

# MEDICINOVA 2009 ANNUAL REPORT

Accelerating the Global Development and Commercialization

of Innovative Pharmaceutical Products

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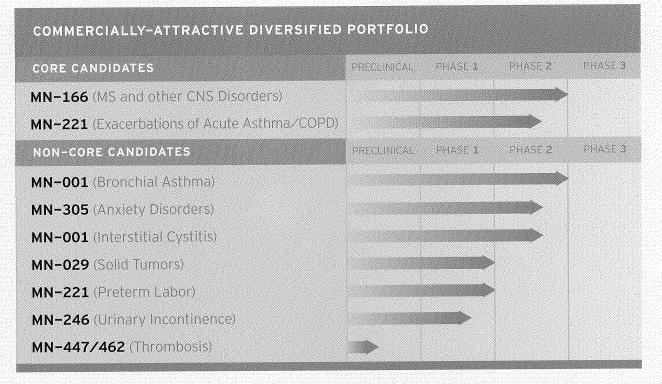
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# ABOUT MEDICINOVA, INC.

MediciNova, Inc. is a publicly-traded biopharmaceutical company founded upon acquiring and developing novel, small-molecule therapeutics for the treatment of serious diseases with a commercial 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, chronic obstructive pulmonary disease exacerbations, multiple sclerosis and other neurologic conditions, 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 on its two prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and chronic obstructive pulmonary disease exacerbations and MN-166 for the treatment of multiple sclerosis or chronic pain or drug addiction. Each drug candidate is currently in clinical trial under U.S. INDs and MediciNova is considering strategic collaborations to support further development of the MN-221 and MN-166 programs. Additionally, MediciNova will seek to monetize its other product candidates.

# DEVELOPMENT PORTFOLIO



# To Our Fellow Stockholders:

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For MediciNova, 2009 was a year highlighted by the advancement of our prioritized product candidates, MN-221 for the treatment of acute exacerbations of asthma and chronic obstructive pulmonary disease (COPD) exacerbations and MN-166 for the treatment of multiple sclerosis (MS) or chronic pain or drug addiction. MediciNova acquired Avigen, Inc. in December 2009 and with the completion of the transaction, MediciNova intends to integrate the two clinical development programs based on ibudilast (MediciNova's MN-166 and Avigen's AV-411). 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.

We are currently conducting a Phase II emergency department clinical trial (MN-221-CL-007), which is enrolling patients suffering from acute exacerbations of asthma. In addition, we have expanded the potential utility of MN-221 by conducting a Phase I clinical trial in stable, moderate-to-severe COPD



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

patients. For MN-166, an ongoing Phase I study in opioid withdrawal is currently enrolling patients.

We believe that MN-221 and MN-166 each present compelling opportunities with clear differentiated market advantages. Each drug candidate is currently in clinical trials in the United States although we will not pursue any further significant development of MN-166 until such time that we secure a strategic collaboration to advance the development of such product candidate. We continue to consider strategic collaborations to support further development of the MN-221 and MN-166 programs in order to draw on the development, regulatory and commercialization expertise and financial resources of larger biotechnology and pharmaceutical partners. **SEC Mail Processing** 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 and COPD Exacerbations

MN-221 is a highly selective 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 -agonists. MN-221 may offer the clinically important advantage of fewer cardiovascular side effects than older-adrenergic agonists due to its greater selectivity for the 2-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-adrenergic agonist treatment due to severe bronchoconstriction.

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 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. 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. Improvement in forced expiratory volume in 1 second (FEV1) values generally appeared to be greater for patients receiving MN-221 in addition to standardized treatment.

In July 2009, MediciNova announced the proposed final protocol for its Phase II clinical trial (MN-221-CL-007), which is evaluating the safety and efficacy of MN-221 in patients with severe, acute exacerbations of asthma. Following a more comprehensive pharmacokinetic/pharmacodynamic (PK/PD) analysis and model of data from pervious Phase II clinical trials, it was determined that the dose of 1,200 micrograms of MN-221 administered over one hour may provide greater potential efficacy without conferring additional risk to patients.

In November 2009, MediciNova announced the initiation of a Phase Ib clinical trial to evaluate the safety of MN–221 at planned escalating doses in patients with stable, moderate-to-severe COPD. COPD exacerbations represent the second respiratory indication for which MediciNova is currently evaluating MN–221.

