

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934.

For the quarterly period ended June 30, 1999

or,

TRANSITION REPORTS PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934.

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

COMMISSION FILE NUMBER: 0-23556

INHALE THERAPEUTIC SYSTEMS, INC.  
(Exact name of registrant as specified in its charter)

DELAWARE

94-3134940

-----  
(State of other jurisdiction of  
incorporation or organization)

-----  
(IRS Employer Identification No.)

150 INDUSTRIAL ROAD  
SAN CARLOS, CALIFORNIA 94070  
(Address of principal executive offices)

650-631-3100  
(Registrant's telephone number, including area code)

Not applicable

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(Former name, former address and former fiscal year, if changed since last  
report)

Indicate by check mark whether the registrant (1) has filed all reports  
required by Section 13 or 15(d) of the Securities Exchange Act of 1934 during  
the preceding 12 months (or for such shorter period that the registrant was  
required to file such reports), and (2) has been subject to such filing  
requirements for the past 90 days.  Yes  No

APPLICABLE ONLY TO CORPORATE ISSUERS

The number of outstanding shares of the registrant's Common Stock, \$0.0001  
par value, was 16,983,335 as of July 30, 1999.

INHALE THERAPEUTIC SYSTEMS, INC.  
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CONDENSED BALANCE SHEET  
(IN THOUSANDS)

	JUNE 30, 1999 (UNAUDITED)	DECEMBER 31, 1998 *
	-----	-----
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 14,671	\$ 24,916
Short-term investments	43,618	57,946
Accounts receivable	13,632	1,013
Other current assets	538	665
	-----	-----
Total current assests	72,459	85,540
Property and equipment, net	54,136	49,863
Deposits and other assets	93	93
	-----	-----
	\$126,688	\$134,496
	-----	-----
LIABILITES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 12,468	\$ 8,397
Deferred revenue	3,163	4,359
	-----	-----
Total current liabilities	\$ 15,631	\$ 12,756
Equipment financing obligation	1	9
Tenant improvement loan	4,916	4,931
Accrued rent	1,058	919
Stockholders' equity:		
Common stock	2	2
Capital in excess of par value	173,501	172,847
Deferred compensation	(1,075)	(931)
Accumulated other comprehensive loss	(100)	(19)
Accumulated deficit	(67,246)	(56,018)
	-----	-----
Total stockholders' equity	105,082	115,881
	-----	-----
	\$126,688	\$134,496
	-----	-----

SEE ACCOMPANYING NOTES

(\*) The balance sheet at December 31, 1998 has been derived from the audited Financial Statements at that date, which are included in the Company's Form 10-K for the year ended December 31, 1998 as filed with the Securities and Exchange Commission. This balance sheet does not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

INHALE THERAPEUTIC SYSTEMS, INC.

CONDENSED STATEMENTS OF OPERATIONS  
 (IN THOUSANDS, EXCEPT PER SHARE INFORMATION)  
 (UNAUDITED)

	THREE MONTHS ENDED JUNE 30,		SIX MONTHS ENDED JUNE 30,	
	1999	1998	1999	1998
Contract research revenue	\$ 9,877	\$ 6,679	\$ 17,657	\$ 10,544
Operating costs and expenses:				
Research and development	14,613	8,645	27,328	15,862
General and administrative	1,933	2,025	3,197	3,950
Total operating costs and expenses	16,546	10,670	30,525	19,812
Loss from operations	(6,669)	(3,991)	(12,868)	(9,268)
Interest income, net	663	1,141	1,640	2,269
Net loss	\$ (6,006)	\$ (2,850)	\$ (11,228)	\$ (6,999)
Basic and diluted net loss per share	\$ (0.35)	\$ (0.18)	\$ (0.66)	\$ (0.45)
Shares used in computing basic and diluted net loss per share	16,951	15,638	16,940	15,603

SEE ACCOMPANYING NOTES

INHALE THERAPEUTIC SYSTEMS, INC.

CONDENSED STATEMENTS OF CASH FLOWS  
 INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS  
 (IN THOUSANDS)  
 (UNAUDITED)

	SIX MONTHS ENDED JUNE 30,	
	1999	1998
	-----	-----
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash used in operations	(\$14,912)	(\$10,815)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Sale of short-term investments, net of purchases and maturities	14,248	39,352
Purchases of property and equipment	(9,925)	(16,158)
	-----	-----
Net cash provided by investing activities	4,323	23,194
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments of equipment financing obligations	(25)	(151)
Issuance of common stock, net of issuance costs	369	1,305
	-----	-----
Net cash provided by financing activities	344	1,154
	-----	-----
Net increase (decrease) in cash and cash equivalents	(10,245)	13,533
Cash and cash equivalents at beginning of period	24,916	14,948
	-----	-----
Cash and cash equivalents at end of period	\$14,671	\$28,481
	-----	-----

SEE ACCOMPANYING NOTES.

INHALE THERAPEUTIC SYSTEMS, INC.

NOTES TO CONDENSED FINANCIAL STATEMENTS  
JUNE 30, 1999  
(UNAUDITED)

1. Organization and Basis of Presentation

Inhale Therapeutic Systems, Inc. ("Inhale" or the "Company") was incorporated in the State of California in July 1990 and reincorporated in the State of Delaware in July 1998. Since inception, Inhale has been engaged in the development of systems for the pulmonary delivery of macromolecule drug therapies for systemic and local lung applications.

The accompanying unaudited condensed financial statements of Inhale have been prepared by management in accordance with generally accepted accounting principles for interim financial information and the instructions for Form 10-Q and Article 10 of Regulation S-X. The condensed balance sheet as of June 30, 1999, the condensed statements of operations for the three and six month periods ended June 30, 1999 and 1998, and the condensed statements of cash flows for the six month periods ended June 30, 1999 and 1998 have been prepared by Inhale without audit, but include all adjustments (consisting only of normal recurring adjustments) which Inhale considers necessary for a fair presentation of the financial position at such dates and the operating results and cash flows for those periods. Although Inhale believes that the disclosures in these financial statements are adequate to make the information presented not misleading, certain information normally included in financial statements and related footnotes prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to the rules and regulations of the Securities and Exchange Commission (the "Commission"). The accompanying financial statements should be read in conjunction with the financial statements and notes thereto included in Inhale's Annual Report on Form 10-K for the year ended December 31, 1998 as filed with the Commission.

Results for any interim period presented are not necessarily indicative of results for any other interim period or for the entire year.

2. COMPREHENSIVE LOSS

Other comprehensive losses (primarily unrealized losses on available for sale securities) amounted to \$81,000 and \$30,000, respectively, for the six month periods ended June 30, 1999 and 1998.

3. REVENUE RECOGNITION

Contract revenue from collaborative research agreements is recorded when earned and as the related costs are incurred. Payments received which are related to future performance are deferred and recognized as revenue when earned over future performance periods. In accordance with contract terms, up-front and progress payments from collaborative research agreements are considered to be payments to support continued research and development activities under the agreements. In accordance with the Company's revenue recognition policy, these payments are included in deferred revenue and are recognized as the related research and development expenditures are incurred.

Contract research revenue from one partner represented 76% of Inhale's revenue in the six month period ended June 30, 1999. Contract revenue from three partners accounted for 42%, 25% and 20% of Inhale's total revenue in the corresponding period in 1998. Costs of contract research revenue approximate such revenue and are included in operating costs and expenses.

4. NET LOSS PER SHARE

Basic and diluted net loss per common share is computed in conformance with Statement of Financial Accounting Standards No. 128, "Earnings Per Share", which Inhale adopted in 1997. Accordingly, the weighted

average number of common shares outstanding are used while common stock equivalent shares for stock options and warrants are not included in the per share calculations as the effect of their inclusion would be antidilutive.

## 5. SEGMENT INFORMATION

Management has organized Inhale's business in one operating segment which includes activities related to the development of systems for the pulmonary delivery of macromolecule drugs. Inhale's operations are presently located in the United States and Inhale derives all of its revenues from within the United States.

### ITEM 2.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Management's Discussion and Analysis of Financial Condition and Results of Operations for the three and six months ended June 30, 1999 and 1998 should be read in conjunction with the Management's Discussion and Analysis of Financial Condition and Results of Operations included in Inhale's Annual Report on Form 10-K for the year ended December 31, 1998. The following discussion contains forward-looking statements that involve risk and uncertainties. Inhale's actual results could differ materially from those discussed here. Factors that could cause or contribute to such differences include, but are not limited to, those discussed herein under the heading "Risk Factors" as well as those discussed in Inhale's Annual Report on Form 10-K for the year ended December 31, 1998.

Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's analysis only as of the date hereof. Inhale undertakes no obligation to publicly release the results of any revision to these forward-looking statements which may be made to reflect events or circumstances occurring after the date hereof or to reflect the occurrence of unanticipated events.

