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SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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FORM S-3  
REGISTRATION STATEMENT  
Under  
THE SECURITIES ACT OF 1933  
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INHALE THERAPEUTIC SYSTEMS  
(Exact name of registrant as specified in its charter)

CALIFORNIA  
(State or other jurisdiction of  
incorporation or organization)

94-3134940  
(I.R.S. Employer  
Identification Number)

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1060 EAST MEADOW CIRCLE  
PALO ALTO, CALIFORNIA 94303  
(415) 354-0700  
(Address, including zip code, and telephone number, including area code, of  
registrant's principal executive offices)

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ROBERT B. CHESS  
PRESIDENT AND CHIEF EXECUTIVE OFFICER  
INHALE THERAPEUTIC SYSTEMS  
1060 EAST MEADOW CIRCLE  
PALO ALTO, CALIFORNIA 94303  
(415) 354-0700  
(Name, address, including zip code, and telephone number, including area  
code, of agent for service)

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COPIES TO:

MARK P. TANOURY, ESQ.  
COOLEY GODWARD LLP  
3000 SAND HILL ROAD  
BUILDING 3, SUITE 230  
MENLO PARK, CALIFORNIA 94025  
(415) 843-5000

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Approximate date of commencement of proposed sale to the public:  
AS SOON AS PRACTICABLE AFTER THE REGISTRATION STATEMENT BECOMES EFFECTIVE.

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If the only securities being registered on this Form are being offered  
pursuant to dividend or interest reinvestment plans, please check the following  
box. / /

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

If this form is filed to register additional securities for an offering

pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. / /

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

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

CALCULATION OF REGISTRATION FEE

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
Common Stock, no par value	1,800,000	\$18.8125	\$33,862,500.00	\$10,261.00

(1) Estimated in accordance with Rule 457(c) solely for the purpose of computing the amount of the registration fee based on the average of the high and low prices of the Company's Common Stock as reported on the Nasdaq National Market on January 27, 1997.

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 THAT SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

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

SUBJECT TO COMPLETION, DATED JANUARY 31, 1997  
PROSPECTUS

INHALE THERAPEUTIC SYSTEMS

1,800,000 SHARES

COMMON STOCK

This Prospectus relates to the public offering, which is not being underwritten, of 1,800,000 shares of Common Stock, no par value (the "Shares"), of Inhale Therapeutic Systems ("Inhale" or the "Company"). All of these Shares are held and may be offered by certain shareholders of the Company (the "Selling Shareholders") who acquired such Shares pursuant to an exemption from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act") provided by Section 4(2) thereof. The Shares are being registered by the Company pursuant to the terms of certain Stock Purchase Agreements dated January 28, 1997 by and between the Company and the individual Selling Shareholders (the "Purchase Agreements"). See "Selling Shareholders" and "Plan of Distribution."

The sale of the Shares may be effected by the Selling Shareholders from

time to time in transactions on the Nasdaq National Market, in privately negotiated transactions or in a combination of such methods of sale, at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing prices or at negotiated prices. The Selling Shareholders may effect such transactions by selling the Shares to or through broker-dealers, and such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the Selling Shareholders and/or the purchasers of the Shares for whom such broker-dealers may act as agents or to whom they may sell as principals or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). See "Plan of Distribution."

None of the proceeds from the sale of the Shares by the Selling Shareholders will be received by the Company. The Company has agreed, among other things, to bear certain expenses (other than fees and expenses of counsel and underwriting discounts and commission and brokerage commissions and fees) in connection with the registration and sale of the Shares being offered by the Selling Shareholders. See "Selling Shareholders."

The Common Stock of the Company is quoted on the Nasdaq National Market under the symbol "INHL." The last reported sales price of the Company's Common Stock on the Nasdaq National Market on January 30, 1997 was \$18.625 per share.

The Selling Shareholders and any agents, broker-dealers or underwriters that participate in the distribution of the Shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission received by them and any profit on the resale of the Common Stock purchased by them may be deemed to be underwriting discounts or commissions under the Act. The Company will not receive any proceeds from the sale of shares by the Selling Shareholders. The Company has agreed to indemnify the Selling Shareholders and certain other persons against certain liabilities, including liabilities under the Act. See "Selling Shareholders" and "Plan of Distribution."

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THIS OFFERING INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 5 OF THIS PROSPECTUS.

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

, 1997

NO PERSON IS AUTHORIZED IN CONNECTION WITH ANY OFFERING MADE HEREBY TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATION NOT CONTAINED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS, AND ANY INFORMATION OR REPRESENTATION NOT CONTAINED OR INCORPORATED HEREIN MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL, OR A SOLICITATION OF AN OFFER TO BUY, BY ANY PERSON IN ANY JURISDICTION IN WHICH IT IS UNLAWFUL FOR SUCH PERSON TO MAKE SUCH OFFER OR SOLICITATION. NEITHER THE DELIVERY OF THIS PROSPECTUS AT ANY TIME NOR ANY SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCES, IMPLY THAT THE INFORMATION HEREIN IS CORRECT AS OF ANY DATE SUBSEQUENT TO THE DATE HEREOF.

#### AVAILABLE INFORMATION

The Company is subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith, files annual and quarterly reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information may be inspected and copied at the Commission's Public Reference Section, 450 Fifth Street, N.W.,

Room 1024, Washington, D.C. 20549, as well as at the Commission's Regional Offices at 7 World Trade Center, 13th Floor, New York, New York 10048; and 500 West Madison Street, Suite 1400, Chicago, Illinois 60661-2511. Copies of such material can be obtained at prescribed rates from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. The Common Stock of the Company is quoted on the Nasdaq National Market. Reports and other information concerning the Company may be inspected at the National Association of Securities Dealers, Inc. at 1735 K Street, N.W. Washington, D.C. 20006.

#### ADDITIONAL INFORMATION

A registration statement on Form S-3 with respect to the Shares offered hereby (the "Registration Statement") has been filed with the Commission under the Act. This Prospectus does not contain all of the information contained in such Registration Statement and the exhibits and schedules thereto, certain portions of which have been omitted pursuant to the rules and regulations of the Commission. For further information with respect to the Company and the Shares offered hereby, reference is made to the Registration Statement and the exhibits and schedules thereto. Statements contained in this Prospectus regarding the contents of any contract or any other documents are not necessarily complete and, in each instance, reference is hereby made to the copy of such contract or document filed as an exhibit to the Registration Statement. The Registration Statement, including exhibits thereto, may be inspected without charge at the Commission's principal office in Washington, D.C., and copies of all or any part thereof may be obtained from the Public Reference Section, Securities and Exchange Commission, Washington, D.C., 20549, upon payment of the prescribed fees.

#### INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents, filed or to be filed with the Commission under the Exchange Act are hereby incorporated by reference into this Prospectus:

(i) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1995, including all material incorporated by reference therein; and

(ii) The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 1996, including all material incorporated by reference therein; and

(iii) The Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 1996, including all material incorporated by reference therein; and

2

(iv) The Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996, including all material incorporated by reference therein; and

(v) The description of the Common Stock contained in the Company's Registration Statement on Form 8-A as filed on May 2, 1994.

All documents filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and prior to the termination of the offering shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents. Any statement contained in this Prospectus or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any subsequently-filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

The Company will provide without charge to each person, including any beneficial owner, to whom this Prospectus is delivered, upon written or oral request of such person, a copy of any and all of the documents that have been incorporated by reference herein (not including exhibits to such documents unless such exhibits are specifically incorporated by reference herein or into such documents). Such request may be directed to Inhale Therapeutic Systems, Attention: Investor Relations, 1060 East Meadow Circle, Palo Alto,

THE COMPANY

THE FOLLOWING IS QUALIFIED IN ITS ENTIRETY BY THE MORE DETAILED INFORMATION INCLUDING "RISK FACTORS" APPEARING ELSEWHERE IN THIS PROSPECTUS AND THE FINANCIAL STATEMENTS AND NOTES THERETO CONTAINED IN THE COMPANY'S ANNUAL REPORT (FORM 10-K) FOR THE YEAR ENDED DECEMBER 31, 1995, INCORPORATED BY REFERENCE HEREIN (THE "ANNUAL REPORT"). EXCEPT FOR THE HISTORICAL INFORMATION CONTAINED HEREIN, THE DISCUSSION IN THIS PROSPECTUS CONTAINS FORWARD-LOOKING STATEMENTS THAT INVOLVE RISKS AND UNCERTAINTIES. THE COMPANY'S ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE DISCUSSED HEREIN. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE, BUT ARE NOT LIMITED TO, THOSE DISCUSSED IN "RISK FACTORS" BEGINNING AT PAGE 5 OF THIS PROSPECTUS AND THOSE DISCUSSED IN "MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS" AND "BUSINESS" CONTAINED IN THE ANNUAL REPORT, AS WELL THOSE DISCUSSED ELSEWHERE IN THE PROSPECTUS, THE ANNUAL REPORT, AND ANY OTHER DOCUMENT INCORPORATED HEREIN PRIOR TO THE TERMINATION OF THE OFFERING.

Inhale is developing a pulmonary drug delivery system applicable to a wide range of peptides, proteins and other molecules currently delivered by injection or by other routes including existing inhalation systems. As an alternative to invasive delivery techniques, a pulmonary delivery system potentially could expand the market for pharmaceutical drug therapies by increasing patient acceptance and improving compliance, which in turn could decrease medical complications and the associated costs of disease management. Pulmonary delivery also may enable new therapeutic uses of certain drugs. Inhale is focusing development efforts on applying its pulmonary delivery system primarily to drugs for systemic and local lung diseases that either have proven efficacy and are approved for delivery by injection or are in late stage human clinical trials. In addition, the Company is applying its delivery technology to selected other applications where its approach may have significant advantages. Several Inhale projects are in clinical trials, including insulin (currently in a Phase IIb clinical trial) and numerous other projects are in various stages of research, feasibility, formulation and preclinical development.

Medical science, health care providers and consumers have been searching for alternatives to injection as a means of delivering drugs. To date, oral, transdermal, and nasal routes of delivery have been shown to have low natural bioavailability (the amount of drug absorbed from the delivery site into the bloodstream) due to the large size of macromolecules, making these routes commercially unattractive alternatives for the natural delivery of most macromolecule drugs.

Inhale approaches pulmonary drug delivery with the objective of maximizing overall system efficiency while addressing commercial requirements for reproducibility, formulations stability, safety and convenience. Inhale is designing its delivery system to integrate customized formulations and proprietary fine dry powder processing and packaging technology with a proprietary inhalation device for efficient, reproducible lung delivery of macromolecule powders. To achieve this goal, Inhale is combining an understanding of lung biology, aerosol science, chemical engineering, mechanical engineering, and protein formulations in its system development efforts. Inhale intends to take bulk drugs supplied by collaborative pharmaceutical and biotechnology partners, formulate and process these drugs into fine powders and fill and package the powders into individual dosing units (blisters). The blisters are designed to be loaded into Inhale's device, which patients then activate to inhale the aerosolized drugs.

Inhale's strategy is to work with collaborative partners to develop and commercialize drugs for systemic and local lung indications using its pulmonary delivery system. Inhale is engaged in early stage feasibility, research or development collaborations with Pfizer Inc. ("Pfizer"), Baxter Healthcare Corporation (a subsidiary of Baxter International) ("Baxter"), Centeon (a company of Armour and Behring), Eli Lilly and Company ("Lilly"), Immunex Corporation, Genzyme Corporation as well as other major international pharmaceutical and biotechnology companies. In addition to its collaborations, Inhale has initiated projects with several drugs (calcitonin, heparin, Interferon-Alpha, Interferon-Beta and follicle stimulating hormone). The Company anticipates that any product that might be developed would be commercialized through a collaborative partner and believes its partnering

strategy will enable it to reduce its cash requirements while developing a large and diversified potential product portfolio.

