INSMED INC
Form S-3
November 19, 2004
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As filed with the Securities and Exchange Commission on November 19, 2004

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

INSMED INCORPORATED

(Exact name of registrant as specified in its charter)

Virginia	**54-1972729**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**

4851 Lake Brook Drive

Glen Allen, Virginia 23060

(804) 565-3000

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

Kevin P. Tully, C.G.A.

Principal Financial Officer,

Treasurer and Controller

Insmed Incorporated

4851 Lake Brook Drive

Glen Allen, Virginia 23060

(804) 565-3000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mitchell S. Bloom

Testa, Hurwitz & Thibeault, LLP

125 High Street

Boston, Massachusetts 02110

Tel: (617) 248-7000

Fax: (617) 248-7100

Approximate date of commencement of the proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment, 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 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

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee(1)
Common stock, $0.01 par value(2)	9,683,326 shares(2)(3)	$ 1.43	$ 13,847,156	$ 1,755

(1) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(c) on the basis of $1.43 per share, which was the average of the high and low prices of the common stock as quoted on the Nasdaq National Market on November 15, 2004.

(2) This Registration Statement also relates to the rights to purchase shares of Series A Junior Participating Preferred Stock of the Registrant which are attached to all shares of Common Stock issued pursuant to terms of the Registrant s Rights Agreement, dated as of May 16, 2001. Until the occurrence of certain prescribed events, the rights are not exercisable, are evidenced only by the certificates for the Common Stock and will be transferred with and only with the Common Stock. Because no separate consideration is paid for the rights, the registration fee therefor is included in the fee for the Common Stock.

(3) Includes 3,227,775 shares of common stock issuable upon exercise of warrants to purchase common stock held by the selling stockholders.

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 Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders named in this prospectus are not soliciting any offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED NOVEMBER 19, 2004

P R O S P E C T U S

9,683,326 Shares

INSMED INCORPORATED

Common Stock

This prospectus relates to the offer and sale from time to time of up to 9,683,326 shares of our common stock by the selling stockholders named in this prospectus.

The selling stockholders identified in this prospectus, or their pledgees, donees, transferees or other successors-in-interest, may sell the shares of our common stock at various times and in various types of transactions, including sales in the open market, sales in negotiated transactions and sales by a combination of these methods. Shares may be sold at the market price of the common stock at the time of a sale, at prices relating to the market price over a period of time or at prices negotiated with the buyers of shares. We do not know, however, when the proposed sales of the shares by the selling stockholders will occur. More detailed information concerning the distribution of the shares is contained in the section of this prospectus entitled Plan of Distribution.

We are registering the offer and sale of the shares of common stock to satisfy our contractual obligations to provide the selling stockholders with freely tradable shares. We will not receive any of the proceeds from the sale of the shares.

Our common stock is listed on the Nasdaq National Market under the trading symbol INSM. The reported closing price of our common stock on the Nasdaq National Market on November 18, 2004 was $1.59 per share.

YOU SHOULD CONSIDER CAREFULLY THE RISK FACTORS BEGINNING ON PAGE 2 OF THIS PROSPECTUS BEFORE PURCHASING ANY OF THE COMMON STOCK OFFERED HEREBY.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____ , 2004

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You should rely on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling stockholders, as defined below, are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the shares of common stock. In this prospectus, selling stockholders refers to the persons identified in the section titled Selling Stockholders. In this prospectus, Insmed, we, us and our refer to Insmed Incorporated.

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PROSPECTUS SUMMARY

This summary highlights important features of this offering and the information included or incorporated by reference in this prospectus. This summary may not contain all of the information that is important to you. You should read the entire prospectus carefully, including Risk Factors beginning on page 2, before deciding to invest in our common stock.

Insmed Incorporated

Insmed Incorporated is a biopharmaceutical company focused on the development of drug candidates for the treatment of metabolic diseases and endocrine disorders with unmet medical needs. Our approach is to correct metabolic defects in the human body by replacing key regulatory molecules in a physiologically relevant fashion. We believe this will translate into an intrinsic safety advantage for our products in the marketplace. We currently have the following two lead drug candidates, which we are actively developing to treat indications in the metabolic and oncology fields:

- recombinant human insulin-like growth factor-I bound to recombinant human insulin-like growth factor binding protein-3 (rhIGF-I/rhIGFBP-3), also known as SomatoKine®; and
- recombinant human insulin-like growth factor binding protein-3 (rhIGFBP-3).

For SomatoKine® (rhIGF-I/rhIGFBP-3), the most advanced indication in development is the treatment of severe growth disturbance due to growth hormone insensitivity syndrome, or GHIS (i.e., Laron s Syndrome). In children, this condition is characterized by a height standard deviation score three standard deviations below normal and an IGF-I standard deviation score three standard deviations below normal. GHIS can lead to a range of other metabolic disorders, including lipid abnormalities, decreased bone density, obesity and insulin resistance. We have been granted Orphan Designation by the United States Food and Drug Administration (FDA) and European Agency for the Evaluation of Medicinal Products (EMEA) for rhIGF-I/rhIGFBP-3 in the treatment of GHIS and extreme insulin resistance. A worldwide Phase III clinical trial for rhIGF-I/rhIGFBP-3 in the treatment of GHIS is in progress.

Our oncology program focuses on IGFBP-3 as a naturally occurring anti-tumor agent. This protein is normally found in the human bloodstream and several epidemiological studies have demonstrated that cancer risk increases with decreasing blood levels of IGFBP-3. rhIGFBP-3 is a recombinant protein that mimics the effects of IGFBP-3 in the bloodstream. This drug candidate is currently in pre-clinical development for a variety of cancers including those of the breast, lung, colon and prostate. We have also initiated a Phase I clinical study for rhIGFBP-3.

Corporate Information

Insmed was incorporated in Virginia on November 29, 1999 to facilitate the May 31, 2000 acquisition of Celtrix Pharmaceuticals, Inc. by Insmed Pharmaceuticals, Inc. Insmed Pharmaceuticals, Inc., our predecessor, was incorporated in Virginia on September 23, 1988 and Celtrix Pharmaceuticals, Inc., was incorporated on July 24, 1990. Our principal executive offices are located at 4851 Lake Brook Drive, Glen Allen, Virginia 23060 and our phone number is (804) 565-3000.

The Offering

Common stock offered by selling stockholders.	9,683,326 shares, including up to 3,227,775 shares issuable upon exercise of warrants to purchase common stock held by the selling stockholders.
Use of proceeds.	We will not receive any proceeds from the sale of shares in this offering.
Nasdaq National Market symbol.	INSM
Risk Factors.	See Risk Factors for a discussion of the factors you should carefully consider before deciding to invest in shares of our common stock.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below before making an investment decision. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

If any of the following risks actually occur, our business, financial condition, or results of operations could be materially adversely affected. In that case, the trading price of our common stock could decline, and you could lose all or part of your investment.

This prospectus contains forward-looking statements that involve risk and uncertainties. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of a variety of factors, including those set forth in the following risk factors and elsewhere in, or incorporated by reference into, this prospectus. In evaluating an investment in the shares of common stock you should consider carefully the following risk factors in addition to the other information presented in this prospectus or incorporated by reference into this prospectus.

Risk Factors Related to Our Business

Since we have a limited operating history, a history of operating losses and an expectation that we will generate operating losses for the foreseeable future, we may not achieve profitability for some time, if at all.

We are focused on product development and currently have no commercial sales. We have incurred losses each year of operation and we expect to continue incurring operating losses for the foreseeable future. The process of developing our products requires significant pre-clinical testing and clinical trials as well as regulatory approvals for commercialization and marketing before we can begin to generate any revenue from product sales. In addition, commercialization of our drug candidates will require us to establish a sales and marketing organization and contractual relationships to enable product manufacturing and other related activities. We expect that these activities, together with our general and administrative expenses, will result in substantial operating losses for the foreseeable future. As of September 30, 2004, our accumulated deficit was approximately $208 million. For the nine months ended September 30, 2004, our consolidated net loss was $21.4 million.

We currently have two lead product candidates, recombinant human (rh) IGF-I/rhIGFBP-3 (also known as SomatoKine®) and rhIGFBP-3. rhIGF-I/rhIGFBP-3 is currently in development for a number of metabolic and endocrine indications. The most advanced indication in development is the treatment of severe growth disturbance due to growth hormone insensitivity syndrome (GHIS). Our second compound, rhIGFBP-3, is currently in pre-clinical development for a variety of cancers including breast, lung, colon and prostate. We have also initiated a Phase I clinical study for rhIGFBP-3.

All of our products are currently in the research and development stage and if we are unable to commercialize them it will adversely affect our business, financial condition and results of operations.