#### OVERVIEW

Since its inception in July 1990, Inhale has been engaged in the development of a pulmonary system for the delivery of macromolecules and other drugs for systemic and local lung applications. Inhale has been unprofitable since inception and expects to incur significant and increasing additional operating losses over the next several years primarily due to increasing research and development expenditures and expansion of late stage clinical and early stage commercial manufacturing facilities. To date, Inhale has not sold any commercial products and does not anticipate receiving revenue from product sales or royalties in the near future. For the period from inception through June 30, 1999, Inhale incurred a cumulative net loss of approximately \$67.2 million. The sources of working capital have been equity financings, financings of equipment acquisitions and tenant improvements, interest earned on investments of cash, and revenues from short-term research and feasibility agreements and development contracts.

Inhale typically has been compensated for research and development expenses during initial feasibility work performed under collaborative arrangements. Partners that enter into collaborative agreements will pay for research and development expenses and make additional payments to Inhale as Inhale achieves certain key milestones. Inhale expects to receive royalties from its partners based on their revenues received from product sales, and to receive revenue from the manufacturing of powders and the supply of devices. In certain cases, Inhale may enter into collaborative agreements under which Inhale's partners would manufacture or package powders or supply inhalation devices, thereby potentially limiting one or more sources of revenue for Inhale. To achieve and sustain profitable operations, Inhale, 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 Inhale can generate sufficient product or contract research revenue to become profitable or to sustain profitability.

#### RESULTS OF OPERATIONS

Revenue in the second quarter of 1999 was \$9.9 million compared to \$6.7 million in the second quarter of 1998, an increase of approximately 48%. Revenues for the six months ended June 30, 1999 were \$17.7 million as

compared to \$10.5 million for the six months ended June 30, 1998, an increase of 69%. The increase in revenue for both the three and six month periods was primarily due to the expansion of Inhale's existing collaborative agreement with Pfizer, Inc. and includes activities associated with the manufacture of Phase III clinical supplies. Revenue for the first and second quarters of 1999 and 1998 was comprised of reimbursed research and development expenses as well as the amortization of the pro-rata portion of up-front signing and progress payments received from Inhale's collaborative partners. Recognition of up-front signing and progress payments is based on actual efforts expended. Costs of contract research revenue approximate such revenue and are included in research and development expenses.

Research and development expenses increased to approximately \$14.6 million in the second quarter of 1999 from \$8.6 million in the corresponding period of 1998, an increase of 70%. Research and development expenses for the six months ended June 30, 1999 were \$27.3 million compared to \$15.9 million for the six months ended June 30, 1998, an increase of 72%. The increase for the three and six month periods was due to increased spending related to the scale-up of technologies and the continuing development of the Company's manufacturing capabilities in order to support Phase III inhaleable insulin clinical trials and commercial production. In addition, the Company hired additional scientific and development personnel to handle an increase in the number of development projects and incurred increased expenses associated with device development. The largest components of the 72% increase in research and development expenses for the six months ended June 30, 1999 compared to the same period in 1998 are the increase in salaries and employee benefits expense of \$4.3 million, \$3.1 million in research and development supplies and services, and \$3.2 million in facilities and administrative expense allocations associated with supporting the research and development efforts. Inhale expects research, development and process development spending to increase over the next few years as Inhale continues to expand its development efforts under collaborative agreements and scales up its commercial manufacturing facility.

General and administrative expenses decreased slightly to \$1.9 million in the second quarter of 1999 from \$2.0 million in the second quarter of 1998. For the six month period ended June 30, 1999, general and administrative expenses were \$3.2 million compared to \$4.0 million in the comparable period of 1998, a decrease of 20%. The decrease for the three and six month periods was due principally to a change in the Company's methodology for allocating administrative costs to research and development expenses. In the third quarter of 1998, the Company began allocating information systems costs associated with supporting the Inhale organization including systems infrastructure development, maintenance and support activities. In 1999 the Company began allocating human resources costs, including administrative staffing expenses, because these costs were also associated with supporting the Inhale organization. For the six month period ended June 30, 1999, the allocation of information systems costs and human resources costs resulted in a decrease in administrative expenses of \$1.1 million and \$0.5 million, respectively, which was offset by a net increase in administrative expenses of \$0.8 million related to increased facilities costs and the allocated share of administrative expenses associated with supporting the Company's increased research efforts, including administrative staffing and business development activities. General and administrative expenses are expected to continue to increase over the next few years to support increasing levels of research, development and manufacturing activities.

Net interest income decreased to \$0.7 million in the second quarter of 1999 compared to \$1.1 million in the second quarter of 1998, a decrease of 36%. Net interest income decreased to \$1.6 million in the six month period ended June 30, 1999 compared to \$2.3 million for the six months ended June 30, 1998. Interest income was earned on lower cash and investment balances held by Inhale in the three and six month periods ended June 30, 1999, compared to the same periods in 1998.

#### LIQUIDITY AND CAPITAL RESOURCES

Inhale has financed its operations primarily through public and private placements of its equity securities, contract research and milestone payments, financing of equipment acquisitions and interest income earned on its investments of cash. At June 30, 1999, Inhale had cash, cash equivalents and short-term investments of approximately \$58.3 million.

Inhale's operations used cash of \$14.9 million in the six months ended June 30, 1999, as compared to \$10.8 million used in the six months ended June 30, 1998. The increase in cash used in operations was due principally to the continued expansion of research activities resulting from an expanded scope of the Pfizer collaboration, an increase in the number of research projects being undertaken and the need to provide general and administrative support for these



increased research efforts, including increased business development and marketing expenses. Additionally, the increase in cash used in operations was attributed to Inhale's increased investment in working capital, particularly the increase in accounts receivable of \$12 million at June 30, 1999 compared to the same period in prior year, which was offset by an increase in current liabilities of \$3 million.

Inhale purchased property and equipment of approximately \$9.9 million during the six months ended June 30, 1999, compared to \$16.1 million for the corresponding period in 1998. The decrease in purchased property and equipment is due to the fact that 1998 spending included costs related to the build out of Inhale's headquarters and construction of phase one of its manufacturing plant located in San Carlos, California, which is now largely complete.

Inhale expects its cash requirements to continue to increase at an accelerated rate due to expected increases in costs associated with further research and development of its technologies, development of drug formulations, process development for the manufacture and filling of powders and devices, marketing and general and administrative costs. These expenses include, but are not limited to, increases in personnel and personnel related costs, purchases of capital equipment, investments in technologies, inhalation device prototype construction and facilities expansion, including the completion of its late stage clinical and commercial manufacturing facility.

Given the current cash burn rate, the Company believes that it would have sufficient cash to meet its operating expense requirements for at least the next 12 months. However, the Company plans to continue to invest heavily in its growth and the need for cash will be dependent upon the timing of these investments. Inhale's capital needs will depend on many factors, including continued scientific progress in its research and development arrangements, progress with pre-clinical and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs of developing and the rate of scale-up of Inhale's powder processing and packaging technologies, the timing and cost of its late-stage clinical and early commercial production facility, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, the need to acquire licenses to new technologies and the status of competitive products. To satisfy its long-term needs, Inhale intends to seek additional funding, as necessary, from corporate partners and from the sale of securities. There can be no assurance that additional funds, if and when required, will be available to Inhale on favorable terms, if at all.

#### YEAR 2000 COMPLIANCE

Inhale is aware of the issues associated with the programming code in existing computer systems as the Year 2000 approaches. The Year 2000 ("Y2K") problem is pervasive and complex as virtually every computer operation may be affected in some way by the rollover of the two digit year value to "00". The issue is whether systems will properly recognize date sensitive information when the year changes to 2000. If Inhale's software and firmware with date-sensitive functions are not Y2K compliant, they may recognize a date with "00" as the year 1900 rather than the year 2000. This could result in a system failure or miscalculations causing disruptions of operations, including, among other things, interruptions in manufacturing operations, a temporary inability to process transactions, or engage in similar normal business activities.

Inhale is utilizing both internal and external resources to conduct a comprehensive review of its systems to identify those systems that could be affected by the Y2K problem and has developed an implementation plan to resolve the issue by the end of 1999. The scope of the Y2K effort includes information technology ("IT") such as software and hardware, non-IT systems or embedded technology such as microcontrollers contained in various manufacturing and lab equipment, environmental and safety systems, facilities and utilities, and the Y2K readiness of key third parties such as suppliers and financial institutions. A multi-step Y2K readiness plan has been developed for its internal systems. This plan includes the following elements: 1) Awareness - raising Inhale's awareness of the Y2K issue; 2) Discovery - keeping an inventory and monitoring the compliance status of key financial, informational and operations systems subject to Y2K issues; 3) Assessment - determining both the business impact of noncompliance and the likelihood of noncompliance from each of the entities in the inventory; 4) Validation Remediation - the process of validating entities to ascertain compliance and remediate non-compliant entities. As of June 30, 1999, Inhale had completed the Awareness, Discovery and Assessment phases of the plan. The Remediation and Validation phase is underway with completion of mission critical and high impact systems by the end of the third quarter of 1999.