In March 2010, MediciNova reported positive preliminary results from a Phase Ib clinical trial to evaluate the safety and efficacy of MN-221 in patients with stable, moderate to severe chronic obstructive pulmonary disease (COPD). There were no clinically significant safety concerns noted. Preliminary results demonstrated clinically significant improvements in percent change in FEV1. This randomized, double-blind, placebo-controlled Phase Ib study involved 48 moderate-to-severe COPD patients who received a one (1) hour intravenous infusion of MN-221 at three different escalating dose levels (300 micrograms, 600 micrograms, or 1200 micrograms) or placebo. Based on preliminary findings, all doses of MN-221 produced a clinically significant improvement in FEV1(L) as compared to the baseline and placebo. At the end of the one hour infusion, FEV1(L) increased as compared to baseline by an average of 21.5% (p=0.0025) for the 1200 microgram dose, 16.2% (p=0.020) for the 600 microgram dose, and 9.2% (p=NS) for the 300 microgram dose compared to a decrease of 4.0% for the placebo.

# MN-166 for the Treatment of Multiple Sclerosis or Neuropathic Pain or Opioid Withdrawal

MN-166 is a novel, orally bioavailable compound licensed from Kyorin Pharmaceutical Co., Ltd., which has been under development for the treatment of MS by MediciNova. Previously Avigen had been developing the same compound for the treatment of neuropathic pain, opioid withdrawal and methamphetamine addiction. 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 March 2010, MN-166 was highlighted in an issue of Neurology that included two articles related to the potential clinical utility and unique pharmacological action of MN-166 in treating multiple sclerosis (MS). The primary publication, authored by Frederik Barkhof, M.D., Ph.D., Vrije Universitiet Medical Center, Amsterdam, and collaborators, details the safety and efficacy profile of MN-166 in the two-year MN-166-CI-001 trial performed in Europe and completed in 2008. In the article, Dr. Barkhof et al. review ibudilast (MN-166) trial findings, previously summarized in MediciNova's press releases and a presentation at the 2008 World Congress on Treatment and Research in Multiple Sclerosis meeting, and poses that ibudilast's apparent clinical benefit may be related to a neuroprotective action. Also published was an editorial commentary by the multiple sclerosis specialist, Robert Fox, M.D., Cleveland Clinic, entitled "Primary neuroprotection: The Holy Grail of multiple sclerosis therapy". In this article, Dr. Fox comments on the Barkhof article and notes that ibudilast's unique actions may differentiate it from other approved MS drugs and MS drugs in development. Specifically, he refers to ibudilast's non-selective phosphodiesterase (PDE) inhibition and amelioration of activated resident brain inflammatory cells, known as glial cells, as a possible means of curbing the "smoldering" nature of inflammation in the neurodegeneration associated with progressive MS and potentially other conditions including Parkinson's and Alzheimer's diseases.

MediciNova acquired Avigen in December, 2009, resulting in an integrated ibudilast program with strong preclinical and clinical components, issued and pending use patents and follow-on, patented analogs. Kazuko Matsuda, M.D., Ph.D., Senior Director of Clinical Affairs at MediciNova and a co-author on the MS trial report with Dr. Barkhof, emphasized that "the dose-response relationship between the 30 and 60 mg/day doses in the MN-166-CI-001 MS trial coupled with the encouraging clinical experience in Avigen's trials at dose regimens up to 100 mg/day provides a strong rationale for continued clinical development of MN-166 in these neurological disorders."

We are proud of our progress in 2009. Importantly, our strategic focus has allowed for the advancement of our two prioritized product candidates and completion of the Avigen acquisition while maintaining fiscal prudence. In 2010, 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.**

**2009 Annual Report to Stockholders** 

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# MEDICINOVA, INC.

# 2009 ANNUAL REPORT TO STOCKHOLDER

# For the Fiscal Year Ended December 31, 2009

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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, 2009, 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; our ability to realize the anticipated strategic and financial benefits of our acquisition of Avigen, Inc., or Avigen; our ability to integrate Avigen's ibudalist development program with ours; 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 or debt financing 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," "could," "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 forwardlooking 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. In December 2009, we completed our acquisition of Avigen, a biopharmaceutical company that had focused on identifying and developing differentiated products to treat patients with serious disorders.

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, in the United Kingdom, pursuant to which we have obtained rights to develop and commercialize our current product candidates.

Since our inception, 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 product development programs which have been in clinical development for the treatment of asthma, acute exacerbations of asthma, multiple sclerosis, or MS, other central nervous system, or CNS, disorders, interstitial cystitis, or IC, solid tumor cancers, Generalized Anxiety Disorder/insomnia, preterm labor and urinary incontinence. Our two earlier stage product development programs have been in preclinical development for the treatment of thrombotic disorders. In addition, we have expanded the development program for one of our prioritized product candidates, MN-221, to evaluate MN-221 for the treatment of Chronic Obstructive Pulmonary Disease, or COPD, exacerbations.