4

The Company was incorporated in California in July 1990. The Company's executive offices are located at 1060 East Meadow Circle, Palo Alto, California 94303, and its telephone number is (415) 354-0700.

#### RISK FACTORS

THE FOLLOWING ARE SIGNIFICANT RISK FACTORS THAT SHOULD BE CONSIDERED CAREFULLY IN EVALUATING THE COMMON STOCK OF INHALE. INVESTMENT IN THE COMMON STOCK OF INHALE INVOLVES A HIGH DEGREE OF RISK.

EARLY STAGE COMPANY. Inhale is in an early stage of development. There can be no assurance that the Company's pulmonary delivery technology will prove to be technically feasible or commercially applicable to a range of macromolecules and other drugs. Only four of the Company's pulmonary delivery formulations, insulin, Interleukin-1 Receptor, salmon calcitonin and a peptide for the treatment of osteoporosis have been subject to any human clinical testing. Although many of the underlying drug compounds with which the Company is working have been tested in humans by others using alternative delivery routes, Inhale's potential products will require extensive research, development, preclinical and clinical testing, and may involve lengthy regulatory review. There can be no assurance that any of the Company's potential products will prove safe and effective in clinical trials, meet applicable regulatory standards, be capable of being produced in commercial quantities at acceptable cost or be successfully marketed. Moreover, even if the Company's products prove to be safe and effective and are approved for marketing by the United States Food and Drug Administration ("FDA") and other regulatory authorities, there can be no assurance that health care providers, payors or patients will accept the Company's products. Any failure of the Company to achieve technical feasibility, demonstrate safety, achieve clinical efficacy, obtain regulatory approval or, together with partners, successfully market products, would have a material adverse effect on the Company. See "Risk Factors -- No Assurance of Successful Development or Commercialization of Drugs for Pulmonary Delivery," "-- Government Regulation; Uncertainty of Obtaining Regulatory Approval" and "-- Uncertainty Related to Health Care Reform and Third-Party Reimbursement."

NO ASSURANCE OF SUCCESSFUL DEVELOPMENT OR COMMERCIALIZATION OF DRUGS FOR PULMONARY DELIVERY. The commercial viability of Inhale's pulmonary drug delivery system for any drugs will depend upon the Company achieving sufficient system efficiency (measured by the percentage of bulk drug entering the manufacturing process that eventually is absorbed into the bloodstream relative to injection for systemic indications, or the amount of drug delivered to the lung tissue for local lung indications), formulation stability, safety and dosage reproducibility.

The initial screening determinant for the feasibility of pulmonary delivery of any systemic drug is pulmonary bioavailability, which measures the percentage of the drug absorbed into the bloodstream when delivered directly to the lungs. In addition, a certain percentage of each drug dose may be lost at various stages of the manufacturing and pulmonary delivery process -- in drug formulation, dry powder processing, packaging, and in moving the drug from a delivery device into the lungs. Too much drug loss at any one stage or cumulatively in the manufacturing and delivery process could render a drug commercially unfeasible for pulmonary delivery.

Formulation stability (the physical and chemical stability of the formulated drug over time and under various storage conditions) and safety will vary with each drug and the type and amount of excipients that are used in the formulation. Reproducibility (the ability to deliver a consistent and predictable amount of drug into the bloodstream over time both for a single patient and across patient groups) will require, among other things, the development of an inhalation device that consistently delivers predictable amounts of dry powder formulations to the deep lung.

The Company's integrated approach to systems development relies upon several different but related technologies, and its business strategy depends upon collaborations with corporate partners. Development of powder formulations, processing and packaging technology and the delivery device,

establishing collaborations with partners, laboratory and clinical testing, and manufacturing scale-up must proceed contemporaneously so as not to delay any aspect of systems development. Any delay in one component of product or business development could cause consequential delays in the Company's ability to develop, obtain approval of or market therapeutic

5

products using its system. Further refinement of the Company's device prototype, further scale-up of the powder processing system and automated packaging system will need to be accomplished before initiation of later stage clinical trials.

There can be no assurance that Inhale will be able to demonstrate pulmonary bioavailability for the drug candidates it has identified or may identify, will be able to achieve commercial viability of its pulmonary delivery system or will achieve the total system efficiency needed to be competitive with alternative routes of delivery. Further, there can be no assurance that the Company's pulmonary delivery system will prove to be safe, provide reproducible dosages of stable formulations sufficient to achieve clinical efficacy, regulatory approval or market acceptance. In addition, there can be no assurance that Inhale will advance the various aspects of product and business development on a timely basis that does not cause delays in overall product development. The failure to demonstrate pulmonary bioavailability, achieve total system efficiency, provide safe, reproducible dosages of stable formulations or advance timely the various aspects of product and business development would have a material adverse effect on the Company. See "Risk Factors -- Dependence Upon Partners" and "-- Government Regulation; Uncertainty of Obtaining Regulatory Approval."

HISTORY OF OPERATING LOSSES; UNCERTAINTY OF FUTURE PROFITABILITY. The Company has not been profitable since inception and, through September 30, 1996, had incurred a cumulative deficit of approximately \$24.4 million. The Company expects to continue to incur substantial and increasing losses over at least the next several years as the Company's research and development efforts, preclinical and clinical testing activities and manufacturing scale-up efforts expand and as the Company plans and builds its late stage clinical and early commercial production facility. All of the Company's potential products are in research or in the early stages of development, and no revenues have been generated from approved product sales. The Company's revenues to date have consisted primarily of payments under short-term research and feasibility agreements and development contracts. To achieve and sustain profitable operations, the Company, alone or with others, must successfully develop, obtain regulatory approval for, manufacture, introduce, market and sell products utilizing its pulmonary drug delivery system. There can be no assurance that the Company can generate sufficient product or contract research revenue to become profitable or to sustain profitability.

DEPENDENCE UPON PARTNERS. The Company currently does not possess the resources necessary to develop, complete the FDA approval process for, or commercialize any of its potential therapeutic products. The Company's ability to apply its pulmonary delivery system to a broad range of drugs will depend upon its ability to establish and maintain collaborative arrangements since many of the drugs currently approved for sale or in clinical testing are covered by third party patents. The Company has entered into collaborative arrangements with certain of its partners to fund clinical trials, assist in obtaining regulatory approval and commercialize certain products. Inhale has also entered into agreements with partners to test the feasibility of its pulmonary delivery system with certain of their proprietary molecules. There can be no assurance that the Company will be able to enter into additional collaborations or that its feasibility agreements will lead to collaborations. There also can be no assurance that the Company will be able to maintain any such collaborative arrangements or feasibility agreements or that any such collaborative arrangements or feasibility agreements will be successful. The failure of the Company to enter into or maintain such collaborative arrangements and feasibility agreements would have a material adverse effect on the Company. Moreover, the inability of the Company to enter into a collaborative arrangement with the owner of any patented drug may preclude the Company from working with such drug.

The Company's existing partners have the rights to pursue parallel development of other drug delivery systems which may compete with the

Company's pulmonary drug delivery system and to terminate their agreements with the Company at any time without significant penalty. The Company anticipates that any future partners would have similar rights. Although the Company intends generally to formulate and manufacture powders for partners and to supply inhalation devices for such powders, certain partners may choose to formulate or manufacture their own powders, or to develop or supply their own device, thereby limiting one or more potential sources of revenue for Inhale. In addition, the Company anticipates that it may be precluded from entering into arrangements with companies whose products compete with products sold by its partners. The Company also will have limited or no control over the resources that any partner may devote to the Company's products, over partners' development efforts, including the design and conduct of clinical trials, and over the pricing of any such

6

products. The pharmaceutical and biotechnology industries are consolidating, and acquisitions by, or of, the Company's existing or potential collaborative partners may affect the initiation or continuation of any such collaborations. There can be no assurances that any of the Company's present or future collaborative partners will perform their obligations as expected, will devote sufficient resources to the development, clinical testing or marketing of the Company's potential products or will not terminate their agreements with the Company prematurely. Any parallel development by a partner of alternate drug delivery systems, development by a partner rather than by Inhale of components of the delivery system, preclusion from entering into competitive arrangements, failure to obtain timely regulatory approvals, premature termination of an agreement, or failure by a partner to devote sufficient resources to the development and commercialization of the Company's products would have a material adverse effect on the Company. See "Risk Factors -- Dependence Upon Proprietary Technology; Uncertainty of Obtaining Licenses or Developing Technology."

LIMITED MANUFACTURING EXPERIENCE; RISK OF SCALE-UP. To achieve the levels of production of Inhale's dry powder drug formulations necessary to support late stage human clinical trials and for early commercialization of any of such products, the Company will need to scale-up its current powder processing facilities and automated filling, plan and build a late stage clinical and early commercial production facility, and comply with the good manufacturing practices ("GMP") prescribed by the FDA and other standards prescribed by various federal, state and local regulatory agencies in the United States and any other country of use.

The Company has no experience manufacturing products for large scale clinical testing or commercial purposes. To date, the Company has performed powder processing on the small scale needed for early stage trials and for testing formulations of certain other potential therapeutic products and scaled-up powder processing for larger clinical trials. There can be no assurance that manufacturing and control problems will not arise as the Company attempts to further scale-up its powder processing facilities or that such scale-up can be achieved in a timely manner or at a commercially reasonable cost. Any failure to surmount such problems could delay or prevent late stage clinical testing and commercialization of the Company's products and would have a material adverse effect on the Company. To date, the Company has relied on a particular method of powder processing. There can be no assurance that this technology will be applicable to all drugs or that the drug losses in powder processing will not be too high for commercial viability for certain drugs. In the event that the Company decides to pursue alternative powder processing methods for some or all of its drugs, there can be no assurance that these methods will prove commercially practical for aerosol drugs or that the Company will have or be able to acquire rights to use such alternative methods. See "Risk Factors -- Dependence Upon Proprietary Technology; Uncertainty of Obtaining Licenses or Developing Technology."

Fine particle powders and small quantity packaging (such as those to be used in the Company's delivery system) require special handling. The Company has designed and qualified small scale automated filling equipment for small quantity packaging of fine powders. The Company faces significant technical challenges scaling-up an automated filling system that can accurately and economically handle the small dose and particle sizes of its powders in commercial quantities. There can be no assurances that the Company will be able to scale-up its automated filling equipment in a timely manner or at commercially reasonable costs. Any failure or delay in such scale-up would

delay product development or bar commercialization of the Company's products and would have a material adverse effect on the Company.

The Company also faces technical challenges in further developing its inhalation device to achieve the efficiency necessary to deliver a broad range of drugs, to produce such a device in quantities sufficient for later stage clinical trials and early commercialization, and to adapt the device as may be required for different powder formulations. There can be no assurance that Inhale will successfully achieve such efficiencies, will be able to produce such quantities or will be able to adapt the device as required. The failure of the Company to overcome any such challenges would have a material adverse effect on the Company. For late stage clinical trials and initial commercial production, the Company intends to use one or more contract manufacturers to produce its device. There can be no assurance that Inhale will be able to enter into or maintain such arrangements. The failure of the Company to enter into and maintain such arrangements would have a material adverse effect on the Company. See

7

"Risk Factors -- No Assurance of Successful Development or Commercialization of Drugs for Pulmonary Delivery."