All of our potential products are in the research and development stage. Our long-term viability and growth depend on the successful commercialization of products which lead to revenue and profits. In order to commercialize any of our products they must first be successfully developed. Pharmaceutical product development is an expensive, high risk, lengthy, complicated, resource intensive process. In order to succeed, among other things, we must be able to:

identify potential drug product candidates;

design and conduct appropriate laboratory, pre-clinical and other research;

submit for and receive regulatory approval to perform clinical studies;

design and conduct appropriate clinical studies;

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- select and recruit clinical investigators;
- select and recruit subjects for our studies;
- collect, analyze and correctly interpret the data from our studies;
- submit for and receive regulatory approvals for marketing; and
- manufacture the drug product candidates according to current good manufacturing practices (cGMP).

The development program with respect to any given product will take many years and thus delay our ability to generate profit. In addition, potential products that appear promising at early stages of development may fail for a number of reasons, including the possibility that the products may require significant additional testing or turn out to be:

- unsafe;
- not effective;
- too difficult or expensive to manufacture;
- too difficult to administer; or
- unstable.

In order to conduct the development programs for our potential products we must, among other things, be able to successfully:

- raise sufficient money to pay for the development;
- attract and retain appropriate personnel; and
- develop relationships with other companies to perform various development activities that we are unable to perform.

Even if we are successful in developing our products, there are numerous developments that could prevent the successful commercialization of the products such as:

- the regulatory approvals of our products are delayed or we are required to conduct further research and development with our products prior to receiving regulatory approval;

we are unable to build a sales and marketing group to successfully launch and sell our products;

we are unable to raise the additional funds needed to successfully develop and commercialize our products or acquire additional products for growth;

an event such as a lawsuit or other litigation drains our cash;

we are unable to manufacture the quantity of product needed in accordance with current good manufacturing practices to meet market demand or at all;

our product is determined to be ineffective or unsafe following approval and is removed from the market or we are required to perform additional research and development to further prove the safety and effectiveness of the product before re-entry into the market;

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- competition from other products or technologies prevents or reduces market acceptance of our products;
- we do not have and cannot obtain the intellectual property rights needed to manufacture or market our products without infringing on another company s patents; or
- we are unable to obtain reimbursement for our products or such reimbursement may be less than is necessary to produce a reasonable profit.

Our growth strategy includes the commercialization of more than one product. We may not be able to identify and acquire complementary products, businesses or technologies and if acquired or licensed, they might not improve our business, financial condition or results of operations.

The failure to successfully acquire, develop and commercialize products will adversely affect our business, financial condition and results of operations.

If our products fail in pre-clinical or clinical trials or if we cannot enroll enough patients to complete our clinical trials, such failure may adversely affect our business, financial condition and results of operations.

In order to sell our products, we must receive regulatory approval. Before obtaining regulatory approvals for the commercial sale of any of our products under development, we must demonstrate through pre-clinical studies and clinical trials that the product is safe and effective for use in each target indication. In addition, the results from pre-clinical testing and early clinical trials may not be predictive of results obtained in later clinical trials. There can be no assurance that our clinical trials will demonstrate sufficient safety and effectiveness to obtain regulatory approvals. A number of companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in late stage clinical trials even after promising results in early stage development. If our products fail in pre-clinical or clinical trials, it will have an adverse effect on our business, financial condition and results of operations.

We are currently conducting a Phase III clinical trial of rhIGF-I/rhIGFBP-3 in patients with GHIS and plan to include the data from this trial as a pivotal piece of information in a New Drug Application (NDA) submission to the United States Food and Drug Administration (FDA) and in a Marketing Authorization Application (MAA) to the European Agency for the Evaluation of Medicinal Products (EMEA). The FDA and EMEA have substantial discretion in the approval process and may refuse to accept our NDA or MAA submissions, respectively. We must receive approval of these applications before we can market rhIGF-I/rhIGFBP-3 in the respective territories. We have also commenced a Phase I clinical trial for rhIGFBP-3 and are also planning other clinical trials with rhIGFBP-3 and SomatoKine®. The completion rate of these and other clinical trials is dependent on, among other factors, the patient enrollment rate. Patient enrollment is a function of many factors, including:

- investigator identification and recruitment;
- regulatory approvals to initiate study sites;
- patient population size;

the nature of the protocol to be used in the trial;

patient proximity to clinical sites;

eligibility criteria for the study; and

competition from other companies clinical trials for the same patient population.

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We believe our planned procedures for enrolling patients are appropriate; however, delays in patient enrollment would increase costs and delay ultimate commercialization and sales, if any, of our products. Such delays could materially adversely affect our business, financial condition and results of operations.

We may be required to conduct broad, long-term clinical trials to address concerns that the long-term use of rhIGF-I/rhIGFBP-3 in broader chronic indications might increase the risk of diabetic retinopathy. This may adversely affect our business, financial condition and results of operations.

In previously published clinical trials of rhIGF-I, concerns were raised that long-term use of rhIGF-I might lead to an increased incidence and/or severity of retinopathy, a disease of new blood vessel growth in the eye which results in loss of vision. Because our product contains rhIGF-I, the FDA may require us to conduct broad, long-term clinical trials to address these concerns prior to receiving FDA approval for broad chronic indications such as diabetes. These clinical trials would be expensive and could delay our commercialization of rhIGF-I/rhIGFBP-3 for these broader chronic indications. Adverse results in these trials could prevent our commercialization of rhIGF-I/rhIGFBP-3 for broad chronic indications or could jeopardize existing development and approvals in other indications.

We cannot be certain that we will obtain any regulatory approvals in the United States and Europe. The failure to obtain such approvals may materially adversely affect our business, financial condition and results of operations.

We are required to obtain various regulatory approvals prior to studying our drug products in humans and then again before we market and distribute our products. The regulatory review and approval process required to perform a clinical study in both the U.S. and Europe includes evaluation of pre-clinical studies and clinical trials, as well as the evaluation of our manufacturing process and is complex, lengthy, expensive, resource intensive and uncertain. Securing regulatory approval to market our products also requires the submission of extensive pre-clinical and clinical data, manufacturing information regarding the process and facility, scientific data characterizing our product and other supporting data to the regulatory authorities in order to establish its safety and effectiveness. This process is also complex, lengthy, expensive, resource intensive and uncertain. We have limited experience in filing and pursuing applications necessary to gain these regulatory approvals.

Data submitted to the regulators is subject to varying interpretations that could delay, limit or prevent regulatory agency approval. We may also encounter delays or rejections based on changes in regulatory agency policies during the period in which we develop a drug and/or the period required for review of any application for regulatory agency approval of a particular product. Delays in obtaining regulatory agency approvals could adversely affect the marketing of any drugs that our collaborative partners or we develop. Such delays could impose costly procedures on our collaborative partners or our activities, diminish any competitive advantages that our collaborative partners or we may attain and adversely affect our ability to receive royalties, any of which could materially adversely affect our business, financial condition and results of operations.

We are currently conducting a Phase III clinical trial of rhIGF-I/rhIGFBP-3 in patients with GHIS and plan to include the data from this trial as a pivotal piece of information in a NDA submission to the FDA and in a MAA submission to the EMEA. We must receive approval of these applications before we can market rhIGF-I/rhIGFBP-3.

As part of our normal development we continue to increase our scale of production and refine our manufacturing process. Because of these changes we are required to perform various comparability analyses to demonstrate that the drug product used in our previous development studies is essentially the same as the new drug product produced. We have had several discussions with the FDA and other foreign regulatory agencies regarding our Phase III clinical study and this comparability analysis and believe we understand what is required to satisfy the FDA and EMEA. We plan to submit this data to the appropriate regulatory authorities as part of the regulatory process. If we are unable to produce

comparable drug product or meet the regulatory requirements of comparability it will materially adversely affect our business, financial condition and results of operations.

The regulatory authorities have substantial discretion in the approval process and may either refuse to accept our applications, or may decide after review of our applications that our data is insufficient to allow approval of rhIGF-

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I/rhIGFBP-3. If the FDA or EMEA do not accept or approve our application, it may require that we conduct additional clinical, pre-clinical or manufacturing studies and submit that data before it will reconsider our application. This could materially adversely affect our business, financial condition and results of operations.

Even if the FDA or EMEA grants approval for a drug, such approval may limit the indicated uses for which we may market the drug, and this could limit the potential market for such drug. Furthermore, if we obtain approval for any of our products, the marketing and manufacture of such products remain subject to extensive regulatory requirements. Even if the FDA or EMEA grants approval, such approval would be subject to continual review, and later discovery of unknown problems could restrict the products future use or cause their withdrawal from the market. Failure to comply with regulatory requirements could, among other things, result in fines, suspension of regulatory approvals, operating restrictions and criminal prosecution. In addition, many countries require regulatory agency approval of pricing and may also require approval for the marketing in such countries of any drug that our collaborative partners or we develop.

If our Phase III clinical trial is unsuccessful or we cannot produce comparable drug product, have not correctly understood the regulatory requirements associated with comparability of drug products or for various other reasons cannot satisfy ongoing regulatory requirements, we may not receive NDA and/or MAA approvals or such approvals may be substantially delayed or withdrawn. Any of these events could materially adversely affect our business, financial condition and results of operations.