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 and COPD exacerbations	Phase II clinical trial in emergency rooms to evaluate MN-221 at planned escalating doses in patients with severe, acute exacerbations of asthma completed in Q2, 2009	Kissei Pharmaceutical	Worldwide, except Japan
		Phase II clinical trial in emergency rooms to evaluate safety and efficacy in patients with severe, acute exacerbations of asthma initiated in Q1, 2009		
		Phase Ib clinical trial to evaluate the safety and efficacy of MN-221 in patients with stable, moderate to severe COPD initiated in Q4, 2009 and completed in Q1, 2010		
MN-166/ AV411*	Multiple sclerosis and other CNS disorders**	Phase II clinical trial of MN-166 completed in Q2, 2008.	Kyorin Pharmaceutical (MN-166)	Worldwide, except Japan, China, Taiwan and South Korea (MN-
		Prototype once-per-day oral formulation developed for future clinical trials.		166)

\* MN-166 and AV411 are both ibudalist, an orally available, small molecule therapeutic. With the acquisition of AV411, we intend to integrate the two ibudalist-based product development programs and pursue discussions with potential partners to secure a strategic collaboration to advance clinical development of the combined development programs.

AV411 has advanced through multiple Phase 1 and 2a clinical trials in healthy volunteers and patients with neuropathic pain and is currently in a Phase 1b/2a opioid withdrawal clinical trial funded by the National Institute on Drug Abuse, or NIDA. AV411 is also in collaborative studies with NIDA for methamphetamine addiction.

\*\* Other CNS disorders encompass neuropathic pain, opioid withdrawal and methamphetamine addiction.

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 further clinical development, as we presently intend with MN-166/AV411.

We intend to limit development activities for the balance of our product candidates. For each of these remaining product candidates, we plan to conduct development activities only to the extent deemed necessary to maintain our license rights or maximize our value while pursuing a variety of initiatives to monetize such product candidate on appropriate terms.

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 <sup>†</sup> ; Phase II clinical trial in insomnia completed in Q4, 2007 <sup>†</sup> <sup>†</sup>	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

These eight product development programs consist of:

<b>MN-</b> 447	Thrombotic disorders	Preclinical	Meiji Seika Kaisha	Worldwide, except Japan and certain countries in Asia
<b>MN-462</b>	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.

# **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 development programs, MN-221 and MN-166/AV411. 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 and COPD exacerbations independently in the United States; however, following completion of the Phase II clinical trial of MN-166 for the treatment of MS in the second quarter of 2008 and the acquisition of AV411 in December 2009, we have not undertaken, nor do we plan to undertake, any further significant clinical development of MN-166/AV411 until such time that we secure a strategic collaboration to advance the combined MN-166/AV411 ibudalist-based development program. 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.
- Pursue additional indications and commercial opportunities for our prioritized product candidates. We will seek to maximize the value of MN-221 and MN-166/AV411 by pursuing other potential indications and commercial opportunities for such product candidates. For example, we have rights to develop and commercialize MN-221 for any disease or indication. In addition to the ongoing evaluation of MN-221 for the treatment of acute exacerbations of asthma, we have recently expanded our development program for MN-221 to evaluate MN-221 for the treatment of COPD exacerbations utilizing our existing Investigational New Drug Application, or IND, for MN-221.
- *Maximize the value of the remainder of our diversified pipeline of existing product candidates.* We will conduct development activities strategically 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 take advantage of industry relationships to acquire product candidates with high potential and existing preclinical or early clinical data from Japanese pharmaceutical 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 "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 ende	d December	31,		September 26, 2000 (inception) to December 31,
	2009	2008	2007	2006	2005	<u>2009</u>
Statements of Operations Data:						
Revenues	\$ \$	— \$	\$	264 \$	804	\$ 1,558
Operating expenses: Cost of revenues Research and	_			147	674	1,258
development General and	10,873	13,828	42,121	32,171	22,738	144,546
administrative	10,366	8,773		9,624	7,479	89,027
Total operating expenses	21,239	22,601	53,494	41,942	30,891	234,831
Operating loss Gain/(impairment charge), net on investment securities and ARS	(21,239)	(22,601)	(53,494)	(41,678)	(30,088)	) (233,273)
put	310	(1,260)		—		(950)
Foreign exchange loss	(14)	(88)				(102)
Other income, net	581	2,038	4,611 (20)	5,988	4,396	18,377 (40)
Income Taxes	(7)	(14)			(05 (00)	
Net loss Accretion to redemption value of redeemable convertible preferred	(20,369)	(21,925)	(48,903)	(35,690)	(25,692)	· · · · · ·
stock Deemed dividend resulting from beneficial conversion on Series C redeemable convertible					(20	) (99)
preferred stock						(31,264)
Net loss applicable to common stockholders	\$ (20,369) <b>\$</b>	(21,925) \$	(48,903) \$	(35,690) \$	(25,712	) <u>\$(247,351)</u>
Basic and diluted net loss per share	\$ <u>(1.68)</u> \$	(1.82) \$	(4.16) \$	(3.52) \$	(2.88	)
Shares used to compute basic and diluted net loss per share	12,105,835	2,072,027 1	1,752,139 1	0,130,920 8	3,928,533	