FUTURE CAPITAL NEEDS; UNCERTAINTY OF ADDITIONAL FUNDING. The Company's operations to date have consumed substantial and increasing amounts of cash. The negative cash flow from operations is expected to continue and to accelerate in the foreseeable future. The development of the Company's technology and proposed products will require a commitment of substantial funds to conduct the costly and time-consuming research and preclinical and clinical testing activities necessary to develop early commercial production facility and to bring any such products to market. The Company's future capital requirements will depend on many factors, including continued progress in the research and development of the Company's technology and drug delivery system, the ability of the Company to establish and maintain collaborative arrangements with others and the terms thereof, payments received from partners under research and development agreements, progress with preclinical and clinical trials, the time and costs involved in obtaining regulatory approvals, the cost of development and the rate of scale-up of the Company's powder processing and packaging technologies, the timing and costs of its late stage clinical and early commercial production facility, the cost involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, the need to acquire licenses to new technology and the status of competitive products.

The Company expects that its existing capital resources, contract research revenues from collaborations and the net proceeds of this offering and interest thereon, will enable the Company to maintain its current and planned operations at least through 1998. Thereafter, the Company may need to raise substantial additional capital to fund its operations. The Company intends to seek such additional funding through collaborative or partnering arrangements, the extension of existing arrangements, or through public or private equity or debt financings. There can be no assurance that additional financing will be available on acceptable terms or at all. If additional funds are raised by issuing equity securities, further dilution to shareholders may result. If adequate funds are not available, the Company may be required to delay, reduce the scope of, or eliminate one or more of its research or development programs or obtain funds through arrangements with collaborative partners or others that may require the Company to relinquish rights to certain of its technologies, product candidates or products that the Company would otherwise seek to develop or commercialize.

DEPENDENCE UPON PROPRIETARY TECHNOLOGY; UNCERTAINTY OF OBTAINING LICENSES OR DEVELOPING TECHNOLOGY. The Company's success will depend in part upon protecting its proprietary technology from infringement, misappropriation, duplication and discovery. The Company intends to rely principally on a combination of patent law, trade secrets and contract law to protect its proprietary technology in the United States and abroad. Inhale has filed patent applications covering certain aspects of its device, powder processing technology, and powder formulations and pulmonary route of delivery for certain molecules, and plans to file additional patent applications. On October 17, 1995 the United States Patent and Trademark Office ("PTO") issued U.S. Patent No. 5,458,135 to Inhale covering the use of its device as a method for delivering powder formulations of drugs to the

lung. There can be no assurance that any of the patents applied for by the Company will issue, or that any patents that issue will be valid and enforceable. Even if such patents are enforceable, the Company anticipates that any attempt to enforce its patents could be time consuming and costly.

The patent positions of pharmaceutical, biotechnology and drug delivery companies, including Inhale, are uncertain and involve complex legal and factual issues. Additionally, the coverage claimed in a patent application can be significantly reduced before the patent is issued. As a consequence, the Company does not know whether any of its patent applications will result in the issuance of patents or, if any patents issue, whether they will provide significant proprietary protection or will be circumvented or invalidated. Since patent applications in the United States are maintained in secrecy until patents issue, and since publication of discoveries in the scientific or patent literature often lag behind actual discoveries, the Company cannot be certain that it was the first inventor of inventions covered by its pending patent applications or that it was the first to file patent applications for such inventions. Moreover, the Company may have to participate in interference proceedings declared by the PTO to determine priority of invention, which could result in substantial cost to the Company, even if the eventual outcome is favorable to the Company. There can be no assurance that the Company's patents, if issued, would be held valid by a court of competent jurisdiction. An adverse outcome could subject the Company to significant

8

liabilities to third parties, require disputed rights to be licensed from or to third parties or require the Company to cease using the technology in dispute.

The Company is aware of numerous pending and issued United States and foreign patent rights and other proprietary rights owned by third parties that relate to aerosol devices and delivery, pharmaceutical formulations, dry powder processing technology and the pulmonary route of delivery for certain macromolecules. The Company cannot predict with any certainty which, if any, patents and patent applications will be considered relevant to the Company's technology by authorities in the various jurisdictions where such rights exist, nor can the Company predict with certainty which, if any, of these rights will or may be asserted against it by such third parties. The Company is aware of an alternate dry powder processing technology which Inhale is not using for its current products under development but may desire to use for certain products in the future. The ownership of this powder processing technology is unclear and the Company is aware that multiple parties, including Inhale, claim patent, trade secret and other rights in the technology. If the Company determines that this alternate powder processing technology is relevant to the development of future products and further determines that a license to this alternate powder processing technology is needed, there can be no assurance that the Company can obtain a license from the relevant party or parties on commercially reasonable terms, if at all. There can be no assurance that the Company can obtain any license to any technology that the Company determines it needs, on reasonable terms, if at all, or that Inhale could develop or otherwise obtain alternate technology. The failure of the Company to obtain licenses if needed would have a material adverse effect on the Company.

Third parties from time to time have asserted and may assert that the Company is employing technology that they believe is based on issued patents, trade secrets or know-how of others. In addition, future patents may issue to third parties which the Company's technology may infringe. The Company could incur substantial costs in defending itself and its partners against any such claims. Furthermore, parties making such claims may be able to obtain injunctive or other equitable relief which could effectively block the Company's ability to further develop or commercialize some or all of its products in the United States and abroad, and could result in the award of substantial damages. In the event of a claim of infringement, the Company and its partners may be required to obtain one or more licenses from third parties. There can be no assurances that the Company or its partners will be able to obtain such licenses at a reasonable cost, if at all. Defense of any lawsuit or failure to obtain any such license could have a material adverse effect on the Company.

The Company's ability to develop and commercialize its technology will

be affected by the Company's or its partners' access to the drugs which are to be formulated. Many drugs, including powder formulations of certain drugs which are presently under development by the Company, are subject to issued and pending United States and foreign patent rights which may be owned by competing entities. There are issued patents and pending patent applications relating to the pulmonary delivery of macromolecule drugs, including several for which the Company is developing pulmonary delivery formulations. Specifically, a patent has been granted in Europe which is directed to aerosol formulations of serine protease inhibitors, including alpha-1 antitrypsin, for the treatment of the lung. The resulting patent situation is highly complex, and the ability of any one company to commercialize a particular biopharmaceutical drug is highly unpredictable. The Company intends generally to rely on the ability of its partners to provide access to the drugs which are to be formulated for pulmonary delivery. There can be no assurance that the Company's partners will be able to provide access to drug candidates for formulation for pulmonary delivery or that, if such access is provided, the Company or its partners will not be accused of, or determined to be, infringing a third party's rights and will not be prohibited from working with the drug or be found liable for damages that may not be subject to indemnification. Any such restriction on access or liability for damages would have a material adverse effect on the Company.

The Company also will rely on trade secrets and contract law to protect certain of its proprietary technology. There can be no assurance that any such contract will not be breached, or that if breached, the Company will have adequate remedies. Furthermore, there can be no assurance that any of the Company's trade secrets will not become known or independently discovered by third parties.

The PTO has recently adopted changes to the United States patent law which change the term of issued patents, subject to certain transition periods, to 20 years from the date of filing rather than 17 years from date of

issuance. Beginning in June 1995, the patent term became 20 years from the earliest effective filing date of the underlying patent application. Such change may reduce the effective term of protection for patents that are pending for more than three years in the PTO. In addition, as of January 1996, all inventors who work outside of the United States are able to establish a date of invention on the same basis as those working in the United States. Such change could adversely affect the ability of the Company to prevail in a priority of invention dispute with a third party located or doing work outside of the United States. While the Company cannot predict the effect that such changes will have on its business, such changes could have a material adverse effect on the Company's ability to protect its proprietary information and sustain the commercial viability of its products. Furthermore, the possibility of extensive delays in such process, could effectively further reduce the term during which a marketed product could be protected by patents. See "Risk Factors -- Dependence Upon Partners," "-- Government Regulation; Uncertainty of Obtaining Regulatory Approval."

DEPENDENCE UPON AND NEED TO ATTRACT KEY PERSONNEL. The Company is highly dependent upon the principal members of its scientific and management staff. The Company does not have employment contracts with its key employees, nor does the Company have key man insurance policies on them. The Company also relies on consultants and advisors to assist the Company in formulating research and development strategy. To pursue its product development and commercialization plans, the Company will be required to hire additional qualified scientific personnel to perform research and development, as well as personnel with expertise in clinical testing, government regulation and manufacturing. Expansion in product development and manufacturing also is expected to require the addition of management personnel and the development of additional expertise by existing management personnel. Retaining and attracting qualified personnel, consultants and advisors will be critical to the Company's success. The Company faces competition for qualified individuals from numerous pharmaceutical, biotechnology and drug delivery companies, universities and other research institutions. There can be no assurance that the Company will be able to retain its current key employees or attract and retain qualified additional personnel and management when needed and its failure to do so would have a material adverse effect on the Company's ability to develop and commercialize products.

#### GOVERNMENT REGULATION; UNCERTAINTY OF OBTAINING REGULATORY APPROVAL.

The production and marketing of the Company's products and its ongoing research and development activities are subject to regulation by numerous governmental authorities in the United States and other countries. Prior to marketing a new dosage form of any drug, including one developed for use with the Company's pulmonary drug delivery system, whether or not such drug was already approved for marketing in another dosage form, the product must undergo rigorous preclinical and clinical testing and an extensive review process mandated by the FDA and equivalent foreign authorities. These processes generally take a number of years and require the expenditure of substantial resources. None of the Company's proposed products has been submitted to the FDA for marketing approval. The Company has no experiences obtaining such regulatory approval, does not have the expertise or other resources to do so and intends to rely on its partners to fund clinical testing and to obtain product approvals. See "Risk Factors -- Dependence Upon Partners."

The time required for completing such testing and obtaining such approvals is uncertain. Further refinement of the device prototype, further scale-up of the powder processing system and automated powder filling and packaging system will need to be accomplished before initiation of later stage clinical trials. Any delay in any of these components of product development may delay testing. In addition, delays or rejections may be encountered based upon changes in FDA policy during the period of product development. Similar delays may also be encountered in other countries. If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which the product may be marketed, and the marketed product, its manufacturer, and its manufacturing facilities remain subject to continual review and periodic inspections. Later discovery of previously unknown problems with a product, manufacturer, or facility may result in restrictions on such product or manufacturer, including withdrawal of the product from the market. There can be no assurance that regulatory approval will be obtained for any products developed by the Company on a timely basis, or at all. The failure to obtain timely regulatory approval of its products, any product marketing limitations or a product withdrawal would have a material adverse effect on the Company.

10

#### UNCERTAINTY RELATED TO HEALTH CARE REFORM AND THIRD-PARTY REIMBURSEMENT.

Political, economic and regulatory influences are subjecting the health care industry in the United States to fundamental change. Although Congress has failed to pass comprehensive health care reform legislation to date, the Company anticipates that Congress, state legislatures and the private sector will continue to review and assess alternative health care delivery and payment systems. Potential approaches that have been considered include mandated basic health care benefits, controls on health care spending, the creation of large insurance purchasing groups, price controls on pharmaceuticals and other fundamental changes to the health care delivery system. Any such proposed or actual changes could cause Inhale's collaborative partners or potential partners to limit or eliminate spending on collaborative drug development projects. Legislative debate is expected to continue in the future, market forces are expected to demand reduced costs and Inhale cannot predict what impact the adoption of any federal or state health care reform measures or future private sector reform may have on its business.

In both domestic and foreign markets, sales of the Company's potential products, if any, will depend in part on the availability of reimbursement from third-party payors such as government health administration authorities, private health insurers and other organizations. Third-party payors are increasingly challenging the price and cost-effectiveness of medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved health care products. There can be no assurance that the Company's proposed products will be considered cost effective or that adequate third-party reimbursement will be available to enable Inhale to maintain price levels sufficient to realize an appropriate return on its investment in product development. Legislation and regulations affecting the pricing of pharmaceuticals may change before the Company's proposed products are approved for marketing and any such changes could further limit reimbursement for medical products and services.

