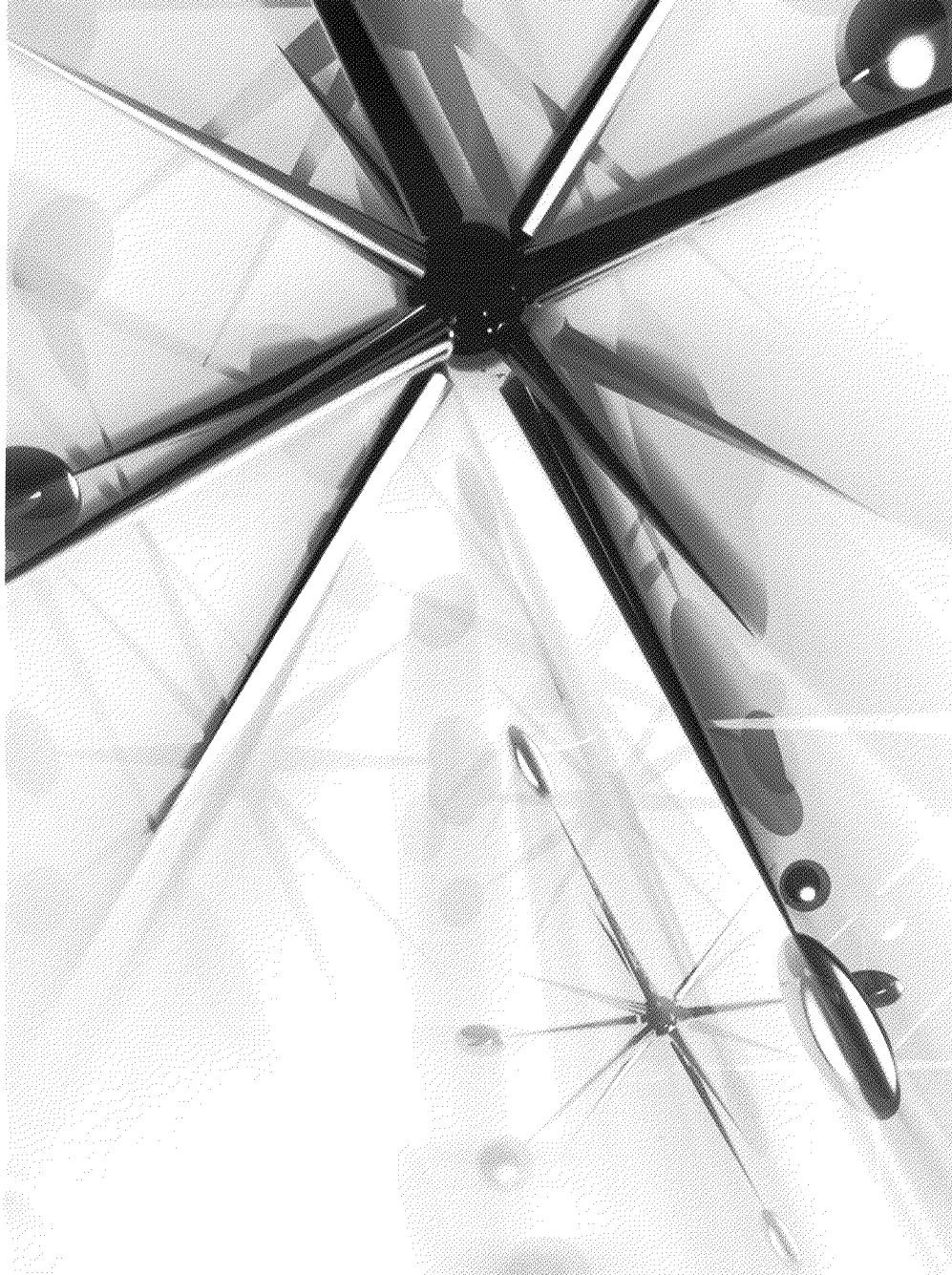
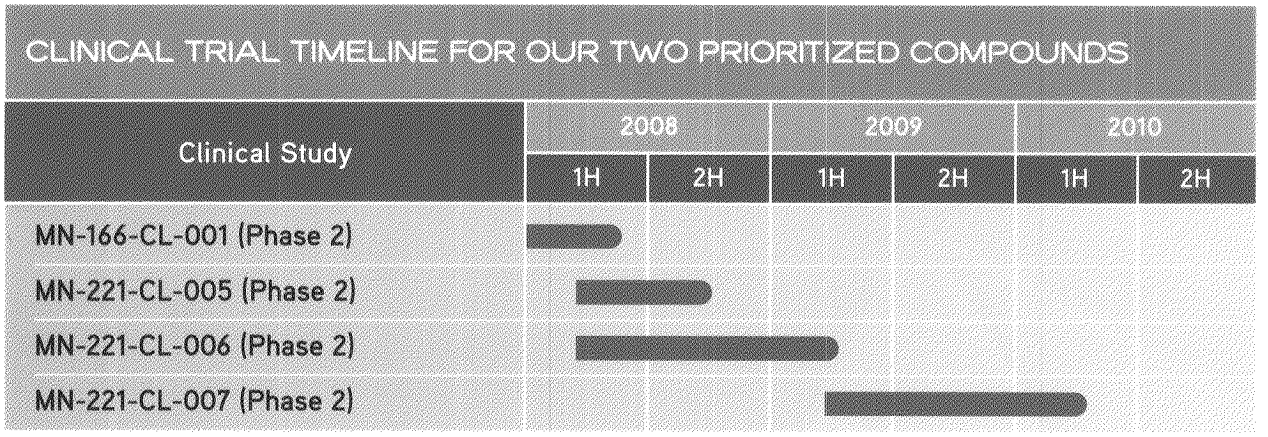


2008 ANNUAL REPORT

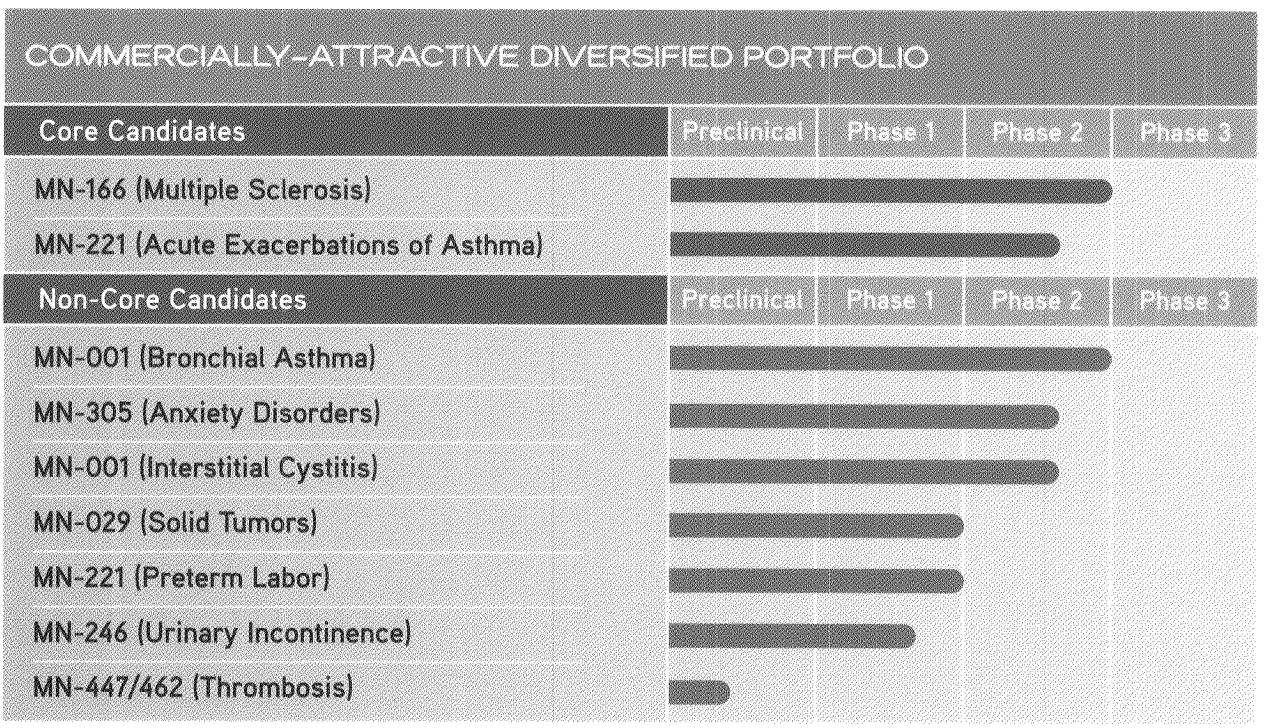
MEDICINOVA

Accelerating the Global Development and
Commercialization of Innovative Pharmaceutical Products

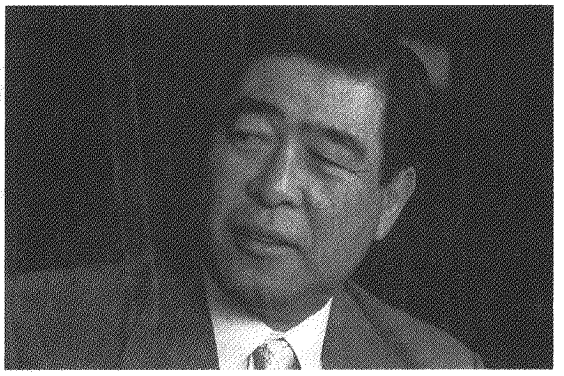


ABOUT MEDICINOVA, INC.

MediciNova, Inc. is a publicly-traded biopharmaceutical company focused on acquiring and developing novel, small-molecule therapeutics for the treatment of diseases with unmet need with a specific focus on the U.S. market. Through strategic alliances primarily with Japanese pharmaceutical companies, MediciNova holds rights to a diversified portfolio of clinical and preclinical product candidates, each of which MediciNova believes has a well-characterized and differentiated therapeutic profile, attractive commercial potential and patent assets having claims of commercially adequate scope. MediciNova's pipeline includes six clinical-stage compounds for the treatment of acute exacerbations of asthma, multiple sclerosis, asthma, interstitial cystitis, solid tumor cancers, Generalized Anxiety Disorder, preterm labor and urinary incontinence and two preclinical-stage compounds for the treatment of thrombotic disorders. MediciNova's current strategy is to focus its resources on its two prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and MN-166 for the treatment of multiple sclerosis, and either pursue development independently, in the case of MN-221, or establish a strategic collaboration to support further development, in the case of MN-166. MediciNova will seek to monetize its other product candidates at key value inflection points.



To Our Fellow Stockholders:



For MediciNova, 2008 was a year highlighted by the advancement of our prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and MN-166 for the treatment of multiple sclerosis (MS), and implementation of our strategic focus on such product candidates. As President and CEO, I am pleased to update our investors around the world and report on the significant progress made with both of these prioritized product candidates.

As an update, we have advanced MN-221 into a Phase II emergency department clinical trial (MN-221-CL-007), which is currently enrolling patients. For MN-166, after announcing encouraging clinical results in April 2008 from a two-year Phase II clinical trial, we are currently seeking a corporate partner to further develop this promising therapy.

We believe that each of MN-221 and MN-166 present compelling opportunities with clear differentiated market advantages. At present, we intend to pursue development of MN-221 for the treatment of acute exacerbations of asthma independently in the United States. However, we will not pursue any further significant clinical development of MN-166 until such time that we secure a strategic collaboration to advance the development of such product candidate. We intend to actively pursue strategic collaborations for these product development programs in order to draw on the development, regulatory, and commercialization expertise and financial resources of larger biotechnology and pharmaceutical partners. We may also decide to pursue potential partners and acquirers of license rights to our programs in markets outside the United States, with the goal of retaining significant commercial participation.

MN-221 for the Treatment of Acute Exacerbations of Asthma

MN-221 is a highly selective $ß_2$-adrenergic receptor agonist licensed from Kissei Pharmaceutical Co., Ltd., which is under development for the treatment of acute exacerbations of asthma, which are long-lasting, severe asthma episodes that do not respond to initial treatment with corticosteroids and inhaled ß-agonists. MN-221 may offer the clinically important advantage of fewer cardiovascular side effects than older ß-adrenergic agonists due to its greater selectivity for the ß2-adrenergic receptor. In addition, the convenience and immediacy of intravenous delivery for potentially life-threatening respiratory conditions is beneficial for patients who cannot obtain the full benefit from inhaled ß-adrenergic agonist treatment due to severe bronchoconstriction.

In September 2008, we reported positive preliminary results from a Phase II clinical trial of MN-221 in patients with moderate to severe, stable asthma (MN-221-CL-005). This clinical trial provided information on prolonged infusion dosing regimens with MN-221, and the results demonstrated clinically significant improvements in forced expiratory volume in one second (FEV_1).

In April 2009, MediciNova reported final data from a Phase II emergency department clinical trial (MN-221-CL-006) evaluating MN-221 at planned escalating doses of 240 to 1,080 micrograms in patients with severe, acute exacerbations of asthma treated in emergency departments. This clinical trial included 29 (13 treated with standard care only and 16 treated with MN-221 plus standard care) patients with severe, acute exacerbations of asthma. All patients received standardized care consisting of albuterol, ipratropium and oral steroid treatment. No safety concerns with adding MN-221 to standardized care were identified following the review of the electrocardiogram (ECG), laboratory and Adverse Experience data. The hospitalization rate among patients with standardized care only was 46 percent (six of 13), which was the anticipated rate, compared to a hospitalization rate of 25 percent (four of 16) among patients receiving MN-221 plus standardized care. This represents a 45 percent reduction in hospitalization rate among patients treated with MN-221. All hospitalizations were due to asthma exacerbations which were judged to be unrelated to study medication and therefore do not raise safety concerns for adding MN-221 to standardized care. As specified in the protocol for this clinical trial, no inferential statistics (i.e., p-values) were calculated for this study. Improvement in forced expiratory volume in 1 second (FEV_1) values generally appeared to be greater for patients receiving MN-221 in addition to standardized treatment.

In April 2009, MediciNova announced that its next Phase II clinical trial for MN-221, a randomized, double-blind, placebo-controlled Phase II clinical trial designed to evaluate the safety and efficacy of MN-221 in patients with severe, acute

exacerbations of asthma in the emergency room setting (MN-221-CL-007), began enrolling patients. We anticipate that this clinical trial will be completed within nine to 12 months from the commencement of enrollment. This study is designed to compare standardized care to standardized care plus MN-221 at a dose of 1.2 mg administered over one hour. Once a patient has received the initial standardized care treatment regimen (consistent with the National Asthma Education and Prevention Program and the Global Initiative for Asthma (GINA) guidelines), the patient will be assessed for response to that treatment. If the patient's FEV_1 is less than or equal to 50 percent of predicted and the patient meets all other study entry criteria, the patient will be randomized to receive either MN-221 or placebo. Patients enrolled in the study will continue to receive standardized care as needed while receiving an intravenous infusion of MN-221 or placebo. The primary efficacy endpoint will be improvement in FEV_1.

MN-166 for the Treatment of Multiple Sclerosis

MN-166 is a novel, orally bioavailable compound licensed from Kyorin Pharmaceutical Co., Ltd., which has been under development for the treatment of MS. We believe that MN-166 may represent a significant advancement in the treatment of MS as it potentially offers several advantages in the marketplace, including neuroprotection and slowing of disease progression, excellent safety and oral dosing.

In April 2008, we announced the results of the completed two-year Phase II clinical trial. In the second year of the study, all patients received active drug. Patients who received 30 or 60 mg of MN-166 per day during the first year of the study remained on the assigned dose for the second 12 months of the study, whereas patients who received placebo during the first 12 months of the study were randomized to receive either 30 or 60 mg of MN-166 per day (double-blind maintained) during the second 12 months of the study. Clinical and radiological outcomes were evaluated.

The results of this two-year Phase II clinical trial were highlighted by positive clinical findings on three independent measures indicative of a potential disease-progression modifying effect. First, sustained disability progression was significantly less likely (by approximately 50 percent) in those patients receiving MN-166 at either 30 or 60 mg per day for 24 months than in those patients receiving the drug for 12 months. Second, we observed significantly less reduction in brain volume loss in patients receiving 60 mg per day of MN-166 for 24 months compared to the other treatment groups. Third, MN-166 treatment at 60 mg per day significantly reduced the relative risk for conversion of new inflammatory lesions identified at month two to Persistent Black Holes (PBHs), an MRI indicator of neuronal loss, eight months later at month ten by 37 percent.

MN-166 was well tolerated at all doses over the two years of this clinical trial, with the most common adverse events possibly related to MN-166 involving mild, transient gastrointestinal disturbances and depression. Of the 297 patients enrolled in this clinical trial, 245 patients completed the full two years of treatment.

In June 2008, additional data from an analysis of the first year of treatment was presented at the 18th Meeting of the European Neurological Society. In September 2008, data from the completed two-year clinical trial was presented at the World Congress for Treatment and Research in MS.

We are proud of our progress in 2008, even more so given the global economic challenges. Importantly, our strategic focus has allowed for the advancement of our two prioritized product candidates while maintaining fiscal prudence. In 2009, we will continue to focus on our goal of maximizing the value of our product candidates and look forward with great anticipation toward the advancement of such goal.

Thank you for your ongoing support.

Sincerely,

Yuichi Iwaki, M.D., Ph.D.
President, Chief Executive Officer and Director

MediciNova, Inc.

2008 Annual Report to Stockholders

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MEDICINOVA, INC.