We cannot be certain that we will obtain any regulatory approvals in foreign countries. The failure to obtain such approvals may materially adversely affect our business, financial condition and results of operations.

In order to market our products outside of the U.S. and European Union (E.U.) territories, our corporate partners and we must comply with numerous and varying regulatory requirements of other countries. The approval procedures vary among countries and can involve additional product testing and administrative review periods. The time required to obtain approval in these other territories might differ from that required to obtain FDA or EMEA approval. The regulatory approval process in these other territories includes at least all of the risks associated with obtaining FDA and EMEA approval detailed above. Approval by the FDA or EMEA does not ensure approval by the regulatory authorities of other countries. If we fail to obtain approval or approval is delayed in certain countries, the market for SomatoKine® may be limited.

We are currently conducting or planning to conduct several clinical studies in the U.S., E.U. and other territories with our products. If we are unable to receive regulatory approval to conduct such studies, it may prevent or substantially delay our development programs which could materially adversely affect our business, financial condition and results of operations.

If another party obtains orphan drug or pediatric exclusivity for a product that is essentially the same as rhIGF-I/rhIGFBP-3 for the treatment of growth disturbance due to GHIS, we may be precluded or delayed from commercializing rhIGF-I/rhIGFBP-3 in that indication. This will materially adversely affect our business, financial condition and results of operations.

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the U.S. The company that obtains the first marketing approval from the FDA for a designated orphan drug for a rare disease receives marketing exclusivity for use of that drug for the designated condition for a period of seven years. Similar laws exist in Europe. Pediatric exclusivity can provide an additional six months of market exclusivity in the U.S. If a competitor obtains approval of the same drug for the same indication or disease before us, we would be blocked from obtaining approval for our product for seven or more years, unless our product can be shown to be clinically superior. In addition, more than one product may be approved by the FDA for the same orphan indication or disease as long as the products are different drugs. As a result, if our product is approved

and receives orphan drug status, the FDA can still approve other drugs for use in treating the same indication or disease covered by our product, which could create a more competitive market for us.

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We are aware of a drug being developed by Tercica, Inc., which we believe is a product containing essentially only rhIGF-I, that is in development for treatment of Severe Pediatric IGF-I Deficiency. We believe this population includes patients with GHIS. We believe this company has received from the FDA orphan drug designation for their product and plans to pursue pediatric exclusivity. The regulatory agencies could determine that this other product is the same drug as our product and is used for the same indication. If the regulatory agencies make this determination and the other product is approved first, the approval of our rhIGF-I/rhIGFBP-3 for GHIS could be blocked for up to seven or more years, which could force us to curtail or cease our operations. We may not be able to benefit from the orphan drug marketing exclusivity because products that are clinically superior may be approved for marketing regardless of whether we receive orphan drug designation and the first marketing approval. The failure to successfully obtain orphan drug market exclusivity or pediatric drug market exclusivity will adversely affect our business, financial condition and results of operations.

Manufacturing capacity necessary to supply rhIGF-I/rhIGFBP-3 and rhIGFBP-3 may not be available, which may adversely affect our business, financial condition and results of operations. If we are unable to re-commission and utilize our Insmed Therapeutic Proteins production facility or find other sufficient manufacturing capacity, it could materially adversely affect our business, financial condition and results of operations.

Failure to successfully manufacture our products could materially adversely affect our business, financial condition and results of operations. In April 2004, we acquired a lease to operate a recombinant protein manufacturing facility formerly operated by Baxter International (NYSE: BAX). We intend to re-commission this facility under the name Insmed Therapeutic Proteins (ITP) in preparation for manufacture of our product candidates. The re-commissioning efforts of our ITP facility are time consuming, resource intensive and capital intensive. There can be no assurance that we will be able to re-commission this facility or utilize it to manufacture our product candidates. We may also enter into strategic alliances with other parties that have established commercial scale manufacturing capabilities. There can be no assurance that we will enter into such strategic alliances on terms favorable to us or at all. If we are unable to re-commission and utilize our ITP facility, establish other facilities and/or establish and maintain relationships with third parties for manufacturing sufficient quantities of our product candidates and their components that meet our planned time and cost parameters, the development and timing of our pre-clinical and clinical trials may be adversely affected. In addition, there can be no assurance that an adverse regulatory inspection of our facilities or a contractor s manufacturing facilities would not impede our commercial supply capability. If our facilities or contract manufacturers facilities can not produce our products according to current good manufacturing practices (cGMP) and pass a cGMP inspection or if our facilities or contract manufacturers facilities become unavailable, we may be unable to develop and commercialize our products. This will materially adversely affect our business, financial condition and results of operations.

The available capacity for the manufacture of recombinant proteins that comprise rhIGF-I/rhIGFBP-3 is limited. A shutdown or disruption in any of these facilities due to technical, regulatory or other problems, resulting in an interruption in supply of these materials, could delay our development activities and adversely impact our business, financial condition and results of operations.

We have manufactured rhIGF-I/rhIGFBP-3 for our Phase III trial at Avecia Ltd s. site at Billingham, England. At present, rhIGF-I/rhIGFBP-3 has never been manufactured by Avecia at scales necessary for commercialization; we cannot guarantee that they will be able to produce rhIGF-I/rhIGFBP-3 at scales necessary to meet commercial demands or that there will not be delays in such production. If we are unable to manufacture rhIGF-I/rhIGFBP-3 or such manufacture is delayed it could materially adversely affect our business, financial condition and results of operations.

Our facilities or the facilities used by our contract manufacturers, including our ITP facility or Avecia Limited, to manufacture rhIGF-I/rhIGFBP-3 may undergo an inspection by the FDA and/or EMEA for compliance with cGMP regulations, before rhIGF-I/rhIGFBP-3 can be approved. In the event these facilities do not receive a satisfactory cGMP inspection for the manufacture of our product, we may need to fund additional modifications to our manufacturing process, conduct additional validation studies, or find alternative manufacturing facilities, any of which would result in significant cost to us as well as a significant delay of up to several years in obtaining approval for rhIGF-I/rhIGFBP-3. In addition, our facilities, our contract manufacturers, and any alternative contract

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manufacturer we may utilize, will be subject to ongoing periodic inspection by the FDA and EMEA and other foreign agencies for compliance with cGMP regulations and similar foreign standards. There can be no assurance that our facilities will comply with these regulations and standards. We do not have control over our contract manufacturers compliance with these regulations and standards.

Avecia Limited has been our sole provider of bulk rhIGF-I/rhIGFBP-3. If we are unable to re-commission our ITP facility and utilize it to manufacture rhIGF-I/rhIGFBP-3, or if Avecia Limited s facilities or any of our other contract manufacturers facilities become unavailable to us for any reason, including failure to comply with cGMP regulations, damage from any event, including fire, flood, earthquake, or terrorism or if they fail to perform under our agreement with them, we may be unable to complete manufacture of rhIGF-I/rhIGFBP-3 or validation of the manufacturing process for rhIGF-I/rhIGFBP-3. This could delay our clinical trials and the approval of our NDA or MAA, which would delay or otherwise adversely affect revenues. If the damage to any of these facilities is extensive, or, for any reason, they do not operate in compliance with cGMP or are unable or refuse to perform under our agreements, we will need to find alternative facilities. The number of contract manufacturers with the expertise and facilities to manufacture rhIGF-I/rhIGFBP-3 bulk drug substance on a commercial scale in accordance with cGMP regulations is extremely limited, and it would take a significant amount of time to arrange for alternative manufacturers. If we need to change to other commercial manufacturers, we would need to transfer and validate the processes and analytical methods necessary for the production and testing of rhIGF-I/rhIGFBP-3 to these new manufacturers. Any of these factors could lead to the delay or suspension of our clinical trials, regulatory submissions, regulatory approvals or commercialization of rhIGF-I/rhIGFBP-3, or higher costs of production and result in our failure to effectively commercialize rhIGF-I/rhIGFBP-3.

Furthermore, if we or our contract manufacturers fail to deliver commercial quantities of bulk drug substance or finished product on a timely basis and at commercially reasonable expense or prices, and we are unable to promptly find one or more replacement manufacturers capable of production at a substantially equivalent cost, in substantially equivalent volume and on a timely basis, we will likely be unable to meet demand for rhIGF-I/rhIGFBP-3 and we would lose potential revenues.

We currently have limited sales, marketing and distribution capabilities, which may make commercializing our products difficult. If we are unable to build sales, marketing and distribution capabilities, it will materially adversely affect our business, financial condition and results of operations.

If the FDA or any other regulatory agency permits us to commence commercial sales of products, we will face competition with respect to commercial sales, marketing and distribution. These are areas in which we have no experience. To market any of our products directly, we must develop a marketing and sales force with technical expertise and with supporting distribution capability. Alternatively, we may engage a pharmaceutical company with a large distribution system and a large direct sales force to assist us. There can be no assurance that we will successfully establish sales and distribution capabilities or gain market acceptance for our proprietary products. To the extent we enter co-promotion or other licensing arrangements, any revenues we receive will depend on the efforts of third parties and there can be no assurance that our efforts will succeed. Failure to successfully sell, market or distribute our products once approved will materially adversely affect our business, financial condition and results of operations.