	As of December 31,						
	2009 2008		2007	2006	2005		
Balance Sheet Data:							
Cash, cash equivalents and current investment							
securities	\$ 43,497	\$ 19,297	\$ 70,635	\$ 104,051	\$ 138,701		
ARS put—current	2,557		_				
Working capital	24,500	17,836	65,938	100,102	134,633		
Restricted cash, investment and letter of credit	31,223						
Long-term investments	2,085	24,047		-			
ARS put—long-term		5,793					
Total assets	94,327	50,224	73,752	111,591	142,394		
ARS loan payable	17,605						
Convertible notes	29,258				· · · ·		
Deficit accumulated during the development							
stage	(247,351)	(226,982)	(205,057)	(156,154)	(120,465)		
Total stockholders' equity	40,013	48,045	66,608	100,981	135,708		

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

#### Overview

## Background

We are a development stage company. We have incurred significant net losses since our inception. At December 31, 2009, from inception, our accumulated deficit was approximately \$247.4 million, including \$46.3 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 certain of our existing product development programs, primarily MN-221 for the treatment of acute exacerbations of asthma and COPD exacerbations, and over the long-term if we are successful in expanding our research and development programs and acquiring or in-licensing products, technologies or businesses that are complementary to our own.

#### Avigen Transaction

On December 18, 2009, Absolute Merger, Inc., a wholly-owned subsidiary of ours, merged with and into Avigen with Avigen continuing as the surviving entity and wholly-owned subsidiary of ours. We refer to this transaction as "the Merger". At the effective time of the Merger, each share of Avigen's common stock (and the associated preferred stock purchase right) was cancelled and extinguished and automatically converted into the right to receive either cash, convertible notes or a combination of both in an amount equal to the First Payment Consideration (as defined below) and the Second Payment Consideration (as defined below) and one Contingent Payment Right, or CPR, granting the holder thereof the rights as described under the section entitled "Contingent Payment Rights" below.

The First Payment Consideration, which was approximately \$1.19 per share of Avigen's common stock, was equal to \$35,461,000 divided by 29,852,115, the number of shares of Avigen's common stock outstanding immediately prior to the effective time of the Merger. The Second Payment Consideration is equal to the amount remaining in the escrow account described below following satisfaction of the Demand Amount (as defined below), as adjusted by the Selected Amount (as defined below).

#### **Escrow** Agreement

Under the terms of the escrow agreement, or Escrow Agreement, entered into at the closing of the Merger, we and Avigen funded \$1,500,000 in an escrow account. After closing, we also deposited into the escrow account certain payments, including certain cash amounts that exceed specified amounts agreed upon by the parties. We (Avigen and us) identified certain additional liabilities of approximately \$400,000 prior to closing of the Merger. At the closing of the Merger, Andrew A. Sauter, Avigen's former Chief Executive Officer and Chief Financial Officer, as the stockholder representative appointed in accordance with the procedures set forth in the Escrow Agreement, authorized the release of \$400,000 from the Escrow Agreement in satisfaction of these additional liabilities. As a result, the Second Payment Consideration is estimated to be no more than approximately \$1.1 million, or \$0.04 per share.

On or prior to June 30, 2010, we will be entitled to submit one demand certificate to claim all or a portion of the funds in the escrow account, or Demand Amount, with respect to certain additional liabilities, including liabilities in excess of specified amounts agreed upon by the parties. Upon delivery of the demand certificate, amounts in the escrow account that are not being demanded in satisfaction of additional liabilities will be released to Avigen's former stockholders on a pro rata basis. The stockholder representative will be entitled to dispute the Demand Amount, and provision has been made in the Escrow Agreement for an independent accounting firm to resolve any unresolved dispute between us and the stockholder representative with respect to the Demand Amount. Amounts disputed will not be distributed until the dispute is resolved, and the timing of the full distribution of the Second Payment Consideration is therefore subject to delay.

Following resolution of the dispute regarding the Demand Amount, which requires the independent accounting firm to select either the amount demanded by us or the amount of such demand as adjusted by the amounts contested by the stockholder representative as the numerical amount it believes is the accurate amount of additional liabilities, or Selected Amount, we will receive an amount reflecting any adjustments resulting from the Selected Amount. Any remaining amounts in the escrow account then will be released to Avigen's former stockholders on a pro rata basis.