2008 ANNUAL REPORT TO STOCKHOLDERS

For the Fiscal Year Ended December 31, 2008

Table of Contents

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Forward-Looking Statements

This Annual Report to Stockholders, or Annual Report, includes forward-looking statements that involve a number of risks and uncertainties, many of which are beyond our control. Our actual results may differ from those anticipated or expressed in these forward-looking statements as a result of various factors, including those set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, under the caption "Item 1A. Risk Factors," and the differences may be material. Forward-looking statements discuss matters that are not historical facts. Forward-looking statements include discussions regarding our operating strategy, growth strategy, licensing and acquisition strategy, cost savings initiatives, industry and economic conditions, market factors, financial condition, liquidity and capital resources, results of operations, expected progress of the development of our product candidates, potential licensing, collaboration and partnering plans, anticipated trends and challenges in our business and the markets in which we operate, competitive position, intellectual property protection, critical accounting policies and the impact of recent accounting pronouncements. In this Annual Report, for example, we make forward-looking statements regarding the potential for our product candidates to receive regulatory approval for one or more indications on a timely basis or at all; the progress and results of pending clinical trials for certain of our product candidates, including any delays in commencing or completing enrollment for our ongoing or planned clinical trials; plans for future clinical trials and regulatory submissions; unexpected adverse side effects or inadequate therapeutic efficacy of certain of our product candidates that could delay or prevent regulatory approval or commercialization or that could result in product liability claims; other difficulties or delays in development, testing, manufacturing and marketing of and obtaining regulatory approval for our product candidates; the scope and validity of patent protection for our product candidates; the market potential for our target markets and our ability to compete; the potential to attract one or more strategic partners and terms of any related transactions; intense competition if any of our product candidates are ever commercialized; the potential impact of uncertainties in the credit and capital markets or a future deterioration of these markets on our investment portfolio; and our ability to raise sufficient capital when needed, or at all. Such forward-looking statements include statements preceded by, followed by or that otherwise include the words "may," "might," "will," "intend," "should," "could," "can," "would," "expect," "believe," "estimate," "anticipate," "predict," "potential," "plan" or similar words. For all forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. You should not rely unduly on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to revise or update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

Summary Information

Our Business

Overview

We are a biopharmaceutical company focused on acquiring and developing novel, small molecule therapeutics for the treatment of diseases with unmet medical need with a specific focus on the U.S. market. Through strategic alliances, primarily with Japanese pharmaceutical companies, we hold rights to a diversified portfolio of clinical and preclinical product candidates, each of which we believe has a well-characterized and differentiated therapeutic profile, attractive commercial potential and patent assets having claims of commercially adequate scope. We were incorporated in Delaware in September 2000.

We believe that our ability to gain access to and acquire potentially high-value product candidates from Japanese and European pharmaceutical companies is largely attributable to the established relationships and broad industry experience of our management team. In particular, we believe our relationships with Japanese pharmaceutical companies and their executives provide us with a competitive advantage in opportunistically sourcing product candidates from Japanese pharmaceutical companies at attractive terms. Since our inception, we

have established relationships with a number of pharmaceutical companies, including Kissei Pharmaceutical Co., Ltd., or Kissei Pharmaceutical, Kyorin Pharmaceutical Co., Ltd., or Kyorin Pharmaceutical, Mitsubishi Tanabe Pharma Corporation and Meiji Seika Kaisha, Ltd., or Meiji Seika Kaisha, in Japan and Angiogene Pharmaceuticals, Ltd., or Angiogene Pharmaceuticals, in the United Kingdom, pursuant to which we have obtained rights to develop and commercialize our current product candidates.

To date, we have acquired licenses to eight compounds for the development of ten product candidates in what we believe are large and underserved markets. Our development pipeline consists of eight programs which have been in clinical development for the treatment of asthma, acute exacerbations of asthma, multiple sclerosis, interstitial cystitis, solid tumor cancers, Generalized Anxiety Disorder/insomnia, preterm labor and urinary incontinence. Our earlier stage programs consist of two product candidates which have been in preclinical development for the treatment of thrombotic disorders.

Our current strategy is to focus our resources on the development of two prioritized product development programs:

Product Candidate	Disease/Indication	Phase of Development	Licensor	Licensed Territory
MN-221	Acute exacerbations of asthma	Phase II clinical trial in emergency rooms to determine safety and efficacy in patients with severe, acute exacerbations of asthma initiated in Q1, 2008; interim data announced in Q1, 2009. Phase II clinical trial to determine safety and efficacy with prolonged and different infusion rates in patients with moderate to severe, stable asthma initiated in Q2, 2008; preliminary results announced in Q3, 2008.	Kissei Pharmaceutical	Worldwide, except Japan
MN-166	Multiple sclerosis	Phase II clinical trial completed in Q2, 2008. Prototype once-per-day oral formulation developed for future clinical trials.	Kyorin Pharmaceutical	Worldwide, except Japan, China, Taiwan and South Korea

Upon completion of proof-of-concept Phase II clinical trials, we will either continue to pursue clinical development independently in the United States, as we presently intend with MN-221, or establish a strategic collaboration to support Phase III clinical development, as we presently intend with MN-166. Following the recent completion of the Phase II clinical trial for MN-166, we are not planning to pursue any further significant clinical development of MN-166 until such time that we are able to secure a strategic collaboration to advance MN-166 into Phase III clinical development.

We do not expect that our eight other existing product candidates will be the subject of significant development activity, except as deemed necessary by management to maintain our license rights or maximize the value of such product candidates. We will continue, however, to pursue a variety of initiatives to monetize these product candidates on appropriate terms.

These eight product development programs consist of:

Product Candidate	Disease/Indication	Phase of Development*	Licensor	Licensed Territory
MN-001	Bronchial asthma	Phase III clinical trial initiated in Q4, 2006 and terminated in Q2, 2007; Once-per-day oral dosing formulation prototypes developed	Kyorin Pharmaceutical	Worldwide, except Japan, China, Taiwan and South Korea
MN-001	Interstitial cystitis	Phase II/III clinical trial completed in Q1, 2007†	Kyorin Pharmaceutical	Worldwide, except Japan, China, Taiwan and South Korea
MN-029	Solid tumors	Phase I clinical trial completed in Q2, 2006; Second Phase I clinical trial completed in Q4, 2007	Angiogene Pharmaceuticals	Worldwide
MN-305	Generalized Anxiety Disorder/ Insomnia	Phase II/III clinical trial completed in Generalized Anxiety Disorder in Q2, 2006†; Phase II clinical trial in insomnia completed in Q4, 2007††	Mitsubishi Tanabe Pharma Corporation	Worldwide, except Japan and certain countries in Asia
MN-221	Preterm labor	Phase I clinical trial completed in Q2, 2007	Kissei Pharmaceutical	Worldwide, except Japan
MN-246	Urinary incontinence	Phase I clinical trial completed in Q4, 2006; Phase I food effects study completed in Q1, 2007	Mitsubishi Tanabe Pharma Corporation	Worldwide, except Japan and certain countries in Asia
MN-447	Thrombotic disorders	Preclinical	Meiji Seika Kaisha	Worldwide, except Japan and certain countries in Asia
MN-462	Thrombotic disorders	Preclinical	Meiji Seika Kaisha	Worldwide, except Japan and certain countries in Asia

* We define a product candidate to be in Phase II/III when the clinical trial design is such that, if the primary endpoint is met, the results may provide confirmatory evidence of efficacy if we choose to submit the clinical trial as a pivotal trial and the U.S. Food and Drug Administration, or FDA, chooses to review the clinical trial as a pivotal trial. However, in regulatory filings with the FDA, we have nominally described these clinical trials as Phase II clinical trials.

† Although positive signs of efficacy were obtained in the clinical trials conducted on MN-001 in interstitial cystitis and MN-305 in Generalized Anxiety Disorder, the predefined primary statistical endpoints of the clinical trials were not achieved; therefore, we would not anticipate submitting either clinical trial as a pivotal trial supporting a New Drug Application, or NDA, to the FDA.

†† In the Phase II clinical trial conducted on MN-305 in insomnia, the predefined statistical endpoint of the clinical trial was not achieved; therefore, we terminated any further development of MN-305 for the treatment of insomnia.

We have assembled a management team with extensive experience in the pharmaceutical and biotechnology industries, including experience in preclinical and clinical research and development, drug substance and product preparation, regulatory affairs and corporate development. We believe that our management team has the expertise necessary for assessing product opportunities, advancing product candidates through the clinical and regulatory processes and building and maintaining product development alliances.

Our Strategy

Our goal is to build a sustainable biopharmaceutical business through the successful development and commercialization of differentiated products for the treatment of diseases with unmet medical need in high-value therapeutic areas. Key elements of our strategy are as follows:

- *Concentrate our resources on our two prioritized product candidates, MN-221 and MN-166.* We may either pursue the development and commercialization of these product candidates ourselves or enter into strategic alliances with larger pharmaceutical companies to do the same. We intend to pursue further development of MN-221 for the treatment of acute exacerbations of asthma independently in the United States; however, following our recent completion of the Phase II clinical trial of MN-166 for the treatment of MS, we are not planning to pursue any further significant clinical development of MN-166 until we secure a strategic collaboration to further development of such product candidate. We intend to actively pursue strategic collaborations for these product development programs to draw on the development, regulatory and commercialization expertise and financial resources of larger biotechnology and pharmaceutical partners. We may also decide to pursue potential partners and potential acquirers of license rights to our programs in markets outside the United States, with the goal of retaining significant commercial participation in these product opportunities.
- *Maximize the value of the remainder of our diversified pipeline of existing product candidates.* We will strategically conduct development activities on the remainder of our existing product candidates, to the extent that we deem any further activities necessary to maintain our license rights or maximize their value, while aggressively pursuing a variety of initiatives to monetize these product candidates on appropriate terms.
- *Opportunistically in-license additional product candidates through our global industry relationships.* Over the long term, we intend to expand our pipeline of in-licensed product candidates by continuing to cultivate and strengthen our business relationships with pharmaceutical companies in Japan and other markets. We believe our ability to leverage industry relationships to acquire product candidates with high potential and existing preclinical or early clinical data from Japanese pharmaceutical companies provides us with a competitive advantage over other drug development companies in the U.S. market. We believe that additional diversification and expansion of our pipeline of product candidates will help maximize the commercial opportunity and mitigate the risks inherent in drug discovery and development.
- *Selectively add commercial capabilities as our product development programs mature.* To ensure our ability to build a sustainable business, we plan to selectively add commercial capabilities to our management team to support our evolution into a commercial entity as our product development programs mature. We may develop our own marketing and sales organization to promote certain of our product candidates.

Selected Financial Data

The selected financial data set forth below is derived from our audited consolidated financial statements and may not be indicative of future operating results. The following selected financial data should be read in conjunction with the Consolidated Financial Statements and notes thereto and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report. Amounts are in thousands, except per share amounts.

	Years ended December 31,					September 26, 2000 (inception) to December 31,
	2008	2007	2006	2005	2004	2008
Statements of Operations Data:						
Revenues	$ —	$ —	$ 264	$ 804	$ 490	$ 1,558
Operating expenses:						
Cost of revenues	—	—	147	674	438	1,258
Research and development	13,828	42,121	32,171	22,738	11,317	133,673
General and administrative	8,773	11,373	9,624	7,479	37,348	78,660
Total operating expenses	22,601	53,494	41,942	30,891	49,103	213,591
Operating loss	(22,601)	(53,494)	(41,678)	(30,088)	(48,613)	(212,033)
Impairment charge, net on long-term investments and asset	(1,260)	—	—	—	—	(1,260)
Foreign exchange loss	(88)	—	—	—	—	(88)
Other income, net	2,038	4,611	5,988	4,396	340	17,796
Income Taxes	(14)	(20)	—	—	—	(34)
Net loss	(21,925)	(48,903)	(35,690)	(25,692)	(48,273)	(195,619)
Accretion to redemption value of redeemable convertible preferred stock	—	—	—	(20)	(79)	(99)
Deemed dividend resulting from beneficial conversion on Series C redeemable convertible preferred stock	—	—	—	—	(31,264)	(31,264)
Net loss applicable to common stockholders	$ (21,925)	$ (48,903)	$ (35,690)	$ (25,712)	$ (79,616)	$(226,982)
Basic and diluted net loss per share	$ (1.82)	$ (4.16)	$ (3.52)	$ (2.88)	$(1,592.32)	
Shares used to compute basic and diluted net loss per share(1)	12,072,027	11,752,139	10,130,920	8,928,533	50,000	

(1) As a result of the conversion of our preferred stock into 6,678,285 shares of our common stock upon completion of our IPO in February 2005, there is a lack of comparability in the basic and diluted net loss per share amounts for the periods presented above.

	As of December 31,				
	2008	2007	2006	2005	2004
Balance Sheet Data:					
Cash, cash equivalents and marketable securities available-for-sale	$ 19,297	$ 70,635	$ 104,051	$ 138,701	$ 50,801
Working capital	17,836	65,938	100,102	134,633	48,704
Long-term investments	24,047	—	—	—	—
Long-term asset	5,793	—	—	—	—
Total assets	50,224	73,752	111,591	142,394	53,769
Redeemable convertible preferred stock	—	—	—	—	43,483
Deficit accumulated during the development stage	226,982	(205,057)	(156,154)	(120,465)	(94,753)
Total stockholders' equity	48,045	66,608	100,981	135,708	7,669

Management's Discussion and Analysis of Financial Condition and Results of Operations

Overview

Background

We are a biopharmaceutical company focused on acquiring and developing novel, small molecule therapeutics for the treatment of diseases with unmet medical need with a specific focus on the U.S. market. Through strategic alliances primarily with Japanese pharmaceutical companies, we hold rights to a diversified portfolio of clinical and preclinical product candidates, each of which we believe has a well-characterized and differentiated therapeutic profile, attractive commercial potential and patent assets having claims of commercially adequate scope.

We are a development stage company. We have incurred significant net losses since our inception. At December 31, 2008, from inception, our accumulated deficit was approximately $227.0 million, including $43.9 million of non-cash stock-based compensation charges related to employee stock-based compensation and founders' warrants. We expect to incur substantial net losses for the next several years as we continue to develop our existing product candidates and over the long-term as we expand our research and development programs and acquire or in-license products, technologies or businesses that are complementary to our own.

Revenues and Cost of Revenues

We have not generated any revenues from licensing, milestones or product sales to date, and we do not expect to generate any revenues from the commercialization of our product candidates within the next several years, if at all. Our revenues to date have been generated from providing development management services under master service agreements with Asahi Kasei Pharma Corporation and Argenes, Inc., pursuant to which we billed consulting fees and our pass-through clinical contract costs. The primary costs associated with our revenue were the clinical contract costs we incurred and passed-through to our customer. Our agreement with Asahi Kasei Pharma Corporation has been completed, and we terminated our agreement with Argenes, Inc. Therefore, we will not generate any further revenue from these agreements.

Research and Development

Our research and development expenses consist primarily of the license fees related to our product candidates, salaries and related employee benefits, costs associated with the preclinical and clinical development of our product candidates, costs associated with non-clinical activities, such as regulatory expenses, and pre-commercialization manufacturing development activities. We use external service providers to manufacture

our product candidates to be used in clinical trials and for the majority of the services performed in connection with the preclinical and clinical development of our product candidates; therefore, these research and development expenses consist substantially of external costs, such as fees paid to consultants, contract research organizations, contract manufacturers and other external service providers, including professional fees and costs associated with legal services, patents and patent applications for our intellectual property. Internal research and development expenses consist of costs of compensation and other expenses for research and development personnel, supplies, materials, facility costs and depreciation. Research and development costs are expensed as incurred or accrued based on certain contractual factors such as for estimates of work performed, milestones achieved, patient enrollment and experience with similar contracts. As actual costs become known, accruals are adjusted. To date, our estimates have not differed significantly from the actual costs incurred.

The following table summarizes our research and development expenses for the periods indicated for each of our product candidates. To the extent that costs, including personnel costs, are not tracked to a specific product development program, such costs are included in the "Unallocated" category (in thousands):

Product Candidate	Disease/Indication	Year ended December 31, 2008	2007	2006
MN-221	Acute exacerbations of asthma	$ 6,542	$ 4,188	$ 814
MN-166	Multiple sclerosis	3,363	9,512	7,965
MN-001	Bronchial asthma	73	14,436	6,013
MN-001	Interstitial cystitis	11	377	2,637
MN-029	Solid tumors	796	2,591	4,359
MN-305	Generalized Anxiety Disorder/Insomnia	18	5,309	3,735
MN-221	Preterm labor	99	873	618
MN-246	Urinary incontinence	(17)	1,771	3,708
MN-447	Thrombotic disorders	123	416	407
MN-462	Thrombotic disorders	5	297	406
SOCC	Cancer; inflammatory diseases	—	—	24
Unallocated		2,815	2,351	1,485
Total research and development		$13,828	$42,121	$32,171

As of the end of the second quarter of 2007, we determined to focus our resources on the development of our two prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and MN-166 for the treatment of MS. However, following completion of the Phase II clinical trial of MN-166 for the treatment of MS in the second quarter of 2008, we have not undertaken, nor do we plan to undertake, any further significant clinical development of MN-166 until such time that we secure a strategic collaboration to advance MN-166 into Phase III clinical development. We anticipate that our research and development expenses will increase with respect to MN-221 in future periods as we continue development and launch clinical trials in support of potential commercialization of this product candidate and decrease with respect to MN-166 in future periods as we will limit expenditures on this product candidate to those development activities deemed necessary, if any, to maximize its value for purposes of securing a partner for Phase III clinical development. However, at this time, due to the risks inherent in the clinical development process and given the early stage of our MN-221 product development program, we are unable to estimate with any certainty the costs that we will incur in the continued development of such product candidate for potential commercialization.