HIGHLY COMPETITIVE INDUSTRY: RISK OF TECHNOLOGICAL OBSOLESCENCE. The biotechnology and pharmaceutical industries are highly competitive and rapidly evolving and significant developments are expected to continue at a rapid pace. The Company's success depends upon maintaining a competitive position in the development of products and technologies for pulmonary delivery of pharmaceutical drugs. If a competing company were to develop or acquire rights to a better dry powder pulmonary delivery device or fine powder processing technology, a better system for efficiently and reproducibly delivering drugs to the deep lung, a non-invasive drug delivery system which is more attractive for the delivery of drugs than pulmonary delivery, or an invasive delivery system which overcomes some of the drawbacks of current invasive systems for chronic or subchronic indications (such as a sustained release system), the Company's business would be materially adversely affected.

The Company is in competition with pharmaceutical, biotechnology and drug delivery companies, hospitals, research organizations, individual scientists and nonprofit organizations engaged in the development of alternative drug delivery systems or new drug research and testing, as well as with entities producing and developing injectable drugs. The Company is aware of a number of companies currently seeking to develop new products and non-invasive alternatives to injectable drug delivery, including oral delivery systems, intranasal delivery systems, transdermal systems and colonic absorption systems. Several of these companies may have or be developing dry powder devices that could be used for pulmonary delivery. The Company is also aware of other companies currently engaged in the development and commercialization of pulmonary drug delivery systems and enhanced injectable drug delivery systems. Many of these companies and entities have greater research and development capabilities, experience, manufacturing, marketing, financial and managerial resources than the Company and represent significant competition for the Company. Acquisitions of competing drug delivery companies by large pharmaceutical companies could enhance competitors' financial, marketing and other resources. Accordingly, the Company's competitors may succeed in developing competing technologies, obtaining FDA approval for products more rapidly than the Company and gaining market acceptance. There can be no assurance that developments by others will not render the Company's products or technologies uncompetitive or obsolete.

PRODUCT LIABILITY; AVAILABILITY OF INSURANCE. The design, development and manufacture of the Company's products involve an inherent risk of product liability claims and associated adverse publicity. Although the Company currently maintains general liability insurance, there can be no assurance that the coverage limits of the

11

Company's insurance policies will be adequate. The Company obtained clinical trial product liability insurance of \$3.0 million for certain clinical trials and intends to obtain insurance for future clinical trials of insulin and other products under development. However, there can be no assurance that the Company will be able to obtain or maintain insurance for any future clinical trials. Such insurance is expensive, difficult to obtain and may not be available in the future on acceptable terms, or at all. A successful claim brought against the Company in excess of the Company's insurance coverage would have a material adverse effect upon the Company and its financial condition.

HAZARDOUS MATERIALS. The Company's research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. The Company may incur substantial costs to comply with environmental regulations.

ANTI-TAKEOVER PROVISIONS. Certain provisions of the Company's Restated Articles of Incorporation and the California General Corporation Law could discourage a third party from attempting to acquire, or make it more difficult for a third party to acquire control of the Company without approval of the Company's Board of Directors. Such provisions could also

limit the price that certain investors might be willing to pay in the future for shares of Common Stock. Certain of such provisions allow the Board of Directors to authorize the issuance of Preferred Stock with rights superior to those of the Common Stock. The Company also will be subject to the provisions of Section 1203 of the California General Corporation Law which requires a fairness opinion to be provided to the Company's shareholders in connection with their consideration of any proposed "interested party" reorganization transaction.

POTENTIAL VOLATILITY OF STOCK PRICE. The market prices for securities of early stage technology companies have historically been highly volatile and the market from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Factors such as fluctuations in the Company's operating results, announcements of technological innovations or new therapeutic products or the announcement or termination of collaborative relationships by the Company or its competitors, governmental regulation, clinical trial results, developments in patent or other proprietary rights, public concern as to the safety of drug formulations developed by the Company or others and general market conditions may have a significant effect on the market price of the Common Stock. The Company securities are subject to a high degree of risk and volatility.

12

#### USE OF PROCEEDS

The Company will not receive any proceeds from the sale of Common Stock by the Selling Shareholders in the offering.

#### DIVIDEND POLICY

The Company has never paid cash dividends. The Company's Board of Directors currently intends to retain any earnings for use in the Company's business and does not anticipate paying any cash dividends in the foreseeable future.

#### SELLING SHAREHOLDERS

The Shares covered by this Prospectus were acquired from the Company pursuant to the Purchase Agreements for an aggregate purchase price of \$32,400,000 (\$18.00 per share). The offer and sale by the Company of the Common Stock to the Selling Shareholders pursuant to the Purchase Agreements was made pursuant to an exemption from the registration requirements of the Securities Act provided by Section 4(2) thereof. The Purchase Agreements contain representations and warranties as to each Selling Shareholder's status as an "accredited investor" as such term is defined in Rule 501 promulgated under the Securities Act. Vector Securities International, Inc., the placement agent, was paid a fee equal to 5.5% of the aggregate purchase price in connection with the sale of the Shares by the Company to the Selling Shareholders pursuant to the Purchase Agreements. In addition, the Company agreed to reimburse such placement agent for its travel and out-of-pocket expenses incurred in connection with the sale of the Shares by the Company to the Selling Shareholders pursuant to the Purchase Agreements up to a maximum of \$100,000.

Pursuant to the Purchase Agreements, each Selling Shareholder has represented that he, she or it acquired the Shares for investment and with no present intention of distributing the Shares. The Company agreed, in such Purchase Agreements, to prepare and file a registration statement as soon as practicable and to bear all expenses other than fees and expenses of counsel for the Selling Shareholders and underwriting discounts and commissions and brokerage commissions and fees. In addition, and in recognition of the fact that the Selling Shareholders, even though purchasing the Shares without a view to distribution, may wish to be legally permitted to sell the Shares when each deems appropriate, the Company filed with the Commission a Registration Statement on Form S-3, of which this Prospectus forms a part, with respect to, among other things, the resale of the Shares from time to time at prevailing prices in the over-the-counter market or in privately-negotiated transactions and has agreed to prepare and file such amendments and supplements to the Registration Statement as may be necessary to keep the Registration Statement effective until all Shares offered hereby have been sold pursuant thereto or until such Shares are no longer, by reason

of Rule 144 under the Securities Act or any other rule of similar effect, required to be registered for the sale thereof by the Selling Shareholders.

None of the Selling Shareholders has had a material relationship with the Company within the past three years except as a result of the ownership of the Shares or other securities of the Company.

The following table sets forth the name of the Selling Shareholders, the number of shares of Common Stock owned beneficially by the Selling Shareholders as of January 28, 1997 and the number of shares which may be offered pursuant to this Prospectus. This information is based upon information provided by the Selling Shareholders. There are currently no agreements, arrangements or understandings with respect to the sale of any of the Shares. The Shares are being registered to permit public secondary trading of the Shares, and the Selling Shareholders may offer the Shares for resale from time to time.

13

NAME ----	SHARES BENEFICIALLY OWNED PRIOR TO THE OFFERING		MAXIMUM NUMBER OF SHARES BEING OFFERED	SHARES BENEFICIALLY OWNED AFTER THE OFFERING	
	NUMBER	PERCENT (1)		NUMBER	PERCENT (1)
Franklin Global Health Care Fund	215,000	1.6%	200,000	15,000	*
Franklin Small Cap Growth Fund	168,000	1.2	168,000	0	--
Franklin Valuemark Annuity - Small Cap Growth Fund	32,000	*	32,000	0	--
The Global Health Sciences Fund(2)	108,550	*	108,550	0	--
Invesco Strategic Portfolios, Inc.- Health Sciences(2)	216,450	1.6	216,450	0	--
Quantum Partners LDC(3)	750,000	5.5	750,000	0	--
T. Rowe Price New Horizons Fund, Inc.(4)	543,750	4.0	243,750	300,000	2.2%
T. Rowe Price Health Sciences Fund, Inc.(4)	81,250	*	81,250	0	--
TOTAL	2,115,000		1,800,000		

\* Less than 1%.

- (1) Applicable percentage of ownership is based on 11,834,792 shares of Common Stock outstanding on January 28, 1997, and assumes the sale and issuance of 1,800,000 shares of Common Stock pursuant to the Purchase Agreements.
- (2) The above named entities are affiliated with the Invesco Trust Company, which serves as investment advisor to these entities.
- (3) The address for Quantum Partners LDC is: c/o Soros Fund Management LLC, 888 Seventh Avenue, 33rd Floor, New York, New York 10106, Attention: Michael C. Neus, Esq.
- (4) The address for the above named entities is: 100 East Pratt Street, Baltimore, Maryland 21202. Certain entities affiliated with this Selling Shareholder beneficially own additional securities of the Company. Such shares are not included in the information set forth above.

14

## PLAN OF DISTRIBUTION

The Shares offered hereunder may be sold from time to time by the Selling Shareholders, or by pledgees, donees, transferees or other successors in interest. Such sales may be made on the Nasdaq National Market or in the over-the-counter market or otherwise, at prices and on terms then prevailing or related to the then-current market price, or in negotiated transactions. The Shares may be sold to or through one or more broker-dealers, acting as agent or principal, in underwritten offerings, block trades, agency placements, exchange distributions, brokerage transactions or otherwise, or in any combination of transactions.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the Shares may not simultaneously engage in market making activities with respect to the Company's Common Stock for a period of two business days prior to the commencement of such distribution. In addition and without limiting the foregoing, the Selling Shareholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, Rules 10b-6 and 10b-7, which provisions may limit the timing of purchases and sales of shares of Common Stock by the Selling Shareholders.

At the time a particular offer of Shares is made, to the extent required, a supplemental prospectus will be distributed which will set forth the number of shares being offered and the terms of the offering including the name or names of any underwriters, dealers or agents, the purchase price paid by any underwriter for the Shares purchased from the Selling Shareholders and any discounts, concessions or commissions allowed or reallocated or paid to dealers.

In connection with any transaction involving the Shares, broker-dealers or others may receive from the Selling Shareholders, and/or the purchasers of the Shares for whom such broker-dealers act as agents or to whom they may sell as principals or both, compensation in the form of discounts, concessions or commissions in amounts to be negotiated at the time (which compensation as to a particular broker-dealer might be in excess of customary commissions). Broker-dealers and any other persons participating in a distribution of the Shares may be deemed to be "underwriters" within the meaning of the Act in connection with such distribution, and any such discounts, concessions or commissions may be deemed to be underwriting discounts or commissions under the Act.

Any or all of the sales or other transactions involving the Shares described above, whether effected by the Selling Shareholders, any broker-dealer or others, may be made pursuant to this Prospectus. In addition, any Shares that qualify for sale pursuant to Rule 144 under the Act may be sold under Rule 144 rather than pursuant to this Prospectus.

In order to comply with the securities laws of certain states, if applicable, the Shares may be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the Shares may not be sold unless the Shares have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

All costs associated with this offering, other than fees and expenses of counsel for the Selling Shareholders and underwriting discounts and commissions and brokerage commissions and fees, will be paid by the Company. The Company has agreed to indemnify the Selling Shareholders against certain liabilities in connection with any offering of the Shares pursuant to this Prospectus, including liabilities arising under the Act.

## LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by Cooley Godward LLP, Menlo Park, California, ("Cooley Godward"). Mark P. Tanoury, a partner of Cooley Godward, is Secretary of the Company.

