person to whom a copy of the Prospectus has been delivered, and who makes a written or oral request, a copy of any and all of the foregoing documents incorporated by reference in the Registration Statement (other than exhibits unless such exhibits are specifically incorporated by reference into such documents). Requests should be submitted in writing or by telephone to Investor Relations, Incyte Pharmaceuticals, Inc., 3174 Porter Drive, Palo Alto, California 94304, telephone (415) 845-4111.

THE COMPANY

Incyte Pharmaceuticals, Inc. ("Incyte" or the "Company") is a leader in the design, development and marketing of genomic database products, software tools, and related services. The Company has created a portfolio of database products including the LifeSeq(TM) gene expression and sequence database, LifeSeq FL(TM) database of full-length genes, LifeSeq Atlas(TM) mapping database, and PathoSeq(TM) microbial database. These databases integrate bioinformatics software with both proprietary and publicly available genetic information to create information-based tools used by pharmaceutical companies in drug discovery and development. In building its databases, the Company utilizes high-throughput, computer-aided gene sequencing and analysis technologies to identify and characterize expressed genes. The Company's current pharmaceutical customers subscribe on a nonexclusive basis. Revenues from these customers generally include database subscription fees and may include additional fees for specific sequencing services, such as satellite database services. The Company's agreements with its customers also provide for milestone payments and royalties from the sale of products developed with Incyte technology and database information. The Company also offers its proprietary software, LifeTools(TM), as a stand-alone product. LifeTools is a suite of specialized bioinformatics software that enable the analysis and management of complex genomic data from multiple sources.

The Company was incorporated in Delaware in 1991. The Company's executive offices are located at 3174 Porter Drive, Palo Alto, California 94304 and its telephone number is (415) 855-0555.

RISK FACTORS

THE SECURITIES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK. THE FOLLOWING FACTORS SHOULD BE CONSIDERED CAREFULLY IN EVALUATING AN INVESTMENT IN THE SHARES OF COMMON STOCK OFFERED HEREBY.

Limited Operating History; History of Operating Losses; Uncertainty of Future Profitability or Continued Revenues. The Company has had a limited operating history and is at an early stage of development. For the six months ended June 30, 1996 and the years ended December 31, 1995, 1994 and 1993, the Company had net losses of \$3.7 million, \$10.1 million, \$11.5 million and \$4.9 million, respectively, and as of December 31, 1995, the Company had an accumulated deficit of \$33.8 million. The Company's expansion of its gene sequencing and database efforts, together with the development of new products, has required and is expected to continue to require a substantial increase in expenditures. The Company currently expects to incur operating losses at least through 1996 and the Company may never achieve significant revenues or profitable operations. The Company's ability to achieve significant revenues or profitability will be dependent upon the Company's ability to obtain additional customers for its database and sequencing products and services. While the Company currently has eleven database subscribers, there can be no assurance that the Company will be able to obtain any additional subscribers for such products and services. Further, the Company's database subscriptions typically have a term of three years, which may be terminated earlier by a subscriber if the Company breaches a material provision of the database subscription agreement, which may include certain performance obligations, and fails to cure such breach within a specified period. There can be no assurance that any of the Company's database subscription agreements will be renewed upon expiration or not terminated earlier upon a material breach thereof by the Company. The loss of revenues from any customer could have a material adverse effect on the Company's business and operating results.

An element of the Company's commercialization strategy is the licensing to customers of the Company's patent rights to individual partial genes or full length cDNA sequences from the Company's proprietary sequence database for development as a potential pharmaceutical, diagnostic or other product. Although some of the Company's customers have taken non-exclusive know-how licenses to specified sequences, to date, none of the Company's customers have entered into an exclusive license under the Company's patent rights. Any potential product that is the subject of such a license would require several years of further development, clinical testing and regulatory approval prior to commercialization. Accordingly, the Company does not expect to receive any milestone or royalty payments from any such licenses for a substantial period of time, if at all.