We intend to limit our expenditures on the remainder of our existing product candidates to only those activities deemed necessary to maintain our license rights or maximize the value of such product candidates, if any, while pursuing a variety of initiatives to monetize such product candidates on appropriate terms. As a result, we expect that research and development expenses will decrease or otherwise remain low for the remainder of our existing product candidates in future periods.

General and Administrative

Our general and administrative expenses primarily consist of salaries, benefits and consulting and professional fees related to our administrative, finance, human resources, business development, legal and information systems support functions. In addition, general and administrative expenses include facilities and insurance costs. General and administrative costs are expensed as incurred or accrued based on monitoring the status of the specified project, contractual factors such as milestones or retainer fees, services provided and invoices received. As actual costs become known to us, we adjust our accruals. To date, general and administrative accruals have not differed significantly from the actual costs incurred.

We anticipate that our general and administrative expenses will continue to increase in future periods as we expand our infrastructure and incur additional costs for insurance and professional and consulting fees associated with operating as a dual-listed public company and supporting our product development programs and business development activities.

Impairment Charge, Net on Long-Term Investments and Long-Term Asset

Our impairment charge consists of loss recognized on our long-term investments as a result of other-than-temporary declines in the fair value of such securities, offset by the gain attributable to our ARS Put (pursuant to the ARS Rights Offer described below). Our long-term investments consist of auction rate securities, or ARS, all of which had AAA ratings at the time of purchase, that principally represent interests in municipal bonds, government-guaranteed student loans, insurance notes and portfolios of securities (primarily commercial paper) and our long-term asset consists of an ARS Put. At December 31, 2008, $21.9 million of our ARS consisted primarily of municipal bonds and government-guaranteed student loan securities and $2.1 million of our ARS consisted of private placement securities. None of the underlying collateral for our ARS consisted of subprime mortgages or collateralized debt obligations. Our ARS were designated as trading securities and have been classified as long-term given the time frame in which we can readily convert these securities into cash. ARS are generally long-term debt instruments that historically have provided liquidity through a "Dutch" auction process that resets the applicable interest rate at predetermined calendar intervals, typically seven, 28, 35 or 49 days.

Through December 31, 2007, only our ARS consisting of private placement securities had experienced failed auctions. However, in February 2008, all of our ARS began experiencing failed auctions. Due to continued negative conditions in the global credit markets, our ARS have continued to fail at auction with few to no trades in either the primary or the secondary markets. As such, with the required adoption of Statement of Financial Accounting Standards, or SFAS, No. 157, *Fair Value Measurements*, as of January 1, 2008, we determined the fair value of our ARS portfolio primarily on Level 3 criteria, which resulted in our reliance on a discounted cash flow valuation model with assumptions related to interest rates, maturities and liquidity determined by us based on the credit quality of the security, the credit quality of the associated insurer, if applicable, the respective prospectus and the credit market outlook. *See Note 2, Fair Value Measurements, of our financial statements for further information regarding the valuation of our ARS.*

In August 2008, UBS AG and its affiliates, or UBS, the brokerage firm through which we purchased the majority of our ARS investments, entered into a settlement with the SEC, the New York Attorney General and other state agencies. Under the settlement, UBS issued to us Auction Rate Security Rights, which would allow us to sell to UBS our ARS held in accounts with UBS, or ARS Rights Offer. Pursuant to the ARS Rights Offer, we received the right to sell to UBS the ARS held in accounts with UBS at par value at any time during the period beginning June 30, 2010 and ending July 2, 2012, or ARS Put. As part of the settlement, UBS also offered to us a no net cost loan program, or ARS Loan, whereby we would be able to borrow up to 75 percent of the market value, as determined by UBS at its sole discretion, of our ARS that have been pledged as collateral at an interest cost that would not exceed the interest being paid on the underlying ARS investments. Under the ARS Loan program, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. In November 2008, we accepted the ARS Rights Offer. In January 2009, we were approved for the ARS

Loan in the amount of $15.9 million and drew down the entire preapproved amount. In addition, in February 2009, we borrowed an additional $2.2 million under the ARS Loan, bringing the total amount outstanding under the ARS Loan to $18.1 million, following UBS' decision to increase our availability under the ARS Loan. All cash received under the ARS Loan was invested in money market accounts.

Although we have the right to sell to UBS the ARS subject to the ARS Put at par beginning June 30, 2010, we determined the fair market value of the respective ARS without consideration of the ARS Put because they are separate contractual agreements under SFAS No. 157.

As of December 31, 2008, the carry value of all of our ARS had been reduced by $7.1 million, from $31.1 million to $24.0 million, to reflect the estimated change in fair market value due primarily to a lack of liquidity. Although our ARS continue to pay interest according to their stated interest terms, we deemed the reduction of the overall fair value of our ARS portfolio as other-than-temporary due to the continued illiquidity of the primary ARS market and our expectation as to when we may be required to liquidate our ARS for operating purposes.

We elected to measure the ARS Put under the fair value option of SFAS No. 159 to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. The fair value of the ARS Put was also determined by a discounted cash flow valuation model with assumptions being made related to interest rate, maturity and liquidity. Based on our discounted cash flow valuation, we recorded a gain of $5.8 million in our consolidated statement of operations. In addition, we recorded the ARS Put as a long-term asset in our consolidated balance sheet, given that the ARS Put is not exercisable until June 2010 at the earliest.

Foreign Exchange Loss

To date, we have conducted most of our clinical trials in the United States. However, the Phase II clinical trial for MN-166 for the treatment of MS was conducted in Eastern Europe. When we entered into the euro-denominated contract with the CRO managing this clinical trial on our behalf, the U.S. dollar to euro conversion rate had remained fairly constant; therefore, we did not enter into a hedging program to mitigate our foreign exchange exposure at such time . We completed this clinical trial in the second quarter of 2008. Our foreign exchange loss in 2008 is attributable to the decline in the value of the U.S. dollar against the euro and is reflected in the remaining accrued payable for this foreign currency contract.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of the consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosure of contingent liabilities at the date of the consolidated financial statements, as well as the revenues and expenses during the reporting periods. We evaluate our estimates and judgments on an ongoing basis, including those related to our significant accruals. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are more fully described in Note 1 to our consolidated financial statements included elsewhere in this Annual Report. Our most critical accounting estimates include our recognition of research and development expenses, which impacts operating expenses and accrued liabilities, and stock-based compensation, which impacts operating expenses. We review our estimates, judgments and assumptions periodically and reflect the effects of revisions in the period in which they are deemed to be necessary. We believe that the following accounting policies are critical to the judgments and estimates used in preparation of our consolidated financial statements.

Research and Development Expenses

Research and development expenses consist of costs incurred to further our research and development activities and include salaries and related employee benefits, costs associated with clinical trials, costs associated with non-clinical activities such as toxicology testing, regulatory activities, research-related overhead expenses and fees paid to external service providers who conduct certain research and development activities on our behalf. We use external service providers and vendors to conduct clinical trials, to manufacture product candidates to be used in clinical trials and to provide various other products and services related to our product development programs. Research and development expenses also include fees for licensed technology for which technological feasibility has not been established and there are no alternative uses. Research and development costs are expensed as incurred or accrued based on certain contractual factors such as for estimates of work performed, milestones achieved, patient enrollment and experience with similar contracts. As actual costs become known, accruals are adjusted. To date, our estimates have not differed significantly from the actual costs incurred.

Long-term Investments and Long-term Asset

Our long-term investments consist of ARS, all of which had AAA ratings at the time of purchase, that principally represent interests in municipal bonds, government-guaranteed student loans, insurance notes and portfolios of securities (primarily commercial paper), and our long-term asset consists of the ARS Put. At December 31, 2008, $21.9 million of our ARS consisted primarily of municipal bonds and government-guaranteed student loan securities and $2.1 million of our ARS consisted of private placement securities. None of the underlying collateral for our ARS consisted of subprime mortgages or collateralized debt obligations. At December 31, 2008, our ARS were designated as trading securities and classified as long-term given the estimated time frame in which we can readily convert these securities into cash.

ARS are generally long-term debt instruments that historically have provided liquidity through a "Dutch" auction process that resets the applicable interest rate at predetermined calendar intervals, typically seven, 28, 35 or 49 days. Due to continued negative conditions in the global credit markets, our ARS have continued to fail at auction with few trades in either the primary or the secondary markets. As such, with the required adoption of SFAS No. 157 as of January 1, 2008, we determined the fair value of our ARS portfolio primarily on Level 3 criteria as prescribed by the accounting standard, which resulted in our reliance on a discounted cash flow valuation model with assumptions related to interest rates, maturities and liquidity determined by us based on the credit quality of the security, the credit quality of the associated insurer, if applicable, the respective prospectuses, and the credit market outlook. Our discounted cash flow valuation model took into consideration liquidity discounts ranging between three percent to 23 percent, LIBOR and 91- day Treasury bill rates at December 31, 2008 and assumed a portfolio maturity of seven years.

We elected to measure the ARS Put which is our right, pursuant to the UBS ARS Rights Offer, to sell to UBS our ARS held in accounts with UBS at par value at any time during the period beginning June 30, 2010 under the fair value option of SFAS 159 to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. The fair value of the ARS Put was also determined by a discounted cash flow valuation model effectively using a liquidity discount of approximately seven percent, an interest rate of approximately five percent which took into consideration the brokerage firm's weighted average cost of capital and a maturity of one and one-half years, given the earliest exercise date of the ARS Put is June 2010.

Stock-Based Compensation

We grant options to purchase our common stock to our employees and directors under our Amended and Restated 2004 Stock Incentive Plan. Additionally, we have outstanding stock options that were granted under our 2000 General Stock Incentive Plan. The benefits provided under both of these plans are subject to the provisions of SFAS No. 123R, *Share-Based Payment,* which requires stock-based compensation for an award of equity instruments, including stock options and employee stock purchase rights, issued to employees to be recognized as a

cost in the consolidated financial statements. The cost of these awards is measured according to the grant date fair value of the stock award and is recognized over the period during which an employee is required to provide service in exchange for the award, which is usually the vesting period. In the absence of an observable market price for the stock award, the grant date fair value of the award would be based upon a valuation methodology that takes into consideration various factors, including the exercise price of the award, the expected term of the award, the current price of the underlying shares, the expected volatility of the underlying share price, the expected dividends on the underlying shares and the risk-free interest rate.

The valuation provisions of SFAS No. 123R require us to estimate certain variables, such as estimated volatility and expected life. If any of our estimations change, such changes could have a significant impact on the stock-based compensation amount we recognize.

Prior to 2006, we accounted for employee stock options and warrants using the intrinsic-value method in accordance with Accounting Principles Board, or APB, Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations, and adopted the disclosure-only provisions of SFAS No. 123, *Accounting for Stock-Based Compensation.*

Stock-based compensation expense, which is a non-cash charge, results from stock option and warrant issuances at exercise prices below the deemed fair value of the underlying common stock. With respect to stock options, we recognize this compensation expense on a straight-line basis over the vesting period of the underlying option, generally four years.

New Accounting Standards Not Yet Adopted

The Financial Accounting Standards Board, or FASB, issued SFAS No. 141 (revised 2007), "*Business Combinations*" and SFAS No. 160, "*Noncontrolling Interests in Consolidated Financial Statements, an amendment of Accounting Research Bulletin No. 51.*" SFAS No. 141R will change how business acquisitions are accounted for and will impact financial statements both on the acquisition date and in subsequent periods. SFAS No. 160 will change the accounting and reporting for minority interests, which will be recharacterized as noncontrolling interests and classified as a component of equity. SFAS No. 141R and SFAS No. 160 are effective for us beginning in the first quarter of fiscal year 2009. Early adoption is not permitted. The impact of adopting SFAS No. 141R on our consolidated financial statements will depend on the economic terms of any future business combinations transactions. We believe the adoption of SFAS No. 160 will not have a material impact on our consolidated financial statements.

Results of Operations

Comparison of the Years ended December 31, 2008 and 2007

Revenues

There were no revenues for the year ended December 31, 2008 or December 31, 2007.

Research and Development

Research and development expenses for the year ended December 31, 2008 were $13.8 million, a decrease of $28.3 million when compared to $42.1 million for the year ended December 31, 2007. The decrease in research and development expenses primarily resulted from our business decision to focus on the development of our two prioritized assets, MN-221 for the treatment of acute exacerbations of asthma and MN-166 for the treatment of MS. This decrease in research and development expenses primarily resulted from the following:

- a decrease of $14.4 million related to the termination of a Phase III clinical trial for MN-001 for the treatment of bronchial asthma;

- a decrease of $5.3 million related to the completion of the Phase II clinical trial for insomnia and the ceased further clinical development of MN-305 for the treatment of Generalized Anxiety Disorder/ insomnia; and
- a decrease of $6.1 million due to the completion of the two year Phase II clinical trial for MN-166 for the treatment of MS; and
- a decrease of $4.9 million related primarily to the completion of clinical trials for MN-029 for the treatment of solid tumors, MN-221 for the treatment of preterm labor and MN-246 for the treatment of urinary incontinence;

which decrease was offset primarily by a net increase of $2.4 million related to the conduct of Phase II clinical trials for MN-221 for the treatment of acute exacerbations of asthma.

General and Administrative

General and administrative expenses were $8.8 million for the year ended December 31, 2008, a decrease of $2.6 million when compared to $11.4 million for the year ended December 31, 2007. The decrease was primarily due to a $1.2 million decrease in stock-based compensation and a $1.4 million decrease related to reduced administrative headcount and fees paid to third-party consultants.

Impairment Charge, Net on Long-Term Investments and Long-Term Asset

For the year-ended December 31, 2008, we recorded a $7.1 million other-than-temporary write-down of the carrying value of our ARS based upon a discounted cash flow valuation analysis of our entire ARS portfolio conducted on a security-by-security basis, the outlook of the ARS market and our expectation as to when we may be required to liquidate our ARS for operating purposes, which was offset by a gain of $5.8 million recognized on the ARS Put which is linked to certain of our ARS.

Foreign Exchange Loss

At December 31, 2007, the conversion rate was approximately $1.30 U.S. dollars for each euro, which approximated the conversion rate at the time we entered into the contract with the CRO managing our Phase II clinical trial for MN-166 for the treatment of MS which was completed in the second quarter of 2008. At December 31, 2008, the conversion rate was approximately $1.41 U.S. dollars for each euro, and we reduced the accrued liability related to this clinical research contract based on reconciliations performed through year end. This resulted in a $0.1 million foreign exchange loss related to the revaluation of our euro-denominated liability for the year ended December 31, 2008.

Interest Income

Interest income primarily consisted of income earned on our cash and investment balances and totaled $2.0 million for the year ended December 31, 2008, a decrease of $2.6 million when compared to $4.6 million for the year ended December 31, 2007. The decrease was due to a decrease in our investment balances and overall lower yields on our investments due to the economic recession.

Comparison of the Years Ended December 31, 2007 and 2006

Revenues

There were no revenues for the year ended December 31, 2007, a decrease of $0.3 million when compared to $0.3 million for the year ended December 31, 2006. The decrease in revenues was due to a lack of activity under our master services agreement with Argenes, Inc., which was terminated in June 2007.

Research and Development

Research and development expenses for the year ended December 31, 2007 were $42.1 million, an increase of $9.9 million when compared to $32.2 million for the year ended December 31, 2006. The increase in research and development expenses was primarily due to:

- an increase of $8.4 million related to the advancement and subsequent termination of a Phase III clinical trial for MN-001 for the treatment of bronchial asthma;
- an increase of $4.7 million related to the completion of a Phase II clinical trial for MN-305 for the treatment of insomnia;
- an increase of $3.4 million in our prioritized drug development program for MN-221 for the treatment of acute exacerbations of asthma primarily related to the advancement of a Phase II clinical trial and market research;
- an increase of $1.6 million in our prioritized drug development program for MN-166 for the treatment of MS primarily related to preclinical studies, manufacturing of drug, market research and consulting services;
- an increase of $0.7 in our other drug development programs and unallocated research and development expenditures; and
- an increase of $0.4 million in stock based compensation;

which increase was offset by $9.3 million related to the completion of clinical trials related to the product development programs for MN-029 for the treatment of solid tumors, MN-305 for the treatment of Generalized Anxiety Disorder, MN-001 for the treatment of IC and MN-246 for the treatment of urinary incontinence.

General and Administrative

General and administrative expenses were $11.4 million for the year ended December 31, 2007, an increase of $1.8 million when compared to $9.6 million for the year ended December 31, 2006. The increase in general and administrative expenses was primarily due to:

- an increase of $1.4 million of stock-based compensation expense; and
- an increase of $1.1 million in compensation-related expenses due to salaries and severance payments;

which increase was offset by a decrease of $0.4 million in legal fees and a decrease of $0.3 million in financial advisor and other fees.

Interest Income

Interest income primarily consisted of income earned on our cash and investment balances. Interest income decreased $1.4 million to $4.6 million for the year ended December 31, 2007 from $6.0 million for the year ended December 31, 2006. The decrease in interest income was primarily due to decreased investment balances and lower rates of return on our investments.