Inhale initiated formal communication with significant vendors and suppliers to determine the extent to which Inhale's operations are vulnerable to those third parties' failure to remediate their own Y2K issues. Suppliers of hardware, software or other products that might contain embedded processors were requested to provide information

regarding Y2K compliance status of their products. Inhale identified mission critical vendors and suppliers and stockpiling measures are being implemented. In addition, in order to protect against the acquisition of additional non-compliant products, Inhale now requires suppliers to warrant that products sold or licensed to Inhale are Y2K compliant. In the event that any of Inhale's significant suppliers do not successfully achieve Y2K compliance in a timely manner, Inhale's business or operations could be adversely affected. There can be no assurance that the systems of other companies on which Inhale's systems rely will be converted on a timely basis and would not have an adverse effect on Inhale's operations.

As of June 30, 1999, Inhale has substantially developed a comprehensive contingency plan to address situations that may result if Inhale is unable to achieve Y2K readiness of its critical operations. The contingency plan will be implemented should situations occur where Inhale is unable to achieve Y2K readiness in its critical operations. There can be no assurance that Inhale's contingency plan will adequately address all issues that may arise in the year 2000. The failure of Inhale to develop and implement, if necessary, an appropriate contingency plan could have a material impact on the operations of Inhale. Finally, Inhale is also vulnerable to external forces that might generally affect industry and commerce, such as utility and transportation company Y2K compliance failures and related service interruptions. If Inhale, its suppliers or collaborative partners fail to remedy any Y2K issues, the most likely worst case scenario would be a delay in Inhale's research programs and efforts to scale-up to manufacturing capacity. Certain chemicals and products could also be spoiled in the event of an extended power outage. If either of these events occur, this in turn could result in the incurrence of material costs or loss of revenue. Presently, Inhale is unable to reasonably estimate the duration and extent of any such interruption, or quantify the effect it may have on its future revenues and results of operations.

Inhale anticipates completing the mission critical, high impact Y2K issues by the third quarter of 1999, which is prior to any anticipated impact on its operating systems and expects the Y2K project to continue beyond the year 2000 with respect to the upgrading, replacement and testing of non-critical systems. These dates are contingent upon the timeliness and accuracy of software and hardware upgrades from vendors, adequacy and quality of resources available to work on completion of the project and any other unforeseen factors. The total expense of the Y2K project is currently estimated at approximately \$750,000, of which approximately \$400,000 has been spent through June 30, 1999, which is not material to Inhale's business operations or financial condition. The expenses of the Y2K project are being funded through operating cash flows.

The costs of the project and the date on which Inhale believes it will complete the Y2K modifications are based on management's best estimates, which were derived utilizing numerous assumptions of future events, including the continued availability of certain resources, third-party modification plans and other factors. There can be no assurance that these estimates will be achieved and actual results could differ materially from those anticipated.

#### RISK FACTORS

WE DO NOT KNOW IF OUR DEEP LUNG DRUG DELIVERY SYSTEM IS TECHNICALLY FEASIBLE.

We are in an early stage of development. There is a risk that our deep lung delivery technology will not be technically feasible. Even if our deep lung delivery technology is technically feasible, it may not be commercially accepted across a range of large and small molecule drugs. We have tested six of our thirteen deep lung delivery formulations in humans. The deep lung formulations tested in humans are insulin, interleukin-1 receptor, salmon calcitonin, an osteoporosis drug and two small molecules.

Many of the underlying drug compounds contained in our deep lung formulations have been tested in humans by other companies using alternative delivery routes. Our potential products require extensive research, development and pre-clinical (animal) and clinical (human) testing. Our potential products also may involve lengthy regulatory review before they can be sold. We do not know if and cannot assure that any of our potential products will prove to be safe and effective or meet regulatory standards. There is a risk that any of our potential products will not be able to be produced in commercial quantities at acceptable cost or marketed successfully. Our failure to achieve technical feasibility, demonstrate safety, achieve clinical efficacy, obtain regulatory approval or, together with partners, successfully market products will seriously impact the amount of our revenue and our results of operations.

WE DO NOT KNOW IF OUR DEEP LUNG DELIVERY SYSTEM IS EFFICIENT.

We may not be able to achieve the total system efficiency needed to be competitive with alternative routes of delivery. System efficiency is the product of the deep lung bioavailability of a potential product and the percentage of each drug dose lost at various stages of the manufacturing and deep lung delivery process. Deep lung bioavailability is the percentage of a drug that is absorbed into the bloodstream when that drug is delivered directly to the lungs. This is the initial screen for whether deep lung delivery of any systemic drug is feasible.

WE DO NOT KNOW IF OUR DEEP LUNG DRUG FORMULATIONS ARE STABLE.

We may not be able to identify and produce powdered versions of drugs that retain the physical and chemical properties needed to work with our delivery device. Formulation stability is the physical and chemical stability of the drug over time and under various storage conditions. Formulation stability will vary with each deep lung formulation and the type and amount of ingredients that are used in the formulation. We would not consider a drug to be a good candidate for development and commercialization if its dose loss is excessive at any one stage or cumulatively in the manufacturing and delivery process or if its deep lung bioavailability is too low. Problems with powdered drug stability would seriously impact our ability to develop and market our potential products.

WE DO NOT KNOW IF OUR DEEP LUNG SYSTEM IS SAFE.

We may not be able to prove potential products to be safe.

Our products require lengthy laboratory, animal and human testing. For most of our products we are in the early stage of human testing. If we find that any product is not safe, we will not be able to commercialize the product. The safety of our deep lung formulations will vary with each drug and the ingredients used in its formulation.

WE DO NOT KNOW IF OUR DEEP LUNG SYSTEM PROVIDES CONSISTENT DOSES OF MEDICINE.

We may not be able to provide reproducible dosages of stable formulations sufficient to achieve clinical success. Reproducible dosing is 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. Reproducible dosing requires the development of:

- an inhalation device that consistently delivers predictable amounts of dry powder formulations to the deep lung;
- accurate unit dose packaging of dry powder formulations; and
- moisture resistant packaging.

We may not be able to develop reproducible dosing of any potential product. The failure to do so means that we would not consider it a good candidate for development and commercialization.

WE DO NOT KNOW IF OUR TECHNOLOGIES CAN BE INTEGRATED IN TIME TO BRING PRODUCT TO MARKET.

We may not be able to integrate all of the relevant technologies to provide an integrated deep lung delivery system. Our integrated approach to systems development relies upon several different but related technologies:

- dry powder formulations;
- dry powder processing technology;
- dry powder packaging technology; and
- deep lung delivery devices.

At the same time we must:

- establish collaborations with partners;
- perform laboratory and clinical testing of potential products; and
- scale-up our manufacturing processes.

We must accomplish all of these steps without delaying any aspect of technology development. Any delay in one component of product or business development could delay our ability to develop, obtain approval of or market therapeutic products using our deep lung delivery technology.

OUR DEEP LUNG DELIVERY SYSTEM MAY NOT BE COMMERCIALY ACCEPTED.

We may not be able to achieve commercial viability of our deep lung delivery system. In order to sell any potential product, we must make it commercially acceptable to the market. This means that we must:

- further refine our device prototype;
- complete scale-up of our powder processing system; and
- complete scale-up of our automated packaging system.

The failure to demonstrate deep lung bioavailability, achieve total system efficiency, provide safe, reproducible dosages of stable formulations or advance on a timely basis the numerous aspects of product and business development will seriously impact the amounts of our revenues and our results of operations.

WE EXPECT TO CONTINUE TO LOSE MONEY FOR THE NEXT SEVERAL YEARS.

We have never been profitable and, through June 30, 1999, have incurred a cumulative deficit of approximately \$67.2 million. We expect to continue to incur substantial and increasing losses over at least the next several years as we expand our research and development efforts, testing activities and manufacturing operations, and as we complete our late stage clinical and early commercial production facility. All of our potential products are in research or in the early stages of development except for our insulin collaboration. We have generated no revenues from approved product sales. Our revenues to date have consisted primarily of payments under short-term research and feasibility agreements and development contracts. To achieve and sustain profitable operations, we must, alone or with others, successfully develop, obtain regulatory approval for, manufacture, introduce, market and sell products using our deep lung drug delivery system. There is a risk that we will not generate sufficient product or contract research revenue to become profitable or to sustain profitability.

WE DEPEND ON PARTNERS FOR REGULATORY APPROVALS AND COMMERCIALIZATION OF OUR PRODUCTS.

Since Inhale is in the business of developing technology for delivering drugs to the lungs and licensing this technology to companies that make and sell drugs, we do not have the people and other resources to do the following things:

- make bulk drugs to be used as medicines;
- design and carry out large scale clinical studies;
- prepare and file documents necessary to obtain government approval to sell a given drug product; and
- market and sell our products when and if they are approved.