New and Uncertain Business. The Company's genomic database subscription business and the use of its databases, software tools, and related services to assist in and improve the efficiency of the traditional drug discovery process represents a business for which there is no precedent. There can be no assurance that such companies will accept the usefulness of the Company's databases, software tools, and related services. The Company's strategy of using high-throughput sequencing to identify genes rapidly and obtain proprietary rights in as many genes as possible is unproven. In addition, the Company has limited experience in providing software-based relational database products or services. The Company's ability to achieve profitability depends on attracting additional customers for its database and sequencing products and services. The high-end nature and price of the Company's database and sequencing products and services are such that there is a limited number of large pharmaceutical companies that are potential customers for such products and services. Additional factors that may affect demand for the Company's products and services include the extent to which the Company's potential customers choose to conduct in-house gene sequencing and bioinformatics analysis, the emergence of competitors offering similar services at competitive prices, the ability of the Company to service satisfactorily its existing customers, the extent to which the gene and related information in the Company's database is made public by or is the subject of patents issued to others, and the emergence of technological innovations in gene sequencing or bioinformatics and relational database software that are more advanced than the technology used by and available to the Company. There can be no assurance that the Company will be able to attract additional customers on acceptable terms for its products and services or develop a sustainable profitable business.

Competition and Technological Changes. There are a finite number of genes in the human genome, and competitors in gene sequencing may seek to identify, sequence and determine in the shortest time possible the biological function of a large number of genes in order to obtain a proprietary position with respect to the largest number of new genes discovered. There are a number of companies, other institutions, and government-financed entities, including Human Genome Sciences, Inc. ("HGS"), the National Institutes of Health ("NIH"), and the Department of Energy, engaged in gene sequencing. Many of these companies, institutions and entities have greater financial and human resources than the Company.

In addition, the gene sequencing machines that are utilized in the Company's high-throughput computer-aided gene sequencing operations are commercially available and are currently being utilized by several competitors. Moreover, some of the Company's competitors or potential competitors are in the process of developing, and may successfully develop, proprietary sequencing technologies that may be more advanced than the technology used by the Company. There can be no assurance that such advanced sequencing technology, if developed, will be commercially available for purchase or license by the Company on reasonable terms, or at all.

HGS has entered into a collaboration with SmithKline Beecham Corporation ("SmithKline Beecham") to engage in large-scale gene sequencing and to develop from gene sequence data therapeutic, vaccine and diagnostic products. Such entities have made certain gene sequence information available to a consortium of four pharmaceutical companies in a similar manner as the Company's database subscriptions and have announced their intention to add at least one more pharmaceutical company to the consortium. HGS is also funding gene sequencing and gene research at The Institute for Genomic Research ("TIGR"), a not-for-profit research institute. TIGR has announced that it, HGS and SmithKline Beecham have established a human cDNA database that is available to academic researchers. In addition, Merck & Co., Inc. ("Merck") is funding gene sequencing efforts at Washington University that are making sequencing information publicly available (the "Merck Gene Index"). The Company expects that additional competitors may attempt to establish gene sequence or genomics databases in the future. In addition, such entities or other persons may discover and establish patent positions with respect to gene sequences in the Company's databases. Such patent positions or the public availability of gene sequences comprising substantial portions of the human genome or on microbial or plant genes could decrease the potential value of the Company's databases to the . Company's customers and adversely affect the Company's ability to realize royalties or other revenue from commercialization of products based upon such genetic information.

The Company's databases also require extensive software support and incorporates features determined by customer needs. To the extent the Company experiences delays or difficulties in implementing its database software or customer requested features, its ability to service its customers may be adversely affected, which might have an adverse effect on the Company's business and operating results.

The genomics industry is characterized by extensive research efforts and rapid technological progress. To remain competitive, the Company will be required to continue to expand its database offerings and to enhance the functionality of its bioinformatics and database software. New developments are expected to continue and there can be no assurance that discoveries by others will not render the Company's services and potential products noncompetitive.

Uncertainty of Protection of Patents and Proprietary Rights. The Company's database business and competitive position are dependent in part upon its ability to protect its proprietary database information and software technology. Despite the Company's efforts to protect its proprietary database information and software technology, unauthorized parties may attempt to obtain and use information that the Company regards as proprietary. Although the Company's database subscription agreements require its customers to provide adequate security for the Company's databases and access thereto, policing unauthorized use of the Company's databases and software by the Company or its customers is difficult. The Company relies on patent, trade secret and copyright law and nondisclosure and other contractual arrangements to protect its proprietary information, although to date, the Company has not been issued any patents with respect to the gene sequences in the Company's databases or registered copyrights for its related software. Patents cannot prevent others from developing, selling or licensing databases which include sequences which might be covered by the Company's patents, copyrights cannot prevent others from independently developing software which might be covered by any copyrights issued to the Company, and trade secret laws do not prevent independent development. Thus, there can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to the Company's proprietary information, that such information will not be disclosed or that the Company can effectively protect its rights to unpatented trade secrets.