If our products fail to achieve market acceptance for any reason, such failure may adversely affect our business, financial condition and results of operations.

There can be no assurance that any of our product candidates, if approved for marketing, will achieve market acceptance. If our products do not receive market acceptance for any reason, it will adversely affect our business, financial condition and results of operations. The degree of market acceptance of any products we develop will depend on a number of factors, including:

the establishment and demonstration in the medical community of the clinical efficacy and safety of our products;

their potential advantage over existing and future treatment methods;

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their price; and

reimbursement policies of government and third-party payers, including hospitals and insurance companies.

For example, even if we obtain regulatory approval to sell our products, physicians and healthcare payers could conclude that our products are not safe and effective and physicians could choose not to use them to treat patients. Our competitors may also develop new technologies or products which are more effective or less costly, or that seem more cost-effective than our products.

Our commercial success will depend in part on third-party payers agreeing to reimburse patients for the costs of products. Government health administration authorities, private health insurers and other organizations generally provide reimbursement. Third-party payers frequently challenge the pricing of new drugs. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Therefore, third-party payers may not approve our products for reimbursement. If third-party payers do not approve our products for reimbursement, sales will suffer, as some patients will opt for a competing product that is approved for reimbursement. Even if third-party payers make reimbursement available, these payers reimbursement policies may adversely affect our corporate partners and our ability to sell such products on a profitable basis. Moreover, the trend toward managed healthcare in the United States, the growth of organizations such as health maintenance organizations and legislative proposals to reform healthcare and government insurance programs could significantly influence the purchase of healthcare services and products, resulting in lower prices and reducing demand for our products which could adversely affect our business, financial condition and results of operations.

In addition, legislation and regulations affecting the pricing of pharmaceuticals may change in ways adverse to us before or after the FDA or other regulatory agencies approve any of our proposed products for marketing. While we cannot predict the likelihood of any such legislative or regulatory proposals, if the government or an agency adopts such proposals, they could materially adversely affect our business, financial condition and results of operations.

If physicians, patients, third-party payers or the medical community in general do not accept and use the products we develop and commercialize, it will materially adversely affect our business, financial condition and results of operations.

We will need additional funds in the future to continue our operations, but we face uncertainties with respect to our access to capital that could adversely impact our business, financial condition and results of operations.

We will require substantial future capital in order to execute our business plan. Our future capital requirements will depend on many factors, including factors associated with:

manufacturing;

process development;

research and development including among other items, pre-clinical testing and clinical trials;

obtaining regulatory approvals;

obtaining marketing sales and distribution capabilities;

launching products;

retaining employees and consultants;

filing and prosecuting patent applications and enforcing patent claims;

establishing strategic alliances; and

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other activities required for product commercialization.

We may also need to spend more money than currently expected because we may change our product development plans, acquire additional products or product candidates or we may misjudge our costs. We have no committed sources of capital and do not know whether additional financing will be available when needed, or, if available, that the terms will be favorable. There can be no assurance that our cash reserves together with any subsequent funding will satisfy our capital requirements. The failure to satisfy our capital requirements will adversely affect our business, financial condition and results of operations. We believe that existing cash reserves will sufficiently fund our activities through to mid 2005.

We may seek additional funding through strategic alliances, private or public sales of our securities or licensing all or a portion of our technology. Such funding may significantly dilute existing stockholders or may limit our rights to our currently developing technology. There can be no assurance, however, that we can obtain additional funding on reasonable terms, or at all. If we cannot obtain adequate funds, we may need to significantly curtail our product development programs and/or relinquish rights to our technologies or product candidates. This may adversely affect our business, financial condition and results of operations.

We are dependent upon retaining and attracting key personnel and others, the loss of which could materially adversely affect our business, financial condition and results of operations.

We depend highly on the principal members of our scientific and management staff, the loss of whose services might significantly delay or prevent the achievement of research, development or business objectives and would materially adversely affect our business, financial condition and results of operations. Our success depends, in large part, on our ability to attract and retain qualified management, scientific and medical personnel, and on our ability to develop and maintain important relationships with commercial partners, leading research institutions and key distributors. We face intense competition for such personnel and relationships. We cannot assure that we will attract and retain such persons or maintain such relationships.

We expect that our potential expansion into areas and activities requiring additional expertise, such as further clinical trials, governmental approvals, manufacturing, sales, marketing and distribution will place additional requirements on our management, operational and financial resources. We expect these demands will require an increase in management and scientific personnel and the development of additional expertise by existing management personnel. The failure to attract and retain such personnel or to develop such expertise could materially adversely affect our business, financial condition and results of operations.

We need collaborative relationships to be successful. If we are unable to form these relationships it could adversely impact our business, financial condition and results of operations.

We currently rely and may in the future rely on a number of significant collaborative relationships for intellectual property rights, research funding, manufacturing, analytical services, pre-clinical development, clinical development and/or sales and marketing. Reliance on collaborative relationships poses a number of risks, including the following:

we cannot effectively control whether our corporate partners will devote sufficient resources to our programs or products;

disputes may arise in the future with respect to the ownership of rights to technology developed with, licensed to or licensed from corporate partners;

disagreements with corporate partners could result in loss of intellectual property rights, delay or terminate the research, development or commercialization of product candidates or result in litigation or arbitration;

contracts with our corporate partners may fail to provide sufficient protection of our intellectual property;

we may have difficulty enforcing the contracts if one of these partners fails to perform;

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corporate partners have considerable discretion in electing whether to pursue the development of any additional products and may pursue technologies or products either on their own or in collaboration with our competitors; and

corporate partners with marketing rights may choose to devote fewer resources to the marketing of our products than they do to products of their own development.

Given these risks, a great deal of uncertainty exists regarding the success of our current and future collaborative efforts. Failure of these efforts could delay, impair or prevent the development and commercialization of our products and adversely affect our business, financial condition and results of operations.

Our growth strategy includes acquiring complementary businesses or technologies that may not be available or, if available and purchased or licensed, might not improve our business, financial condition or results of operations.

As part of our business strategy, we expect to pursue acquisitions and in-license new products and technologies. Nonetheless, we cannot assure you that we will identify suitable acquisitions or products or that we can make such acquisitions or enter into such license agreements on acceptable terms. If we acquire businesses, those businesses may require substantial capital, and we cannot assure you that such capital will be available in sufficient amounts or that financing will be available in amounts and on terms that we deem acceptable. Furthermore, the integration of acquired businesses may result in unforeseen difficulties that require a disproportionate amount of management s attention and our other resources. Finally, we cannot assure you that we will achieve productive synergies and efficiencies from these acquisitions.

We intend to conduct proprietary development programs with collaborators, and any conflicts with them could harm our business, financial condition and results of operations. We intend to enter into collaborative relationships which will involve our collaborator conducting proprietary development programs. Any conflict with our collaborators could reduce our ability to obtain future collaboration agreements and negatively influence our relationship with existing collaborators, which could reduce our revenues and have an adverse effect on our business, financial condition and results of operations. Moreover, disagreements with our collaborators could develop over rights to our intellectual property.

Certain of our collaborators could also be or become competitors. Our collaborators could harm our product development efforts by:

developing competing products;

precluding us from entering into collaborations with their competitors;

failing to obtain timely regulatory approvals;

terminating their agreements with us prematurely; or

failing to devote sufficient resources to the development and commercialization of products.

We face uncertainties related to patents and proprietary technology that may adversely affect our business, financial condition and results of operations.

Our success will depend in part on our ability to:

obtain patent protection for our products;

prevent third parties from infringing on our patents; and

refrain from infringing on the patents of others, both domestically and internationally.

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Our patent positions are highly uncertain, and any future patents we receive for our potential products will be subject to this uncertainty, which may adversely affect our business, financial condition and results of operations. We intend to actively pursue patent protection for products arising from our research and development activities that have significant potential commercial value. Nevertheless, it is possible that, in the patent application process, certain claims may be rejected or achieve such limited allowance that the value of the patents would be diminished. Further, there can be no assurance that any patents obtained will afford us adequate protection. In addition, any patents we procure may require cooperation with companies holding related patents. We may have difficulty forming a successful relationship with these other companies.

We can give no assurance that a third party will not claim (with or without merit) that we have infringed or misappropriated their proprietary rights. A variety of third parties have obtained, and are attempting to obtain, patent protection relating to the production and use of rhIGF-I and/or rhIGFBP-3. We can give no assurances as to whether any issued patents, or patents that may later issue to third parties, would affect our contemplated commercialization of rhIGF-I/rhIGFBP-3 or rhIGFBP-3. We can give no assurances that such patent(s) can be avoided, invalidated or licensed. If any third party were to assert a claim for infringement, we can give no assurances that we would be successful in the litigation or that such litigation would not have a material adverse effect on our business, financial condition and results of operation. Furthermore, we may not be able to afford the expense of defending against such a claim.