The financial statements Inhale Therapeutic Systems appearing in Inhale Therapeutic Systems' Annual Report (Form 10-K) for the year ended December 31, 1995, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon included therein and incorporated herein by reference. Such financial statements and schedules are incorporated herein by reference in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

No dealer, salesman or other person has been authorized to give any information or to make any representations other than those contained in this Prospectus and, if given or made, such other information and representations must not be relied upon as having been authorized by the Company. This Prospectus does not constitute an offer or solicitation by anyone in any state in which such offer or solicitation is not authorized, or in which the person making such offer or solicitation is not qualified to do so, or to any person to whom it is unlawful to make such offer or solicitation. The delivery of this Prospectus at any time does not imply that the information herein is correct as of any time subsequent to the date hereof.

TABLE OF CONTENTS

	Page
Available Information . . . . .	2
Additional Information . . . . .	2
Incorporation of Certain Documents by Reference . . . . .	2
The Company. . . . .	4
Risk Factors . . . . .	5
Use of Proceeds. . . . .	13
Dividend Policy. . . . .	13
Selling Shareholders . . . . .	13
Plan of Distribution . . . . .	15
Legal Matters. . . . .	15
Experts. . . . .	16

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1,800,000 Shares

Common Stock

INHALE THERAPEUTIC  
SYSTEMS

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Prospectus

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\_\_\_\_\_, 1997

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all expenses payable by the Registrant in connection with the sale of the Shares being registered. All the amounts shown are estimates except for the registration fee. None of these expenses will be paid by the Selling Shareholders.

Registration fee..... \$ 10,261

Blue sky qualification fees and expenses.....	5,000
Printing and engraving expenses.....	15,000
Legal fees and expenses.....	50,000
Accounting fees and expenses.....	15,000
Miscellaneous.....	4,739
	-----
Total.....	\$ 100,000
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ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS.

The Registrant's Bylaws provide that the Registrant shall indemnify its directors and executive officers and may indemnify its officers, employees and other agents to the fullest extent permitted by California law. The Registrant is also empowered under its Bylaws to enter into indemnification contracts with its directors and officers and to purchase insurance on behalf of any person whom it is required or permitted to indemnify. Pursuant to California law, the Registrant's directors shall not be liable for monetary damages for breach of the directors' fiduciary duty of care of the Registrant and its shareholders. However, this provision does not eliminate the duty of care, and in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under California law. In addition, each director will continue to be subject to liability for (i) acts or omissions that involve intentional misconduct or a knowing and culpable violation of law, (ii) acts or omissions that a director believes to be contrary to the best interests of the Company or its shareholders or that involve the absence of good faith on the part of the director, (iii) any transaction from which a director derived an improper personal benefit, (iv) any transaction that constitutes an illegal distribution or dividend under California law, and (v) any transaction involving an unlawful conflict of interest between the director and the Registrant under California law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

II-1

ITEM 16. EXHIBITS

EXHIBIT

NUMBER	DESCRIPTION OF DOCUMENT
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- |        |  |
|--------|--|
| 4.1(1) | Restated Articles of Incorporation of the Registrant.  |
| 4.2(2) | Bylaws of the Registrant.  |
| 4.3(2) | Restated Investor Rights Agreement among the Registrant and certain other persons named therein, dated April 29, 1993, as amended October 29, 1993 |
| 4.4(2) | Warrant to purchase 32,727 Shares of Common Stock between the Registrant and Phoenix Leasing Incorporated, dated October 29, 1993.                 |
| 4.5(2) | Specimen stock certificate.  |
| 4.6(3) | Stock Purchase Agreement between the Registrant and Pfizer Inc., dated January 18, 1995.   |
| 4.7(2) | Warrant to purchase 10,000 shares of Common Stock between the Registrant and Thomas J. Peirona, dated November 1, 1996.                            |
| 4.8(2) | Warrant to purchase 10,000 shares of Common Stock between the Registrant and Kiet Nguyen, dated November 1, 1996.                                  |
| 4.9(4) | Stock Purchase Agreement between the Registrant and Baxter World Trade Corporation, dated March 1, 1996.   |
| 4.10   | Form of Stock Purchase Agreement between the Registrant and the Selling Shareholders dated January 28, 1997.                                       |
| 5.1    | Opinion of Cooley Godward LLP.   |

- 10.1 Reference is made to Exhibit 4.10 above.
- 23.1 Consent of Ernst and Young LLP, Independant Auditors.
- 23.2 Consent of Cooley Godward LLP. Reference is made to Exhibit 5.1.
- 24.1 Power of Attorney (included on signature pages).

- -----
- (1) Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 1994.
  - (2) Incorporated by reference to the Company's Registration Statement (No. 33-75942), as amended.
  - (3) Incorporated by reference to the Company's Registration Statement (No. 33-89502), as amended.
  - (4) Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 1996.

ITEM 17. UNDERTAKINGS.

The undersigned registrant hereby undertakes:

(1) To file, during any period during 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-2

(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 any 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 end 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 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement.

(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 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 purposes of determining 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 to be offered therein, and the offering of such securities at that time shall be deemed to be an initial BONA FIDE offering thereof.

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

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 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.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to provisions described in Item 15, 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 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 and will be governed by the final adjudication of such issue.

II-3

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, 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 Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Palo Alto, County of Santa Clara, State of California, on the 30th day of January, 1997.

INHALE THERAPEUTIC SYSTEMS

By: /s/ Robert B. Chess  
-----  
Robert B. Chess  
PRESIDENT, CHIEF EXECUTIVE OFFICER  
AND DIRECTOR

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Robert B. Chess and Judi R. Lum his or her true and lawful attorneys-in-fact and agents, each acting alone, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to the Registration Statement on Form S-3, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as full to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, each acting alone, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

II-4

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

SIGNATURE	TITLE	DATE
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/s/ Robert B. Chess ----- Robert B. Chess	President, Chief Executive Officer and Director (PRINCIPAL EXECUTIVE OFFICER)	January 30, 1997
/s/ Judi R. Lum ----- Judi R. Lum	Chief Financial Officer (PRINCIPAL FINANCIAL AND ACCOUNTING OFFICER)	January 30, 1997
/s/ John S. Patton ----- John S. Patton	Vice President and Director	January 30, 1997
/s/ Mark J. Gabrielson ----- Mark J. Gabrielson	Director	January 30, 1997
/s/ James B. Glavin ----- James B. Glavin	Director	January 30, 1997
/s/ Melvin Perelman ----- Melvin Perelman	Director	January 30, 1997
/s/ Terry L. Ondendyk ----- Terry L. Ondendyk	Chairman of the Board	January 30, 1997

II-5

INDEX TO EXHIBITS

EXHIBIT NUMBER -----	DESCRIPTION OF DOCUMENT -----
4.1(1)	Restated Articles of Incorporation of the Registrant.
4.2(2)	Bylaws of the Registrant.
4.3(2)	Restated Investor Rights Agreement among the Registrant and certain other persons named therein, dated April 29, 1993, as amended October 29, 1993
4.4(2)	Warrant to purchase 32,727 Shares of Common Stock between the Registrant and Phoenix Leasing Incorporated, dated October 29, 1993.
4.5(2)	Specimen stock certificate.
4.6(3)	Stock Purchase Agreement between the Registrant and Pfizer Inc., dated January 18, 1995.
4.7(2)	Warrant to purchase 10,000 shares of Common Stock between the Registrant and Thomas J. Peirona, dated November 1, 1996.
4.8(2)	Warrant to purchase 10,000 shares of Common Stock between the Registrant and Kiet Nguyen, dated November 1, 1996.
4.9(4)	Stock Purchase Agreement between the Registrant and Baxter World Trade Corporation, dated March 1, 1996.
4.10	Form of Stock Purchase Agreement between the Registrant and the Selling Shareholders dated January 28, 1997.
5.1	Opinion of Cooley Godward LLP.
10.1	Reference is made to Exhibit 4.10 above.
23.1	Consent of Ernst and Young LLP, Independant Auditors.

23.2 Consent of Cooley Godward LLP. Reference is made to Exhibit 5.1.

24.1 Power of Attorney (included on signature pages).

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- (1) Incorporated by reference to the Company's Annual Report on Form 10-K for the year ended December 31, 1994.
  - (2) Incorporated by reference to the Company's Registration Statement (No. 33-75942), as amended.
  - (3) Incorporated by reference to the Company's Registration Statement (No. 33-89502), as amended.
  - (4) Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 1996.

PURCHASE AGREEMENT

THIS AGREEMENT is made as of the 28th day of January, 1997, by and among Inhale Therapeutic Systems (the "Company"), a corporation organized under the laws of the State of California, with its principal offices at 1060 East Meadow Circle, Palo Alto, California, 94303, and the purchaser whose name and address is set forth on the signature page hereof (the "Purchaser").

IN CONSIDERATION of the mutual covenants contained in this Agreement, the Company, and the Purchaser agree as follows:

SECTION 1. AUTHORIZATION OF SALE OF THE SHARES. Subject to the terms and conditions of this Agreement, the Company has authorized the sale of up to 1,800,000 shares of the common stock (the "Common Stock"), no par value per share (the "Shares"), of the Company.

SECTION 2. AGREEMENT TO SELL AND PURCHASE THE SHARES. At the Closing (as defined in Section 3), the Company will sell to the Purchaser, and the Purchaser will buy from the Company upon the terms and conditions hereinafter set forth, the number of Shares (at the purchase price) shown below:

Number to Be Purchased -----	Price Per Share In Dollars -----	Aggregate Price -----
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The Company proposes to enter into this same form of purchase agreement with certain other investors (the "Other Purchasers") and expects to complete sales of the Shares to them. The Purchaser and the Other Purchasers are hereinafter sometimes collectively referred to as the "Purchasers," and this Agreement and the agreements executed by the Other Purchasers are hereinafter sometimes collectively referred to as the "Agreements." The term "Placement Agent" shall mean Vector Securities International, Inc.

SECTION 3. DELIVERY OF THE SHARES AT THE CLOSING. The completion of the purchase and sale of the Shares (the "Closing") shall occur as soon as practicable following notification by the Securities and Exchange Commission (the "Commission") to the Company of the Commission's willingness to declare effective the

registration statement to be filed by the Company pursuant to Section 7.1 (the "Registration Statement") at a place and time (the "Closing Date") to be agreed upon by the Company, and the Placement Agent and of which the Purchasers will be notified by facsimile transmission or otherwise.

At the Closing, the Company shall deliver to the Purchaser one or more stock certificates registered in the name of the Purchaser, or in such nominee name(s) as designated by the Purchaser, representing the number of Shares set forth in Section 2 above. The name(s) in which the stock certificates are to be registered are set forth in the Stock Certificate Questionnaire attached hereto as part of Appendix I. The Company's obligation to complete the purchase and sale of the Shares and deliver such stock certificate(s) to the Purchaser at the Closing shall be subject to the following conditions, any one or more of which may be waived by the Company: (a) receipt by the Company of New York Clearing House funds in the full amount of the purchase price for the Shares being purchased hereunder; (b) completion of the purchases and sales under the Agreements with Other Purchasers; and (c) the accuracy of the representations and warranties made by the Purchasers and the fulfillment of those undertakings of the Purchasers to be fulfilled prior to the Closing. The Purchaser's obligation to accept delivery of such stock certificate(s) and to pay for the Shares evidenced thereby shall be subject to the following conditions: (a) the Registration Statement is effective and was first declared effective on or prior to the

60th day after the date such Registration Statement was filed by the Company; and (b) the accuracy in all material respects of the representations and warranties made by the Company herein and the fulfillment in all material respects of those undertakings of the Company to be fulfilled prior to Closing. The Purchaser's obligations hereunder are expressly not conditioned on the purchase by any or all of the Other Purchasers of the Shares that they have agreed to purchase from the Company.

SECTION 4. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE COMPANY. The Company hereby represents and warrants to, and covenants with, the Purchaser as follows:

4.1. ORGANIZATION AND QUALIFICATION. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has all requisite corporate power and authority to conduct its business as currently conducted.