The Company pursues a policy of having its employees, consultants and advisors execute proprietary information and invention agreements upon commencement of employment or consulting relationships with the Company, which agreements provide that all confidential information developed or made known to the individual during the course of the relationship shall be kept confidential except in specified circumstances. There can be no assurance, however, that these agreements will provide meaningful protection for the Company's trade secrets or other proprietary information in the event of unauthorized use or disclosure of such information.

The patentability of gene sequences and other genetic information in general is uncertain, involves complex legal and factual questions, and has recently been the subject of much litigation. As a result, there can be no assurance that patent applications relating to the Company's products or processes will result in patents being issued, or that any issued patents will provide protection against competitors. Even if patents are issued on the basis of gene sequences, there may be uncertainty as to the scope of the coverage, enforceability or commercial protection provided by any such patents. Certain court decisions indicate that disclosure of a partial sequence may not be sufficient to support the patentability of a full-length sequence. In view of these court decisions, as well as the position of the United States Patent and Trademark Office ("USPTO") referred to below, the Company believes that there is a significant risk that patents will not be issued on partial gene sequences derived through high-throughout gene sequencing. Even if patents are issued on the basis of gene sequences, there may be uncertainty as to the scope of the coverage, enforceability or commercial protection provided by any such patents. Finally, if the USPTO begins a policy of allowing applications which claim large numbers of sequences, that policy may adversely affect the ability of the Company to market its products and services in that (1) the policy may result in competitors obtaining patents on a large number of sequences contained in the Company's database, and (2) the policy may result in interferences with competitors causing negotiations or litigation, which could require a protracted period of time and could result in substantial costs to and diversion of efforts by the Company.

The USPTO initially rejected an application filed by the NIH claiming large number of partial sequences, and the NIH announced in February 1994 that it will not pursue further such application. There has been a substantial backlog of biotechnology patent applications, and specifically with respect to applications disclosing or claiming gene sequences, at the USPTO. Although no established policy has emerged from the USPTO regarding the breadth of claims allowed or the degree of protection which should be afforded to applicants claiming gene sequences, present USPTO examiners may reject patent applications claiming large numbers of gene sequences as not having utility under 35 U.S.C. Section 101 and/or not enabled under 35 U.S.C. Section 112.

Additionally, there have been recent discussions concerning whether clinical data will be required for issuance of patents for human therapeutics, which, if required, could delay or affect the ability to obtain patent protection. The USPTO issued new Utility Guidelines in July 1995 that address the requirements for demonstrating utility, particularly in inventions relating to human therapeutics. Notwithstanding the adoption of such Utility Guidelines, there can be no assurance that the position of USPTO examiners will not change with respect to what is required to establish utility for partial or full gene sequences.

As a result of the foregoing, there can be no assurance that patent applications relating to the Company's products or processes will result in patents being issued, or that any issued patents will provide protection against competitors who successfully challenge the Company's patents, obtain patents that may have an adverse effect on the Company's ability to conduct business, or are able to circumvent the Company's patent position.

In view of the time delay in patent approval and the secrecy afforded patent applications, the Company does not know if other applications that would have priority over the Company's applications have been filed. Furthermore, recent changes in U.S. patent laws resulting from the General Agreement on Tariffs and Trade ("GATT") became effective in June 1995. Most notably, GATT resulted in U.S. law being amended to change the term of patent protection from 17 years from patent issuance to 20 years from the earliest effective filing date of the application. Because the time from filing to issuance of biotechnology and gene sequence applications has averaged more than three years, a 20 year patent term from the date of filing may result in a substantially shortened term of patent protection, which may adversely affect the Company's patent position. Pending applications claiming large numbers of gene sequences may, in some situations, need to be refiled while claiming priority to the earlier filing date and, in such situations, the patent term will be measured from the earliest filing date, thereby reducing the patent term and having a potentially adverse effect on the Company's patent position.