When Inhale signs a license agreement to develop a product with a drug company, the drug company agrees to do some or all of the things described above. If our partner fails to do any of these things, Inhale cannot complete the development of the product.

WE DO NOT KNOW IF WE WILL BE ABLE TO PRODUCE OUR PRODUCTS IN COMMERCIAL QUANTITIES.

We must scale-up our current powder processing and filling facilities and comply with the good manufacturing practice standards prescribed by the United States Food and Drug Administration and other standards prescribed by other regulatory agencies to achieve drug production levels that are adequate to support late stage human clinical testing and early commercial sales.

We have no experience manufacturing products for large scale clinical testing or commercial purposes. We have only performed powder processing on the small scale needed for testing formulations and for early stage and larger clinical trials. We may encounter manufacturing and control problems as we attempt to scale-up powder processing facilities. We may not be able to achieve such scale-up in a timely manner or at a commercially reasonable cost, if at all. Our failure to solve any of these problems could delay or prevent late stage clinical testing and commercialization of our products and could seriously impact the amount of our revenues and our results of operations.

To date, we have relied on one particular method of powder processing. There is a risk that this technology will not work with all drugs or that the drug losses will prohibit the commercial viability of certain drugs. Additionally, there is a risk that any alternative powder processing methods we may pursue will not be commercially practical for aerosol drugs or that we will not have or be able to acquire the rights to use such alternative methods.

Our fine particle powders and small quantity packaging require special handling. We have designed and qualified small scale automated filling equipment for small quantity packaging of fine powders. We face significant technical challenges in scaling-up an automated filling system that can handle the small dose and particle sizes of our powders in commercial quantities. There is a risk that we will not be able to scale-up our 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 our products and will impact the level of our revenues and results of operations.

We face many technical challenges in further developing our inhalation device to work with a broad range of drugs, to produce such a device in sufficient quantities and to adapt the device to different powder formulations. There is a risk that we will not successfully achieve any of these things. Our failure to overcome any of these challenges will impact our revenues and results of operations.

For late stage clinical trials and initial commercial production, we intend to use one or more contract manufacturers to produce our drug delivery device. There is a risk that we will not be able to enter into or maintain arrangements with any potential contract manufacturers, and that the failure to do so will impact our revenues and results of operations.

WE DO NOT KNOW IF THE MARKET WILL ACCEPT INHALE'S DEEP LUNG DELIVERY SYSTEM.

The commercial success of our potential products depends upon market acceptance by health care providers, third-party payors like health insurance companies and Medicare, and patients. Our products under development use a new method of drug delivery and there is a risk that our potential products will not be accepted by the market. Market acceptance will depend on many factors, including

- the safety and efficacy results of our clinical trials;
- favorable regulatory approval and product labeling;
- the frequency of product use;
- the availability of third-party reimbursement;
- the availability of alternative technologies; and
- the price of our products relative to alternative technologies.

There is a risk that health care providers, patients or third-party payors will not accept our deep lung drug delivery system. If the market does not accept our potential products, our revenues and results of operations will be seriously impacted if our potential products are not accepted by the market.

OUR PATENTS MAY NOT PROTECT OUR PRODUCTS AND OUR PRODUCTS MAY INFRINGE ON THIRD PARTY PATENT RIGHTS.

Inhale has filed patent applications covering certain aspects of our device, powder processing technology, and powder formulations and deep lung route of delivery for certain molecules, and we plan to file additional patent applications. As of June 30, 1999, we have 37 issued U.S. and foreign patents that cover certain aspects of our technology and we have a number of patent applications pending. There is a risk that any of the patents applied for will not issue, or that any patents that issue or have issued will not be valid and enforceable. Enforcing our patent rights would be time consuming and costly.

We are aware of an alternate dry powder processing technology that we are not using for our current products under development but may desire to use for certain products in the future. The ownership of this powder processing technology is unclear. We are aware that multiple parties, including Inhale, claim patent, trade secret and other rights in the technology. If we determine that this alternate powder processing technology is relevant to the development of future products and further determine that a license to this alternate powder processing technology is needed, we cannot be certain that we can obtain a license from the relevant party or parties on commercially reasonable terms, if at all.

Our access or our partners' access to the drugs to be formulated will affect our ability to develop and commercialize our technology. Many drugs, including powder formulations of certain drugs that are presently under development by us, are subject to issued and pending United States and foreign patents that may be owned by our competitors. We know that there are issued patents and pending patent applications relating to the deep lung delivery of large molecule drugs, including several for which we are developing deep lung delivery formulations. This situation is highly complex, and the ability of any one company, including Inhale, to commercialize a particular drug is unpredictable.

We intend generally to rely on the ability of our partners to provide access to the drugs that are to be formulated by us for deep lung delivery. There is a risk that our partners will not be able to provide access to such drug candidates. Even if such access is provided, there is a risk that our partners or we will be accused of, or determined to be, infringing a third-party's patent rights and will 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 to drug candidates or liability for damages would impact the level of our revenues and results of operations.

WE MAY NOT OBTAIN REGULATORY APPROVAL.

There is a risk that we will not obtain regulatory approval for our products on a timely basis, or at all. Our product must undergo rigorous animal and human testing and an extensive review process mandated by the FDA and equivalent foreign authorities. This process generally takes a number of years and requires the expenditure of substantial resources although the time required for completing such testing and obtaining such approvals is uncertain. We have not submitted any of our products to the FDA for marketing approval. We have no experience obtaining such regulatory approval.

In addition, we may encounter delays or rejections based upon changes in the United States Food and Drug Administration policy, including policy relating to good manufacturing practice compliance, during the period of product development. We may encounter similar delays in other countries.

Even if regulatory approval of a product is granted, the approval may limit the indicated uses for which we may market our product. In addition, our marketed product, our manufacturing facilities and Inhale, as the manufacturer, will be subject to continual review and periodic inspections. Later discovery from such review and inspection of previously unknown problems may result in restrictions on our product or on us, including withdrawal of our product from the market. The failure to obtain timely regulatory approval of our products, any product marketing limitations or a product withdrawal would impact the level of our revenue and results of operations.

IF OUR PRODUCTS ARE NOT COST EFFECTIVE, GOVERNMENT AND PRIVATE INSURANCE PLANS WILL NOT PAY FOR OUR PRODUCTS.

In both domestic and foreign markets, sales of our products under development will depend in part upon the availability of reimbursement from third-party payors, such as government health administration authorities, managed care providers, private health insurers and other organizations. In addition, such 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. Legislation and regulations affecting the pricing of pharmaceuticals may change before our proposed products are approved for marketing. Adoption of such legislation and regulations could further limit reimbursement for medical products. A government third party payor decision to not provide adequate coverage and reimbursements for our products would limit market acceptance of such products.

OUR COMPETITORS MAY DEVELOP AND SELL BETTER DRUG DELIVERY SYSTEMS.

We are aware of other companies engaged in developing and commercializing pulmonary drug delivery systems and enhanced injectable drug delivery systems. Many of these companies have greater research and development capabilities, experience, manufacturing, marketing, financial and managerial resources than we do and represent significant competition for us. Acquisitions of competing drug delivery companies by large pharmaceutical companies could enhance our competitors' financial, marketing and other resources. Accordingly, our competitors may succeed in developing competing technologies, obtaining United States Food and Drug Administration approval for products or gain market acceptance before us. We cannot assure that developments by others will not make our products or technologies uncompetitive or obsolete.

WE EXPECT OUR STOCK PRICE TO REMAIN VOLATILE.

Our stock price is volatile. In the last twelve months our stock price ranged from \$20.13 to \$35.25. We expect it to remain volatile. A variety of factors may have a significant effect on the market price of our common stock, including:

- fluctuations in our operating results;
- announcements of technological innovations or new therapeutic products;
- announcement or termination of collaborative relationships by Inhale or our competitors;
- governmental regulation;
- clinical trial results;
- developments in patent or other proprietary rights;
- public concern as to the safety of drug formulations developed by Inhale or others; and
- general market conditions.

Any litigation instigated against us as a result of this volatility could result in substantial costs and a diversion of our management's attention and resources, which could impact our revenues and results of operations.

INVESTORS SHOULD BE AWARE OF INDUSTRY-WIDE RISKS.

In addition to the risks associated specifically with Inhale described above, investors should also be aware of general risks associated with drug development and the pharmaceutical industry. These include but are not limited to:

- handling of hazardous materials;
- hiring and retaining qualified people; and
- insuring against product liability claims.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in the reported market risks since December 31, 1998.