#### Indenture

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At the closing of the Merger, we and American Stock Transfer & Trust Company, LLC, as trustee, entered into an indenture. Under the terms of a separate trust agreement, or Trust Agreement, \$29.4 million, which represents the First Payment Consideration less \$6.0 million paid out to Avigen shareholders who elected cash payment and the initial principal amount of the convertible notes, or Convertible Notes, was deposited with a trust agent for the benefit of the holders and us (the amount of such deposit together with interest accrued and capitalized thereon, the Property). Provided no event of default has occurred and is continuing, we will be able to direct the investment and reinvestment of the Property in certain approved investment options, including certain money market funds. At the maturity of the Convertible Notes on June 18, 2011, the 18-month anniversary of the closing of the Merger, we will use the Property to pay the principal amount of, and accrued interest on, the Convertible Notes.

The Convertible Notes are our secured obligations, and the Indenture does not limit other indebtedness of ours, secured or unsecured. The indenture contains limited covenants, including a requirement that we deliver to holders of the Convertible Notes quarterly statements setting forth the principal amount of the Convertible Notes at the close of the fiscal quarter as well as information regarding the amount of interest capitalized to such Convertible Notes during the fiscal quarter.

Holders of the Convertible Notes may submit conversion notices, which are irrevocable, instructing the trustee to convert such Convertible Notes into shares of our common stock at an initial conversion price of \$6.80 per share. Following each conversion date, which date generally is the final business day of each calendar month, we will issue the number of whole shares of common stock issuable upon conversion as promptly as practicable (and in any event within 10 business days). Any fractional shares (after aggregating all Convertible Notes being converted by a holder on such date) will be rounded down and we will deliver cash out of the separate trust for the current market value of the fractional share. The Indenture includes customary anti-dilution adjustments and events of default.

### **Contingent Payment Rights**

At the closing of the Merger, we, Avigen and American Stock Transfer & Trust Company, LLC, as rights agent, entered into a Contingent Payment Rights Agreement, or CPR Agreement. The CPR Agreement sets forth the rights that former Avigen stockholders will have with respect to each CPR held after the closing of the Merger. The CPR Agreement provides for the payment of the following amounts on a pro rata basis:

- if the first milestone payment under Avigen's agreement with Genzyme, or the Genzyme Agreement, is received before August 18, 2011, \$6,000,000 or such lesser cash amount paid by Genzyme;
- if the first milestone payment has not occurred and the Parkinson's Product, as defined in the Genzyme Agreement, is sold or otherwise disposed of by us before August 18, 2011, 50 percent of the net proceeds of such sale or disposition received before August 18, 2011; and
- if the trust established pursuant to Avigen's Management Transition Plan is terminated, the amount remaining in such trust upon termination (less any payments required to be made under Avigen's Management Transition Plan Trust Agreement), such amount currently estimated at \$550,000.

All payments will be made on a pro rata basis. In each case, the payments will be net of any related taxes and out-of-pocket costs, damages, fines, penalties and expenses incurred by us. The CPRs are not transferable, except in limited circumstances.

#### **Revenues and Cost of Revenues**

We recognized no revenues for each of the years in the three-year period ended December 31, 2009.

#### **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		Year ended December 31		
Candidate	Disease/Indication	2009	2008	2007
MN-221	Acute exacerbations of asthma and COPD	\$ 8,419	\$ 6,542	\$ 4,188
MN-166/AV411	Multiple sclerosis/other CNS disorders	635	3,363	9,512
MN-001	Bronchial asthma	64	73	14,436
<b>MN-001</b>	Interstitial cystitis	27	11	377
MN-029	Solid tumors	86	796	2,591
MN-305	Generalized Anxiety Disorder/Insomnia	(1)	18	5,309
MN-221	Preterm labor	1	99	873
MN-246	Urinary incontinence	15	(17)	1,771
MN-447	Thrombotic disorders		123	416
MN-462	Thrombotic disorders		-5	297
Unallocated	· · · · · · · · · · · · · · · · · · ·	1,627	2,815	2,351
Total research and	I development	\$10,873	\$13,828	\$42,121

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 ibudalist for the treatment of MS in the second quarter of 2008 and the December 2009 acquisition of AV411 ibudalist for the treatment of other CNS disorders, we plan to combine the two ibudalist-based development programs and pursue discussions with potential partners to secure a strategic collaboration. As such, we have not undertaken, nor do we plan to undertake, any further significant clinical development of MN-166/AV411 until such time that we

secure a strategic collaboration to advance the combined ibudalist-based development program. In addition, as of the third quarter of 2009, we determined to expand the product development program for MN-221 to evaluate MN-221 for the treatment of COPD exacerbations. 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 for the treatment of acute exacerbations of asthma and COPD exacerbations and decrease with respect to MN-166/AV411 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 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 programs, 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 may increase in future periods if we are required to expand our infrastructure based on the success of our current prioritized product development programs and in raising capital to support those and other development programs or otherwise in connection with increased business development activities related to partnering, out-licensing or disposition of our product candidates.