Liquidity and Capital Resources

At December 31, 2008, we had $49.1 million in cash, cash equivalents, investment securities and a long-term asset consisting of the ARS Put as compared to $70.6 million of cash, cash equivalents and marketable securities available-for-sale as of December 31, 2007, which decrease of $21.5 million was primarily a result of our operating loss of $21.9 million. At December 31, 2007, we had $70.6 million in cash, cash equivalents and marketable securities available-for-sale as compared to $104.1 million of cash, cash equivalents and marketable securities available-for-sale at December 31, 2006, which decrease of $33.5 million was primarily a result of our

operating loss of $48.9 million offset by the aggregate proceeds received from our public offering of common stock in February 2007.

Net cash used in operating activities amounted to $21.1 million for the year ended December 31, 2008, primarily due to the net loss incurred during the year ended December 31, 2008 of $21.9 million. Net cash provided by investing activities for the year ended December 31, 2008 consisted of $21.6 million related to the net maturity of investments. Net cash provided by financing activities amounted to $0.1 million for the year ended December 31, 2008, primarily due to the net proceeds received from our employee stock purchase plan.

Our future capital uses and requirements will depend on, and could increase significantly as a result of, many forward-looking factors, including the following:

- progress of our clinical trials and other research and development activities, including expenses to support the clinical development of MN-221 for the treatment of acute exacerbations of asthma and milestone payments that may become payable to Kissei Pharmaceutical based on the progress of such product development program;
- our ability to establish and maintain strategic collaborations, including licensing and other arrangements;
- the scope, prioritization and number of our product development programs;
- the time and costs involved in obtaining regulatory approvals;
- the costs involved in filing, prosecuting, enforcing and defending patent claims and other intellectual property rights;
- the costs of securing manufacturing arrangements for clinical and commercial production of our product candidates;
- the costs of establishing sales and marketing capabilities and commercialization activities if we obtain regulatory clearances to market our product candidates; and
- the extent to which we may in-license, acquire or invest in other indications, products, technologies and businesses.

Until we can generate significant continuing revenues, we expect to satisfy our future cash needs through strategic collaborations, private or public sales of our securities, debt financings or licensing transactions, involving all or a portion of our product candidates, to the extent we are able to do so. We cannot be certain that additional sources of capital will be available to us on acceptable terms, or at all. If sources of capital are not available, we may not be in a position to pursue present or future business opportunities that require financial commitments, and we may be required to delay, reduce the scope of or terminate one or more of our product development programs or our commercialization efforts, curtail our efforts to acquire new product candidates or relinquish rights to our technologies or product candidates.

Sources of Liquidity

Since our inception, our operations have been financed primarily through the private placement of our equity securities and through the public sale of our common stock, net of treasury stock repurchases. Over the three years ended December 31, 2008, we have completed the following sales of equity securities:

- on March 2, 2006, we issued and sold 125,000 shares of common stock to a founder in exercise of warrants for aggregate proceeds of approximately $0.1 million;
- in August 2006, we issued and sold 150,000 shares of common stock to a founder in exercise of warrants and we issued 1,000 shares to a former employee in exercise of stock options for aggregate proceeds of approximately $0.2 million; and

- on February 1, 2007, we completed a public offering of 1,000,000 shares of common stock for aggregate proceeds of $10.6 million, net of underwriting discounts and commissions and certain other costs associated with the offering.

In February, April and August 2007, a founder exercised warrants to purchase 65,984, 108,003 and 109,592 shares of our common stock, respectively, at $1.00 per share in cashless exercises that resulted in the issuance of 60,000, 100,000 and 100,000 shares of common stock, respectively.

In January 2007, a founder exercised warrants to purchase 359,248 shares of our common stock at $1.00 per share in a cashless exercise that resulted in the issuance of 332,196 shares of common stock. In September 2007, a founder exercised warrants to purchase 367,828 shares of our common stock at $1.00 per share in a cashless exercise that resulted in the issuance of 317,851 shares of common stock. At December 31, 2007, no underlying shares of common stock remained subject to purchase under the terms of the founders' warrants.

Auction Rate Securities. At December 31, 2008, our long-term investments included $31.1 million (at par value) of ARS. With the continued negative conditions in the global credit markets, these ARS have experienced multiple failed auctions, as the amount of securities submitted for sale has exceeded the amount of purchase orders. As a result of the failed auctions, these securities are currently not liquid in the primary market. The majority of our ARS are secured by parts of government-guaranteed student loans, and all of our ARS continue to pay interest according to their stated terms (generally 120 basis points over the 91-day U.S. Treasury bill rate or 200 basis points over LIBOR) with interest rates resetting every seven to 63 days. While it is not our intent to hold our ARS until their ultimate stated maturities, these securities are scheduled to mature between 2022 and 2024.

Because an active primary market for ARS does not exist, we utilized a discounted cash flow valuation model utilizing liquidity discounts ranging from three percent to 23 percent to determine the estimated fair value of our ARS investments on a security-by-security basis. We also took into consideration the brokerage firm's pricing model, if applicable, the tax status (taxable vs. tax exempt) of the security, credit quality of the issuer, assumed maturity (seven years), insurance wraps and the portfolio composition. We also made assumptions regarding future cash flows and the likelihood of the ARS being redeemed or refinanced. Although our ARS continue to pay interest at their stated terms, we have recognized a realized loss of $1.3 million in our consolidated statement of operations based on our determination that the loss of value was an other-than-temporary impairment, net of a gain realized on our ARS Put (described below). The carrying value in long-term investments for these ARS at December 31, 2008 was $24.0 million.

ARS Rights Offer, ARS Put and ARS Loan. In August 2008, UBS, the brokerage firm through which we purchased the majority of our ARS investments, entered into a settlement with the SEC, the New York Attorney General and other state agencies. Under the settlement, UBS issued to us the ARS Rights Offer. Pursuant to the ARS Rights Offer, we received the ARS Put. As part of the settlement, UBS also offered to us the ARS Loan, whereby we would be able to borrow up to 75 percent of the market value, as determined by UBS at its sole discretion, of our ARS that have been pledged as collateral at an interest cost that would not exceed the interest being paid on the underlying ARS investments. Under the ARS Loan program, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. In November 2008, we accepted the ARS Rights Offer. In January 2009, we were approved for the ARS Loan in the amount of $15.9 million and drew down the entire preapproved amount. In addition, in February 2009, we borrowed an additional $2.2 million under the ARS Loan, bringing the total amount outstanding under the ARS Loan to $18.1 million, following UBS' decision to increase our availability under the ARS Loan. All cash received under the ARS Loan was invested in money market accounts.

We elected to measure the ARS Put under the fair value option of SFAS No. 159 to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. The fair value of the ARS Put was also determined by a discounted cash flow valuation model effectively using a liquidity discount of approximately seven percent and an interest rate of approximately five percent, which took into consideration the

brokerage firm's weighted average cost of capital. Based on our discounted cash flow valuation, we recorded a gain of $5.8 million in our consolidated statement of operations.

The fair value of our ARS and the ARS Put are based in part on management's estimates and assumptions. In the event of actual market exchanges, if any, these assumptions may prove materially different from those assumed in our valuation models and amounts may be materially different than our estimates. For example, a reduction of the expected term to redemption by two years for our ARS portfolio yielded in our models a net increase in valuation of our ARS of $1.8 million and an increase in expected term to redemption by two years for our ARS portfolio yielded in our model a decrease in valuation of our ARS of $1.7 million. Other factors that may impact the valuation of our ARS and the ARS Put include changes to the credit quality of the underlying assets, discount rates, counterparty risk and the condition of the overall credit market.

Capital Resources

We have consumed substantial amounts of capital since our inception. Our current cash and cash equivalent balances are our principal sources of liquidity. We believe that our existing cash and cash equivalents as of December 31, 2008 will be sufficient to fund our anticipated operating requirements through at least December 31, 2009. Although we believe that our existing capital resources will be sufficient to fund our operating requirements through at least December 31, 2009, including all of our planned research and development activities, we anticipate that we may require significant additional financing in the future to fund our operations and intended research and development activities.

Other Significant Cash and Contractual Obligations

The following summarizes our scheduled long-term contractual obligations that will affect our future liquidity as of December 31, 2008 (in thousands):

	Payment Due By Period				
Contractual Obligations	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
Operating leases	$1,522	$559	$962	$—	$—
License obligations(1)	—	—	—	—	—
Total(2)	$1,522	$559	$962	$—	$—

(1) Under the license agreements for our product candidates, we may be required to make future payments based upon the occurrence of certain milestones related to clinical development, regulatory or commercial events. We will also be required to pay royalties on any net sales of the licensed products, if any are approved by the FDA or foreign regulatory authorities for commercial sale. These milestone payments and royalty payments under our license agreements are not included in the table above because we cannot determine when, or if, the related milestones will be achieved or the events triggering the commencement of payment obligations will occur at present.

(2) We also enter into agreements with third parties to conduct our clinical trials, manufacture our product candidates, perform data collection and analysis and other services in connection with our product development programs. Our payment obligations under these agreements depend upon the progress of our product development programs. Therefore, we are unable at this time to estimate with certainty the future costs we will incur under these agreements.

Quantitative and Qualitative Disclosures About Market Risk

Our primary exposure to market risk due to changes in interest rates relates primarily to the increase or decrease in the amount of interest income we can earn on our investment portfolio. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. Our risk associated with fluctuating interest rates is limited to our investments in interest rate sensitive financial instruments. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. We mitigate default risk by investing in investment grade securities. A hypothetical 100 basis point adverse move in interest rates along the entire interest rate yield curve would not materially affect the fair value of our interest sensitive financial instruments due to their relatively short term nature. Declines in interest rates over time will, however, reduce our interest income, while increases in interest rates over time will increase our interest income.

Our long-term investments consist of ARS, which are debt instruments with long-term maturities in which the interest rates reset in short intervals through "Dutch" auctions by matching buyers and sellers. Our long-term asset consists of an ARS Put. All of our ARS had AAA ratings at the time of purchase and principally represent interests in municipal bonds, government-guaranteed student loans, insurance notes and portfolios of securities (primarily commercial paper). None of the underlying collateral for our ARS consisted of subprime mortgages or collateralized debt obligations. At December 31, 2008, $21.9 million of our ARS consisted primarily of municipal bonds and government-guaranteed student loan securities and $2.1 million of our ARS consisted of private placement securities.

The negative conditions in the global credit markets have prevented most investors, including ourselves, from liquidating certain holdings of ARS because the amount of securities submitted for sale has exceeded the amount of purchase orders for the securities. If there is insufficient demand for the securities at the time of the "Dutch" auction, the auction may not be completed and the interest rates may be reset to the maximum interest rate applicable to the specific securities being auctioned as per the official statement issued at the initial bond sale. When auctions for these securities fail, as they did in 2008, the investments may not be readily convertible to cash until a future auction of these investments is successful or they are redeemed or repurchased, sold through a secondary market or mature. Through December 31, 2008, we successfully liquidated $16.7 million of ARS at par value, which we reinvested in cash equivalents.

In the fourth quarter of 2008, we received and accepted the ARS Rights Offer from UBS. Pursuant to the ARS Rights Offer, we received the ARS Put. In January 2009, we were approved by UBS for the ARS Loan in the amount of $15.9 million and drew down the entire preapproved amount. In addition, in February 2009, we borrowed an additional $2.2 million under the ARS Loan, bringing the total amount outstanding under the ARS Loan to $18.1 million, following UBS' decision to increase our availability under the ARS Loan. Under the ARS Loan program, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. All cash received under the UBS Loan was invested in money market accounts. Because the interest that we pay on the ARS Loan will not exceed the interest that we receive on the ARS pledged as security for the ARS Loan and which are held in the collateral account, we do not believe that this arrangement subjects us to additional interest rate risk.

Market for Registrant's Common Equity and Related Stockholder Matters

Market Information

Our common stock is traded on the Hercules Market of the Osaka Securities Exchange under the symbol "4875" and on the Nasdaq Global Market under the symbol "MNOV." Our stock has been traded on the Hercules Market since February 8, 2005 and on the Nasdaq Global Market since December 7, 2006.

The following table sets forth the high and low sale prices per share of our common stock as reported on the Nasdaq Global Market.

	Common Stock Price	
	High	**Low**
Fiscal year ended December 31, 2007		
First quarter	$14.40	$10.56
Second quarter	$11.00	$ 8.30
Third quarter	$ 9.02	$ 6.35
Fourth quarter	$ 9.00	$ 4.29
Fiscal year ended December 31, 2008		
First quarter	$ 4.78	$ 3.30
Second quarter	$ 4.96	$ 3.31
Third quarter	$ 4.76	$ 2.21
Fourth quarter	$ 2.63	$ 1.50

Holders of Common Stock

As of March 24, 2009, there were approximately 5,600 holders of record of our common stock.

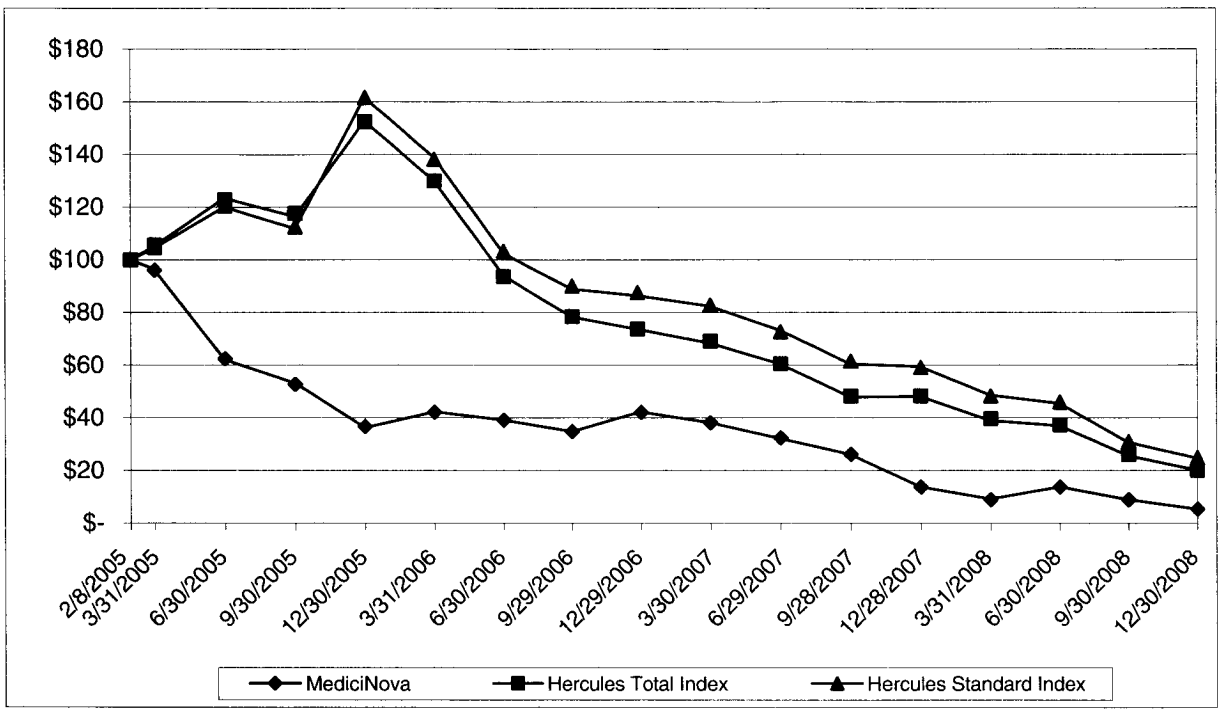
Dividend Policy

We have never declared or paid any cash dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future. We expect to retain our future earnings, if any, to fund the growth and development of our business.

Performance Graphs

The following graph illustrates a comparison of the total cumulative stockholder return on our common stock since February 8, 2005, which is the date our common stock first began trading on the Hercules Market of the Osaka Securities Exchange, to two indices: the Hercules Total Index and the Hercules Standard Index. The graph assumes an initial investment of $100 on February 8, 2005, and that all dividends were reinvested.

Comparison of Cumulative Total Return on Investment
Since February 8, 2005*

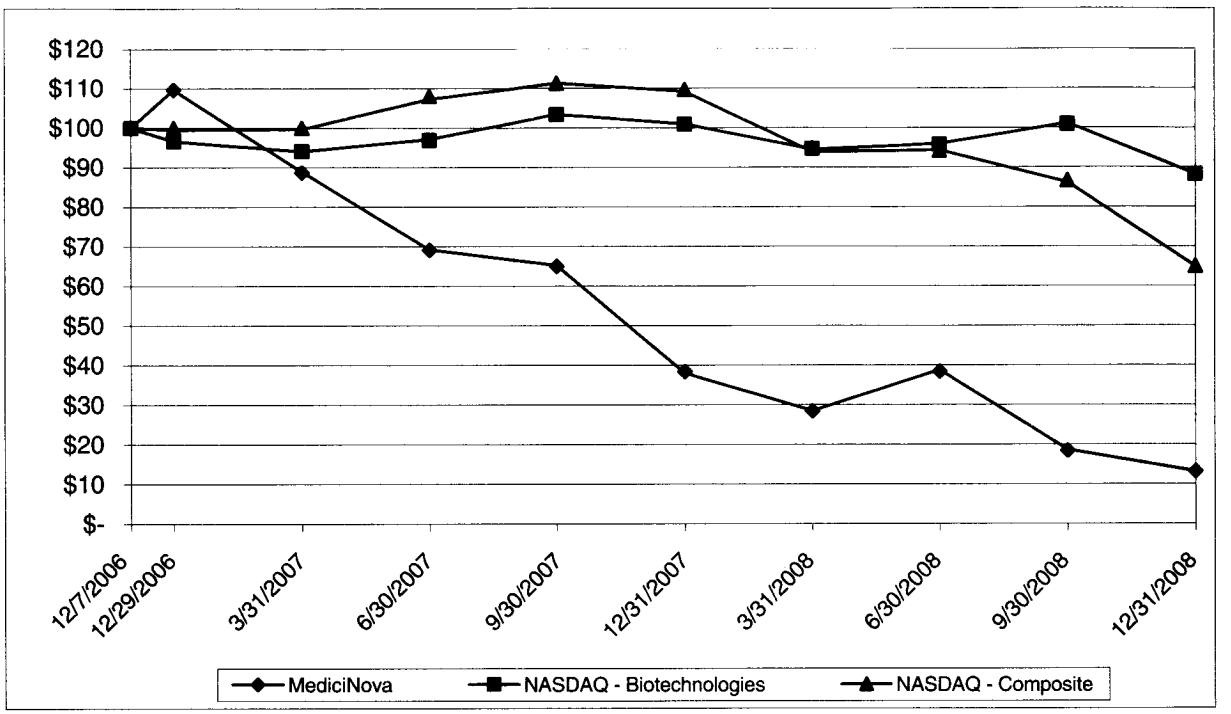


	2/8/2005	12/30/2005	12/29/2006	12/28/2007	12/30/2008
MediciNova, Inc	$100	$ 36	$42	$14	$ 5
Hercules Total Index	$100	$153	$73	$48	$20
Hercules Standard Index	$100	$162	$86	$59	$25

* No cash dividends have been declared or paid on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

The following graph illustrates a comparison of the total cumulative stockholder return on our common stock since December 7, 2006 which is the date our common stock first began trading on the Nasdaq Global Market, to two indices: the NASDAQ Composite Index and the NASDAQ Biotechnology Index. The graph assumes an initial investment of $100 on December 7, 2006, and that all dividends were reinvested.