Third parties, including Genentech, Chiron, Amgen, Novartis AG, and Robert Rieveley hold United States and/or foreign patents possibly directed to the composition, production and/or use of rhIGF-I, rhIGFBP-3, rhIGF-I/rhIGFBP-3 and/or recombinant proteins in general. After examining these patents, we do not believe they present an obstacle to our plans to commercialize rhIGF-I/rhIGFBP-3 and rhIGFBP-3. However, we can provide no assurance that any one of these third parties will not assert in the future a contrary position, for instance in the context of an infringement action. Moreover, while we cannot predict with certainty the outcome of such a proceeding, an adverse ruling could impact our ability to make, use or sell our products.

We may have to undertake costly litigation to enforce any patents issued or licensed to us or to determine the scope and validity of another party s proprietary rights. We cannot assure that a court of competent jurisdiction would validate our issued or licensed patents. An adverse outcome in litigation or an interference or other proceeding in a court or patent office could subject us to significant liabilities to other parties, require us to license disputed rights from other parties or require us to cease using such technology, any of which could materially adversely affect our business, financial condition and results of operations.

In 1998 Genentech requested a hearing with the European Patent Office to oppose the validity of one of our European patents with claims to rhIGFBP-3, uses of rhIGFBP-3 and uses of rhIGF-I/rhIGFBP-3. As of yet, no hearing date has been set by the European Patent Office. Should the opposition hearing be held and should Genentech prevail, some or all of the claims of this patent may be revoked. This result could lessen our ability to exclude others, but would not affect our own ability, to practice these claims.

Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information. Disclosure of this information may materially adversely affect our business, financial condition and results of operations.

In order to protect our proprietary technology and processes, we rely in part on confidentiality agreements with our corporate partners, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover trade secrets and proprietary information. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

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Third-party claims that our products infringe on their proprietary rights may adversely affect our business, financial condition and results of operations.

We have entered into license, supply and manufacturing agreements, and may enter into future agreements, with various parties to develop, manufacture and market our products, and we cannot assure that third parties will not claim that we and/or our licensees, suppliers and/or manufacturers by practicing our technology or by combining our technology with their technology, are infringing on their proprietary rights. If other companies successfully bring legal actions against us, our licensees, suppliers and/or manufacturers claiming patent or other intellectual property infringements, in addition to any potential liability for damages, a court could require us and/or our licensors, manufacturers and/or suppliers to obtain a license in order to continue to use the affected processes or to manufacture or use the affected products, or alternatively, require us and/or our licensors, suppliers and/or manufacturers to cease using such products or processes. Such a result may have an adverse effect on our business, financial condition and results of operations. Any such claim, with or without merit, could result in costly litigation or might require us and/or our licensors, suppliers and/or manufacturers to enter into royalty or licensing agreements, all of which could delay or otherwise adversely impact the development of our potential products for commercial use. If a court requires us to obtain licenses, there can be no assurance that we and/or our licensors, suppliers and/or manufacturers will be able to obtain them on commercially favorable terms, if at all. Without such licenses, we and/or our licensors, suppliers and manufacturers may be unable to develop certain products. Our breach of an existing license or our failure to obtain, or our delay in obtaining, a license to any technology that we require to commercialize our products may materially adversely impact our business, financial condition and results of operations.

An inability to compete successfully will materially adversely affect our business, financial condition and results of operations.

We engage in a business characterized by extensive research efforts, rapid developments and intense competition. We cannot assure that our products will compete successfully or that research and development by others will not render our products obsolete or uneconomical. Our failure to compete effectively would materially adversely affect our business, financial condition and results of operations. We expect that successful competition will depend, among other things, on product efficacy, safety, reliability, availability, timing and scope of regulatory approval and price. Specifically, we expect crucial factors will include the relative speed with which we can develop products, complete the clinical testing and regulatory approval processes and supply commercial quantities of the product to the market. We expect competition to increase as technological advances are made and commercial applications broaden. In each of our potential product areas, we face substantial competition from large pharmaceutical, biotechnology and other companies, as well as universities and research institutions. Relative to us, most of these entities have substantially greater capital resources, research and development staffs, facilities and experience in conducting clinical trials and obtaining regulatory approvals, as well as in manufacturing and marketing pharmaceutical products. Many of our competitors may achieve product commercialization or patent protection earlier than we will. Furthermore, we believe that our competitors have used, and may continue to use, litigation to gain a competitive advantage. Finally, our competitors may use different technologies or approaches to the development of products similar to the products we are seeking to develop.

Since all of our products are under development, we cannot predict the relative competitive position of our products if they are approved for use. However, we expect that the following factors, among others, will determine our ability to compete effectively:

- safety and efficacy;
- product price;
- ease of administration; and

marketing and sales capability.

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Currently, no drug in the U.S. or Europe is approved and marketed as replacement therapy for the treatment of GHIS. Other than Insmed, we are aware of only one other company, Tercica, Inc., that is pursuing development of a product for this indication or a similar indication. Tercica, in documents filed with the Securities and Exchange Commission, has stated that it plans to submit a NDA for the use of rhIGF-I in the treatment of severe pediatric IGF-I deficiency in 2005. We believe this indication would include patients with GHIS. We believe Tercica may also be planning to develop rhIGF-I for some of the same indications that we plan to pursue with rhIGF-I/rhIGFBP-3.

Growth hormone may also be a competitive product for the treatment of some indications that we may pursue with rhIGF-I/rhIGFBP-3. The major suppliers of commercially available growth hormone are Genentech, Eli Lilly, Novo Nordisk, Pfizer and Serono. We believe that Novo Nordisk may be conducting clinical trials for the use of its growth hormone in pediatric IGF-I deficiency. We are also aware that Serono is conducting a Phase III trial with growth hormone for the treatment of HIV associated adipose redistribution syndrome.

In addition, we believe that Genentech, Merck, Novo Nordisk and Pfizer have previously conducted research and development of orally-available small molecules that cause the release of growth hormone, known as growth hormone secretagogues. We are not aware of any continued clinical development of these molecules by these companies. We believe that Rejuvenon Corporation may have licensed certain rights to Novo Nordisk s growth hormone secretagogues, which are in pre-clinical development. We are also aware that Theratechnologies is developing various peptides that stimulate the release of hormones that could be used in the treatment of some of the same indications we plan to pursue with rhIGF-I/rhIGFBP-3.

Many companies are seeking to develop products and therapies for the treatment of diabetes. Our competitors include multinational pharmaceutical companies, specialized biotechnology firms, and universities and other research institutions. Our largest competitors include Amylin Pharmaceuticals, Bristol-Myers Squibb Company, Eli Lilly, GlaxoSmithKline, Merck, Novartis, Novo Nordisk and Takeda Chemical Industries. Various products are currently available to treat type 2 diabetes, such as insulin and oral hypoglycemic drugs.

In addition, several companies are developing various new approaches to improve the treatments of type 1 and type 2 diabetes. Specifically, Amylin Pharmaceuticals has conducted and is continuing to conduct clinical trials for two products, Symlin and Exenatide, for the treatment of type 2 diabetes. Tercica has indicated that it plans to pursue the development of rhIGF-I in the treatment of severe forms of diabetes.

Many companies are pursuing the development of products for the treatment of cancer. Our competitors include multinational pharmaceutical companies, specialized biotechnology firms, and universities and other research institutions. Although we are unaware of any companies developing rhIGFBP-3 for cancer we are aware of companies who are developing products that are intended to target the same pathway as rhIGFBP-3.

Biotechnology and related pharmaceutical technology have undergone and should continue to experience rapid and significant change. We expect that the technologies associated with biotechnology research and development will continue to develop rapidly. Our future will depend in large part on our ability to maintain a competitive position with respect to these technologies. Any compounds, products or processes that we develop may become obsolete before we recover any expenses incurred in connection with their development. Rapid technological change could make our products obsolete, which could materially adversely affect our business, financial condition and results of operations.

Our inability to compete in our industry could materially adversely affect our business, financial condition and results of operations.

Our research and development activities involve the use of hazardous materials, which could expose us to damages that could materially adversely affect our business, financial condition and results of operations.

Our research and development activities involve the controlled use of hazardous materials, including hazardous chemicals and radioactive materials. We believe that our procedures for handling hazardous materials comply with federal and state regulations; however, there can be no assurance that accidental injury or contamination from these materials will not occur. In the event of an accident, we could be held liable for any damages, which could exceed our available financial resources, including our insurance coverage. This liability could materially adversely affect our business, financial condition and results of operations.

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We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous materials and waste products. These laws and regulations may require us to incur significant costs to comply with environmental laws and regulations in the future that could materially adversely affect our business, financial condition and results of operations.