The biotechnology patent situation outside the United States is even more uncertain and is currently undergoing review and revision in many countries. Further, the laws of certain foreign countries may not protect the Company's intellectual property rights to the same extent as do the laws of the United States. The Company may participate in opposition proceedings to determine the validity of its or its competitors' non-United States patents, which could result in substantial cost to and diversion of effort by the Company.

Incyte may be required to obtain licenses to patents or proprietary rights of others. As the biotechnology industry expands and more patents are issued and other companies engage in the business of discovering genes through the use of high speed sequencers or other sequencing technology, the risk increases that the Company's potential products or product rights that it seeks to license may give rise to claims that they infringe the patents of others. No assurance can be given that any licenses required under any such patents or proprietary rights would be made available on terms acceptable to the Company. Litigation may be necessary to defend against or assert claims of infringement, to enforce patents issued to the Company, to protect trade secrets or know-how owned by the Company, or to determine the scope and validity of the proprietary rights of others. Such litigation could result in substantial cost to and diversion of effort by the Company and may have a material adverse effect on the Company's business, operating results and financial condition. In addition, there can be no assurance that these efforts by the Company will be successful.

The Company holds issued patents and has filed several additional patent applications relating to BPI and related molecules. The Company is aware that XOMA Corporation ("Xoma") is developing a BPI product and has licensed a patent and patent applications relating to BPI from New York University. In the event that Xoma is successful in developing its BPI product and such product is believed by the Company possibly to infringe or otherwise threaten the Company's patent rights with respect to BPI, the Company may choose to protect or enforce such patent rights through negotiations, litigation, or infringement or opposition proceedings, which could require a protracted period of time and could result in substantial cost to and diversion of effort by the Company.

Fluctuations in Operating Results. The Company's operating results may fluctuate significantly in the future as a result of a variety of factors, including changes in the demand for the Company's products and services, the pricing of database subscriptions, the nature, pricing and timing of other products and services, including, but not limited to, satellite database services, provided to the Company's customers, changes in the research and development

budgets of the Company's customers and potential customers, capital expenditures and other costs related to the expansion of Incyte's operations, and the introduction of competitive databases or services. The addition or subtraction of a single subscriber to the Company's databases can have a significant effect on the Company's revenues and results of operations. Due to the lengthy sales cycle required for the Company's database products, the Company's revenue levels are difficult to forecast. The need for continued investment in development of the Company's databases and related products and services and for extensive ongoing customer support capabilities results in significant fixed expenses. If revenue in a particular period does not meet expectations, the Company would not be able to adjust significantly its level of expenditures in such period, which would have an adverse effect on the Company's operating results. The Company believes that quarterly comparisons of its financial results will not necessarily be meaningful and should not be relied upon as an indication of future performance.

Lengthy Sales Cycle. The ability of the Company to obtain new customers for the Company's databases, software tools, and related services depends in significant part upon prospective customers' perception that the Company's databases, software tools, and related services can help accelerate drug discovery efforts. The sales cycle is typically lengthy due to the education effort that is required as well as the need to effectively sell the benefits of the Company's databases, software tools, and related services to a variety of constituencies within potential customer companies, including research and development personnel and top management. In addition, each Company's databases subscription involves the negotiation of agreements containing terms that may be unique to each customer, such as the scope of any licenses granted and whether satellite database services or access to multiple databases is desired. The Company may expend substantial funds and management effort with no assurance that a database subscription will result.

Future Capital Needs; Uncertainty of Additional Funding. The Company believes that its existing cash and cash equivalents, should be adequate to satisfy the Company's projected working capital and capital expenditure requirements at least through 1997. However, there can be no assurance that the Company will not need additional capital prior to that time. The Company's capital requirements depend on numerous factors, including the ability of the Company to attract customers to its database and sequencing products and services; the Company's research and development activities, including the costs of technology assessment and acquisition; competing technological and market developments; the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights; the Company's facilities needs; the purchase of additional capital equipment, including capital equipment necessary to insure that the Company's sequencing operation remains competitive; and a decision by the Company to pursue development of potential pharmaceutical products. The Company currently has no plans to develop potential pharmaceutical products. There can be no assurance that changes in the Company's research and development plans or other changes affecting the Company's operating expenses will not result in changes in the timing and amount of expenditure of the Company's capital resources. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of such securities could result in dilution to the Company's existing stockholders. There can be no assurance that additional funding, if necessary, will be available on favorable terms, if at all. If adequate funds are not available, the Company may be required to curtail operations significantly or to obtain funds through entering into collaborative arrangements that may require the Company to relinquish rights to certain of its technologies, product candidates, products or potential markets.