Comparison of Cumulative Total Return on Investment
Since December 7, 2006*



	12/7/2006	6/30/2007	12/31/2007	6/30/2008	12/31/2008
MediciNova, Inc	$100	$ 69	$ 38	$39	$13
NASDAQ Biotechnologies Index	$100	$ 97	$101	$96	$88
NASDAQ Composite Index	$100	$107	$109	$94	$65

* No cash dividends have been declared or paid on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, or misstatements due to error, if any, have been detected. While we believe that our disclosure controls and procedures and internal control over financial reporting are and have been effective, we intend to continue to examine and refine our disclosure controls and procedures and internal control over financial reporting and to monitor ongoing developments in these areas.

As of December 31, 2008, management conducted an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Annual Report.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, management conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2008 based on the framework in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in Internal Control—Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2008.

At June 30, 2008, we qualified as a smaller reporting company under the Securities Act of 1933, as amended, and the Exchange Act due to our market capitalization. As a result of qualifying as a smaller reporting company, this Annual Report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to temporary rules of the SEC that permit us to provide only management's report in this Annual Report.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting in our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
MediciNova, Inc.

We have audited the accompanying consolidated balance sheets of MediciNova, Inc. (a development stage company) as of December 31, 2008 and 2007, and the related consolidated statements of operations and cash flows for each of the three years in the period ended December 31, 2008 and for the period from September 26, 2000 (inception) through December 31, 2008, and for the statements of stockholders' equity for the period from September 26, 2000 (inception) to December 31, 2000 and for each of the eight years in the period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of MediciNova, Inc. (a development stage company) at December 31, 2008 and 2007, and the results of its consolidated operations and its cash flows for each of the three years in the period ended December 31, 2008 and the period from September 26, 2000 (inception) through December 31, 2008, and the consolidated statements of stockholders' equity for the period from September 26, 2000 (inception) to December 31, 2000 and each of the eight years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

San Diego, California
March 27, 2009

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED BALANCE SHEETS

	December 31, 2008	December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 19,297,284	$ 18,778,938
Marketable securities available-for-sale (Note 2)	—	51,856,571
Prepaid expenses and other current assets	718,317	2,443,612
Total current assets	20,015,601	73,079,121
Property and equipment, net	368,299	673,317
Long-term investments (Note 2)	24,047,314	—
Long-term asset (Note 2)	5,792,701	—
Total assets	$ 50,223,915	$ 73,752,438
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 392,572	$ 2,880,462
Accrued expenses	1,011,916	3,619,861
Income taxes payable	9,748	20,000
Accrued compensation and related expenses	765,147	620,604
Total current liabilities	2,179,383	7,140,927
Deferred rent	—	3,310
Total liabilities	2,179,383	7,144,237
Commitments		
Stockholders' equity:		
Common stock, $0.001 par value; 30,000,000 shares authorized at December 31, 2008 and 20,000,000 shares authorized at December 31, 2007; 12,072,027 shares issued at December 31, 2008 and 2007	12,072	12,072
Additional paid-in capital	276,361,775	273,189,063
Accumulated other comprehensive loss	(29,744)	(131,466)
Treasury stock, at cost; 87,314 shares at December 31, 2008 and 124,581 shares at December 31, 2007	(1,317,362)	(1,404,088)
Deficit accumulated during the development stage	(226,982,209)	(205,057,380)
Total stockholders' equity	48,044,532	66,608,201
Total liabilities and stockholders' equity	$ 50,223,915	$ 73,752,438

See accompanying notes.

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years ended December 31,			Period from September 26, 2000 (inception) to December 31, 2008
	2008	2007	2006	
Revenues	$ —	$ —	$ 263,877	$ 1,558,227
Operating expenses:				
Cost of revenues	—	—	146,607	1,258,421
Research and development	13,827,651	42,121,095	32,170,847	133,672,698
General and administrative	8,773,695	11,372,873	9,623,956	78,660,707
Total operating expenses	22,601,346	53,493,968	41,941,410	213,591,826
Operating loss	(22,601,346)	(53,493,968)	(41,677,533)	(212,033,599)
Impairment charge, net on long-term investments and long-term asset	(1,259,984)	—	—	(1,259,984)
Foreign exchange loss	(88,159)	—	—	(88,159)
Other income, net	2,038,219	4,610,724	5,987,922	17,796,214
Income taxes	(13,559)	(20,000)	—	(33,559)
Net loss	(21,924,829)	(48,903,244)	(35,689,611)	(195,619,087)
Accretion to redemption value of redeemable convertible preferred stock	—	—	—	(98,445)
Deemed dividend resulting from beneficial conversion feature on Series C redeemable convertible preferred stock	—	—	—	(31,264,677)
Net loss applicable to common stockholders	$(21,924,829)	$(48,903,244)	$(35,689,611)	$(226,982,209)
Basic and diluted net loss per common share	$ (1.82)	$ (4.16)	$ (3.52)	
Shares used to compute basic and diluted net loss per share	12,072,027	11,752,139	10,130,920	

See accompanying notes.

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY/(DEFICIT)

	Convertible preferred stock		Common stock		Additional paid-in capital	Deferred Compensation	Accumulated other comprehensive loss	Treasury stock	Deficit accumulated during the development stage	Total stockholders' equity
	Shares	Amount	Shares	Amount						
Issuance of common stock for cash to founders at $1.00 per share in September	—	$ —	50,000	$ 50	$ 49,950	$ —	$—	$—	$ —	$ 50,000
Issuance of Series A convertible preferred stock at $10 per share in October	500,000	5,000	—	—	4,995,000	—	—	—	—	5,000,000
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(201,325)	(201,325)
Balance at December 31, 2000	500,000	5,000	50,000	50	5,044,950	—	—	—	(201,325)	4,848,675
Issuance of Series A convertible preferred stock at $10 per share in August	500,000	5,000	—	—	4,995,000	—	—	—	—	5,000,000
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(1,794,734)	(1,794,734)
Balance at December 31, 2001	1,000,000	10,000	50,000	50	10,039,950	—	—	—	(1,996,059)	8,053,941
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(6,931,476)	(6,931,476)
Balance at December 31, 2002	1,000,000	10,000	50,000	50	10,039,950	—	—	—	(8,927,535)	1,122,465
Issuance of Series B convertible preferred stock at $100 per share, net of issuance costs of $1,093,453, in March, April, May and December	107,500	1,075	—	—	9,655,472	—	—	—	—	9,656,547
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(6,209,130)	(6,209,130)
Balance at December 31, 2003	1,107,500	11,075	50,000	50	19,695,422	—	—	—	(15,136,665)	4,569,882
Issuance of Series B convertible preferred stock at $100 per share, net of issuance costs of $1,208,896, in January, February, March, April and May	183,650	1,837	—	—	17,154,267	—	—	—	—	17,156,104
Stock-based compensation related to founders' warrants	—	—	—	—	34,069,916	—	—	—	—	34,069,916
Deferred employee stock-based compensation	—	—	—	—	1,419,300	(1,419,300)	—	—	—	—
Amortization of deferred employee stock-based	—	—	—	—	—	224,579	—	—	—	224,579
Deemed dividend resulting from beneficial conversion feature on Series C redeemable convertible preferred stock	—	—	—	—	31,264,677	—	—	—	(31,264,677)	—
Accretion to redemption value of redeemable convertible preferred stock	—	—	—	—	—	—	—	—	(78,756)	(78,756)
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(48,272,603)	(48,272,603)
Balance at December 31, 2004	1,291,150	12,912	50,000	50	103,603,582	(1,194,721)	—	—	(94,752,701)	7,669,122

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY/(DEFICIT)—(Continued)

	Convertible preferred stock		Common stock		Additional paid-in capital	Deferred Compensation	Accumulated other comprehensive loss	Treasury stock	Deficit accumulated during the development stage	Total stockholders' equity
	Shares	Amount	Shares	Amount						
Issuance of common stock in initial public offering at $38.80 per share in February	—	—	3,000,000	3,000	104,483,895	—	—	—	—	104,486,895
Issuance of common stock upon partial exercise of over-allotment option at $38.80 per share in March	—	—	157,300	157	5,557,616	—	—	—	—	5,557,773
Issuance costs for registration statement filed on behalf of restricted stockholders	—	—	—	—	(165,476)	—	—	—	—	(165,476)
Conversion of redeemable convertible preferred stock into common stock in February	—	—	2,766,785	2,767	43,499,998	—	—	—	—	43,502,765
Conversion of convertible preferred stock into common stock in February	(1,291,150)	(12,912)	3,911,500	3,911	9,001	—	—	—	—	—
Stock-based compensation related to acceleration of option vesting upon employee termination and subsequent reissuance of a fully vested option	—	—	—	—	127,875	—	—	—	—	127,875
Amortization of deferred employee stock-based compensation, net of cancelations	—	—	—	—	—	311,282	—	—	—	311,282
Cancelation of stock options issued to employees and related deferred compensation	—	—	—	—	(84,000)	84,000	—	—	—	—
Accretion to redemption value of redeemable convertible preferred stock	—	—	—	—	—	—	—	—	(19,689)	(19,689)
Purchase of treasury stock at $11.10 per share in December	—	—	—	—	—	—	—	(55,445)	—	(55,445)
Comprehensive loss:										
Net loss	—	—	—	—	—	—	—	—	(25,692,135)	(25,692,135)
Accumulated other comprehensive loss	—	—	—	—	—	—	(15,188)	—	—	(15,188)
Total comprehensive loss	—	—	—	—	—	—	—	—	—	(25,707,323)
Balance at December 31, 2005	—	—	9,885,585	9,885	257,032,491	(799,439)	(15,188)	(55,445)	(120,464,525)	135,707,779

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY/(DEFICIT)—(Continued)

	Convertible preferred stock		Common stock		Additional paid-in capital	Deferred Compensation	Accumulated other comprehensive loss	Treasury stock	Deficit accumulated during the development stage	Total stockholders' equity
	Shares	Amount	Shares	Amount						
Cashless warrant exercises of 260,000 in February, April and August	—	—	260,000	260	(260)	—	—	—	—	—
Warrant exercises of 275,000 shares at $1.00 per share in March and August	—	—	275,000	275	274,725	—	—	—	—	275,000
Write off balance of deferred employee stock-based compensation as of 12/31/05	—	—	—	—	(799,439)	799,439	—	—	—	—
Option exercises of 1,400 shares at $10.00 per share in May and August	—	—	1,400	2	13,998	—	—	—	—	14,000
Amortization of deferred employee stock-based compensation	—	—	—	—	2,090,182	—	—	—	—	2,090,182
Purchase of treasury stock from $10.30—$13.10 per share in February, March, May, June, July, September and October	—	—	—	—	—	—	—	(1,382,425)	—	(1,382,425)
Comprehensive loss:										
Net loss	—	—	—	—	—	—	—	—	(35,689,611)	(35,689,611)
Accumulated other comprehensive loss	—	—	—	—	—	—	(34,017)	—	—	(34,017)
Total Comprehensive loss	—	—	—	—	—	—	—	—	—	(35,723,628)
Balance at December 31, 2006	—	—	10,421,985	10,422	258,611,697	—	(49,205)	(1,437,870)	(156,154,136)	100,980,908

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY/(DEFICIT)—(Continued)

	Convertible preferred stock		Common stock		Additional paid-in capital	Deferred Compensation	Accumulated other comprehensive loss	Treasury stock	Deficit accumulated during the development stage	Total stockholders' equity
	Shares	Amount	Shares	Amount						
Cashless warrant exercises of 650,047 in January and September	—	—	650,047	650	(650)	—	—	—	—	—
Issuance of common stock in a public offering at $12.00 per share in February	—	—	1,000,000	1,000	10,638,600	—	—	—	—	10,639,600
Employee stock-based compensation	—	—	—		3,939,416	—	—	—	—	3,939,416
Issuance of shares under an employee stock purchase plan at $6.72	—	—	—	—	—	—	—	33,782	—	33,782
Comprehensive loss:										
Net loss	—	—	(5)	—	—	—	—	—	(48,903,244)	(48,903,244)
Accumulated other comprehensive loss	—	—	—	—	—	—	(82,261)	—	—	(82,261)
Total comprehensive loss	—	—	—	—	—	—	—	—	—	(48,985,505)
Balance at December 31, 2007	—	$—	12,072,027	$12,072	$273,189,063	$—	$(131,466)	$(1,404,088)	$(205,057,380)	$ 66,608,201

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY/(DEFICIT)—(Continued)

	Convertible preferred stock		Common stock		Additional paid-in capital	Deferred Compensation	Accumulated other comprehensive loss	Treasury stock	Deficit accumulated during the development stage	Total stockholders' equity
	Shares	Amount	Shares	Amount						
Employee stock-based compensation	—	—	—		3,172,712	—	—	—	—	3,172,712
Issuance of shares under an employee stock purchase plan at $2.33 average	—	—	—	—	—	—	—	86,726	—	86,726
Comprehensive loss:										
Net loss	—	—		—	—	—	—	—	(21,924,829)	(21,924,829)
Accumulated other comprehensive loss	—	—	—	—	—	—	101,722	—	—	101,722
Total comprehensive loss	—	—	—	—	—	—	—	—	—	(21,823,107)
Balance at December 31, 2008	—	$—	12,072,027	$12,072	$276,361,775	$—	$(29,744)	$(1,317,362)	$(226,982,209)	$ 48,044,532

MEDICINOVA, INC.
(a development stage company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years ended December 31,			Period from September 26, 2000 (inception) to December 31,
	2008	2007	2006	2008
Operating activities:				
Net loss	$(21,924,829)	$(48,903,244)	$ (35,689,611)	$(195,619,087)
Adjustments to reconcile net loss to net cash used in operating activities:				
Non-cash stock-based compensation	3,172,712	3,939,416	2,090,182	43,935,962
Depreciation and amortization	305,018	516,013	437,392	1,576,096
Amortization of premium/discount on marketable securities	(691,706)	(170,576)	(745,766)	(2,476,420)
Impairment charge, net on long-term investments and long-term asset	1,259,984	—	—	1,259,984
Impairment of sublease	—	—	35,259	35,259
Changes in operating assets and liabilities:				
Prepaid expenses and other assets	1,725,295	4,225,382	(4,110,465)	(718,317)
Accounts payable, income tax payable, accrued expenses and deferred rent	(5,109,397)	(3,678,280)	4,420,998	1,414,236
Accrued compensation and related expenses	144,543	212,600	(497,012)	765,147
Net cash used in operating activities	(21,118,380)	(43,858,689)	(34,059,023)	(149,827,140)
Investing activities:				
Purchases of marketable securities available-for-sale	(2,000,000)	(41,712,645)	(108,173,406)	(377,205,766)
Maturities or sales of marketable securities available-for-sale	23,550,000	85,662,087	114,191,364	348,553,451
Acquisition of property and equipment	—	(380,709)	(208,999)	(2,236,499)
Proceeds from sales of property and equipment	—	62,024	—	256,845
Net cash provided by / (used in) investing activities	21,550,000	43,630,757	5,808,959	(30,631,969)
Financing activities:				
Net proceeds from the sale of common stock	—	10,672,374	289,000	120,890,566
Sale of preferred stock, net of issuance costs	—	—	—	80,216,971
Purchase of treasury stock, net of employee stock purchases	86,726	—	(1,382,425)	(1,351,144)
Net cash provided by / (used in) financing activities	86,726	10,672,374	(1,093,425)	199,756,393
Net increase / (decrease) in cash and cash equivalents	518,346	10,444,442	(29,343,489)	19,297,284
Cash and cash equivalents, beginning of period	18,778,938	8,334,496	37,677,985	—
Cash and cash equivalents, end of period	$ 19,297,284	$ 18,778,938	$ 8,334,496	$ 19,297,284
Supplemental disclosure of non-cash investing and financing activities:				
Conversion of convertible preferred stock into common stock upon initial public offering	$ —	$ —	$ —	$ 43,515,677
Unrealized loss on marketable securities available-for-sale	$ —	$ (39,813)	$ (34,017)	$ (89,018)
Supplemental disclosure of non-cash operating and investing activities:				
Reclassification of current marketable securities available-for-sale to long-term investments	$(24,047,314)	$ —	$ —	$ (24,047,314)
Supplemental disclosures of cash flow information:				
Income taxes paid	$ 24,528	$ —	$ —	$ 24,528
Interest paid	$ —	$ —	$ —	$ —

See accompanying notes.