PART II: OTHER INFORMATION

Item 1. Legal Proceedings - Not Applicable

Item 2. Changes in Securities - None

Item 3. Defaults upon Senior Securities - None

Item 4. Submission of Matters to a Vote of Security Holders

A. The annual meeting of the stockholders was held on June 8, 1999.

B. The following matters were voted upon at the annual meeting:

1. To elect the following directors to hold office until the 2002 Annual Meeting of Stockholders:

	For ---	Withheld -----
Ajit S. Gill	13,297,312	20,560
Melvin Perelman	13,289,337	28,535

2. To ratify the selection of Ernst & Young LLP as independent auditors for the Company for its fiscal year ending December 31, 1999.

For - 13,301,305      Against - 9,292      Abstain - 7,275

Item 5. Other Information

Effective April 27, 1999, Terry Opdendyk resigned as Director and Chairman of the Board of Directors. Irwin Lerner was elected a Director of the Company and Robert Chess was elected Chairman of the Board of Directors. Ajit Gill was named President of the Company.

Item 6. Exhibits and Reports on Form 8-K

(a) The following exhibits are filed herewith or incorporated by reference:

EXHIBIT	EXHIBIT TITLE
2.1 (1)	Agreement and Plan of Merger between Inhale Therapeutic Systems, a California corporation, and Inhale Therapeutic Systems (Delaware), Inc., a Delaware corporation.
3.1 (1)	Certificate of Incorporation of Registrant.
3.2 (1)	Bylaws of the Registrant.
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2 (2)	Restated Investor Rights Agreement among the Registrant and certain other persons named therein, dated April 29, 1993, as amended October 29, 1993.
4.3 (2)	Specimen stock certificate.
4.4 (3)	Stock Purchase Agreement between the Registrant and Pfizer Inc., dated January 18, 1995.
4.5 (9)	Form of Purchase Agreement between the Registrant and the individual Purchasers, dated January 28, 1997.
4.6 (10)	Stock Purchase Agreement between the Registrant and Capital Research and Management Company, dated December 8, 1998.
10.1 (4)	Registrant's 1994 Equity Incentive Plan, as amended,



- 10.2 (7) Registrant's 1994 Non-Employee Directors' Stock Option Plan, as amended
- 10.3 (2) Registrant's 1994 Employee Stock Purchase Plan, as amended.
- 10.4 (2) Standard Industrial Lease between the Registrant and W.F. Batton & Co., Inc., dated September 17, 1992, as amended September 18, 1992.
- 10.5 (2) Addendum IV dated April 1, 1994 to Lease dated September 17, 1992, between the Registrant and W.F. Batton and Marie A. Batton, dated September 17, 1992.
- 10.6 (6) Amendment Agreement Number One, dated October 20, 1995, to Lease dated September 17, 1992, between the Registrant and W.F. Batton & Co., Inc.
- 10.7 (6) Amendment Agreement Number Two, dated November 15, 1995, to Lease, dated September 17, 1992, between Registrant and W.F. Batton and Marie A. Batton, Trustees of the W.F. Batton and Marie A. Batton Trust UTA dated January 12, 1998 ("Batton Trust").

- 10.8 Amendment Agreement Number Three, dated February 14, 1996, to Lease, dated September 17, 1992, between Registrant and Batton Trust.
- 10.9 Amendment Agreement Number Four, dated September 15, 1996, to Lease, dated September 17, 1992, between Registrant and Batton Trust.
- 10.10 (2) Senior Loan and Security Agreement between the Registrant and Phoenix Leasing Incorporated, dated September 15, 1993.
- 10.11 (2) Sublicense Agreement between the Registrant and John S. Patton, dated September 13, 1991.
- 10.11 (5) Stock Purchase Agreement between the Registrant and Baxter World Trade Corporation, dated March 1, 1996.
- 10.12 (8) Sublease and Lease Agreement, dated October 2, 1996 between the Registrant and T.M.T. Associates L.L.C. ("Landlord").
- 10.13 First Amendment, dated October 30, 1996, to Sublease and Lease Agreement, dated October 2, 1996, between Registrant and Landlord.
- 10.14 Letter Agreement, dated April 9, 1997, amending Sublease and Lease Agreement, dated October 2, 1996, between the Registrant and Landlord.
- 10.15 Third Amendment, dated April 16, 1997, to Sublease and Lease Agreement, dated October 2, 1996, between Registrant and Landlord.
- 10.16 Fourth Amendment, dated November 5, 1997, to Sublease and Lease Agreement, dated October 2, 1996, between Registrant and Landlord.
- 27.1 Financial Data Schedule

- - - - -
- (1) Incorporated by reference to the indicated exhibit in Inhale's Quarterly Report on Form 10-Q for the quarter ended June 30, 1998.
  - (2) Incorporated by reference to the indicated exhibit in Inhale's Registration Statement on Form S-1 (No. 33-75942), as amended.
  - (3) Incorporated by reference to the indicated exhibit in Inhale's Registration Statement on Form S-1 (No. 33-89502), as amended.
  - (4) Incorporated by reference to Inhale's Registration Statement on Form S-8 (No. 333-59735).
  - (5) Incorporated by reference to the indicated exhibit in Inhale's Quarterly Report on Form 10-Q for the quarter ended March 31, 1996.
  - (6) Incorporated by reference to the indicated exhibit in Inhale's Annual Report on Form 10-K for the year ended December 31, 1995.
  - (7) Incorporated by reference to the indicated exhibit in Inhale's Quarterly Report on Form 10-Q for the quarter ended June 30, 1996.
  - (8) Incorporated by reference to the indicated exhibit in Inhale's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996.
  - (9) Incorporated by reference to Inhale's Registration statement on Form S-3 (No. 333-20787).
  - (10) Incorporated by reference to the indicated exhibit in Inhale's Registration Statement on Form S-3 (No. 333-68897), as amended.
- (b) Reports on Form 8-K.  
None.

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto.

INHALE THERAPEUTIC SYSTEMS, INC.

DATE: August 16, 1999

BY: /S/Robert B. Chess

-----  
Robert B. Chess  
Chairman and Co-Chief Executive Officer and  
Director  
(Duly Authorized Officer)

BY: /S/Ajit S. Gill

-----  
Ajit S. Gill  
President and Co-Chief Executive Officer and  
Director  
(Duly Authorized Officer)

BY: /S/Brigid A. Makes

-----  
Brigid A. Makes  
Vice President of Finance and Administration  
and Chief Financial Officer  
(Chief Accounting Officer)

AMENDMENT AGREEMENT NUMBER THREE TO LEASE

1001 E. MEADOW CIRCLE  
PALO ALTO, CALIFORNIA

THIS AMENDMENT AGREEMENT NUMBER THREE TO LEASE (this "Amendment") is entered into as of February 14, 1996, by and between W. F. BATTON AND MARIE A. BATTON, TRUSTEES OF THE W. F. BATTON AND MARIE A. BATTON TRUST UTA DATED JANUARY 12, 1998 ("Lessor"), and INHALE THERAPEUTIC SYSTEMS, a California corporation ("Lessee").

RECITALS

A. W. F. Batton & Co., Inc., as lessor, and Lessee entered into a Standard Industrial Lease-Net dated as of September 17, 1992 (the "Lease") covering premises located at 1001 East Meadow Circle, Palo Alto, California (referred to in the Lease as "1015 East Meadow Circle") (the "Premises"). Capitalized terms used but not defined herein have the meanings assigned to them in the Lease.

B. By letter dated March 2, 1993 from Lessor to Lessee it was confirmed that the Premises originally consisted of 13,442 square feet. Effective as of May 1, 1994 by Addendum IV to Lease, Paragraph 2, Premises, of the Lease was amended by adding 4,648 square feet, increasing the Premises from 13,442 square feet to 18,090 square feet.

C. The Lease was amended by Amendment Agreement Number One to Lease entered into as of October 20, 1995 by W. F. Batton & Co., Inc., and Lessee. The Lease was amended by Amendment Number Two to Lease entered into as of November 15, 1995. The Lease dated September 17, 1992, as amended, is referred to herein collectively as the "Lease."

D. The Premises have been further increased by 1,920 square feet of space by the transfer of 1,920 square feet from the premises of the adjoining tenant, JEOL USA, Inc. ("JEOL"), to the Premises of Lessee. The 1,920 square feet added to the Premises are the area 96 feet by 20 feet between columns B through G and bay 9 and bay 10.

E. Lessor and Lessee now wish to amend the Lease to reflect the further increase in the number of square feet in the Premises by the transfer of said 1,920 square feet of space from JEOL to Lessee.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants of the parties contained herein, the parties agree as follows:

1. The effective date of this Amendment is March 1, 1996.

2. Paragraph 2 of the Lease is amended to provide that the address of the Premises is 1001 East Meadow Circle, Palo Alto, California 94303 and, with the addition of said 1,920 square feet of space, the Premises now consist of approximately 20,010 square feet.

3. All construction costs incurred to separate the 1,920 square feet from the JEOL premises and to add said 1,920 square feet to the Premises of Lessee shall be paid 50% by Lessee and 50% by JEOL. Lessor shall not be liable for any of said construction costs.