Management of Growth. The Company has recently experienced, and expects to continue to experience, significant growth in the number of its employees, the extent of its gene sequencing efforts and database business, and the scope of its operations. This growth has placed, and may continue to place, a significant strain on the Company's management and operations. The Company's ability to manage effectively such growth will depend upon its ability to broaden its management team and its ability to attract, hire and retain skilled employees. The Company's success will also depend on the ability of its officers and key employees to continue to implement and improve its operational, management information and financial control systems and to expand, train and manage its employee base. In addition, the Company must continue to take steps to provide customer support resources as the number of overall subscribers and the number of requests from subscribers increases. The Company's inability to manage effectively growth could have a material adverse effect on the Company's business, financial condition and operating results.

Dependence on Key Employees. The Company is highly dependent on the principal members of its scientific and management staff, including Roy A. Whitfield, its President and Chief Executive Officer, and Randal W. Scott, its Executive Vice President and Chief Scientific Officer, the loss of whose services would have a material adverse effect on the Company's business. The Company has not entered into any employment agreements with any of such persons and does not maintain any key person life insurance policy on the life of any employee. The Company's future success also will depend in part on the continued service of its key scientific, software, bioinformatics and management personnel and its ability to identify, hire and retain additional personnel, including personnel in the customer service and marketing area. There is intense competition for such qualified personnel in the areas of the Company's activities, especially with respect to experienced bioinformatics and software personnel, and there can be no assurance that the Company will be able to continue to attract and retain such personnel necessary for the development of the Company's business. Failure to attract and retain key personnel could have a material adverse effect on the Company's business, financial condition and operating results.

Dependence on Others. The Company currently uses a single supplier to provide its gene sequencing machines and certain reagents required in connection with the gene sequencing process. While other gene sequencing machines are available, the Company does not believe that they are as efficient as the machines currently used by the Company. No assurance can be given that either the gene sequencing machines or the reagents will remain available in commercial quantities at acceptable costs. Should the Company be unable to obtain additional machines or an adequate supply of reagents or other ingredients at commercially reasonable rates, its ability to continue to identify genes through gene sequencing would be adversely affected. Although the Company obtains tissue samples from which mRNA may be isolated from a number of sources, the Company believes that its tissue access agreement with Mayo Foundation for Medical Education and Research ("Mayo Clinic") is important to the development and value of the Company's databases due in part to the inclusion of a full pathology report on each tissue accessed and the ability to access tissue with diverse characteristics. The loss of access to tissue from Mayo Clinic could adversely affect the Company's business.

The Company's strategy for the development of its database and sequencing business may require the Company to enter into various arrangements with corporate and academic collaborators and others. In addition, the Company's strategy for the research, development and commercialization of most, if not all, of its portfolio of partial and full gene sequences and proteins requires the Company to enter into various arrangements with corporate and academic collaborators and others. The success of these collaborations is dependent upon the performance of outside parties of their responsibilities. There can be no assurance that the Company will be able to establish collaborative arrangements or license agreements that the Company deems necessary or acceptable to develop its database and sequencing business or, in the future, to commercialize its portfolio of partial and full gene sequences or that such collaborative arrangements or license agreements will be successful. In addition, there can be no assurance that the collaborators will not be pursuing alternative technologies or developing alternative products either on their own or in collaboration with others, including the Company's competitors.

The Company has relied on scientific, technical, pathology, commercial and other data supplied and disclosed by others, including its academic collaborators and sources of tissue samples, and may rely on such data in the construction of its database. There can be no assurance that such data contains no errors or omissions, the knowledge of which would adversely change the prospects for the Company's business.