4.2. AUTHORIZED CAPITAL STOCK. Except as disclosed in or contemplated by the Confidential Private Placement Memorandum dated January 27, 1997 prepared by the Company (the "Private Placement Memorandum"), the Company had authorized and outstanding capital stock as set forth under the heading "Capitalization" in the Private Placement Memorandum as of the

-2-

date set forth therein; the issued and outstanding shares of the Company's Common Stock have been duly authorized and validly issued, are fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities, and conform to the description thereof contained in or incorporated by reference into the Private Placement Memorandum. All issued and outstanding shares of capital stock of each subsidiary of the Company have been duly authorized and validly issued and are fully paid and nonassessable. Except as disclosed in or contemplated by the Private Placement Memorandum and the financial statements of the Company, and the related notes thereto, incorporated by reference into the Private Placement Memorandum, neither the Company nor any subsidiary has outstanding any options to purchase, or any preemptive rights or other rights to subscribe for or to purchase, any securities or obligations convertible into, or any contracts or commitments to issue or sell, shares of its capital stock or any such options, rights, convertible securities or obligations. The description of the Company's stock, stock bonus and other stock plans or arrangements and the options or other rights granted and exercised thereunder, set forth in the Private Placement Memorandum, or incorporated by reference therein, accurately and fairly presents the information required to be shown with respect to such plans, arrangements, options and rights.

4.3. ISSUANCE, SALE AND DELIVERY OF THE SHARES. The Shares have been duly authorized and, when issued, delivered and paid for in the manner set forth in this Agreement, will be duly authorized, validly issued, fully paid and nonassessable, and will conform to the description thereof contained in the Registration Statement. No preemptive rights or other rights to subscribe for or purchase exist with respect to the issuance and sale of the Shares by the Company pursuant to this Agreement. No stockholder of the Company has any right (which has not been waived or has not expired by reason of lapse of time following notification of the Company's intent to file the Registration Statement) to require the Company to register the sale of any shares owned by such stockholder under the Securities Act of 1933, as amended, (the "Securities Act") in the Registration Statement. No further approval or authority of the stockholders or the Board of Directors of the Company will be required for the issuance and sale of the Shares to be sold by the Company as contemplated herein.

4.4. DUE EXECUTION, DELIVERY AND PERFORMANCE OF THE AGREEMENTS. The Company has full legal right, power and authority to enter into the Agreements and perform the transactions contemplated hereby. The Agreements have been duly authorized, executed and delivered by the Company and constitute valid and binding obligations of the Company in accordance with

-3-

their terms. The making and performance of the Agreements by the Company and the consummation of the transactions herein contemplated will not violate any provision of the certificate of incorporation or bylaws, or other organizational documents, of the Company or any of its subsidiaries, and will not conflict with, result in the breach or violation of, or constitute, either by itself or upon notice or the passage of time or both, a default under any agreement, mortgage, deed of trust, lease, franchise, license, indenture, permit or other instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries or any of its respective properties may be bound or affected, any statute or any authorization, judgment, decree, order, rule or regulation of any court or any regulatory body, administrative agency or other governmental body applicable to the Company or any of its subsidiaries or any of their respective properties. No consent, approval, authorization or other order of any court, regulatory body, administrative agency or other governmental body is required for the execution and delivery of this Agreement or the consummation of the transactions contemplated by this Agreement, except for compliance with the Blue Sky laws applicable to the offering of the Shares. Upon their execution and delivery, and assuming the valid execution thereof by the respective Purchasers, the Agreements will constitute valid and binding obligations of the Company, enforceable in accordance with their respective terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as the indemnification agreements of the Company in Section 7.3 hereof may be legally unenforceable.

4.5. ACCOUNTANTS. Ernst & Young LLP, who have expressed their opinion with respect to the financial statements and schedules to be filed with the Commission as a part of the Registration Statement and included in the Registration Statement and the Prospectus which forms a part thereof, are independent accountants as required by the Securities Act and the rules and regulations promulgated thereunder (the "Rules and Regulations").

4.6. NO DEFAULTS. Except as to defaults, violations and breaches which individually or in the aggregate would not be material to the Company, neither the Company nor any of its subsidiaries is in violation or default of any provision of its certificate of incorporation or bylaws, or other organizational documents, or is in breach of or default with respect to any provision of any agreement, judgment, decree, order, mortgage, deed of trust, lease, franchise, license, indenture, permit or other instrument to which it is a party or by which it or any of its properties are bound; and there does not exist any state of

-4-

fact which constitutes an event of default on the part of the Company or any such subsidiary as defined in such documents or which, with notice or lapse of time or both, would constitute such an event of default, except such defaults which individually or in the aggregate would not be material to the Company.

4.7. CONTRACTS. The contracts so described in the Private Placement Memorandum or incorporated by reference therein are in full force and effect on the date hereof; and neither the Company nor any of its subsidiaries, nor to the best of the Company's knowledge, any other party is in breach of or default under any of such contracts.

4.8. NO ACTIONS. Except as disclosed in the Private Placement Memorandum or incorporated by reference therein, there are no legal or governmental actions, suits or proceedings pending or, to the best of the Company's knowledge, threatened to which the Company or any of its subsidiaries is or may be a part or of which property owned or leased by the Company or any of its subsidiaries is or may be the subject, or related to environmental or discrimination matters, which actions, suits or proceedings might, individually or in the aggregate, prevent or adversely affect the transactions contemplated by this Agreement or result in a material adverse change in the condition (financial or otherwise), properties, business, results of operations or prospects of the Company and its subsidiaries; and no labor disturbance by the employees of the Company or any of its

subsidiaries exists or is imminent which might be expected to affect adversely such condition, properties, business, results of operations or prospects. Neither the Company nor any of its subsidiaries is party or subject to the provisions of any material injunction, judgment, decree or order of any court, regulatory body administrative agency or other governmental body.

4.9. PROPERTIES. The Company has good and marketable title to all the properties and assets reflected as owned in the financial statements included in the Private Placement Memorandum or incorporated by reference therein, subject to no lien, mortgage, pledge, charge or encumbrance of any kind except (i) those, if any, reflected in such financial statements, or (ii) those which are not material in amount and do not adversely affect the use made and promised to be made of such property by the Company and its subsidiaries. The Company or the applicable subsidiary holds its leased properties under valid and binding leases, with such exceptions as are not materially significant in relation to the business of the Company. Except as disclosed in the Private Placement Memorandum or incorporated by reference therein, the Company owns or leases all such properties as are necessary to its operations as now conducted or as proposed to be conducted.

-5-

4.10. NO MATERIAL CHANGE. Since September 30, 1996 and except as described in or specifically contemplated by the Private Placement Memorandum, (i) the Company and its subsidiaries have not incurred any material liabilities or obligations, indirect, or contingent, or entered into any material verbal or written agreement or other transaction which is not in the ordinary course of business or which could result in a material reduction in the future earnings of the Company and its subsidiaries; (ii) the Company and its subsidiaries have not sustained any material loss or interference with their respective businesses or properties from fire, flood, windstorm, accident or other calamity, whether or not covered by insurance; (iii) the Company has not paid or declared any dividends or other distributions with respect to its capital stock and the Company and its subsidiaries are not in default in the payment of principal or interest on any outstanding debt obligations; (iv) there has not been any change in the capital stock other than the sale of the Shares hereunder, shares issued pursuant to employee equity incentive plans or purchase plans approved by the Company's Board of Directors, and 272,456 shares issued to Pfizer Inc., or indebtedness material to the Company and its subsidiaries (other than in the ordinary course of business); and (v) there has not been any material adverse change in the condition (financial or otherwise), business, properties, results of operations or prospects of the Company and its subsidiaries.

4.11. INTELLECTUAL PROPERTY. Except as disclosed in or specifically contemplated by the Private Placement Memorandum or incorporated by reference therein, the Company has sufficient trademarks, trade names, patent rights, copyrights, licenses, and governmental authorizations to conduct its businesses as now conducted; and the Company has no knowledge of any material infringement by it of trademark, trade name rights, patent rights, copyrights, licenses, trade secrets or other similar rights of others, and no claim has been made against the Company regarding trademark, trade name, patent, copyright, license, trade secrecy or other infringement which could have a material adverse effect on the condition (financial or otherwise), business, results of operations or prospects of the Company.

4.12. COMPLIANCE. The Company has not been advised, and has no reason to believe, that either it or any of its subsidiaries is not conducting business in compliance with all applicable laws, rules and regulations of the jurisdictions in which it is conducting business, including, without limitation, all applicable local, state and federal environmental laws and regulations; except where failure to be so in compliance would not materially adversely affect the condition (financial or otherwise), business, results of operations or prospects of the Company and its subsidiaries.

-6-

4.13. TAXES. The Company and its subsidiaries have filed all necessary federal, state and foreign income and franchise tax returns and

have paid or accrued all taxes shown as due thereon, and the Company has no knowledge of tax deficiency which has been or might be asserted or threatened against the Company or its subsidiaries which could materially and adversely affect the business, operations or properties of the Company and its subsidiaries.

4.14. TRANSFER TAXES. On the Closing Date, all stock transfer or other taxes (other than income taxes) which are required to be paid in connection with the sale and transfer of the Shares to be sold to the Purchaser hereunder will be, or will have been, fully paid or provided for by the Company and all laws imposing such taxes will be or will have been fully complied with.

4.15. INVESTMENT COMPANY. The Company is not an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

4.16. OFFERING MATERIALS. The Company has not distributed and will not distribute prior to the Closing Date any offering material in connection with the offering and sale of the Shares other than the Private Placement Memorandum.

4.17. INSURANCE. Each of the Company and its subsidiaries maintains insurance of the types and in the amounts generally deemed adequate for its business, including, but not limited to, insurance covering all real and personal property owned or leased by the Company and its subsidiaries against theft, damage, destruction, acts of vandalism and all other risks customarily insured against, all of which insurance is in full force and effect.

4.18. CONTRIBUTIONS. Neither the Company nor any of its subsidiaries has, directly or indirectly, at any time during the last five years (i) made any unlawful contribution to any candidate for public office, or failed to disclose fully any contribution in violation of law, or (ii) made any payment to any federal or state governmental officer or official, or other person charged with similar public or quasi-public duties, other than payments required or permitted by the laws of the United States or any jurisdiction thereof.

4.19. ADDITIONAL INFORMATION. The Company represents and warrants that the information contained in the following documents, which the Placement Agent have furnished to the Purchaser, or will furnish prior to the Closing, is or will be true and correct in all material respects as of their respective final dates:

-7-

- (a) the Company's 1996 Annual Report to Shareholders;
- (b) the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 1995 (without exhibits);
- (c) Notice to Shareholders and Proxy Statement for the Company's Annual Meeting of Shareholders held on May 15, 1996;
- (d) the Confidential Placement Memorandum dated January 27, 1997 containing certain summary information relating to the sale by the Company of the Shares pursuant to the Agreements, including all addenda and exhibits thereto (other than the Appendices) (the "Private Placement Memorandum");
- (e) all other documents, if any, filed by the Company with the Securities and Exchange Commission since December 31, 1995 pursuant to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

4.20. LEGAL OPINION. Prior to the Closing, Cooley Godward LLP, counsel to the Company, will deliver its legal opinion to the Placement Agent reasonably satisfactory to the Placement Agent and counsel to the Placement Agent. Such opinion shall also state that each of the Purchasers may rely thereon as though it were addressed directly to such Purchaser.

4.21. CERTIFICATE. A certificate of the Company executed by the Chairman of the Board or President and the chief financial or accounting

officer of the Company, dated the Closing Date in form and substance satisfaction to the Purchasers to the effect that the representations and warranties of the Company set forth in this Section 4 are true and correct as of the date of this Agreement and as of the Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied on or prior to such Closing Date.