We may be subject to product liability claims if our products harm people, and we have only limited product liability insurance.

The manufacture and sale of human therapeutic products involve an inherent risk of product liability claims and associated adverse publicity. We currently have only limited product liability insurance for clinical trials and no commercial product liability insurance. We do not know if we will be able to maintain existing or obtain additional product liability insurance on acceptable terms or with adequate coverage against potential liabilities. This type of insurance is expensive and may not be available on acceptable terms. If we are unable to obtain or maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims, we may be unable to commercialize our products. A successful product liability claim brought against us in excess of our insurance coverage, if any, may require us to pay substantial amounts. This could have a material adverse effect our business, financial condition and results of operations.

The market price of our stock may continue to be highly volatile, and we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Our common stock is listed on the Nasdaq National Market under the ticker symbol INSM. The market price of our stock has been and may continue to be highly volatile, and announcements by us or by third parties may have a significant impact on our stock price. These announcements may include:

- our listing status on the Nasdaq National Market;
- results of our clinical trials and pre-clinical studies, or those of our corporate partners or our competitors;
- our operating results;
- developments in our relationships with corporate partners;
- developments affecting our corporate partners;
- negative regulatory action or regulatory approval with respect to our announcement or our competitors announcement of new products;
- government regulations, reimbursement changes and governmental investigations or audits related to us or to our products;
- developments related to our patents or other proprietary rights or those of our competitors;

changes in the position of securities analysts with respect to our stock;

operating results below the expectations of public market analysts and investors;

additions or departure of key personal; and/or

activities of short sellers and risk arbitrageurs.

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In addition, the stock market has from time to time experienced extreme price and volume fluctuations, which have particularly affected the market prices for emerging biotechnology and biopharmaceutical companies, and which have often been unrelated to their operating performance. These broad market fluctuations may adversely affect the market price of our common stock.

Future sales by existing shareholders may lower the price of our common stock, which could result in losses to our shareholders. Future sales of substantial amounts of common stock in the public market, or the possibility of such sales occurring, could adversely affect prevailing market prices for our common stock or our future ability to raise capital through an offering of equity securities. Substantially all of our common stock is freely tradable in the public market without restriction under the Securities Act of 1933, unless these shares are held by affiliates of our company, as that term is defined in Rule 144 under the Securities Act.

We have never paid dividends on our common stock. We currently intend to retain our future earnings, if any, to fund the development and growth of our businesses and, therefore, we do not anticipate paying any cash dividends in the foreseeable future.

We may be the subject of securities class action litigation due to future stock price volatility.

In the past, when the market price of a stock has been volatile, holders of that stock have often instituted securities class action litigation against the company that issued the stock. If any of our shareholders brought a lawsuit against us, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management. This risk is particularly prevalent for biotechnology companies, which have generally experienced greater than average stock price volatility in recent years.

Certain provisions of Virginia law, our articles of incorporation and our amended and restated bylaws, and our Stockholder Rights Plan make a hostile takeover by a third party difficult.

Certain provisions of Virginia law and our articles of incorporation and amended and restated bylaws could hamper a third party s acquisition of, or discourage a third party from attempting to acquire control of us. The conditions could also limit the price that certain investors might be willing to pay in the future for shares of our common stock. These provisions include:

- a provision allowing us to issue preferred stock with rights senior to those of the common stock without any further vote or action by the holders of the common stock. The issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of common stock or could adversely affect the rights and powers, including voting rights, of the holders of the common stock. In certain circumstances, such issuance could have the effect of decreasing the market price of the common stock;

- the existence of a staggered board of directors in which there are three classes of directors serving staggered three-year terms, thus expanding the time required to change the composition of a majority of directors and perhaps discouraging someone from making an acquisition proposal for us;

- the amended and restated bylaws requirement that shareholders provide advance notice when nominating our directors;

the inability of shareholders to convene a shareholders meeting without the Chairman of the Board, the President or a majority of the board of directors first calling the meeting; and

the application of Virginia law prohibiting us from entering into a business combination with the beneficial owner of 10% or more of our outstanding voting stock for a period of three years after the 10% or greater owner first reached that level of stock ownership, unless we meet certain criteria.

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In addition, in May 2001 our board of directors approved the adoption of a Shareholder Rights Plan under which shareholders received rights to purchase new shares of preferred stock if a person or group acquires 15% or more of our common stock. These provisions are intended to discourage acquisitions of 15% or more of our common stock without negotiations with the board. The rights trade with our common stock, unless and until they are separated upon the occurrence of certain future events. Our board of directors may redeem the rights at a price of $0.01 per right prior to the time a person acquires 15% or more of our common stock.

FORWARD-LOOKING INFORMATION

The matters discussed throughout this prospectus that are not historical facts are forward-looking and, accordingly, involve estimates, projections, goals, forecasts, assumptions and uncertainties that could cause actual results or outcomes to differ materially from those expressed in the forward-looking statements. This prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934 (the Exchange Act). Our actual results may differ materially from those projected in the forward-looking statements as a result of the risk factors set forth above. In particular, please review the sections captioned Management s Discussion and Analysis of Financial Condition and Results of Operations in our current reports on Form 10-Q for the quarter ended September 30, 2004, and in our annual report on Form 10-K for the fiscal year ended December 31, 2003, which reports are incorporated herein by reference, and such section of any subsequently filed Exchange Act reports.

These forward-looking statements may include, but are not limited to, future capital expenditures, acquisitions (including the amount and nature of acquisitions), future revenues, earnings, margins, costs, demand for new pharmaceutical products, market trends in the pharmaceutical business, inflation and various economic and business trends. In some cases, you can identify forward-looking statements by terms such as may, will, should, could, would, expects, plans, anticipates, believes, estimates, forecasts, projects, predicts, potential, and intended to identify forward-looking statements. Forward-looking statements include all statements regarding commencement of clinical trials, expected financial position, results of operations, cash flows, dividends, financing plans, business strategies, operating efficiencies or synergies, budgets, capital and other expenditures, competitive positions, growth opportunities for our proposed products, plans and objectives of management, proposed relationships with third-party research organizations, manufacturers and suppliers and markets for our stock.

We caution you not to place undue reliance on these forward-looking statements, which speak only as of the date they were made. We do not undertake any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this prospectus or to reflect the occurrence of unanticipated events. These statements reflect our current views with respect to future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss many of these risks in this prospectus in greater detail under the heading Risk Factors. In connection with forward-looking statements which appear in these disclosures, prospective purchasers of the shares offered hereby should carefully consider the factors set forth in this prospectus under Risk Factors. Also these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of our common stock by the selling stockholders. All proceeds from the sale of the shares of common stock by the selling stockholders will be received directly by the selling stockholders. See Selling Stockholders. If the selling stockholders exercise the warrants to purchase our common stock for cash instead of on a net exercise basis, then we will receive the exercise price from the exercise of the warrants. The proceeds, if any, will be added to our working capital and be available to fund the ongoing activities relating to SomatoKine® and rhIGFBP-3 and for general corporate purposes.

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SELLING STOCKHOLDERS

On November 8, 2004, we raised approximately $8.7 million in gross proceeds from a private placement to 14 institutional and accredited investors. We issued 6,455,551 shares of common stock and warrants to purchase up to an additional 3,227,775 shares of common stock in the November 2004 private placement. The warrants are not exercisable until May 5, 2005 and will expire, to the extent not exercised, on November 5, 2009.

We are registering the 9,683,326 shares covered by this prospectus on behalf of the selling stockholders named in the table below, consisting of 6,455,551 shares of common stock and 3,227,775 shares of common stock issuable upon exercise of the warrants. We have registered the shares to permit the selling stockholders and their pledgees, donees, transferees or other successors-in-interest that receive their shares from the selling stockholders as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus to resell the shares.

The table below sets forth information as of November 5, 2004 regarding ownership of our common stock by the selling stockholders and the number of shares that may be sold by them pursuant to this prospectus. The percentage ownership shown in the table is based on 44,865,194 shares of common stock issued and outstanding as of November 5, 2004, together with the shares of common stock purchased by the selling stockholders in the November 8, 2004 private placement. The selling stockholders are not making any representations that the shares covered by this prospectus will be offered for sale. The selling stockholders may from time to time offer and sell pursuant to this prospectus any or all of the shares of common stock being registered. Because the selling stockholders may offer all or some portion of the shares of common stock listed in the table and may sell all, part or none of the shares of common stock listed pursuant to this prospectus or otherwise, no estimate can be given as to the number of shares of common stock that will be held by the selling stockholders upon termination of the offering. See Plan of Distribution below.

The number of shares owned by the selling stockholders is determined by rules promulgated by the Securities and Exchange Commission for beneficial ownership and is not necessarily indicative of ownership for any other purposes. Notwithstanding the preceding sentence, and although the warrants held by the selling stockholders are not exercisable within 60 days of November 5, 2004, the shares of common stock issuable upon exercise of the warrants held by the selling stockholders are included in the numbers set forth in the table below since those shares of common stock are included in this registration statement. However, for purposes of calculating each selling stockholder s percentage ownership, the shares of common stock issuable upon exercise of the warrants are included for that selling stockholder but not the warrants of any other selling stockholder.