#### **Investment Securities and ARS Put**

Our investment securities consist of ARS, all of which had AAA ratings at the time of original purchase. 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. All of our ARS principally represent interests in municipal bonds, government-guaranteed student loans, insurance notes and portfolios of securities (primarily commercial paper). When our ARS were originally purchased, there was an active market for purchasing and selling ARS; therefore, we considered these investment securities to be available-for-sale.

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 adoption of Accounting Standards Codification, or ASC, 820, authoritative guidance for fair value measurements and disclosures (formerly Statement of Financial Accounting Standards, or SFAS, No. 157), we determine the fair value of our ARS portfolio primarily on Level 3 criteria, which results 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. Given the lack of a primary and secondary market for our ARS investment securities, we designated all of our ARS investment securities as trading securities at December 31, 2008. As a result, any

additional increase or decrease in the fair value of our ARS investment securities is recorded as either a gain or an impairment charge, respectively, in our consolidated statement of operations. For the year ended December 31, 2009, we recorded a net gain on our investment securities of \$3.5 million to increase the overall carrying value of our investment securities. We have classified our investment securities covered by the ARS Rights Offer (as described below) as current assets given that they can be converted into cash within twelve months from December 31, 2009. Our remaining investment securities are considered long-term assets, as they cannot be readily converted to cash within 12 months from December 31, 2009.

In August 2008, UBS, the brokerage firm through which we purchased the majority of our ARS, 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 the 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 the 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 terms of the ARS Loan, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. If at any time UBS exercises its right to terminate the credit line agreement governing the ARS Loan, then UBS is required to provide, as soon as reasonably possible, alternative financing on substantially the same terms and conditions as those under the credit line agreement and the agreement will remain in full force and effect until such time as such alternative financing has been established. 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. At December 31, 2009, the outstanding balance of the ARS Loan was \$17.6 million.

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 ARS without consideration of the ARS Put because they are deemed separate contractual agreements under ASC 820.

We elected to measure the ARS Put under the fair value option of ASC 825, authoritative guidance on financial instruments (formerly SFAS No. 159), to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. Under ASC 825, any subsequent increase or decrease in the fair value of the ARS Put would be recorded as either a gain or an impairment charge, respectively, in our consolidated statement of operations. 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. For the year ended December 31, 2009, based on our discounted cash flow valuation, we recorded an impairment charge of \$3.2 million in our consolidated statement of operations due to a decrease in the carrying value of the ARS Put to \$2.6 million.

The net gain on our investment securities and ARS Put was \$0.3 million for the year ended December 31, 2009, which we recorded in our consolidated statement of operations.

#### 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 eurodenominated 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 2009 is primarily attributable to the decline in the value of the U.S. dollar against the euro on the accrued payable for this foreign currency denominated contract. At December 31, 2009, the accrued payable had been settled.

#### **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.

#### **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 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. Valuation of our stock option grants 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.

Stock option compensation expense is recognized on a straight-line basis over the vesting period of the underlying option, generally four years.

#### **Business Combinations**

Our consolidated financial statements include an acquired business' operations after the completion of the acquisition. We account for acquired businesses using the acquisition method of accounting. The acquisition method of accounting for acquired businesses requires, among other things, that most assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date and that the fair value of acquired in-process research and development (IPR&D) be recorded on the balance sheet. Also, transaction costs are expensed as incurred. Any excess of the purchase price over the assigned values of the net assets acquired is recorded as goodwill. See Notes to Consolidated Financial Statements—Note 2. Avigen Transaction for further information on IPR&D and goodwill.

#### Fair Value Measurements

We are required to measure certain assets and liabilities at fair value, either upon initial measurement or for subsequent accounting or reporting. We use fair value extensively in the initial measurement of net assets acquired in a business combination and when accounting for and reporting on investment securities and certain financial instruments or assets. We estimate fair value using an exit price approach, which requires, among other things, that we determine the price that would be received to sell an asset or paid to transfer a liability in an orderly market of market participants, considering the highest and best use of assets and, for liabilities, assuming the risk of non-performance will be the same before and after the transfer. Many, but not all, of our financial instruments are carried at fair value. In addition, as required under accounting rules for business combinations, the assets acquired and liabilities assumed from Avigen on December 18, 2009 have been recorded at their estimated fair values as of the acquisition date. For additional information on the valuation approach to determine fair value, including a description of the inputs used, see Long Lived Assets below and Notes to Consolidated Financial Statements—Note 2. Avigen Transaction. Also, for information on fair value for our financial instruments, see Notes to Consolidated Financial Statements—Other Than Intangibles and Goodwill.