SECTION 5. REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE PURCHASER. (a) The Purchaser represents and warrants to, and covenants with, the Company that: (i) the Purchaser, taking into account the personnel and resources it can practically bring to bear on the purchase of the Shares contemplated hereby, is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in shares representing an investment decision like that involved in the purchase of the Shares, including investments in securities issued by the Company, and has requested, received, reviewed and considered all information it deems relevant in making an

-8-

informed decision to purchase the Shares; (ii) the Purchaser is acquiring the number of Shares set forth in Section 2 above in the ordinary course of its business and for its own account for investment (as defined for purposes of the Hart-Scott-Rodino Antitrust Improvement Act of 1976 and the regulations thereunder) only and with no present intention of distributing any of such Shares or any arrangement or understanding with any other persons regarding the distribution of such Shares; (iii) the Purchaser will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) any of the Shares except in compliance with the Act, and the Rules and Regulations; (iv) the Purchaser has completed or caused to be completed the Registration Statement Questionnaire and the Stock Certificate Questionnaire, both attached hereto as Appendix I, for use in preparation of the Registration Statement and the answers thereto are true and correct to the best knowledge of the Purchaser as of the date hereof and will be true and correct as of the effective date of the Registration Statement; (v) the Purchaser has, in connection with its decision to purchase the number of Shares set forth in Section 2 above, relied solely upon the Private Placement Memorandum and the documents included therein and the representations and warranties of the Company contained herein; and (vi) the Purchaser is an "accredited investor" within the meaning of Rule 501 of Regulation D promulgated under the Securities Act.

(b) The Purchaser hereby covenants with the Company not to make any sale of the Shares without effectively causing the prospectus delivery requirement under the Securities Act to be satisfied, and the Purchaser acknowledges and agrees that such Shares are not transferable on the books of the Company unless the certificate submitted to the transfer agent evidencing the Shares is accompanied by a separate officer's certificate: (i) in the form of Appendix II hereto, (ii) executed by an officer of, or other authorized person designated by, the Purchaser, and (iii) to the effect that (A) the Shares have been sold in accordance with the Registration Statement, the Securities Act and the Rules and Regulations and any applicable state securities or blue sky laws and (B) the requirement of delivering a current prospectus has been satisfied. The Purchaser acknowledges that there may occasionally be times when the Company must suspend the use of the prospectus forming a part of the Registration Statement until such time as an amendment to the Registration Statement has been filed by the Company and declared effective by the Commission, or until such time as the Company has filed an appropriate report with the Commission pursuant to the Exchange Act. The Purchaser hereby covenants that it will not sell any Shares pursuant to said prospectus during the period commencing at the time at which the Company gives the Purchaser

-9-

notice of the suspension of the use of said prospectus and ending at the time the Company gives the Purchaser notice that the Purchaser may thereafter effect sales pursuant to said prospectus. The Purchaser further covenants to notify the Company promptly of the sale of all of its Shares.

(c) The Purchaser further represents and warrants to, and covenants with, the Company that (i) the Purchaser has full right, power, authority and capacity to enter into this Agreement and to consummate the transactions contemplated hereby and has taken all necessary action to authorize the execution, delivery and performance of this Agreement, and (ii) upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of the Purchaser enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law) and except as the indemnification agreements of the Purchaser in Section 7.3 hereof may be legally unenforceable.

SECTION 6. SURVIVAL OF REPRESENTATIONS, WARRANTIES AND AGREEMENTS. Notwithstanding any investigation made by any party to this Agreement or by the Placement Agent, all covenants, agreements, representations and warranties made by the Company and the Purchaser herein and in the certificates for the Shares delivered pursuant hereto shall survive the execution of this Agreement, the delivery to the Purchaser of the Shares being purchased and the payment therefor.

SECTION 7. REGISTRATION OF THE SHARES; COMPLIANCE WITH THE SECURITIES ACT.

7.1. REGISTRATION PROCEDURES AND EXPENSES. The Company shall:

- (a) as soon as practicable, prepare and file with the Commission the Registration Statement on Form S-3 relating to the sale of the Shares by the Purchaser from time to time through the automated quotation system of The Nasdaq Stock Market or the facilities of any national securities exchange on which the Company's common stock is then traded or in privately-negotiated transactions;
- (b) use its reasonable efforts, subject to receipt of necessary information from the Purchasers, to cause the Commission to notify the Company of the Commission's willingness to declare the Registration Statement effective within 60 days after the Registration Statement is filed by the Company;
- (c) prepare and file with the Commission such amendments and supplements to the Registration Statement and the prospectus used in connection therewith as may be necessary to keep the Registration Statement effective until the date on which the Shares may be resold by the Purchasers without registration by reason of Rule 144(k) under the Securities Act or any other rule of similar effect;
- (d) furnish to the Purchaser with respect to the Shares registered under the Registration Statement (and to each underwriter, if any, of such Shares) such reasonable number of copies of prospectuses and such other documents as the Purchaser may reasonably request, in order to facilitate the public sale or other disposition of all or any of the Shares by the Purchaser, PROVIDED, HOWEVER, that the obligation of the Company to deliver copies of prospectuses to the Purchaser shall be subject to the receipt by the Company of reasonable assurances from the Purchaser that the Purchaser will comply with the applicable provisions of the Securities Act and of such other securities or blue sky laws as may be applicable in connection with any use of such prospectuses;
- (e) file documents required of the Company for normal blue sky clearance in states specified in

writing by the Purchaser, PROVIDED, HOWEVER, that the Company shall not be required to qualify to do business or consent to service of process in any jurisdiction in which it is not now so qualified or has not so consented; and

- (f) bear all expenses in connection with the procedures in paragraphs (a) through (e) of this Section 7.1 and the registration of the Shares pursuant to the Registration Statement, other than fees and expenses, if any, of counsel or other advisers to the Purchaser or the Other Purchasers or underwriting discounts, brokerage fees and commissions incurred by the Purchaser or the Other Purchasers, if any.

7.2. TRANSFER OF SHARES AFTER REGISTRATION. The Purchaser agrees that it will not effect any disposition of the Shares or its right to purchase the Shares that would constitute a sale within the meaning of the Securities Act except as contemplated in the Registration Statement referred to in Section 7.1 and that it will promptly notify the Company of any changes

-11-

in the information set forth in the Registration Statement regarding the Purchaser or its Plan of Distribution.

7.3. INDEMNIFICATION. For the purpose of this Section 7.3:

- (i) the term "Purchaser/Affiliate" shall include the Purchaser and any affiliate of such Purchaser;
- (ii) the term "Registration Statement" shall include any final prospectus, exhibit, supplement or amendment included in or relating to the Registration Statement referred to in Section 7.1.

(a) The Company agrees to indemnify and hold harmless each of the Purchasers and each person, if any, who controls any Purchaser within the meaning of the Securities Act, against any losses, claims, damages, liabilities or expenses, joint or several, to which such Purchasers or such controlling person may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement, including the prospectus, financial statements and schedules, and all other documents filed as a part thereof, as amended at the time of effectiveness of the Registration Statement, including any information deemed to be a part thereof as of the time of effectiveness pursuant to paragraph (b) of Rule 430A, or pursuant to Rule 434, of the Rules and Regulations, or the prospectus, in the form first filed with the Commission pursuant to Rule 424(b) of the Regulations, or filed as part of the Registration Statement at the time of effectiveness if no Rule 424(b) filing is required (the "Prospectus"), or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state in any of them a material fact required to be stated therein or necessary to make the statements in any of them not misleading, or arise out of or are based in whole or in part on any inaccuracy in the representations and warranties of the Company contained in this Agreement, or any failure of the Company to perform its obligations hereunder or under law, and will reimburse each Purchaser and each such controlling person for any legal and other expenses as such expenses are reasonably incurred by such Purchaser or such controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; PROVIDED, HOWEVER, that the Company will not be liable in any such case to the extent that any such loss, claim, damage,

-12-

liability or expense arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, the Prospectus or any amendment or supplement thereto in reliance upon and in conformity with written information furnished to the Company (i) by or on behalf of the Purchaser expressly for use therein or (ii) the failure of such Purchaser to comply with the covenants and agreements contained in Sections 5(b) or 7.2 hereof respecting sale of the Shares, the inaccuracy of any representations made by such Purchaser herein or any statement or omission in any Prospectus that is corrected in any subsequent Prospectus that was delivered to the Purchaser prior to the pertinent sale or sales by the Purchaser.

In addition to its other obligations under this paragraph (a), the Company agrees that, as an interim measure during the pendency of any claim, action, investigation, inquiry or other proceeding arising out of or based upon any statement or omission, or any alleged statement or omission, or any inaccuracy in the representations and warranties of the Company in this Agreement or failure to perform its obligations in this Agreement, all as described in this paragraph (a), it will reimburse each Purchaser on a quarterly basis for all reasonable legal or other expenses incurred in connection with investigating or defending any such claim, action, investigation, inquiry or other proceeding, notwithstanding the absence of a judicial determination as to the propriety and enforceability of the Company's obligation, to reimburse each Purchaser for such expenses and the possibility that such payments might later be held to have been improper by a court of competent jurisdiction. To the extent that any such interim reimbursement payment is so held to have been improper, each Purchaser shall promptly return it to the Company together with interest, compounded daily, determined on the basis of the Prime Rate (or other commercial lending rate for borrowers of the highest credit standing) announced from time to time by Bank of America National Trust and Savings Association, San Francisco, California (the "Prime Rate"). Any such interim reimbursement payments which are not made to a Purchaser within 30 days of a request for reimbursement shall bear interest at the Prime Rate from the date of such request. This indemnity agreement will be in addition to any liability which the Company may otherwise have.

(b) Each Purchaser will severally indemnify and hold harmless the Company, each of its directors, each of its officers who signed the Registration Statement and each person, if any, who controls the Company within the meaning of the Securities Act, against any losses, claims, damages, liabilities or expenses to which the Company, each of its directors, each of its officers who signed the Registration Statement or controlling person may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at

-13-

common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Purchaser) insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) arise out of or are based upon any failure to comply with the covenants and agreements contained in Sections 5(b) or 7.2 hereof respecting the sale of the Shares, the inaccuracy of any representation made by such Purchaser herein or any untrue or alleged untrue statement of any material fact contained in the Registration Statement, the Prospectus, or any amendment or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, the Prospectus, or any amendment or supplement thereto, in reliance upon and in conformity with written information furnished to the Company by or on behalf of any Purchaser expressly for use therein, and will reimburse the Company, each of its directors, each of its officers who signed the Registration Statement or controlling person for any legal and other expense reasonably incurred by the Company, each of its directors, each of its officers who signed the Registration Statement or controlling person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action. In addition to its other obligations under this paragraph (b), each Purchaser severally agrees that,

as an interim measure during the pendency of any claim, action, investigation, inquiry or other proceeding arising out of or based upon any failure to comply, statement or omission, or any alleged failure to comply, statement or omission, described in this paragraph (b) which relates to written information furnished to the Company by or on behalf of any Purchaser, it will reimburse the Company (and, to the extent applicable, each officer, director or controlling person) on a quarterly basis for all reasonable legal or other expenses incurred in connection with investigating or defending any such claim, action, investigation, inquiry or other proceeding, notwithstanding the absence of a judicial determination as to the propriety and enforceability of the Purchaser's obligations to reimburse the Company (and, to the extent applicable, each officer, director or controlling person) for such expenses and the possibility that such payments might later be held to have been improper by a court of competent jurisdiction. To the extent that any such interim reimbursement payment is so held to have been improper, the Company (and, to the extent applicable, each officer, director or controlling person) shall promptly return it to such Purchaser together with interest, compounded daily, determined on the basis of the Prime Rate. Any such interim reimbursement payments which are not made to the Company within 30 days of a request for reimbursement shall bear interest

-14-

at the Prime Rate from the date of such request. This indemnity agreement will be in addition to any liability which such Purchaser may otherwise have.