MEDICINOVA, INC.
(a development stage company)

Notes to Consolidated Financial Statements

1. The Company, Basis of Presentation and Summary of Significant Accounting Policies

The Company

We were incorporated in the state of Delaware in September 2000. We are a development stage biopharmaceutical company focused on acquiring and developing novel, small molecule therapeutics for the treatment of diseases with unmet medical need with a specific focus on the U.S. market. Through strategic alliances primarily with Japanese pharmaceutical companies, we hold rights to a diversified portfolio of clinical and preclinical product candidates, each of which we believe has a well-characterized and differentiated therapeutic profile, attractive commercial potential and patent assets having claims of commercially adequate scope.

Basis of Presentation

Our primary activities since incorporation have been organizational activities, including recruiting personnel, establishing office facilities, conducting research and development, performing business and financial planning and raising capital. Accordingly, we are considered to be in the development stage as defined by SFAS No. 7, *Accounting and Reporting by Development Stage Enterprises.*

We have sustained operating losses since inception and expect such losses to continue over the next several years. Management plans to continue financing the operations with equity issuances, debt arrangements or a combination thereof. We expect current working capital to be sufficient to fund our operations through December 31, 2009. If adequate future funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or development programs, or cease operations. During the first quarter of 2005, we completed our initial public offering ("IPO") of 3,000,000 shares of common stock in Japan for proceeds of $104.5 million, net of estimated underwriting discounts and commissions and offering costs. In December 2006, we were listed on the Nasdaq Global Market. Accordingly, we are a public company in both the United States and Japan, as our stock is traded on both the Nasdaq Global Market and the Hercules Market of the Osaka Securities Exchange.

Principles of Consolidation

The consolidated financial statements include the accounts of MediciNova, Inc. and its wholly-owned subsidiaries. MediciNova, Inc. and its subsidiaries are collectively referred to herein as "we," "our" or "us." We do not have any interests in any variable interest entities.

On December 13, 2006, MediciNova (Europe) Limited, a wholly-owned subsidiary of MediciNova, Inc., was incorporated under the laws of England and Wales and established for the purpose of facilitating the clinical development of our compounds for the European marketplace. MediciNova (Europe) Limited's functional currency is the U.S. dollar, the reporting currency of its parent.

On January 4, 2007, MediciNova Japan, Inc., a wholly-owned subsidiary of MediciNova, Inc., was incorporated under the laws of Japan and established to strengthen business development and investor and public relations activities in Japan and other Asian countries. MediciNova Japan, Inc.'s functional currency is the U.S. dollar, the reporting currency of its parent.

All intercompany transactions and investments in our subsidiaries have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from these estimates under different assumptions or conditions.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and other highly liquid investments with original maturities of three months or less from the date of purchase. Cash equivalents at December 31, 2008 consisted primarily of 90-day certificates of deposits at multiple institutions all less than the current FDIC limits and money market funds.

Marketable Securities Available-for-sale

Investments with maturity of more than three months on the date acquired are considered short-term investments and have been classified by us as marketable securities available-for-sale. Marketable securities available-for-sale consist principally of auction rate securities ("ARS"), corporate debt securities and government sponsored securities with AAA ratings at the time they were acquired. Such investments are carried at fair value, with unrealized gains and losses, if any, included as a separate component of stockholders' equity (deficit). Fair value for debt securities and government sponsored securities is determined by the most recently traded price of each security as of the balance sheet date and fair value of ARS is determined by a discounted cash flow valuation model with assumptions being made with regard to interest rates, liquidity, the credit quality of the issuer and the underlying collateral, the length of time and extent to which the market value (if any) has been less than cost and our intent and ability to retain the security in order to allow for an anticipated recovery of our cost basis. The cost of marketable securities available-for-sale is based on the specific identification method.

During the fiscal year ended December 31, 2008, our marketable securities available-for-sale which consisted of corporate debt securities and government-sponsored securities matured and were converted into cash equivalents. At December 31, 2008, all of our remaining marketable securities available-for-sale, which consisted of ARS, were designated as trading securities and have been classified as long-term investments due to the time frame in which we can readily convert these securities into cash. At December 31, 2007, our marketable securities available-for-sale included $45.0 million of municipal ARS that were issued through syndicated offerings, $2.7 million of ARS issued through private placements, $0.7 million of corporate debt securities and $3.5 million of government-sponsored securities. At December 31, 2007, although there were no issues with the credit quality of any of our securities, we did record an unrealized loss of $0.1 million in our consolidated statement of stockholders' equity (deficit) when we lowered the carrying value of our private placement ARS to their estimated market value, which had decreased due to the failed auctions these securities began experiencing in August 2007 which continued through 2008. If the credit ratings of any of our security issuers further deteriorates and any decline in market value is determined to be other-than-temporary, we would adjust the carrying value of the investment through an impairment charge, that would be recorded as realized loss in our consolidated statement of operations.

Long-term Investments and Long-term Asset

Our long-term investments consist of ARS, all of which had AAA ratings at the time of purchase, that principally represent interests in municipal bonds, government-guaranteed student loans, insurance notes and portfolios of securities (primarily commercial paper), and our long-term asset consists of an ARS Put (described

below). At December 31, 2008, $21.9 million of our ARS consisted primarily of municipal bonds and government-guaranteed student loan securities and $2.1 million of our ARS consisted of private placement securities. None of the underlying collateral for our ARS consisted of subprime mortgages or collateralized debt obligations. At December 31, 2008, our ARS have been classified as long-term given the estimated time frame in which we can readily convert these securities into cash.

ARS are generally long-term debt instruments that historically have provided liquidity through a "Dutch" auction process that resets the applicable interest rate at predetermined calendar intervals, typically seven, 28, 35 or 49 days. Due to continued negative conditions in the global credit markets, our ARS have continued to fail at auction with few trades in either the primary or the secondary markets. As such, with the required adoption of SFAS No. 157 as of January 1, 2008, we determined the fair value of our ARS portfolio primarily on Level 3 criteria as prescribed by the accounting standard, which resulted in our reliance on a discounted cash flow valuation model with assumptions related to interest rates, maturities and liquidity determined by us based on the credit quality of the security, the credit quality of the associated insurer, if applicable, the respective prospectuses, and the credit market outlook.

In August 2008, UBS and its affiliates ("UBS"), the brokerage firm through which we purchased the majority of our ARS investments, entered into a settlement with the SEC, the New York Attorney General and other state agencies. Under the settlement, UBS issued to us the Auction Rate Security Rights, which would allow us to sell to UBS our ARS held in accounts with UBS ("ARS Rights Offer"). Pursuant to the ARS Rights Offer, we received the right to sell to UBS the ARS held in accounts with UBS at par value at any time during the period beginning June 30, 2010 and ending July 2, 2012 ("ARS Put"). As part of the settlement, UBS also offered to us a no net cost loan program ("ARS Loan"), whereby we would be able to borrow up to 75% of the market value, as determined by UBS at its sole discretion, of our ARS that have been pledged as collateral at an interest cost that would not exceed the interest being paid on the underlying ARS investments. Under the ARS Loan program, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. In November 2008, we accepted the ARS Rights Offer. In January 2009, we were approved for the ARS Loan in the amount of $15.9 million and drew down the entire preapproved amount. In addition, in February 2009, we borrowed an additional $2.2 million under the ARS Loan, bringing the total amount outstanding under the ARS Loan to $18.1 million, following UBS' decision to increase our availability under the ARS Loan. All cash received under the ARS Loan was invested in money market accounts.

We elected to measure the ARS Put under the fair value option of SFAS 159 to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. The fair value of the ARS Put was also determined by a discounted cash flow valuation model effectively using a liquidity discount of approximately 7% and an interest rate of approximately 5%, which took into consideration the brokerage firm's weighted average cost of capital. Based on our discounted cash flow valuation, we recorded a gain of $5.8 million in our consolidated statement of operations. In addition, we recorded the ARS Put as a long-term asset in our consolidated balance sheet as the ARS Put is not exercisable until June 2010, at the earliest.

Concentration of Credit Risk

Financial instruments that potentially subject us to a significant concentration of credit risk consist primarily of cash, cash equivalents, marketable securities available-for-sale and long-term investments. We maintain deposits in federally insured financial institutions in excess of federally insured limits. However, management believes we are not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. Additionally, we have established guidelines regarding diversification of our investments and their maturities, which are designed to maintain safety and liquidity.

Fair Value of Financial Instruments

Financial instruments, including cash and cash equivalents, accounts payable and accrued liabilities, are carried at cost, which we believe approximates fair value given their short-term nature.

Property and Equipment

Property and equipment, net, which consists of leasehold improvements, furniture and equipment and software, is stated at cost. Leasehold improvements, furniture and equipment, and software are depreciated using the straight-line method over the estimated useful lives of the related assets. The useful life for furniture, equipment (other than computers) and software is five years, computers is three years and leasehold improvements are amortized over the lesser of the useful life or the term of the lease. Our current lease expires in August 2011.

Impairment of Long-Lived Assets

We review long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition are less than its carrying amount. The impairment loss, if recognized, would be based on the excess of the carrying value of the impaired asset over its respective fair value. Impairment, if any, is assessed using discounted cash flows.

Revenue Recognition

In connection with the management of clinical trials, we pay, pursuant to our contracts, fees to investigators and other pass-through costs for which we are reimbursed at cost, without mark-up or profit. In addition, we charge management fees based on negotiated hourly rates pursuant to master services agreements with Asahi Kasei Pharma Corporation and Argenes, Inc. We recognize management fees based on actual hours worked and recognize pass-through expenses as revenue when the related liability is incurred in accordance with Emerging Issues Task Force ("EITF") Rule No. 01-14, *Income Statement Characterization of Reimbursements Received for "Out-of-Pocket" Expenses Incurred.* EITF No. 01-14 requires reimbursable pass-through expenses incurred to be characterized as revenue in the statement of operations. Pass-through costs represent the majority of cost of revenues for all periods in which we have recorded revenue.

Research and Development

Research and development expenses consist of costs incurred to further our research and development activities and include salaries and related employee benefits, costs associated with clinical trials, costs associated with non-clinical activities such as toxicology testing, regulatory activities, research-related overhead expenses, and fees paid to external service providers who conduct certain research and development activities on our behalf. We use external service providers and vendors to conduct clinical trials, to manufacture product candidates to be used in clinical trials and to provide various other products and services related to our product development programs. Research and development expenses also include fees for licensed technology for which technological feasibility has not been established and there are no alternative uses. Research and development costs are expensed as incurred or accrued based on certain contractual factors such as for estimates of work performed, milestones achieved, patient enrollment and experience with similar contracts. As actual costs become known, accruals are adjusted. To date, our estimates have not differed significantly from the actual costs incurred.

Income Taxes

In accordance with Statement of Financial Accounting Standards ("SFAS") No. 109, *Accounting for Income Taxes*, a deferred tax asset or liability is determined based on the difference between the financial statement and the tax basis of assets and liabilities as measured by the enacted tax rates, which will be in effect when these differences reverse. We provide a valuation allowance against net deferred tax assets unless, based upon the available evidence, it is more likely than not that the deferred tax assets will be realized.

In July 2006, the Financial Accounting Standards Board ("FASB") issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes—An Interpretation of FASB Statement No. 109* ("FIN 48"). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with FASB Statement No. 109, *Accounting for Income Taxes*, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Additionally, FIN 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

We adopted the provisions of FIN 48 on January 1, 2007. As a result of the adoption of FIN 48, we had no cumulative effect adjustment, and therefore no change to the January 1, 2007 balance in retained earnings. At January 1, 2007, December 31, 2007 and December 31, 2008, we had no unrecognized tax benefits that, if recognized, would affect our effective income tax rate in future periods.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. We had no accrued interest or penalties at January 1, 2007, December 31, 2007 or December 31, 2008.

We are subject to taxation in the United States, California and foreign jurisdictions, of which currently no years are under examination. Our tax years for 2000 and forward are subject to examination by the U.S. and state tax authorities due to the carryforward of unutilized net operating losses and research and development credits. At December 31, 2008, income taxes relate to income earned by our Japanese subsidiary, MediciNova Japan, Inc.

Stock-Based Compensation

We grant stock options to our employees, directors and consultants under the MediciNova, Inc. Amended and Restated 2004 Stock Incentive Plan (the "2004 Plan"), the successor to the MediciNova, Inc. 2000 General Stock Incentive Plan (the "2000 Plan"). No additional stock options have been or will be issued under the 2000 Plan subsequent to our IPO. Stock options issued to non-employees were recorded at their fair value as determined in accordance with EITF Issue No. 96-18, *Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services.*

The exercise price of stock options granted during the years ended December 31, 2008, 2007 and 2006 were either equal to market value or at a price above market value on the date of grant. During the years ended December 31, 2008, 2007 and 2006, options to purchase 615,540, 151,000 and 1,702,891 shares of common stock, respectively, were granted and stock-based compensation expense for such stock options is reflected in operating results during fiscal years 2008, 2007 and 2006. The estimated fair value of each stock option award was determined on the date of grant using the Black-Scholes option valuation model with the following weighted-average assumptions for stock option grants:

	Year Ended December 31,	
	2008	2007
Risk-free interest rate	3.00%	4.64%
Expected volatility of common stock	69.00%	69.00%
Dividend yield	0.00%	0.00%
Expected option term (in years)	4.00	4.00

The risk-free interest rate assumption is based upon observed interest rates appropriate for the expected term of our employee stock options. The expected volatility is based on the weighted average volatility of our stock price, factoring in changes in the daily share price, and the volatility of stock prices of certain peers within our industry sector and management's judgment. We have not paid any dividends on common stock since our inception and do not anticipate paying dividends on our common stock in the foreseeable future. The expected life of employee stock options represents the average of the life of the options and the average vesting period based on management's judgment given the progression of our prioritized clinical program.

As stock-based compensation expense recognized in the accompanying consolidated statement of operations for the years ended December 31, 2008, 2007 and 2006 were based on awards ultimately expected to vest, such expense should be reduced for estimated forfeitures. SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. We have very few employees, our turnover has been minimal and our stock options vest monthly; therefore, we did not estimate any forfeitures in fiscal 2008 and will adjust our stock-based compensation expense should any forfeitures occur. Our determination of fair value is affected by our stock price, as well as a number of assumptions that require judgment. The weighted-average fair value of each stock option granted during the years ended December 31, 2008, 2007 and 2006, estimated as of the grant date using the Black-Scholes option valuation model, was $2.37 per option, $5.27 per option and $6.62 per option, respectively.

For the years ended December 31, 2008, 2007 and 2006, stock-based compensation expense related to stock options was $3.2 million, $3.9 million and $2.1 million, respectively, and was recorded as a component of general and administrative expense ($1.8 million, $3.0 million and $1.6 million, respectively) and research and development expense ($1.4 million, $0.9 million and $0.5 million, respectively). No stock options were exercised during the years ended December 31, 2008 and 2007; however, there were two stock option exercises during the year ended December 31, 2006, from which approximately $14,000 was received.

As of December 31, 2008, there was $5.2 million of unamortized compensation cost related to unvested stock option awards, which is expected to be recognized over a remaining weighted-average vesting period of 1.8 years, on a straight-line basis. Prior to the adoption of SFAS No. 123R, we presented unamortized compensation cost as deferred compensation and classified it as a separate component of stockholders' equity. On January 1, 2006, in accordance with the provisions of SFAS No. 123R, we reclassified deferred compensation against additional paid-in capital.

Comprehensive Income (Loss)

We have adopted SFAS No. 130, *Reporting Comprehensive Income*, which requires that all components of comprehensive income (loss), including net income (loss), be reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity (net assets) during a period from transactions and other events and circumstances from non-owner sources. Net income (loss) and other comprehensive income (loss), including foreign currency translation adjustments and unrealized gains and losses on investments, are reported, net of their related tax effect, to arrive at comprehensive income (loss). Our comprehensive loss includes unrealized losses on marketable securities and currency translation. The table below sets forth the components of our accumulated other comprehensive loss at:

	December 31,		
	2008	**2007**	**2006**
Beginning Balance	$(131,466)	$ (49,205)	$(15,188)
Currency translation	101,722	6,757	—
Unrealized loss on marketable securities	—	(89,018)	(34,017)
Ending Balance	$ (29,744)	$(131,466)	$(49,205)

As of December 31, 2008, 2007 and 2006, our comprehensive loss was $21,823,107, $48,985,505 and $35,723,628, respectively.

Net Loss Per Share

Net loss per share is presented as basic and diluted net loss per share. Basic net loss per share is calculated by dividing the net loss by the weighted average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders by the weighted average number of common share equivalents outstanding for the period determined using the treasury-stock method. For purposes of this calculation, convertible preferred stock, stock options and warrants are considered to be common stock equivalents and are only included in the calculation of diluted net loss per share when their effect is dilutive. There were no potentially dilutive securities for the years ended December 31, 2008 and 2007. Potentially dilutive securities of 88,403 for the year ended December 31, 2006 were excluded from determining diluted earnings per share because of their anti-dilutive effect.