Except as otherwise disclosed below, none of the selling stockholders has, or within the past three years has had, any positions, office or other material relationship with us. Each of the selling security holders has represented to us that it is not acting as an underwriter in this offering, that it purchased its shares and warrants in the ordinary course of business, and at the time of such purchase, it had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

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Investor	Number of Shares Owned Before Offering		Number of Shares Offered Pursuant to the Prospectus	Number of Shares Owned After Offering	
	Number	Percent	Number	Number	Percent
Jennison Health Sciences Fund, a series of the Jennison Sector Funds, Inc.[1]	2,600,000	5.7%	2,100,000	500,000	1.1%
Capital Ventures International[2]	1,554,887	3.4%	1,388,887	166,000	*
Steelhead Investments Ltd.[3]	1,111,110	2.5%	1,111,110		*
Walker Smith International Fund, Ltd.[4]	576,150	1.3%	576,150		*
Walker Smith Capital (QP), L.P.[5]	441,960	1.0%	441,960		*
Walker Smith Capital, L.P.[6]	93,000	*	93,000		*
Xmark Fund, L.P.[7]	555,555	1.2%	555,555		*
Xmark Fund, LTD[8]	555,555	1.2%	555,555		*
Portside Growth and Opportunity Fund[9]	1,683,334	3.7%	750,000	933,334	2.1%
Smithfield Fiduciary LLC[10]	555,555	1.2%	555,555		*
Omicron Master Trust[11]	555,555	1.2%	555,555		*

1 Includes 700,000 shares of Common Stock issuable upon exercise of warrants.

2 Includes 628,962 shares of Common Stock issuable upon exercise of warrants, of which 166,000 are not offered pursuant to this prospectus. Capital Ventures International is under common control with one or more NASD members, none of whom are currently expected to participate in the sale of shares of common stock offered pursuant to this prospectus.

3 Includes 370,370 shares of Common Stock issuable upon exercise of warrants.

4 Includes 192,050 shares of Common Stock issuable upon exercise of warrants.

5 Includes 147,320 shares of Common Stock issuable upon exercise of warrants.

6 Includes 31,000 shares of Common Stock issuable upon exercise of warrants.

7 Includes 185,185 shares of Common Stock issuable upon exercise of warrants.

8 Includes 185,185 shares of Common Stock issuable upon exercise of warrants.

9 Includes 500,000 shares of Common Stock issuable upon exercise of warrants, of which 250,000 are not offered pursuant to this prospectus. Ramius Capital Group, LLC (Ramius Capital) is the investment adviser of Portside Growth and Opportunity Fund (Portside) and consequently has voting control and investment discretion over securities held by Portside. Ramius Capital disclaims beneficial ownership of the shares held by Portside, Peter A. Cohen, Morgan B. Stark, Thomas W. Strauss and Jeffrey M. Solomon are the sole managing members of C4S & Co., LLC, the sole managing member of Ramius Capital. As a result, Messrs. Cohen, Stark, Strauss and Solomon may be considered beneficial owners of any shares deemed to be beneficially owned by Ramius Capital. Messrs. Cohen, Stark, Strauss and Solomon disclaim beneficial ownership of these shares.

10 Includes 185,185 shares of Common Stock issuable upon exercise of warrants. Highbridge Capital Management, LLC is the trading manager of Smithfield Fiduciary LLC and consequently has voting control and investment discretion over securities held by Smithfield. Glenn Dubin and Henry Swieca control Highbridge. Each of Highbridge, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Smithfield.

11 Includes 185,185 shares of Common Stock issuable upon exercise of warrants. Omicron Capital, L.P., a Delaware limited partnership (Omicron Capital), serves as investment manager to Omicron Master Trust, a trust formed under the laws of Bermuda (Omicron), Omicron Capital, Inc., a Delaware corporation (OCI), serves as general partner of Omicron Capital, and Winchester Global Trust Company Limited (Winchester) serves as the trustee of Omicron. By reason of such relationships, Omicron Capital and OCI may be deemed to share dispositive power over the shares of our common stock owned by Omicron, and Winchester may be deemed to share voting and dispositive power over the shares of our common stock owned by Omicron. Omicron Capital, OCI and Winchester disclaim beneficial ownership of such shares of our common stock. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock being offered by Omicron, as those terms are used for the purposes of Regulation 13D-G under the Securities Exchange Act of 1934, as amended. Omicron and Winchester are not affiliates of one another, as that term is used for purposes of the Securities Exchange Act of 1934, as amended, or of any other person named in this prospectus as a selling stockholder. No person or group (as that term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended, or the SEC s Regulation 13D-G) controls Omicron and Winchester.

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Investor	Number of Shares Owned Before Offering		Number of Shares Offered Pursuant to the Prospectus	Number of Shares Owned After Offering	
	Number	Percent	Number	Number	Percent
Iroquois Capital LP[12]	555,555	1.2%	555,555		*
RHP Master Fund, Ltd.[13]	333,333	*	333,333		*
Frank Kung[14]	111,361	*	111,111	250	*
Total	**11,282,910**	**24.9%**	**9,683,32**	**1,599,584**	**3.6%**

12 Includes 185,185 shares of Common Stock issuable upon exercise of warrants.

13 Includes 111,111 shares of Common Stock issuable upon exercise of warrants. RHP Master Fund, Ltd. is a party to an investment management agreement with Rock Hill Investment Management, L.P., a limited partnership of which the general partner is RHP General Partner, LLC. Pursuant to such agreement, Rock Hill Investment Management directs the voting and disposition of shares owned by RHP Master Fund. Messrs. Wayne Bloch, Gary Kaminsky and Peter Lockhart own all of the interests in RHP General Partner. The aforementioned entities and individuals disclaim beneficial ownership of the Company s Common Stock owned by the RHP Master Fund.

14 Includes 37,037 shares of Common Stock issuable upon exercise of warrants.

* Indicates less than 1%.

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PLAN OF DISTRIBUTION

The shares of common stock offered hereby may be sold from time to time by the selling stockholders for their own accounts. We will receive none of the proceeds from this offering. We will bear substantially all costs and expenses incident to the offering and sale of the shares to the public, including legal fees and disbursements of counsel, blue sky expenses, accounting fees and filing fees, but excluding any brokerage commissions, discounts or similar charges.

Resale of the shares by the selling stockholders are not subject to any underwriting agreement. The shares of common stock covered by this prospectus may be sold by the selling stockholders or by their permitted pledgees, donees, transferees, beneficiaries, distributees or successors-in-interest selling shares received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other non-sale related transfer. In addition, certain of the selling stockholders are corporations or partnerships which may, in the future, distribute their shares to their stockholders or partners, respectively. Those shares may later be sold by those stockholders or partners. The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale. The shares offered by each selling stockholder may be sold from time to time:

- at market prices prevailing at the time of sale,
- at prices relating to such prevailing market prices, or
- at negotiated prices.

Such sales may be effected in the over-the-counter market, on the Nasdaq National Market, or on any exchange on which the shares may then be listed. We will supply the selling stockholders with reasonable quantities of this prospectus. The shares may be sold by one or more of the following:

- one or more block trades in which a broker or dealer so engaged will attempt to sell all or a portion of the shares held by the selling stockholders as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by such broker or dealer for its account pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- in negotiated transactions; and
- through other means.

To the extent permitted by law, the selling stockholders may enter into hedging transactions when selling the shares. For example, the selling stockholders may:

sell shares short and redeliver such shares to close out their short positions;

enter into transactions involving short sales by the brokers or dealers;

enter into option or other types of transactions that require the selling stockholders to deliver shares to a broker or dealer, who then resells or transfer the shares under this prospectus; or

loan or pledge the shares to a broker or dealer, who may sell the loaned shares or, in the event of default, sell the pledged shares.

There is no assurance that any of the selling stockholders will sell any or all of the shares offered by them.

The selling stockholders may effect sales through customary brokerage channels, either through broker-dealers acting as agents or brokers, or through broker-dealers acting as principals, who may then resell the shares, or at

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private sales or otherwise, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. The selling stockholders may effect such transactions by selling shares to or through broker-dealers, and such broker-dealers may receive compensation in the form of underwriting discounts, concessions, commissions or fees from the selling stockholders and/or purchasers of the shares for whom such broker-dealers may act as agent or to whom they sell as principal, or both (which compensation to a particular broker-dealer might be in excess of customary commissions). The selling stockholders may further agree to indemnify any broker-dealer or agent against certain liabilities related to the selling of the common stock, including liabilities arising under the Securities Act of 1933. Any broker-dealers that participate with the selling stockholders in the distribution of the shares may be deemed to be underwriters, and any commissions received by them and any profit on the resale of the shares positioned by them might be deemed to be underwriting compensation, within the meaning of the Securities Act of 1933, in connection with such sales. To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

We have agreed to keep the registration statement of which this prospectus forms a part effective until the earlier of (i) November 8, 2006, (ii) the date on which the selling stockholders may sell all of the shares of common stock offered pursuant to this prospectus without restriction by the volume limitations of Rule 144(e) of the Securities Act and (iii) the date on which the selling stockholders have sold all of the shares of common stock offered pursuant to this prospectus under a registration statement. Pursuant to the terms of our Stock and Warrant Purchase Agreements with the selling stockholders, we may temporarily suspend the rights of the selling stockholders to resell their shares pursuant to this prospectus under certain circumstances.