(c) Promptly after receipt by an indemnified party under this Section 7.3 of notice of the commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 7.3 notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to any indemnified party for contribution or otherwise than under the indemnity agreement contained in this Section 7.3 or to the extent it is not prejudiced as a proximate result of such failure. In case any such action is brought against any indemnified party and such indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it may wish, jointly with all other indemnifying parties similarly notified, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; provided, however, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that there may be a conflict between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of its election so to assume the defense of such action and approval by the indemnified party of counsel, the indemnifying party will not be liable to such indemnified party under this Section 7.3 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed such counsel in connection with the assumption of legal defenses in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel, approved by such indemnifying party in the case of paragraph (a), representing the indemnified parties who are parties to such action) or (ii) the indemnified party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of action, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying party.

-15-

(d) If the indemnification provided for in this Section 7.3 is required by its terms but is for any reason held to be unavailable to or otherwise insufficient to hold harmless an indemnified party under paragraphs

(a), (b) or (c) of this Section 7.3 in respect to any losses, claims, damages, liabilities or expenses referred to herein, then each applicable indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of any losses, claims, damages, liabilities or expenses referred to herein (i) in such proportion as is appropriate to reflect the relative benefits received by the Company and the Purchaser from the placement of Common Stock or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but the relative fault of the Company and the Purchaser in connection with the statements or omissions or inaccuracies in the representations and warranties in this Agreement which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The respective relative benefits received by the Company on the one hand and each Purchaser on the other shall be deemed to be in the same proportion as the amount paid by such Purchaser to the Company pursuant to this Agreement for the Shares purchased by such Purchaser that were sold pursuant to the Registration Statement bears to the difference (the "Difference") between the amount such Purchaser paid for the Shares that were sold pursuant to the Registration Statement and the amount received by such Purchaser from such sale. The relative fault of such Selling Shareholders and each Purchaser shall be determined by reference to, among other things, whether the untrue or alleged statement of a material fact or the omission or alleged omission to state a material fact or the inaccurate or the alleged inaccurate representation and/or warranty relates to information supplied by the Company or by such Purchaser and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to above shall be deemed to include, subject to the limitations set forth in paragraph (c) of this Section 7.3 any legal or other fees or expenses reasonably incurred by such party in connection with investigating or defending any action or claim. The provisions set forth in paragraph (c) of this Section 7.3 with respect to notice of commencement of any action shall apply if a claim for contribution is to be made under this paragraph (d); PROVIDED, HOWEVER, that no additional notice shall be required with respect to any action for which notice has been given under paragraph (c) for purposes of indemnification. The Company and each Purchaser agree that it would not be just and equitable if contribution pursuant to this Section 7.3 were determined solely by pro rata allocation (even if the Purchaser were treated as one entity for such purpose) or by any other method of allocation which does not

-16-

take account of the equitable considerations referred to in this paragraph. Notwithstanding the provisions of this Section 7.3, no Purchaser shall be required to contribute any amount in excess of the amount by which the Difference exceeds the amount of any damages that such Purchaser has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Purchasers' obligations to contribute pursuant to this Section 7.3 are several and not joint.

(e) It is agreed that any controversy arising out of the operation of the interim reimbursement arrangements set forth in paragraphs (a) and (b) of this Section 7.3, including the amounts of any requested reimbursement payments and the method of determining such amounts, shall be settled by arbitration conducted under the provisions of the Constitution and Rules of the Board of Governors of The New York Stock Exchange, Inc. Any such arbitration must be commenced by service of a written demand for arbitration or a written notice of intention to arbitrate, therein electing the arbitration tribunal. In the event the party demanding arbitration does not make such designation of any arbitration tribunal in such demand or notice, then the party responding to said demand or notice is authorized to do so. Such an arbitration would be limited to the operation of the interim reimbursement provisions contained in paragraphs (a) and (b) of this Section 7.3 and would not resolve the ultimate propriety or enforceability of the obligation to reimburse expenses which is created by the provisions of such paragraphs (a) and (b).

7.4. TERMINATION OF CONDITIONS AND OBLIGATIONS. The conditions precedent imposed by Section 5 or this Section 7 upon the transferability of the Shares shall cease and terminate as to any particular number of the Shares when such Shares shall have been effectively registered under the Securities Act and sold or otherwise disposed of in accordance with the intended method of disposition set forth in the Registration Statement covering such Shares or at such time as an opinion of counsel satisfactory to the Company shall have been rendered to the effect that such conditions are not necessary in order to comply with the Securities Act.

7.5. INFORMATION AVAILABLE. So long as the Registration Statement is effective covering the resale of Shares owned by the Purchaser, the Company will furnish to the Purchaser:

- (a) as soon as practicable after available  
(but in the case of the Company's Annual Report to Shareholders, within 120 days after the end of each fiscal year of the Company), one copy of (i)

-17-

its Annual Report to Shareholders (which Annual Report shall contain financial statements audited in accordance with generally accepted accounting principles by a national firm of certified public accountants), (ii) if not included in substance in the Annual Report to Shareholders, its Annual Report on Form 10-K, (iii) if not included in substance in its Quarterly Reports to Shareholders, its quarterly reports on Form 10-Q, and (iv) a full copy of the particular Registration Statement covering the Shares (the foregoing, in each case, excluding exhibits);

- (b) upon the reasonable request of the Purchaser, a reasonable number of copies of the prospectuses to supply to any other party requiring such prospectuses;

and the Company, upon the reasonable request of the Purchaser, will meet with the Purchaser or a representative thereof at the Company's headquarters to discuss all information relevant for disclosure in the Registration Statement covering the Shares subject to appropriate confidentiality limitations.

SECTION 8. BROKER'S FEE. The Purchaser acknowledges that the Company intends to pay to the Placement Agent a fee in respect of the sale of the Shares to the Purchaser. Each of the parties hereto hereby represents that, on the basis of any actions and agreements by it, there are no other brokers or finders entitled to compensation in connection with the sale of the Shares to the Purchaser.

SECTION 9. NOTICES. All notices, requests, consents and other communications hereunder shall be in writing, shall be mailed by first-class registered or certified airmail, or nationally recognized overnight express courier postage prepaid, and shall be deemed given when so mailed and shall be delivered as addressed as follows:

- (a) if to the Company, to:

Inhale Therapeutic Systems  
1060 East Meadow Circle  
Palo Alto, California 94303  
Attention: President

-18-

with a copy so mailed to:

Cooley Godward LLP  
3000 Sand Hill Road  
Building 3, Suite 230  
Menlo Park, California 94025  
Attn: Mark P. Tanoury, Esq.

or to such other person at such other place as the Company shall designate to the Purchaser in writing;

- (b) if to the Purchaser, at its address as set forth at the end of this Agreement, or at such other address or addresses as may have been furnished to the Company in writing; and

SECTION 10. CHANGES. This Agreement may not be modified or amended except pursuant to an instrument in writing signed by the Company and the Purchaser.

SECTION 11. HEADINGS. The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be part of this Agreement.

SECTION 12. SEVERABILITY. In case any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

SECTION 13. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of New York and the federal law of the United States of America.

SECTION 14. COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which, when taken together, shall constitute but one instrument, and shall become effective when one or more counterparts have been signed by each party hereto and delivered to the other parties.

-19-

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

INHALE THERAPEUTIC SYSTEMS

By \_\_\_\_\_

Print or Type:

Name of Purchaser  
(Individual or Institution):  
\_\_\_\_\_

Name of Individual representing  
Purchaser (if an Institution):  
\_\_\_\_\_

Title of Individual representing  
Purchaser (if an Institution):  
\_\_\_\_\_

Signature by:

Individual Purchaser or Individual  
representing Purchaser:  
\_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Telecopier: \_\_\_\_\_

-20-

SUMMARY INSTRUCTION SHEET FOR PURCHASER

(to be read in conjunction with the entire  
Purchase Agreement which follows)

A. Complete the following items on BOTH Purchase Agreements:

1. Page 20 - Signature:

- (i) Name of Purchaser (Individual or Institution)
- (ii) Name of Individual representing Purchaser (if an Institution)
- (iii) Title of Individual representing Purchaser (if an Institution)
- (iv) Signature of Individual Purchaser or Individual representing Purchaser

2. Appendix I - Stock Certificate Questionnaire:

Provide the information requested by the Stock Certificate Questionnaire.

Appendix I - Registration Statement Questionnaire:

Provide the information requested by the Registration Statement Questionnaire.

3. Return BOTH properly completed and signed Purchase Agreements including the properly completed Appendix I to:

Vector Securities International, Inc.  
Suite 350  
1751 Lake Cook Road  
Deerfield, Illinois 60015  
Attn: Marina S. Bozilenko

B. Instructions regarding the transfer of funds for the purchase of Shares will be sent by facsimile to the Purchaser by the Placement Agents at a later date.

C. Upon the resale of the Shares by the Purchasers after the Registration Statement covering the Shares is effective, as described in the Purchase Agreement, the Purchaser:

- (i) must deliver a current prospectus of the Company to the buyer (prospectuses must be obtained from the Company at the Purchaser's request); and
- (ii) must send a letter in the form of Appendix II to the Company so that the Shares may be properly transferred.

Appendix I  
(one of two)

INHALE THERAPEUTIC SYSTEMS

STOCK CERTIFICATE QUESTIONNAIRE

Pursuant to Section 3 of the Agreement, please provide us with the following information:

1. The exact name that your Shares are to be registered in (this is the name that will appear on your stock certificate(s)). You may use a nominee name if appropriate: \_\_\_\_\_



[fill in the number of or otherwise

\_\_\_\_\_ and the requirement of delivering a  
identify Registration Statement]

current prospectus by the Company has been complied with in connection with such  
sale.

Print or Type:

Name of Purchaser  
(Individual or  
Institution): \_\_\_\_\_

Name of Individual  
representing  
Purchaser (if an  
Institution) \_\_\_\_\_

Title of Individual  
representing  
Purchaser (if an  
Institution): \_\_\_\_\_

Signature by:

Individual Purchaser  
or Individual repre-  
senting Purchaser: \_\_\_\_\_

EXHIBIT 5.1

[COOLEY GODWARD LETTERHEAD]

January 31, 1997

Inhale Therapeutic Systems  
1060 East Meadow Circle  
Palo Alto, California 94303

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by Inhale Therapeutic Systems (the "Company") of a Registration Statement on Form S-3 on January 31, 1997 (the "Registration Statement") with the Securities and Exchange Commission covering the offering of up to one million eight hundred thousand (1,800,000) shares of the Company's Common Stock, no par value (the "Shares").

In connection with this opinion, we have examined the Registration Statement and related Prospectus, your Restated Articles of Incorporation and Bylaws, as amended, and such other documents, records, certificates, memoranda and other instruments as we deem necessary as a basis for this opinion. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof, and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued in accordance with the Registration Statement and related Prospectus, will be validly issued, fully paid, and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Very truly yours,

COOLEY GODWARD LLP

/s/ Mark P. Tanoury  
Mark P. Tanoury

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Inhale Therapeutic Systems for the registration of 1,800,000 shares of its Common Stock and to the incorporation by reference therein of our report dated January 19, 1996, with respect to the financial statements of Inhale Therapeutic Systems included in its Annual Report (Form 10-K) for the year ended December 31, 1995, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Palo Alto, California  
January 28, 1997