4. Paragraph 1, Premises, of Addendum IV to Lease is amended to provide that Lessee is leasing from Lessor and occupying seventy-one percent (71%) of the total number of square feet in the building (determined by dividing the number of square feet in the Premises, 20,010, by the total number of square feet in the building in which the Premises are located, 28,150 square feet). Lessee's share of the total operating expenses of the building and outside area of the real property of which the Premises are a part shall be seventy-one percent (71%) from and after the effective date of this Amendment.

5. The OLD RENT SCHEDULE for the period 2/1/95 through 2/29/96 set forth in Paragraph 3 of Addendum IV to the Lease, Base Monthly Rent Schedule, which shall remain in effect through February 29, 1996 is as follows:

Months*	Monthly Rent Per Square Foot NNN		
-----	-----		
25-36 (2/1/95-1/31/96)	\$0.97 x 13,442	=	\$13,038.74
	0.7375 x 4,648	=	3,427.90
			-----
			\$16,466.64
37 (2/1/96-2/29/96)	\$1.05 x 13,442	=	\$14,114.10
	0.7375 x 4,648	=	3,427.90
			-----
			\$17,542.00

\*prior to 2/1/95, see Paragraph 3, Addendum IV

6. Paragraph 3 of Addendum IV to the Lease, Base Monthly Rent Schedule, is amended effective March 1, 1996, as follows:

Months -----	Monthly Rent Per Square Foot NNN -----		
38-48	\$1.05 x 13,442	=	\$14,114.10
(3/1/96-1/31/97)	0.7375 x 4,648	=	3,427.90
	1.01 x 1,920	=	1,939.20
			-----
			\$19,481.20
49-64	\$1.10 x 13,442	=	\$14,786.20
(2/1/97-5/31/98)	0.7375 x 4,648	=	3,427.90
	1.01 x 1,920	=	1,939.20
			-----
			\$20,153.30

7. Paragraph 3 of Amendment Number One to Lease dated October 20, 1995 is amended to read as follows:

Paragraph 51 of Addendum II to the Lease is amended by deleting "61-120" from the column entitled "Months" and substituting "65-124 (6/1/98-5/31/03)" therefor. If the option to extend is exercised the Base Monthly Rent for the period June 1, 1998 through May 31, 1999 shall be equal to the Base Monthly Rent for May 1998 adjusted by the CPI increase for the twelve (12) months ending May 1998, minimum 3% maximum 6%. There shall be annual cumulative CPI increases thereafter (May through May) minimum 3% maximum 6%. In no event shall Base Monthly Rent for any twelve months period of the option term be less than Base Monthly Rent for the previous twelve months period.

8. Except as amended hereby, the Lease shall remain in full force and effect.

9. This Amendment may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed at Palo Alto, California, as of the date first above written.

LESSOR:

W. F. BATTON AND MARIE A. BATTON,  
TRUSTEES OF THE W. F. BATTON AND  
MARIE A. BATTON TRUST UTA DATED  
JANUARY 12, 1988

/s/ W. F. BATTON

-----  
W. F. Batton, Trustee

/s/ MARIE A. BATTON

-----  
Marie A. Batton, Trustee

LESSEE:

INHALE THERAPEUTIC SYSTEMS,  
a California corporation

By /s/ AJIT SINGH GILL

-----  
Its Chief Financial Officer  
-----

AMENDMENT AGREEMENT NUMBER FOUR TO LEASE

1001 E. MEADOW CIRCLE  
PALO ALTO, CALIFORNIA

THIS AMENDMENT AGREEMENT NUMBER FOUR TO LEASE (this "Amendment") is entered into as of September 15, 1996, by and between W. F. BATTON AND MARIE A. BATTON, TRUSTEES OF THE W. F. BATTON AND MARIE A. BATTON TRUST UTA DATED JANUARY 12, 1988 ("Lessor"), and INHALE THERAPEUTIC SYSTEMS, a California corporation ("Lessee").

RECITALS

A. Lessor and Lessee entered into a Standard Industrial Lease - Net dated as of September 17, 1992 (the "Lease") covering premises located at 1001 East Meadow Circle, Palo Alto, California (referred to in the Lease as "1015 East Meadow Circle") (the "Premises"). Capitalized terms used but not defined herein have the meanings assigned to them in the Lease.

B. (1) The Lease was amended by letter agreement dated March 2, 1993, (2) by Addendum IV to Lease effective as of May 1, 1994, (3) by Amendment Agreement Number One to Lease entered into as of October 20, 1995, (4) by Amendment Number Two to Lease entered into as of November 15, 1995, and (5) by Amendment Agreement Number Three to Lease entered into as of February 14, 1996. The Lease dated September 17, 1992, as amended, is referred to herein collectively as the "Lease."

E. Lessor and Lessee now wish to amend the Lease further to reflect the exercise by Lessee of the option to extend the term of the Lease.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants of the parties contained herein, the parties agree as follows.

1. By the execution and delivery of this Amendment, Lessee hereby gives Lessor written notice of the exercise by Lessee of the option to extend the term of the Lease for the period of five (5) years from June 1, 1998 through May 31, 2003, pursuant to Paragraph 51 of Addendum II to the Lease, as amended by Paragraph 7 of Amendment Agreement Number Three to Lease dated February 14, 1996, which provides as follows:

"Paragraph 51 of Addendum II to the Lease is amended by deleting "61-120" from the column entitled "Months" and substituting "65-124



(6/1/98 - 5/31/03)" therefor. If the option to extend is exercised the Base Monthly Rent for the period June 1, 1998 through May 31, 1999 shall be equal to the Base Monthly Rent for May 1998 adjusted by the CPI increase for the twelve (12) months ending May 1998, minimum 3% maximum 6%. There shall be annual cumulative CPI increases thereafter (May through May) minimum 3% maximum 6%. In no event shall Base Monthly Rent for any twelve months period of the option term be less than Base Monthly Rent for the previous twelve months period."

Lessor and Lessee agree that the term of the Lease is extended upon the terms and conditions set forth herein. The option extension period shall be upon all of the terms and conditions of the Lease except that (a) the monthly Base Rent shall be payable by Lessee to Lessor pursuant to the provision set forth above, and (b) there shall be no additional option to extend.

2. Except as amended hereby, the Lease shall remain in full force and effect.

3. This Amendment may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed and delivered shall be deemed to be an original and all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed at Palo Alto, California, as of the first above written.

LESSOR: W. F. BATTON and MARIE A. BATTON,  
Trustees of the W. F. Batton and  
Marie A. Batton Trust UTA dated  
January 12, 1988

By: /s/ Marie A. Batton, Trustee  
-----  
Marie A. Batton, Trustee

LESSEE: INHALE THERAPEUTIC SYSTEMS,  
a California corporation

By: /s/ Ajit Singh Gill  
-----  
Its: Chief Operating Officer  
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FIRST AMENDMENT TO SUBLEASE  
AND LEASE AGREEMENT

This First Amendment to Sublease and Lease Agreement (this "Amendment") is made by and between TMT Associates, LLC, a California limited liability company ("Landlord"), and Inhale Therapeutic Systems, a California corporation ("Tenant"), effective as of the 30th day of October, 1996.

RECITALS

A. Landlord and Tenant have entered into that certain Sublease and Lease Agreement (the "Lease") dated October 2, 1996. All capitalized terms used herein shall have the same meaning ascribed to them in the Lease, unless expressly defined in this Amendment.

B. Landlord and Tenant desire to modify certain provisions of the Lease as set forth in this Amendment.

AGREEMENT

NOW, THEREFORE, Landlord and Tenant hereby agree as follows:

1. PAYMENT OF CERTAIN COSTS. Landlord and Tenant acknowledge and agree that construction cost estimates received by Tenant for certain components of the Tenant Improvements described below are in excess of amounts contemplated at the time of execution of the Lease. The components of the Tenant Improvements which are the subject of this Paragraph 1 are: (a) the installation of a new roof membrane and necessary repairs required to install a new roof membrane of the premises, but excluding any structural modifications to the roof which Tenant may desire to perform, (b) the exterior rear wall of the premises (excluding the installation of any glass or windows, but including exterior doors), (c) construction of the front portion of the parking lot which is necessary to install approximately 7,200 square feet of parking improvements to replace a portion of the building to be removed, and (d) construction of the rear parking lot (such components of the Tenant Improvements referred to herein as the "Subject Improvements"). In addition to the Tenant's Improvement Allowance currently set forth in the Lease in the amount of Five Million Dollars (\$5,000,000). Landlord shall contribute an amount (the "Subject Amount") toward the cost of performing the approved modifications to and construction of the Subject Improvements equal to fifty percent (50%) of the difference between: (x) the actual costs incurred by Tenant to modify or construct the Subject Improvements, less (y) Five Hundred Thousand Dollars (\$500,000). Notwithstanding the preceding sentence, in no event shall the Subject Amount exceed Two Hundred Fifty Thousand Dollars (\$250,000). Upon Tenant's completion of the Subject Improvements, Tenant shall deliver to Landlord invoices and other reasonable supporting documentation requested by

Landlord required to determine the amount of the costs incurred by Tenant to modify and/or construct the Subject Improvements. Tenant's determination of such costs shall be subject to Landlord's approval, which shall not be unreasonably withheld.