Recent Accounting Pronouncements

The FASB issued SFAS No. 141 (revised 2007), "*Business Combinations*" and SFAS No. 160, "*Noncontrolling Interests in Consolidated Financial Statements, an amendment of Accounting Research Bulletin No. 51.*" SFAS No. 141R will change how business acquisitions are accounted for and will impact financial statements both on the acquisition date and in subsequent periods. SFAS No. 160 will change the accounting and reporting for minority interests, which will be recharacterized as noncontrolling interests and classified as a component of equity. SFAS No. 141R and SFAS No. 160 are effective for us beginning in the first quarter of fiscal year 2009. Early adoption is not permitted. The impact of adopting SFAS No. 141R on our consolidated financial statements will depend on the economic terms of any future business combinations transactions. We believe the adoption of SFAS No.160 will not have a material impact on our consolidated financial statements.

In June 2007, the Financial Accounting Standards Board ("FASB") ratified the consensus reached by the Emerging Issues Task Force ("EITF") in EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities*, which requires that

nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and amortized over the period that the goods are delivered or the related services are performed, subject to an assessment of recoverability. EITF 07-3 was effective for fiscal years beginning after December 15, 2007. Effective January 1, 2008, we adopted EITF 07-3, which resulted in no impact to our consolidated financial statements.

In February 2007, the FASB issued Statement of Financial Accounting Standards ("SFAS") No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, which allows an entity to voluntarily choose to measure certain financial assets and liabilities at fair value. SFAS No. 159 was effective for fiscal years beginning after November 15, 2007. Effective January 1, 2008, we adopted SFAS No. 159. In the fourth quarter of 2008, we elected to measure an eligible financial asset, our ARS Put, at fair value, due to its linkage with certain of our long-term ARS investments, which resulted in the recording of $5.8 million of gain in our consolidated financial statements. *See Note 2, Fair Value Measurements, of the notes to our consolidated financial statements for information and related disclosures regarding our fair value measurements.*

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, which defines fair value, establishes guidelines for measuring fair value and expands disclosures regarding fair value measurements. SFAS No. 157 does not require any new fair value measurements but rather eliminates inconsistencies in guidance found in various prior accounting pronouncements and is effective for fiscal years beginning after November 15, 2007. In February 2008, the FASB issued FASB Staff Position 157-2, which delays the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually) until fiscal years beginning after November 15, 2008 and interim periods within those fiscal years, which will be our fiscal year 2009. These nonfinancial items include assets and liabilities such as reporting units measured at fair value in a goodwill impairment test and nonfinancial assets acquired and liabilities assumed in a business combination. Although we have no nonfinancial assets or nonfinancial liabilities that are measured at fair value, effective January 1, 2008, we adopted SFAS No. 157 for financial assets and liabilities recognized at fair value on a recurring basis. The partial adoption of SFAS No. 157 for financial assets and liabilities did not have a material impact on our consolidated financial statements. *See Note 2, Fair Value Measurements, of the notes to our consolidated financial statements for information and related disclosures regarding our fair value measurements.*

2. Fair Value Measurements

As stated in Note 1, we adopted SFAS No. 157 as of January 1, 2008. As defined in SFAS No. 157, fair value is based on the price that would be received to sell an asset or would be paid to transfer a liability in an orderly transaction between market participants at the measurement date. To increase the comparability and consistency of fair value measurements, SFAS No. 157 prescribes a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels, as generally described below:

Level 1:	Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities at the measurement date.
Level 2:	Inputs are quoted prices for similar items in active markets or inputs are quoted prices for identical or similar items in markets that are not active.
Level 3:	Inputs are unobservable due to little or no market data availability and inputs are usually developed by management or a third-party, which reflect those inputs that a market participant would use. The fair value hierarchy gives the lowest priority to Level 3 inputs.

At December 31, 2008, cash and cash equivalents (instruments with maturities of three months or less at the date of purchase) were $19.3 million, of which $4.0 million was invested in domestic 90-day certificates of deposits and the remainder primarily in money market funds. We measure our cash equivalents on a recurring basis. The fair value of our cash equivalents, which are current assets, is based on Level 1 criteria, in which their carrying amount is a reasonable estimate of their fair value based on daily quoted market prices.

Marketable Securities Available-For-Sale, Long-Term Investments and Long-Term Asset

During fiscal year 2008, our marketable securities available-for-sale related to corporate debt securities and government-sponsored securities matured and were converted into cash equivalents. At December 31, 2008, all of our remaining marketable securities available-for-sale were designated as trading securities and classified as long-term investments due to the time frame in which we can readily convert these securities into cash. At December 31, 2007, our marketable securities available-for-sale included $45.0 million of municipal ARS that were issued through syndicated offerings, $2.7 million of ARS issued through private placements, $0.7 million of corporate debt securities and $3.5 million of government-sponsored securities. All of the corporate debt securities and government sponsored securities had contractual maturities of 12 months or less. The ARS primarily have stated maturities that are structured with short-term holding periods. At the end of each holding period, a new auction is held to determine the rate or dividend for the next holding period. We can sell or continue to hold securities at par at each auction. In order for us to sell ARS, the auction needs to be successful, which means that demand in the marketplace exceeds supply. The length of each holding period is determined at the original issuance of the ARS. As of December 31, 2007, we had $47.7 million of ARS with stated maturity dates ranging from 2022 to 2044 and reset dates primarily ranging from seven to 63 days.

	December 31, 2008				December 31, 2007			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Auction rate securities	$—	$—	$—	$—	$47,800,000	$ —	$(98,975)	$47,701,025
Corporate debt securities	—	—	—	—	700,700	—	(646)	700,054
Government sponsored securities	—	—	—	—	3,444,889	10,603	—	3,455,492
	$—	$—	$—	$—	$51,945,589	$10,603	$(99,621)	$51,856,571

We measure all of our marketable securities available-for-sale on a recurring basis based on Level 3 criteria. At December 31, 2007, our investments in ARS principally represent interests in government guaranteed student loans, municipal bonds, educational institutions, insurance notes and portfolios of securities (primarily commercial paper). At December 31, 2007, approximately $45.0 million of the ARS held by us consisted primarily of municipal securities. None of the underlying collateral for the ARS held by us consisted of subprime mortgages or collateralized debt obligations. As of December 31, 2007, the $0.1 million unrealized loss on ARS related to a decrease in estimated market value due to failed auctions associated with approximately $2.7 million of private placement ARS.

The following tables reconciles the amortized cost of auction rate securities classified as current marketable securities available-for-sale at December 31, 2007, with the fair value of such auction rate securities which were reclassified to long-term investments during fiscal year 2008:

	Amortized Cost at 12/31/2007	Sales or Redemptions of Auction Rate Securities at Par from 1/1/08 to 12/31/08	Impairment Charge on Auction Rate Securities at 12/31/08	Transfers Out of Current Marketable Securities Available-For-Sale to Long-Term Investments from 1/1/08 to 12/31/08	Long-Term Investments Fair Value at 12/31/08 Based on Level 3
Auction rate securities (1)	$41,400,000	$(14,100,000)	$(6,244,431)	$(21,055,569)	$21,055,569
Auction rate securities (2)	6,400,000	(2,600,000)	(808,255)	(2,991,745)	2,991,745
Totals	$47,800,000	$(16,700,000)	$(7,052,686)	$(24,047,314)	$24,047,314

(1) Aggregated fair value reported at December 31, 2008 reflects fair value as determined principally by our discounted cash flow model with liquidity discount, pursuant to which we took into consideration the brokerage firm's pricing model, the tax status (taxable vs. tax exempt) of the security, credit quality of the issuer, assumed maturity (seven years), insurance wraps and the portfolio composition. We also made assumptions regarding future cash flows and the likelihood of the ARS being redeemed or refinanced. In addition, we performed a sensitivity analysis by calculating fair value with a maturity of one year through ten years. The annual coupon rate utilized was set at the U.S. Treasury Department published average of the bond equivalent rates of the 91-day Treasury bills auctioned during the quarter ending December 31, 2008 (which was the Federal Family Education Loan Program special allowance rate for the quarter ending December 31, 2008) plus 120 basis points. We believe that using this interest rate is reasonable given that a majority of our ARS portfolio is collateralized by student loans guaranteed by the U.S. government under the Federal Family Education Loan Program. Using our discounted cash flow model with liquidity discounts ranging from 4% to 23%, we calculated aggregate fair value for these securities, which ranged between $25.3 million with a two-year maturity, $22.7 million with a five-year maturity and $18.8 million with a ten-year maturity. As of December 31, 2008, although the ARS continue to pay interest according to their stated interest terms, we deemed the $6.2 million reduction of the overall fair value of the ARS as other-than-temporary due to the continued illiquidity of the primary ARS market and our expectation as to when we may be required to liquidate the ARS for operating purposes.

(2) Aggregated fair value reported at December 31, 2008 reflects fair value as determined by our discounted cash flow model, which employed liquidity discounts ranging from 3% to 23% depending on the security type and included assumptions regarding future cash flows and the likelihood of the redemption or refinancing of such ARS. We also performed a sensitivity analysis by calculating fair value with a maturity of one year through ten years. The interest rate utilized in the model was either LIBOR plus the spread, as indicated in the respective security prospectus which was generally 200 basis points, or the U.S. Treasury Department published average of the bond equivalent rates of the 91-day Treasury bills auctioned during the quarter ending December 31, 2008 (which was the Federal Family Education Loan Program special allowance rate for the quarter ending December 31, 2008) plus 120 basis points for the ARS collateralized by student loans. The LIBOR rate was per bankrate.com which we deemed as a reasonable source given it is a widely utilized third-party rate source. We believe that utilizing the Federal Family Education Loan Program special allowance rate for the student loan ARS is reasonable given the collateral of the ARS is student loans. Using this methodology, we calculated aggregate fair value for these securities, which ranged between $3.5 million with a two-year maturity, $3.2 million with a five-year maturity and $2.7 million with a ten-year maturity. As of December 31, 2008, although the ARS continue to pay interest according to their

stated interest terms, we deemed the $0.8 million reduction of the overall fair value of the ARS as other-than-temporary due to the continued illiquidity of the primary ARS market and our expectation as to when we may be required to liquidate the ARS for operating purposes.

In November 2008, we received and accepted the ARS Rights Offer from UBS. Pursuant to the ARS Rights Offer, we received the ARS Put, which we classified as a long-term asset. We elected to measure the ARS Put under the fair value option of SFAS 159 to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. We measure the ARS Put on a recurring basis. The fair value of the ARS Put was also determined on Level 3 basis through the use of a discounted cash flow valuation model with assumptions being made related to interest rate, maturity and liquidity. We effectively used a liquidity discount of approximately 7%, an interest rate of approximately 5% which took into consideration the brokerage firm's weighted average cost of capital and a maturity of 1.5 years given that the earliest the ARS Put can be exercised is June 2010. Based on our discounted cash flow valuation, we recorded a gain of $5.8 million in our consolidated statement of operations, which effectively net our realized loss on our overall ARS portfolio to $1.3 million.

3. Balance Sheet Details

Property and Equipment

Property and equipment, net, consist of the following:

	December 31,	
	2008	2007
Leasehold improvements	$ 498,581	$ 498,581
Furniture and equipment	880,337	892,638
Software	380,245	380,245
	1,759,163	1,771,464
Less accumulated depreciation and amortization	(1,390,864)	(1,098,147)
	$ 368,299	$ 673,317
Depreciation and amortization expense	$ 305,018	$ 516,013

Accrued Expenses

A substantial portion of our ongoing research and development activities are performed under agreements we enter into with external service providers, including clinical research organizations, which conduct many of our research and development activities. A portion of our ongoing general and administrative activities relate to legal, accounting and consulting services. We accrue for costs incurred as the services are being provided by monitoring the status of clinical trials or specific projects or services provided, contractual factors such as milestones or retainer fees and the invoices received from our external service providers. Accrued expenses consist of the following:

	December 31,	
	2008	2007
Research and development costs	$ 740,207	$3,120,668
Professional services fees	176,236	244,351
Other	95,473	254,842
	$1,011,916	$3,619,861

4. Related Party Transactions

Our board of directors approved an arrangement in September 2001 to engage Dr. Yuichi Iwaki as a consultant in connection with financing transactions and business development activities, which was subsequently amended in November 2003 and November 2004. Pursuant to such arrangement, Dr. Iwaki was paid $20,000 per month plus other cash or stock compensation, if any, as the board of directors deemed appropriate for services rendered. In July 2005, the board of directors appointed Dr. Iwaki as our Executive Chairman and, in September 2005, appointed Dr. Iwaki as our Acting Chief Executive Officer and Acting Chief Financial Officer. In January 2006, Dr. Iwaki's consulting fee was increased to $29,167 per month based on the findings of an independent study covering executive compensation. In March 2006, Dr. Iwaki was appointed as our President and Chief Executive Officer. Effective January 1, 2007, Dr. Iwaki became a full-time employee. Compensation earned by Dr. Iwaki as a consultant during the years ended December 31, 2007, 2006, 2005 and the period from September 26, 2000 (inception) to December 31, 2007 were $0, $500,000, $320,000 and $1,180,000, respectively.

On May 4, 2007, our board of directors approved the modification of certain stock option grants received by Dr. Iwaki while serving in his consulting capacity as President and Chief Executive Officer as a result of the change in Dr. Iwaki's status from consultant to employee. Two nonqualified stock option ("NSO") grants received by Dr. Iwaki for 40,000 shares of common stock and 333,503 shares of common stock, which were granted on January 4, 2006 and November 12, 2006, respectively, were modified such that the NSO grants were cancelled and new grants of incentive stock options equal in number to the prior NSO grants were granted at the prior exercise prices and with the original vesting schedules approved for the cancelled NSO grants. Pursuant to SFAS No. 123R, there is no impact to our consolidated financial results related to the modification from nonqualified stock options to incentive stock options as there is no incremental value attributed to the modified awards.

5. Commitments and Contingencies

Facility Lease

In January 2004, we leased 16,609 square feet of space for our corporate headquarters under a non-cancelable operating lease that was set to expire in February 2008. In January 2008, we entered into a third amendment to lease for our corporate headquarters at the same location in which we reduced the amount of space under lease to 12,699 square feet of office space through August 2011. In June 2005, we leased 1,726 square feet of office space in Tokyo, Japan under a non-cancelable operating lease that expires in May 2009. Rent expense for the year ended December 31, 2008 was $551,234 and rent expense, net of sub-lease income for the years ended December 31, 2007, 2006, and the period from September 26, 2000 (inception) to December 31, 2008 was $683,971, $624,430, and $3,017,949, respectively.

Future minimum payments are as follows:

Years ending December 31:	
2009	$ 492,969
2010	$ 476,214
Thereafter	$ 331,446
Total minimum payments	$1,300,629

License Agreements

We have entered into numerous license agreements to acquire the rights to develop and commercialize a variety of product candidates. Pursuant to these agreements, we have obtained exclusive licenses to the patent rights and know-how for all indications under the agreements within our licensed territories. We generally make an upfront payment and are required to make additional payments upon the achievement of specific development and regulatory approval milestones. We are also obligated to pay royalties under the agreements until the later of the expiration of the applicable patent or the applicable last date of market exclusivity after the first commercial sale, on a country-by-country basis.

The amounts expended under these agreements and charged to research and development expense during the years ended December 31, 2008, 2007, 2006, and the period from September 26, 2000 (inception) to December 31, 2008 were $100,000, $3,000,000, $1,050,000 and $9,850,000, respectively. As of December 31, 2008, future potential milestone payments totaled approximately $94.1 million, and there are no minimum royalties required under any of the license agreements. From June 19, 2002 (the date of our first license agreement) through December 31, 2008, we have entered into nine license agreements with Japanese and British pharmaceutical companies and a non-profit research institute.

Termination of Phase III Trial for MN-001, Bronchial Asthma

On June 26, 2007, we announced a strategic initiative to focus our resources on the development and commercialization of two prioritized assets in our development pipeline, MN-221 for the treatment of acute exacerbations of asthma and MN-166 for the treatment of multiple sclerosis. As part of this strategy, we terminated the Phase III clinical trial of MN-001 for the treatment of bronchial asthma. At December 31, 2007, the termination of the Phase III clinical trial was completed and our financial results for the year then ended reflect additional research and development expense of $2.1 million (or $0.18 loss per share) to complete the wind-down of this clinical trial.

Legal Proceedings

In November 2006, we reached a mediation settlement of the dispute concerning the termination of employment of a former executive in the Tokyo District Court. Under the settlement, which is the subject of a written mediation decree prepared by the Tokyo District Court, we agreed to pay the former executive eight months of severance pay, or approximately $160,000, which was included as a charge in our consolidated statement of operations in fiscal 2006.

On April 30, 2007, a participant in one of our clinical trials filed a lawsuit against us, the clinical investigatory site where the individual participated in the clinical trial and the chief investigator at such clinical investigatory site. The complaint alleged that the plaintiff's daughter suffered permanent injuries *in utero* as a result of the plaintiff's participation in our clinical trial. Our insurance carrier assumed defense of this lawsuit, which was settled on September 27, 2007 with no admission of liability. On October 29, 2007, the court entered an order of dismissal of the claims asserted against us and all other defendants and subsequently entered a final judgment approving the settlement. Settlement of the lawsuit did not have a material adverse effect on our business, financial condition or operating results.

We may become involved in various disputes and legal proceedings which arise in the ordinary course of business. While it is not possible to accurately predict or determine the outcome of these matters, an adverse result in any of these matters may occur which could harm our business. We are currently not a party to any legal proceedings.