We will inform the selling stockholders of the need for delivery of copies of this prospectus in connection with sales under the registration statement.

Some states require that any shares sold in that state only be sold through registered or licensed brokers or dealers. In addition, some states require that the shares have been registered or qualified for sale in that state, or that there exists an exemption from the registration or qualification requirements and that the exemption has been complied with.

Any shares covered by the prospectus that qualify for resale pursuant to Rule 144 under the Securities Act of 1933, as amended, may be sold under Rule 144 rather than pursuant to this prospectus. In addition to selling the shares of common stock, the selling stockholders may transfer the shares by gift, distribution or other transfer not involving market makers or established trading markets.

Our common stock is quoted on the Nasdaq National Market under the symbol INSM. Wachovia Bank, N.A. is the transfer agent for shares of our common stock.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Woods Rogers PLC.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, have audited our consolidated financial statements included in our Annual report on Form 10-K for the year ended December 31, 2003, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, proxy statements, and other information with the Securities and Exchange Commission (the SEC). You may read and copy any documents we file at the SEC s Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our SEC filings are also available to the public on our web site at http://www.insmed.com at the SEC s web site at http://www.sec.gov.

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INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act, until all the shares registered by this prospectus are sold. The documents we incorporate by reference are:

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2003, as amended on August 25, 2004 and on September 23, 2004;

2. Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2004, June 30, 2004 and September 30, 2004;

3. Our Current Reports on Form 8-K, filed with the SEC on February 11, 2004, April 15, 2004, May 5, 2004, August 5, 2004, November 9, 2004 and November 10, 2004;

4. The description of our Common Stock contained in our Registration Statement on Form 8-A, as filed with the SEC on June 1, 2000, including any amendment or report filed for the purpose of updating that description; and

5. The description of our Preferred Stock Purchase Rights contained in our Registration Statement on Form 8-A, as filed with the SEC on May 17, 2001, including any amendment or report filed for the purpose of updating that description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: Mr. Kevin P. Tully, Insmed Incorporated, 4851 Lake Brook Drive, Glen Allen, Virginia 23060; telephone number (804) 565-3000.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby (except for any underwriting discounts and commissions), all of which will be borne by Insmed. All amounts shown are estimates except the SEC registration fee.

SEC registration fee	$ 1,755
Accounting fees and expenses	7,500
Legal fees and expenses	30,000
Miscellaneous	10,000
Total	$ 49,255

Item 15. Indemnification of Directors and Officers.

The Virginia Stock Corporation Act (the VSCA) permits, and the Registrant s Articles of Incorporation require, indemnification of the Registrant s directors and officers in a variety of circumstances, which may include indemnification for liabilities under the Securities Act of 1933, as amended (the Securities Act). Under Sections 13.1-697 and 13.1-702 of the VSCA, a Virginia corporation generally is authorized to indemnify its directors and officers in civil or criminal actions if they acted in good faith and believed their conduct to be in the best interests of the corporation and, in the case of criminal actions, had no reasonable cause to believe that the conduct was unlawful. The Registrant s Articles of Incorporation require indemnification of directors and officers with respect to certain liabilities, expenses and other amounts imposed upon them because of having been a director or officer, except in the case of willful misconduct or a knowing violation of criminal law.

In addition, the Registrant carries insurance on behalf of directors, officers, employees or agents that may cover liabilities under the Securities Act. The Registrant s Articles of Incorporation also provide that, to the full extent the VSCA (as it presently exists or may hereafter be amended) permits the limitation or elimination of the liability of directors and officers, no director or officer of the Registrant shall be liable to the Registrant or its shareholders for monetary damages with respect to any transaction, occurrence or course of conduct. Section 13.1-692.1 of the VSCA presently permits the elimination of liability of directors and officers in any proceeding brought by or in the right of a company or brought by or on behalf of shareholders of a company, except for liability resulting from such person s having engaged in willful misconduct or a knowing violation of the criminal law or any federal or state securities law, including, without limitation, any unlawful insider trading or manipulation of the market for any security. Sections 13.1-692.1 and 13.1-696 to -704 of the VSCA are hereby incorporated by reference herein.

Item 16. Exhibits.

EXHIBIT INDEX

Exhibit Number	Description
4.1	Description of Capital Stock (contained in the Registrant s Articles of Incorporation previously filed as Annex H to the Joint Proxy Statement/Prospectus contained in Part I of the Registrant s Registration Statement on Form S-4 (Registration No. 333-30098) on February 11, 2000 and incorporated herein by reference).
4.2	Specimen stock certificate representing common stock, $.01 par value per share, of the Registrant (previously filed as Exhibit 4.2 to the Registrant s Registration Statement on Form S-4 (Registration No. 333-30098) on February 11, 2000 and incorporated herein by reference).

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4.3	Article VI of the Articles of Incorporation of the Registrant (previously filed as Exhibit 4.1A to the Registrant s Registration Statement on Form S-4 (Registration No. 333-30098) on February 11, 2000 and incorporated herein by reference).
4.4	Rights Agreement, dated as of May 16, 2001, between the Registrant and First Union National Bank, as Rights Agent (which includes as (i) Exhibit A the form of Articles of Amendment to the Registrant s Articles of Incorporation, as amended, (ii) Exhibit B the form of Rights Certificate, and (iii) Exhibit C the Summary of the Rights to Purchase Preferred Stock) (previously filed as Exhibit 4.4 to the Registrant s Registration Statement on Form 8-A filed with the Securities and Exchange Commission on May 17, 2001 and incorporated herein by reference).
4.5	Form of Rights Certificate (previously filed as Exhibit B to the Rights Agreement, dated as of May 16, 2001, between the Registrant and First Union National Bank, as Rights Agent, filed as Exhibit 4.4 to the Registrant s Registration Statement on Form 8-A filed with the Securities and Exchange Commission on May 17, 2001 and incorporated herein by reference).
5.1	Opinion of Woods Rogers PLC.
10.1	Form of Stock and Warrant Purchase Agreement.[1]
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Woods Rogers PLC (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page of this Registration Statement).

1 Incorporated by reference to Insmed s Current Report on Form 8-K filed November 10, 2004 (File No. 000-30739).

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Item 17. Undertakings.

(a) 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 Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement; *provided, however*, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the Registration Statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement.

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

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

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

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to 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 Securities Act of 1933 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 Securities Act of 1933 and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in Reston, Virginia, on November 19, 2004.

INSMED INCORPORATED

By: /s/ KEVIN P. TULLY, C.G.A.

Kevin P. Tully, C.G.A.
Principal Financial Officer, Treasurer and Controller

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POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated. The undersigned officers and directors of Insmed Incorporated whose signature appears below hereby constitute and appoint Geoffrey Allan and Kevin P. Tully, or any of them singly, his true and lawful attorney-in-fact and agent with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign the Registration Statement on Form S-3 filed herewith and any and all amendments (including post-effective amendments and any related Rule 462(b) Registration Statement and any other documents filed with the Securities and Exchange Commission) to the Registration Statement on Form S-3, and to cause the same to be filed, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby granting to said attorney-in-fact and agent, or any of them, full power and authority to do and perform each and every act and thing whatsoever requisite or desirable to be done in and about the premises, as fully to all intents and purposes as the undersigned might or could do in person, hereby ratifying and confirming all acts and things that said attorney-in-fact and agent, or any of them, or his or their substitute, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ GEOFFREY ALLAN, PH.D. **Geoffrey Allan, Ph.D.**	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)	November 19, 2004
/s/ KEVIN P. TULLY, C.G.A. **Kevin P. Tully, C.G.A.**	Treasurer and Controller (Principal Financial and Accounting Officer)	November 19, 2004
/s/ KENNETH G. CONDON **Kenneth G. Condon**	Director	November 19, 2004
/s/ GRAHAM K, CROOKE, MB.BS **Graham K, Crooke, MB.BS**	Director	November 19, 2004
/s/ STEINAR J. ENGELSEN, M.D. **Steinar J. Engelsen, M.D.**	Director	November 19, 2004
/s/ MELVIN SHAROKY, M.D. **Melvin Sharoky, M.D.**	Director	November 19, 2004
/s/ RANDALL W. WHITCOMB, M.D. **Randall W. Whitcomb, M.D.**	Director	November 19, 2004

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