Risks Associated with Acquisitions. As part of its business strategy, the Company may from time to time acquire assets and businesses principally relating to or complementary to its operations, including for the purpose of acquiring specific technology. The Company acquired Genome Systems, Inc. ("Genome Systems") and Combion Inc., two privately held companies, in July 1996 and August 1996, respectively. These and any other acquisitions by the Company will be accompanied by the risks commonly encountered in acquisitions of companies. Such risks include, among other things, potential exposure to unknown liabilities of acquired companies or to acquisition costs and expenses exceeding amounts anticipated for such purposes, fluctuations in the Company's quarterly and annual operating results due to the costs and expenses of acquiring and integrating new businesses or technologies, the difficulty and expense of assimilating the operations and personnel of the acquired businesses, the potential disruption of the Company's ongoing business and diversion of management time and attention, the inability to successfully integrate or to complete the development and application of acquired technology and the potential failure to achieve

anticipated financial, operating and strategic benefits from such acquisitions, difficulties in establishing and maintaining uniform standards, controls, procedures and policies, the impairment of relationships with and possible loss of key employees and customers of acquired businesses as a result of changes in management and ownership, the incurrence of amortization expenses if an acquisition is accounted for as a purchase, and dilution to the stockholders of the Company if the consideration for the acquisition consists of stock. There can be no assurance that the Company will be successful in overcoming these risks or any other problems encountered in connection with such acquisitions.

Hazardous Materials; Environmental Matters. The Company's research and development involves the controlled use of hazardous and radioactive materials and biological waste. The Company is subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by such laws and regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. Although the Company believes that it is in compliance in all material respects with applicable environmental laws and regulations and currently does not expect to make material additional capital expenditures for environmental control facilities in the near-term, there can be no assurance that the Company will not be required to incur significant costs to comply with environmental laws and regulations in the future, nor that the operations, business or assets of the Company will not be materially or adversely affected by current or future environmental laws or regulations. See "Business -- Government Regulation."

Uncertainty of Pharmaceutical Pricing, Health Care Reform and Related Matters. The levels of revenues and profitability of pharmaceutical companies may be affected by the continuing efforts of governmental and third party payors to contain or reduce the costs of health care through various means. For example, in certain foreign markets pricing or profitability of prescription pharmaceuticals is subject to government control. In the United States, there have been, and the Company expects that there will continue to be, a number of federal and state proposals to implement similar government control. It is uncertain what legislative proposals will be adopted or what actions federal, state or private payors for healthcare goods and services may take in response to any healthcare reform proposals or legislation. The Company cannot predict the effect healthcare reforms may have on its business, and no assurance can be given that any such reforms will not have a material effect on the Company. Further, to the extent that such proposals or reforms have a material adverse effect on the business, financial condition or profitability of pharmaceutical companies that are prospective collaborators or licensees for the Company's databases or the Company's potentially novel genes that may lead to therapeutic or diagnostic products, the Company's ability to commercialize such products may be adversely affected. In addition, in both the United States and elsewhere, sales of prescription pharmaceuticals are dependent in part on the availability of reimbursement to the consumer from third party payors, such as government and private insurance plans. Third party payors are increasingly challenging the prices charged for medical products and services. If the Company seeks to commercialize one or more pharmaceutical products, there can be no assurance that these products will be considered cost effective and that reimbursement to the consumer will be available or will be sufficient to allow the Company to sell its products on a competitive basis.

General Economic and Market Conditions. All of the Company's current revenues are derived from, and the Company expects that all of its revenues in the foreseeable future will be derived from, products and services provided to the pharmaceutical industry. Accordingly, the Company's success in the foreseeable future is directly dependent upon the success of the companies within those industries and their continued demand for the Company's products and services. The Company's operations may in the future be subject to substantial period-to-period fluctuations as a consequence of economic downturns and pricing pressures experienced by pharmaceutical companies that lead to delays and reductions in research and development expenditures by such companies, general domestic and foreign economic conditions affecting the timing of orders from major customers, the current market-driven pressures on companies to consolidate and reduce costs, and other factors affecting research and development spending. There can be no assurance that such factors will not have a material adverse effect on the Company's business, operating results and financial condition.