#### Long-Lived Assets and Impairment of Long-Lived Assets

We review long-lived assets, including property and equipment, and other intangible assets, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable and we perform impairment testing for goodwill and IPR&D annually. When it is determined that impairment has occurred, a charge to operations will be recorded. Impairment on property and equipment or other intangible assets, if any, is assessed using discounted cash flows. Impairment on goodwill is assessed on our overall market capitalization, as we operate under one reporting segment. Impairment on IPR&D is assessed on a fair value cost approach.

#### New Accounting Standards Not Yet Adopted

In October 2009, the FASB ratified Accounting Standards Update, or ASU, 2010-13, which eliminates the residual method of allocation and the requirement to use the relative selling price method when allocating revenue in a multiple deliverable arrangement. When applying the relative selling price method, the selling price for each deliverable shall be determined using vendor specific objective evidence of selling price, if it exists, otherwise third-party evidence of selling price. If neither vendor specific objective evidence nor third-party

evidence of selling price exists for a deliverable, companies shall use its best estimate of the selling price for that deliverable when applying the relative selling price method. ASU 2010-13 shall be effective in fiscal years beginning on or after June 15, 2010, with earlier application permitted. Companies may elect to adopt this guidance prospectively for all revenue arrangements entered into or materially modified after the date of adoption, or retrospectively for all periods presented. We do not believe the adoption of this accounting standard will have a material effect on our consolidated results of operations or financial condition.

In March 2010, the FASB issued ASU No. 2010-11, "Derivatives and Hedging (Topic 815): Scope Exception Related to Embedded Credit Derivatives". The FASB believes this ASU clarifies the type of embedded credit derivative that is exempt from embedded derivative bifurcation requirements. Specifically, only one form of embedded credit derivative qualifies for the exemption—one that is related only to the subordination of one financial instrument to another. As a result, entities that have contracts containing an embedded credit derivative feature in a form other than such subordination may need to separately account for the embedded credit derivative feature. The amendments in the ASU are effective for each reporting entity at the beginning of its first fiscal quarter beginning after June 15, 2010. Early adoption is permitted at the beginning of each entity's first fiscal quarter beginning after March 5, 2010. We do not believe the adoption of this accounting standard will have a material effect on our consolidated results of operations or financial condition.

#### **Results of Operations**

#### Comparison of the Years ended December 31, 2009 and 2008

#### Revenues

There were no revenues for the year ended December 31, 2009 or December 31, 2008.

#### Research and Development

Research and development expenses for the year ended December 31, 2009 were \$10.9 million, a decrease of \$2.9 million when compared to \$13.8 million for the year ended December 31, 2008. This decrease in research and development expenses primarily resulted from the following:

- a decrease of \$2.7 million due to the completion of the two year Phase II clinical trial for MN-166 for the treatment of MS;
- a decrease of \$0.9 million related primarily to the completion of clinical trials for MN-029 for the treatment of solid tumors and other non-prioritized assets; and
- a decrease of \$1.2 million in research and development personnel costs not tracked to a specific development program,

which decrease was offset primarily by a net increase of \$1.9 million related to the conduct of Phase II clinical trials for MN-221 for the treatment of acute exacerbations of asthma and COPD.

#### General and Administrative

General and administrative expenses were \$10.4 million for the year ended December 31, 2009, an increase of \$1.6 million when compared to \$8.8 million for the year ended December 31, 2008. The \$1.6 million increase was primarily related to expenses in connection with the Avigen transaction, including expenses related to legal fees to review and draft the merger agreement and related registration statement, accounting fees related to review of and consent for the related registration statement, the cost of the fairness opinion, and printing and mailing costs related to the special shareholders' meeting needed to approve the Avigen transaction.

## Gain/Impairment Charge on Investment Securities and ARS Put

For the year-ended December 31, 2009, we recorded a net gain of \$0.3 million on our investment securities and ARS Put, as compared to a net impairment charge of \$1.3 million for the year-ended December 31, 2008. The net gain in 2009 on our investment securities and ARS Put is primarily due to a change in assumed maturity in our discounted cash flow valuation analysis. In 2009 we utilized a five year assumed maturity on our ARS subject to UBS settlement, as opposed to a seven year assumed maturity in 2008. The change in assumed maturity was based on the outlook for the ARS market.