6. Redeemable Convertible Preferred Stock and Stockholders' Equity

Initial Public Offering in Japan

On February 4, 2005, we completed an IPO of 3,000,000 shares of common stock in Japan and received aggregate proceeds of $104,486,895, net of underwriting discounts and commissions and offering expenses. In addition, on March 8, 2005, we closed the sale of an additional 157,300 shares of our common stock pursuant to the partial exercise by our underwriters of an over-allotment option which resulted in aggregate proceeds to us of $5,557,773, net of underwriting discounts and commissions. In connection with our IPO, redeemable convertible and convertible preferred stock outstanding as of February 4, 2005 was automatically converted into 6,678,285 shares of common stock.

Public Offering in the United States

On February 1, 2007, we completed a public offering of 1,000,000 shares of common stock in the United States at a purchase price of $12.00 per share and received aggregate net proceeds of approximately $10,639,600 million, net of underwriting discounts and commissions and offering expenses.

Redeemable Convertible Preferred Stock

On September 2, 2004, we sold 27,667,856 shares of Series C redeemable convertible preferred stock at a purchase price of $1.62 per share for total net proceeds of $43,404,320, net of issuance costs. The Series C preferred stock was sold at a price per share below our IPO price. Accordingly, pursuant to EITF Issue No. 98-5, *Accounting for Convertible Securities with Beneficial Conversion Features*, we recorded a deemed dividend on the Series C preferred stock of $31,264,677, which is equal to the number of shares of Series C preferred stock

sold multiplied by the difference between the estimated fair value of the underlying common stock and the Series C preferred stock conversion price per share. The deemed dividend increased the net loss applicable to common stockholders in the calculation of basic and diluted net loss per common share and was reported as a charge to accumulated deficit and a credit to additional paid-in capital, with no net impact on total stockholders' equity.

Founders' Common Stock and Warrants

At inception, we issued a total of 50,000 shares of our common stock to two of our founders who became officers and directors, for proceeds of $50,000. We also granted the two individuals warrants to purchase 50,000 shares of our common stock at an exercise price of $1.00 per share. The warrants contained an antidilution clause providing the founders with the right to purchase additional shares of common stock any time there was a dilution event so that they could maintain their original ownership percentage. At December 31, 2003, as a result of the Series A and Series B preferred stock sales, the warrants were adjusted to allow the holders to purchase up to 365,000 shares of common stock. At December 31, 2007, no underlying shares of common stock remained subject to purchase under the terms of these warrants.

From January through May 2004, in conjunction with the sale of Series B preferred stock, the shares of common stock issuable upon exercise of the warrants were adjusted up to 732,300 shares. Based on subsequent financing activities and the price of our IPO, we believe that the estimated fair value of the 732,300 shares exceeded the $1.00 exercise price of the warrants and, as a result, we recorded stock-based compensation in general and administrative expense in the amount of $19,405,950.

On September 2, 2004, in conjunction with the sale of Series C preferred stock, we and our two founders amended the terms of our warrant agreements. In exchange for relinquishing any future anti-dilution rights, the number of underlying common shares that could be purchased under the terms of the warrants was increased and fixed at 1,285,657, up from 732,300. Since all of the warrants were previously variable, we recorded additional stock-based compensation in general and administrative expense of $14,663,966 based on the estimated value of the underlying common stock on September 2, 2004 for a total of $34,069,916. Since the number of warrants became fixed at September 2, 2004, no additional compensation has been recorded.

Other Warrants

In May 2004, as compensation for fundraising efforts related to the sale of Series B preferred stock, we issued to BioVen Advisory, Inc. a warrant to purchase 50,000 shares of common stock with an exercise price of $10.00 per share and an expiry date of May 2009. The warrant was valued at the $250,000 cash value of the services performed. The warrant issuance had no net impact on the consolidated financial statements because the transaction resulted in both a charge and a credit to additional paid-in capital.

Stock Options

We grant options to our employees, directors and consultants under the 2004 Plan, the successor to the 2000 Plan.

2000 General Stock Incentive Plan

In September 2000, we adopted the 2000 Plan under which incentive stock options could be granted to our employees and nonstatutory stock options and other stock-based awards could be granted to employees, directors and consultants. Stock options have been granted with an exercise price of $10.00 per share and vest 25% after

the first year of service from the grant date, with the remaining shares vesting in equal monthly installments over the subsequent 36 months of service. An employee may exercise stock options prior to vesting in which case we have the right to repurchase the unvested shares at the original exercise price if the employee is terminated before vesting in all shares occurs.

Following the vesting period, options are exercisable until the earlier of 90 days after the employee's termination with us or the ten-year anniversary of the initial grant, subject to adjustment under certain conditions. We have the right to purchase all of those shares that the employees have or will acquire under these stock options. The purchase price for any vested shares repurchased will be the greater of the fair market value of such shares on the date of purchase or the aggregate exercise price for such shares.

At December 31, 2008, stock options to purchase a total of 85,500 shares of common stock were outstanding under the 2000 Plan at a weighted average exercise price of $10.00 per share. No additional stock options have been or will be issued under the 2000 Plan subsequent to our IPO. However, stock options previously granted under the 2000 Plan will remain outstanding until the earlier of expiration or exercise.

2004 Stock Incentive Plan

In connection with our IPO, we adopted the 2004 Plan, which serves as the successor program to the 2000 Plan. The 2004 Plan became effective upon the completion of our IPO in February 2005 and was amended and restated in February 2007.

The 2004 Plan is administered by the compensation committee of our board of directors and provides for the grant of (i) options to purchase shares of common stock; (ii) restricted stock; (iii) stock appreciation rights; and (iv) stock units. Incentive stock options may only be granted to employees. Nonstatutory stock options and other stock-based awards may be granted to employees, non-employee directors and consultants.

The number of shares reserved for issuance under the 2004 Plan will be increased on the first day of each of our fiscal years from 2006 through 2014, with the first such increase occurring on January 1, 2006, by the lesser of: (i) 100,000 shares; (ii) 3% of our outstanding common stock on the last day of the immediately preceding fiscal year; or (iii) the number of shares determined by our board of directors. In addition, in February 2007 and June 2008, the total number of shares available for grant under the 2004 Plan was increased by 300,000 and 1,000,000, respectively.

Options granted to optionees other than non-employee directors will generally vest monthly over a four-year period, beginning on the vesting commencement date. The exercise price of an incentive stock option shall not be less than 100% of the fair market value at the time of grant and the exercise price of a nonstatutory stock option shall not be less than 85% of the fair market value at the time of grant.

Fully vested automatic grants of nonstatutory stock options will be made to non-employee directors in an initial amount of 1,000 shares upon first becoming a member of our board of directors. Immediately after each of our regularly scheduled annual meetings of stockholders, each non-employee director will be automatically granted a nonstatutory option to purchase 1,000 shares of our common stock, at 100% of the fair market value at the time of grant, provided that the director has served on our board for at least six months. Each annual option will be fully vested and exercisable on the date which is six months after the date of grant.

The 2004 Plan terminates ten years after its initial adoption by the board of directors, unless terminated earlier by the board of directors. The board of directors may amend or terminate the plan at any time, subject to stockholder approval where required by applicable law.

A summary of our stock option activity and related information as of December 31, 2008 is as follows:

	Number of Option Shares	Weighted Average Exercise Price
Outstanding at January 1, 2008	1,990,078	$12.58
Granted	615,540	$ 4.40
Exercised	—	$ —
Cancelled	(26,107)	$17.17
Outstanding at December 31, 2008	2,579,511	$10.59
Exercisable at December 31, 2008	1,410,563	$12.16

The weighted average contractual life of options outstanding at December 31, 2008 was 7.8 years and the weighted average contractual life of exercisable options at December 31, 2008 was 7.4 years. There was no intrinsic value of stock options exercised during the year ended December 31, 2008 or outstanding and exercisable at December 31, 2008, based on the Nasdaq Global Market on such date.

Common Stock Reserved for Future Issuance

The following table summarizes common stock reserved for future issuance at December 31, 2008:

Common Stock under the employee stock purchase program	257,706
Common stock warrants	50,000
Common stock options outstanding (under the 2000 Plan and 2004 Plan)	2,579,511
Common stock options authorized for future grant (under the 2004 Plan)	1,445,489
	4,332,706

7. Income Taxes

The significant components of our deferred income taxes at December 31, 2008 and 2007 are as follows:

	December 31,	
	2008	2007
Deferred tax assets:		
Net operating loss carryforwards	$ 51,884,000	$ 44,918,000
Capitalized licenses	2,805,000	3,009,000
Research tax credits	5,380,000	4,722,000
Deferred compensation	1,093,000	1,035,000
Unrealized loss on marketable securities	513,000	—
Other, net	257,000	205,000
Net deferred tax assets	61,932,000	53,889,000
Less valuation allowance	(61,932,000)	(53,889,000)
	$ —	$ —

We have established a valuation allowance against our deferred tax assets due to the uncertainty that such assets will be realized. We periodically evaluate the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred tax assets will be realizable, the valuation allowance will be reduced.

At December 31, 2008, we had federal and California net operating loss carryforwards of approximately $127.5 million and $126.3 million, respectively. The federal net operating loss carryforwards begin to expire in 2020, and the California net operating loss carryforwards begin to expire in 2015. At December 31, 2008, we also had federal and California research tax credit carryforwards of approximately $4,800,000 and $800,000, respectively. The federal research tax credit carryforwards begin to expire in 2024, and the California research tax credit carryforward does not expire and can be carried forward indefinitely until utilized.

Additionally, utilization of the NOL and tax credit carryforwards will be subject to a substantial annual limitation under Section 382 and 383 of the Internal Revenue Code of 1986, and similar state provisions due to ownership change limitations that have occurred. These ownership changes will limit the amount of NOL and tax credit carryforwards that can be utilized to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382 and 383, results from transactions increasing ownership of certain stockholders or public groups in the stock of the corporation by more than 50 percentage points over a three-year period. An analysis was performed which indicated that multiple ownership changes have occurred in previous years which created annual limitations on our ability to utilize NOL and tax credit carryovers. Such limitations will result in approximately $8.8 million and $2.2 million of tax benefits related to federal and state NOL and tax credit carryforwards, respectively, that will expire unused. Accordingly, the related NOL and R&D credit carryforwards have been removed from deferred tax assets accompanied by a corresponding reduction of the valuation allowance. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, related to our operations in the U.S. will not impact our effective tax rate.

In July 2006, the FASB issued FIN 48, which clarifies the accounting for uncertainty in income taxes recognized in a company's financial statements in accordance with SFAS No. 109, "Accounting for Income Taxes." FIN 48 prescribes a recognition threshold and measurement process for recording in the financial statements uncertain tax positions taken or expected to be taken in a tax return. Additionally, FIN 48 provides guidance on the de-recognition, classification, interest and penalties, accounting in interim periods, and disclosure requirements for uncertain tax positions. We adopted the provisions of FIN 48 beginning January 1, 2007. The adoption of FIN 48 did not impact our financial condition, results of operations or cash flows. As of December 31, 2008, we have not recorded any uncertain tax benefits.

We file income tax returns in the United States, California and foreign jurisdictions. Due to our losses incurred, we are essentially subject to income tax examination by tax authorities from our inception to date. Our policy is to recognize interest expense and penalties related to income tax matters as tax expense. At December 31, 2008, we do not have any significant accruals for interest related to unrecognized tax benefits or tax penalties.

8. Employee Savings Plan and Employee Stock Purchase Plan

We have an employee savings plan available to substantially all employees. Under the plan, an employee may elect salary reductions which are contributed to the plan. The plan provides for discretionary contributions by us, which totaled $151,488, $155,598, $113,809 and $712,132 for the years ended December 31, 2008, 2007, 2006 and the period from September 26, 2000 (inception) to December 31, 2008, respectively.

Under the MediciNova, Inc. 2007 Employee Stock Purchase Plan ("ESPP"), 300,000 shares of our common stock have been reserved for issuance. The ESPP permits full-time employees to purchase our common stock through payroll deductions (which cannot exceed 15% of each employee's compensation) at the lower of 85% of fair market value at the beginning of the offering period or the end of each six-month offering period. For the year ended December 31, 2008, 37,267 shares were issued under the ESPP, leaving 257,706 shares available for future issuance.

9. Quarterly Financial Data (Unaudited)

The following financial information reflects all normal recurring adjustments, which are, in the opinion of management, necessary for a fair statement of the results of the interim periods. Summarized quarterly data for fiscal 2008 and 2007 are as follows (in thousands, except per share data):

	Year Ended December 31, 2008			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Selected quarterly financial data:				
Revenue	$ —	$ —	$ —	$ —
Total operating expenses	8,660	4,460	5,697	3,785
Net loss	(10,803)	(4,892)	(4,815)	(1,415)
Net loss applicable to common stockholders	(10,803)	(4,892)	(4,815)	(1,415)
Basic and diluted net loss per common share(1)	(0.89)	(0.40)	(0.40)	(0.12)

	Year Ended December 31, 2007			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Selected quarterly financial data:				
Revenue	$ —	$ —	$ —	$ —
Total operating expenses	17,219	20,901	11,341	4,032
Net loss	(15,904)	(19,780)	(10,228)	(2,992)
Net loss applicable to common stockholders	(15,904)	(19,780)	(10,228)	(2,992)
Basic and diluted net loss per common share(1)	(1.40)	(1.68)	(0.87)	(0.25)

(1) Loss per share is computed independently for each of the quarters presented. Therefore, the sum of the quarterly net loss per share will not necessarily equal the total for the year.

10. Subsequent Events

ARS Loan

In the fourth quarter of 2008, we received and accepted the ARS Rights Offer from UBS. Pursuant to the ARS Rights Offer, we received the ARS Put. In January 2009, we were approved by UBS for the ARS Loan in the amount of $15.9 million and drew down the entire pre-approved amount. In February 2009, we were advised by UBS that our ARS portfolio was re-priced given market conditions as of such time. UBS' re-pricing of our ARS resulted in an increase in the fair value of $2.8 million for such securities. As a result, we borrowed an additional $2.2 million under the ARS Loan, which amount represents 75% of the increased value of the ARS, thereby bringing the total amount outstanding under the ARS Loan to $18.1 million. Under the ARS Loan, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. All cash received under the ARS Loan was invested in money market accounts.

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CORPORATE INFORMATION

OFFICERS

Yuichi Iwaki, M.D., Ph.D.
President & Chief Executive Officer

Shintaro Asako, CPA
Vice President & Chief Financial Officer

Richard Gammans, Ph.D.
Chief Development Officer

Michael Kalafer, M.D.
Chief Medical Officer

Masatsune Okajima
Vice President & Head of Japanese Office

BOARD OF DIRECTORS

Jeff Himawan, Ph.D.
Chairman of the Board
Managing Director, Essex Woodlands Health Ventures

Alan Dunton, M.D.
Chief Executive Officer, Panacos Pharmaceuticals, Inc.

Yuichi Iwaki, M.D., Ph.D.
President & Chief Executive Officer, MediciNova, Inc.

Arlene Morris
President & Chief Executive Officer, Affymax, Inc.
Director, Biotechnology Industry Organization

Hideki Nagao
Senior Advisor, Department Corporate Finance,
Division 3 Development Bank of Japan

John K.A. Prendergast, Ph.D.
President, SummerCloud Bay, Inc.
Co-founder and Director, Avigen, Inc.
Co-founder and Chairman of the Board, Palatin Technologies, Inc.

Daniel Vapnek, Ph.D.
Adjunct Professor, University of California, Santa Barbara

CORPORATE HEADQUARTERS

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San Diego, CA 92122
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Fax: (858) 373-7000
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ANNUAL MEETING

The annual stockholders' meeting will be held on Thursday, June 11, 2009 at the Northern Trust Tower, 4370 La Jolla Village Drive, Suite 210, San Diego, CA 92122.

TRANSFER AGENT

American Stock Transfer & Trust Company
59 Maiden Lane
Plaza Level
New York, NY 10038
www.amstock.com

COMPANY COUNSEL

Dechert LLP
Washington, DC

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Ernst & Young, LLP
San Diego, CA

COMMON STOCK LISTING

Ticker Symbol: MNOV, The Nasdaq Global Market
4875, The Osaka Securities Exchange

STOCKHOLDERS' INQUIRIES

Stockholders may obtain copies of our news releases, Securities and Exchange Commission filings, including Forms 10-K, 10-Q, and 8-K, and other company information free of charge by accessing our website at www.medicinova.com or by contacting our Investor Relations Department at (858) 373-1500.

FORWARD-LOOKING STATEMENTS

Statements in this Annual Report that are not strictly historical in nature constitute forward-looking statements. These forward-looking statements include, without limitation, statements regarding our plans and strategies, the progress and timing of our drug development programs and related clinical trials, the safety and efficacy of our product candidates and the potential novelty of such product candidates as treatments for disease, future clinical trials and product development activities, future performance, economic conditions, industry, anticipated trends and challenges in our business, intellectual property protection, results of operations, financial condition, liquidity and capital resources, and any other statement that is not historical in nature, including any statement which includes the words "believes," "expects," "anticipates," "intends," "estimates," "projects," "plans," "can," "should," "could," "may," "would," "will" or similar expressions. These forward-looking statements represent our judgment as of the date of this Annual Report. Actual events or results may differ materially from those expressed or implied in any such forward-looking statements due to various factors, including, but not limited to, the risks and uncertainties inherent in drug development and commercialization. For a discussion of these and other factors, please refer to our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2008 and our subsequent periodic reports on Forms 10-Q and 8-K. You are cautioned not to place undue reliance on these forward-looking statements. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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