Risk of Business Interruption. The Company conducts all of its sequencing and most of its other activities at its facilities in Palo Alto, California, a seismically active area. Although the Company maintains business interruption insurance, the Company does not currently have, nor does it plan to obtain earthquake insurance. A major catastrophe (such as an earthquake or other natural disaster) could result in a prolonged interruption of the Company's business

Possible Volatility of Stock Price. The market price of the shares of Common Stock, like that of the common stock of many other life sciences companies, is likely to be highly volatile, and the market has from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. The market price of the Common Stock could be subject to significant fluctuations in response to variations in the Company's anticipated or actual operating results, sales of substantial amounts of Common Stock, announcements concerning the Company or its competitors, including technological innovations or new commercial products or services, developments in patent or other proprietary rights of the Company or its competitors, including litigation, conditions in the life sciences, pharmaceuticals or genomics industries, governmental regulation, health care legislation, changes in estimates of the Company's performance by securities analysts, failure to meet securities analysts' expectations, market conditions for life sciences or technology stocks in general, and other events or factors.

USE OF PROCEEDS

The Company will not receive any proceeds from the sale of the Shares by the Selling Stockholders.

SELLING STOCKHOLDERS

The following table sets forth certain information as of September 30, 1996 regarding the beneficial ownership of Common Stock by each of the Selling Stockholders and the Shares offered hereby by such Selling Stockholders.

	Shares Beneficially Owned Prior to Offering(1)	Number of Shares Being Offered	Shares Beneficially Owned After Offering(1)(2)		
	Number	Percent		Number 	Percent
Paul Gold	94,518	*	47,259	47,259	*
David A. Smoller Vysis, Inc	94,518 15,037	*	47,259 7,519	47,259 7,518	*
Mark Cunningham(3)	10,741	*	5,371	5,370	*

- * Less than 1%.
- (1) Information with respect to beneficial ownership is based upon information obtained from the Selling Stockholders.
- (2) Assumes the sale of all Shares offered hereby and no other purchases or sales of Common Stock. See "Plan of Distribution."
- (3) Represents shares that may be purchased upon the exercise of an option.

All of the Selling Stockholders received their respective shares of Common Stock in connection with the acquisition by the Company of all of the outstanding shares of capital stock of Genome Systems. Paul Gold and David A. Smoller are officers and the founders of, and Mark Cunningham is an employee of, Genome Systems, now a wholly-owned subsidiary of the Company. Vysis, Inc. has entered into a collaborative agreement with the Company and a services supply agreement with Genome Systems.

Sales of the Shares may be effected by or for the account of the Selling Stockholders from time to time in transactions (which may include block transactions) on the Nasdaq National Market, in negotiated transactions, through a combination of such methods of sale, or otherwise, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices, or at negotiated prices. The Selling Stockholders may effect such transactions by selling the Shares directly to purchasers, through broker-dealers acting as agents for the Selling Stockholders, or to broker-dealers who may purchase Shares as principals and thereafter sell the Shares from time to time in transactions (which may include block transactions) on the Nasdaq National Market, in negotiated transactions, through a combination of such methods of sale, or otherwise. In effecting sales, broker-dealers engaged by a Selling Stockholders may arrange for other broker-dealers to participate. Such broker-dealers, if any, may receive compensation in the form of discounts, concessions or commissions from the Selling Stockholders and/or $\,$ the purchasers of the Shares for whom such broker-dealers may act as agents or to whom they may sell as principals, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions).

The Selling Stockholders and any broker-dealers, agents or underwriters that participate with the Selling Stockholders in the distribution of the Shares may be deemed to be "underwriters" within the meaning of the Securities Act. Any commissions paid or any discounts or concessions allowed to any such persons, and any profits received on the resale of the Shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

The Company has agreed to bear all expenses of registration of the Shares (other than fees and expenses, if any, of counsel or other advisors to the Selling Stockholders). Any commissions, discounts, concessions or other fees, if any, payable to broker-dealers in connection with any sale of the Shares will be borne by the Selling Stockholder selling such Shares.

LEGAL MATTERS

Certain legal matters with respect to the validity of Common Stock offered hereby are being passed upon for the Company by Pillsbury Madison & Sutro LLP, San Francisco, California.

EXPERTS

The financial statements of Incyte Pharmaceuticals, Inc. at December 31, 1995 and 1994, and for each of the three years in the period ended December 31, 1995, included in the Company's Annual Report (Form 10-K) for the year ended December 31, 1995, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such financial statements are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various expenses payable by the Registrant in connection with the sale and distribution of the securities being registered hereby. Normal commission expenses and brokerage fees are payable individually by the Selling Stockholders. All amounts are estimated except the Securities and Exchange Commission registration fee.