2. METHOD OF PAYMENT. Landlord shall pay the Subject Amount in accordance with either of the two provisions set forth below:

(a) At such time as Landlord obtains the Tenant Improvement Loan, Landlord may finance an additional amount as is necessary to obtain the funds to pay the Subject Amount to Tenant in cash upon the closing of such financing, provided that Tenant shall have no responsibility with respect to repayment of such additional loan amount and such amount shall not be considered a part of the Tenant Improvement Loan for any purpose under the Lease, or

(b) The potential reduction in monthly Base Rent set forth in Paragraph 3.2(b) of the Lease, which potential reduction may commence upon the thirteenth (13th) month following the Rent Commencement Date, shall be increased to that amount which is necessary to amortize the sum of Five Hundred Thousand Dollars (\$500,000) plus the Subject Amount at an interest rate of ten percent (10%) per annum over a period of eighteen (18) months. Such monthly reduction amount shall not exceed Forty-Five Thousand Forty-Two Dollars and Eighty-One Cents (\$45,042.81). The references in such Paragraph 3.2(b) to Five Hundred Thousand Dollars (\$500,000) shall be increased to Five Hundred Thousand Dollars (\$500,000), plus the Subject Amount.

3. TENANT'S PAYMENT OF ADDITIONAL COSTS. Landlord and Tenant mutually intend that Tenant may finance Tenant's share of the additional costs for the Subject Improvements. Therefore, the Tenant's Improvement Allowance (as defined in Paragraph 34.1(d) of the Lease) shall be increased to an amount equal to the sum of Five Million Dollars (\$5,000,000), plus the Subject Amount, but in no event shall the Tenant's Improvement Allowance exceed Five Million Two Hundred Fifty Thousand Dollars (\$5,250,000). In accordance with the provisions of Lease, the Tenant Improvement Loan shall also be increased by a similar amount. In the event Landlord is unable to obtain the Tenant Improvement Loan, as contemplated by the Lease, Tenant shall fund Tenant's share of the increased cost of the Subject Improvements in cash together with the other Tenant Improvement Costs.

4. PAYMENT OF COSTS OF ASBESTOS REMOVAL. Landlord and Tenant acknowledge and agree that the Landlord's Work (as defined in Paragraph 34.1(a) of the Lease) currently includes removal and/or abatement of asbestos containing materials located in the interior of the premises or on the roof thereof. The obligation to remove and/or abate any asbestos containing materials which may be located in the interior of the premises or on the roof thereof shall be deleted from the Landlord's Work, and such removal and/or abatement shall be performed by Tenant. Landlord shall pay any increase in the costs incurred by Tenant to install and construct the Tenant Improvements which are caused by

and directly relate to Tenant's removal and/or abatement of asbestos containing materials located in the interior of the premises or on the roof thereof. Such amounts shall be payable within thirty (30) days of Landlord's receipt of invoices and reasonable supporting documentation requested by Landlord evidencing the costs incurred by Tenant to perform such removal and/or abatement.

5. CONFIRMATION OF SATISFACTION OF CERTAIN CONDITIONS. Tenant acknowledges and agrees that the condition to Tenant's obligations under the Lease set forth in subparagraph 1(b) has been satisfied, provided that such satisfaction shall not be completed until Landlord and Tenant have fully executed this Amendment, and that the condition set forth in subparagraph 1(c) has been fully satisfied.

6. NO FURTHER MODIFICATIONS. Except as expressly set forth herein, the terms and conditions of the Lease shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment as of the date first set forth above.

LANDLORD:

TMT ASSOCIATES, LLC, a California  
limited liability company

By: /s/ Kiet Nguyen  
-----  
Kiet Nguyen, Member

By: /s/ Thomas Peirona  
-----  
Thomas Peirona, Member

TENANT:

Inhale Therapeutic Systems, a  
California corporation

By: /s/ Ajit Singh Gill  
-----

Its: Exec. VP Tech Ops  
-----

April 9, 1997

VIA FACSIMILE

Mr. Thomas Peirona  
TMT Associates LLC  
1515 Industrial Way  
Belmont, CA 94002

Re: \$57,500 Advance

Dear Mr. Peirona:

This letter will evidence Inhale Therapeutic System's ("Inhale") agreement to loan \$57,500 to TMT Associates, LLC ("TMT"), and TMT's agreement to repay such amount, upon the conditions described below:

1. Inhale will loan the sum of \$57,500 to TMT upon execution of this letter by TMT;
2. TMT shall pay the \$57,500 to SunAmerica in partial payment of the application fee due in connection with the loan from SunAmerica Life Insurance Company to TMT (the "SunAmerica Loan") described in the Agreement Regarding Tenant Improvement Loan dated as of April 2, 1997;
3. TMT shall repay the \$57,500, without interest, to Inhale, upon the closing of the SunAmerica Loan, but only if Inhale elects not to accept the tenant improvement portion of the SunAmerica Loan;
4. In the event the SunAmerica Loan has not closed by May 1, 1997, Inhale shall be entitled to deduct the amount of \$9,583.33 per month from its obligation to pay rent to TMT under the Sublease and Lease Agreement dated as of October 30, 1996 (the "Lease") for six consecutive months.
5. This letter shall constitute an amendment to the Lease, and may be signed in two or more counterparts, which shall together constitute one and the same agreement.

If you agree to the terms of this letter and amendment to Lease, please execute the enclosed copy and return it to the undersigned.

Sincerely,

Inhale Therapeutic Systems, Inc.

Inhale Therapeutic Systems, Inc.

By: /s/ Sharron Reiss-Miller  
-----  
Name: Sharron Reiss-Miller  
-----  
Title: Director, Operations  
-----

By: /s/ Robert Chess  
-----  
Name: Robert Chess  
-----  
Title: President/CEO  
-----

Received and Agreed to:

TMT Associates, LLC

By /s/ Kiet Nguyen  
-----  
Kiet Nguyen, Member

And By /s/ Thomas Peirona  
-----  
Thomas Peirona, Member

THIRD AMENDMENT TO LEASE

This Third Amendment to Sublease and Lease Agreement is dated, for reference purposes only, as of April 16, 1997, and is entered into by and between TMT Associates, LLC ("Landlord") and Inhale Therapeutics Systems, Inc. ("Tenant"), for the purpose of amending that certain Sublease and Lease Agreement dated as of October 2, 1996, as previously amended by the First Amendment to Sublease and Lease Agreement dated as of October 30, 1996, and by the letter amendment dated April 9, 1997 (collectively the "Lease") by and between Landlord and Tenant concerning the lease of the property located at 1515 Industrial Way, Belmont, California, as more specifically described in the Lease (the "Premises").

For valuable consideration, the receipt and sufficiency of which are hereby acknowledged (including, without limitation, the making of a \$5,000,000 loan by Tenant to Landlord the ("\$5,000,000 Loan"), the parties agree as follows:

1. CONDITIONS TO EFFECTIVENESS: The effectiveness of this Third Amendment is hereby conditional upon the closing of the \$5,000,000 Loan and acquisition of fee simple title to the Premises by Landlord by April 30, 1997 (collectively the "Closing"). Unless and until such transactions shall have been consummated, this Third Amendment shall be of no force or effect.
2. DEFINITIONS: All capitalized terms used but not defined herein shall have the meanings assigned to them in the Lease.
3. TENANT IMPROVEMENT LOAN; PARAGRAPH 3.1(b) OF LEASE. Landlord and Tenant acknowledge and agree that Paragraph 3.1(b) of the Lease provides that Tenant shall pay an interest rate under the Tenant Improvement Loan which is equal to the rate payable by Landlord thereunder, plus two percent (2%). Landlord and Tenant further acknowledge and agree that such two percent (2%) increase in the interest rate payable by Tenant under the Tenant Improvement Loan is for the purpose of mitigating the tax impacts on Landlord of providing the Tenant Improvement Loan to Tenant, due to the fact that all rent payable to Landlord under the Lease must be recognized as income, but that the principal amount of the Tenant Improvement Loan repaid by Landlord cannot be deducted. Landlord and Tenant shall use due diligence and reasonable efforts to investigate alternate means by which the tax impacts on Landlord in connection with the Tenant Improvement Loan can be eliminated in a manner other than the payment by Tenant of the additional two percent (2%) to be included in the interest rate payable by Tenant under the Tenant Improvement Loan. In the event an alternative method can be determined which is approved by both Landlord and Tenant, such approval not to be unreasonably withheld, then the additional two percent (2%) to be included in the interest rate payable by the Tenant under the Tenant Improvement Loan shall be deleted from Paragraph 3.1(b) of the Lease at such time as both Landlord and Tenant have reasonably approved such alternative, which may include, by way of example, and not by way of

limitation, allocation to Landlord of the right to an increased amount of depreciation on the tenant improvements.