	Amount
SEC registration fee	\$ 1,731.00 10,000.00 10,000.00 3,269.00
Total	\$25,000.00 ======

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law provides for the indemnification of officers, directors, and other corporate agents in terms sufficiently broad to indemnify such persons under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Act"). Article VII of the Registrant's Restated Certificate of Incorporation (Exhibit 3(i) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1994) and Article V of the Registrant's Bylaws (Exhibit 3(ii) to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1994) provide for indemnification of the Registrant's directors, officers, employees and other agents to the extent and under the circumstances permitted by the Delaware General Corporation Law. The Registrant has also entered into agreements with its directors and officers that will require the Registrant, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers to the fullest extent not prohibited by law.

ITEM 16. EXHIBITS

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
5.1	Opinion of Pillsbury Madison & Sutro LLP.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Pillsbury Madison & Sutro (included in its opinion filed as Exhibit 5.1 to this Registration Statement).
24.1	Power of Attorney (see page II-3).

ITEM 17. UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Act"), may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such

indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes:

- (1) To file during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
- (i) to include any prospectus required by Section 10(a)(3) of the Act:
- (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement; and
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that are incorporated by reference in this Registration Statement.

- (2) That, for the purpose of determining any liability under the Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for purposes of determining any liability under the Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3, and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Palo Alto, State of California, on October 3, 1996.

INCYTE PHARMACEUTICALS, INC.

By ROY A. WHITFIELD

Roy A. Whitfield

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Roy A. Whitfield, Randal W. Scott, and Denise M. Gilbert, and each of them, his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this Registration Statement, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

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

Name	Title 	Date
ROY A. WHITFIELD Roy A. Whitfield	President and Chief Executive Officer (Principal Executive Officer) and Director	October 3, 1996
DENISE M. GILBERT Denise M. Gilbert	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	October 3, 1996
JANET L. NIBEL Janet L. Nibel	Director of Finance and Administration (Principal Accounting Officer)	October 3, 1996
JEFFREY J. COLLINSON Jeffrey J. Collinson	Chairman of the Board	October 3, 1996
BARRY M. BLOOM	Director	October 3, 1996
Barry M. Bloom		
FREDERICK B. CRAVES Frederick B. Craves	Director	October 3, 1996

Name 	Title 	Date
JON S. SAXE	Director	October 3, 1996
Jon S. Saxe		
RANDAL W. SCOTT	Director	October 3, 1996
Randal W. Scott		

17

EXHIBIT INDEX

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Exhibit 5.1

LAW OFFICES OF PILLSBURY MADISON & SUTRO LLP

LOS ANGELES
NEW YORK
SACRAMENTO
SAN FRANCISCO
WASHINGTON, D.C.
TOKYO

POST OFFICE BOX 7880 SAN FRANCISCO, CALIFORNIA 94120 TELEPHONE (415) 983-1000 TELECOPIER (415) 983-1200 MENLO PARK ORANGE COUNTY SAN DIEGO SAN JOSE HONG KONG

October 3, 1996

Incyte Pharmaceuticals, Inc. 3174 Porter Drive Palo Alto, CA 94304

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

We are acting as counsel for Incyte Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in connection with the registration under the Securities Act of 1933, as amended, of 107,408 shares of Common Stock, \$.001 par value (the "Common Stock"), of the Company, to be offered and sold by certain stockholders of the Company (the "Selling Stockholders"). In this regard we have participated in the preparation of a Registration Statement on Form S-3 relating to such 107,408 shares of Common Stock. (Such Registration Statement, as amended, is herein referred to as the "Registration Statement.")

We are of the opinion that the shares of Common Stock to be offered and sold by the Selling Stockholders have been duly authorized and legally issued and are fully paid and nonassessable.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the Registration Statement and in the Prospectus included therein.

Very truly yours,

PILLSBURY MADISON & SUTRO LLP

1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Incyte Pharmaceuticals, Inc. for the registration of 107,408 shares of its common stock and to the incorporation by reference therein of our report dated February 8, 1996, with respect to the financial statements of Incyte Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 1995, filed with the Securities and Exchange Commission.

ERNST & YOUNG LLP

Palo Alto, California October 2, 1996