- 4. RENT COMMENCEMENT DATE: The parties agree that Tenant's obligation to pay Base Rent under the Lease shall commence upon July 1, 1997.
- 5. RETENTION OF BROKERS: Landlord and Tenant shall mutually agree upon the broker to be retained in connection with pursuing any Tenant Improvement Loan, other than a loan from SunAmerica Life Insurance Company.
- 6. COUNTERPARTS: This Third Amendment may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall be deemed one and the same agreement.
- 7. NO FURTHER MODIFICATION: Except as modified by this Third Amendment, the Lease remains unchanged and in full force and effect.

In Witness Whereof, the undersigned have entered into this Third Amendment, to be effective as of the Closing:

Inhale Therapeutic Systems, Inc.

BY: \_\_\_\_\_  
 NAME: \_\_\_\_\_  
 TITLE: \_\_\_\_\_

TMT ASSOCIATES LLC,  
a California limited liability company

BY: /s/ Kiet Nguyen  
-----

NAME: Kiet Nguyen  
-----

TITLE: Member  
-----

AND BY: /s/ Thomas Peirona  
-----

NAME: Thomas Peirona  
-----

TITLE: Member  
-----



## FOURTH AMENDMENT TO SUBLEASE AND LEASE AGREEMENT

THIS FOURTH AMENDMENT TO SUBLEASE AND LEASE AGREEMENT (this "Amendment") is made by and between TMT ASSOCIATES, LLC, a California limited liability company ("Landlord"), and INHALE THERAPEUTIC SYSTEMS, a California corporation ("Tenant"), effective as of the 5th day of November, 1997.

## RECITALS

A. Landlord and Tenant have entered into that certain Sublease and Lease Agreement (the "Original Lease") dated October 2, 1996, as amended by that certain First Amendment to Sublease and Lease Agreement (the "First Amendment") dated October 30, 1996, that certain Letter Agreement dated April 9, 1997, and that certain Third Amendment to Lease dated April 16, 1997 (collectively the "Existing Lease"). All capitalized terms used herein shall have the same meaning ascribed to them in the Existing Lease, unless expressly defined in this Amendment.

B. Landlord and Tenant desire to modify certain provisions of the Existing Lease as set forth in this Amendment.

## AGREEMENT

NOW, THEREFORE, Landlord and Tenant hereby agree as follows:

1. Landlord's Obligation to Reimburse Tenant for Costs Incurred By Tenant in Performing Landlord's Obligations.

(a) DELETION OF SECTION 4 OF THE FIRST AMENDMENT. Section 4 of the First Amendment provides that Tenant shall remove and/or abate asbestos containing materials located in the interior of the premises or on the roof thereof ("ACM"). Such paragraph provides that Landlord shall pay the costs of such removal and/or abatement within thirty (30) days of receipt of invoices regarding the costs thereof. Landlord and Tenant desire to modify such method of payment, and the cost reimbursement provisions of Section 4 of the First Amendment are hereby deleted. The cost reimbursement provisions of this Section 1 shall supersede and fully replace the provisions of Section 4 of the First Amendment.

(b) TENANT'S COSTS INCURRED IN CONNECTION WITH PERFORMANCE OF LANDLORD'S OBLIGATIONS AND ADJUSTMENT TO DECEMBER RENT. Tenant has incurred the amount of \$235,197.00 (referred to herein as the "First Portion of the Reimbursable Amount") in connection with the performance of certain work for which Landlord has agreed to reimburse Tenant, including, without limitation, abatement of ACM, abatement of lead, repair of damage caused by Landlord's contractor, demolition of canopy, installation of sidewalk, clean-up, demolition of storage shed, and certain building and fire code compliance work. Landlord's payment of the First Portion of the Reimbursable Amount shall satisfy all of Landlord's reimbursement obligations to Tenant with respect to lead abatement in Phase I of the Building.

The Base Rent under the Lease is intended to increase to \$59,150 effective in January 1998. As an accommodation to Landlord, Tenant has agreed to increase the December 1997 Base Rent to \$59,150, provided that Landlord reimburses Tenant the amount of \$18,850 (referred to herein as the "Second Portion of the Tenant's Reimbursable Amount"). The First Portion of the Reimbursable Amount and the Second Portion of the Tenant's Reimbursable Amount are collectively referred to herein as the "Reimbursable Amount".

(c) REDUCTION IN RENT OR TENANT REIMBURSABLE AMOUNT.

Beginning on January 1, 1998, Tenant shall be entitled to deduct from the rental amount due each month, an amount necessary to amortize the Reimbursable Amount over a period of twelve (12) months at an annual interest rate of ten per cent per annum, with interest commencing to accrue on January 1, 1998.

(d) REPAYMENT OF ALL OUTSTANDING TENANT REIMBURSABLE AMOUNT

UPON SALE OR REFINANCING. Notwithstanding Tenant's right to reduce the rent in accordance with Section 1(b), above, Landlord shall repay to Tenant all unpaid Tenant Reimbursable Amount, plus all accrued and unpaid interest, upon the closing of a financing or sale of Landlord's interest in the real property subject to the Lease (the "Property"). Upon such payment, the offset right in Paragraph 1(c) shall terminate.

2. "SUBJECT IMPROVEMENTS" UNDER FIRST AMENDMENT. Section 1 of the

2.

First Amendment provides that Landlord shall contribute an amount equal to fifty percent (50%) of the difference between (x) the actual costs incurred by Tenant to modify or construct the Subject Improvements (as defined therein), less (y) Five Hundred Thousand Dollars, but in no event more than \$250,000. The amounts which Landlord is required to pay under Section 1 of the First Amendment are referred to herein as the "Landlord's Portion of Shared Costs". Section 2 of the First Amendment provides two methods for Landlord to repay Landlord's Portion of Shared Costs. Section 2 of the First Amendment is hereby deleted and replaced with the provisions of this Paragraph 2 of this Fourth Amendment.

(a) RENTAL REDUCTION IN CONNECTION WITH LANDLORD'S PORTION OF SHARED COSTS. Beginning on January 1, 1999, Tenant shall be entitled to deduct from the rental amount due each month, an amount necessary to amortize the Landlord's Portion of Shared Costs over a period of eighteen (18) months at an annual interest rate of ten per cent per annum, such interest to commence accruing as of July 1, 1998.

(b) REPAYMENT OF LANDLORD'S PORTION OF SHARED COSTS UPON SALE OR REFINANCING. Notwithstanding Tenant's right to reduce the rent in accordance with Section 2(a), above, Landlord shall repay to Tenant any unpaid Landlord's Portion of Shared Costs, plus all accrued and unpaid interest, upon the closing of a financing or sale of Landlord's interest in the Property. Upon such payment, the offset right in Paragraph 2(a) shall terminate.

3. EXTENSION OF DUE DATE OF \$5,000,000 LOAN. In consideration for Tenant's agreement to extend the due date of the April 14, 1997 Secured Promissory Note in the amount of \$5,000,000 (the "Note") until the earlier of (i) December 31, 1997, or (ii) the date upon which financing or sale of Landlord's interest in the Property is consummated, Landlord and Tenant have agreed to the modifications to the Lease described herein.

4. NO FURTHER MODIFICATIONS. Except as expressly set forth herein, the terms and conditions of the Existing Lease shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have executed this Fourth Amendment as of the date first set forth above.

LANDLORD:  
  
TMT ASSOCIATES, LLC.  
a California limited liability company

TENANT:  
  
INHALE THERAPEUTIC SYSTEMS,  
a California corporation

By: /s/ Thomas Peirona  
-----

By: /s/ Ajit Singh Gill  
-----

Its: Member  
-----

Its: Chief Operating Officer  
-----



THE QUARTERLY FINANCIAL STATEMENTS OF INHALE THERAPEUTIC SYSTEMS, INC. AS FILED  
ON FORM 10-Q FOR THE PERIOD ENDED JUNE 30, 1999

1,000

6-MOS		
	DEC-31-1999	
	JAN-01-1999	
	JUN-30-1999	
		14,671
	43,618	
	13,632	
	0	
	0	
	72,459	
		64,891
	(10,755)	
	126,688	
15,631		0
0		0
	0	
	173,503	
	(68,421)	
126,688		0
	17,657	
		0
	30,525	
	0	
	0	
	0	
(11,228)		
	0	
0		
	0	
	0	
		0
	(11,228)	
	(0.66)	
	(0.66)	