#### Foreign Exchange Loss

Foreign exchange loss was \$14,000 for the year ended December 31, 2009, a decrease of \$74,000 when compared \$88,000 for the year ended December 31, 2008. The decrease in foreign exchange loss was due to less weakening of the U.S. dollar against the euro and the settlement of the foreign currency denominated contract.

#### Other Income, net

Other income, net consisted of interest income earned on our cash and investment balances and totaled \$581,000 for the year ended December 31, 2009, a decrease of \$1.4 million when compared to \$2.0 million for the year ended December 31, 2008. The decrease was primarily due to a decrease in interest earned on most of our cash and investment balances due to lower interest rates as a result of the continued economic downturn. In addition, during the year ended December 31, 2009, \$235,000 of interest expense was recorded on the ARS Loan.

#### 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 ARS Put

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.

#### Other Income

Other income primarily consisted of interest 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.

#### **Liquidity and Capital Resources**

At December 31, 2009, we had \$28.4 million in cash, cash equivalents, investment securities- current and an ARS Put, net of ARS loan, as compared to \$49.1 million of cash, cash equivalents, investment securities and a long-term asset consisting of the ARS Put as of December 31, 2008, which decrease of \$20.7 million was primarily a result of our \$3.0 million payment to acquire Avigen and our operating loss of \$20.4 million, offset by noncash expenses. 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 at December 31, 2007, which decrease of \$21.5 million was primarily a result of our operating loss of \$21.9 million. Restricted cash and letter of credit of \$30.5 million would be included in our liquidity analysis and capital resources upon the conversion of the associated convertible notes into our stock. Through March 2010 we issued a total of 249,291 shares of our stock as a result of notes conversions and, accordingly, a total of approximately \$1.7 million was transferred from restricted cash to cash and cash equivalents.

Net cash used in operating activities amounted to \$17.0 million for the year ended December 31, 2009, primarily due to the net loss incurred during the year ended December 31, 2009 of \$20.4 million. In addition, \$1.8 million of cash used in operating activities was directly related to the Avigen transaction. Net cash used in investing activities of \$1.1 million for the year ended December 31, 2009 consisted of the net cash used to acquire Avigen, offset by the net maturities/sales of investment securities. Net cash provided by financing

activities amounted to \$18.1 million for the year ended December 31, 2009, primarily due to the net proceeds received from our ARS Loan of \$17.6 million.

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, 2009, we have completed the following sales of equity securities:

• 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 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, 2009, our investment securities (both current and long-term) totaled \$30.0 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 two percent to 25 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 (primarily five 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 2009 we modified the assumed maturity of student loan backed ARS to five years from seven years due to the outlook of the credit markets. With the change is assumed maturity, for the year ended December 31, 2009 we have recognized a net gain of \$3.5 million in our consolidated statement of operations as the investment securities are designated as trading securities. The carrying value of our investment securities at December 31, 2009 was \$26.3 million and the carrying value of our ARS Put (as described below) was \$2.6 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 ASC 825 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 realized loss of \$3.2 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 \$3.4 million and an increase in expected term to redemption by two years for our ARS portfolio yielded in our models a for our ARS portfolio yielded in our model a decrease in valuation of our ARS of \$1.1 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.

*Convertible Notes.* Upon conversion of the Convertible Notes at each monthly conversion date, the Indenture and Trust Agreement permit the release of the principal and interest represented by such Convertible Notes to us. As no Convertible Notes were converted into shares of our common stock as of December 31, 2009, no amounts were released to us in 2009. Following the January and February 2010 conversion dates, an aggregate of \$1.7 million was released to us in accordance with the Indenture and Trust Agreement, and any subsequent conversions will enhance our liquidity position.

#### 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, 2009 will be sufficient to fund our anticipated operating requirements through at least December 31, 2010. Although we believe that our existing capital resources will be sufficient to fund our operating requirements through at least December 31, 2010, 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 may affect our future liquidity as of December 31, 2009 (in thousands):

	Payment Due By Period							
Contractual Obligations	Total			3-5 Years	More than 5 Years			
Operating leases	\$ 1,165	\$ 687	\$ 478	\$	\$—			
License obligations(1)	_							
Convertible Notes due 2011 (2)	\$29,258		\$29,258					
Escrow Agreement (2)	\$ 1,094	\$1,094						
Total(3)	\$31,517	\$1,781	\$29,736	<u>\$</u>	<u>\$</u>			

- (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) These are recorded at fair value which is less than face value due to a lack of marketability discount employed in the binomial option pricing model we used to value these contractual obligations.
- (3) 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 investment securities are trading securities and consist of ARS, which are debt instruments with longterm maturities in which the interest rates reset in short intervals through "Dutch" auctions by matching buyers and sellers. All of our ARS had AAA ratings at the time of purchase and principally represent interests in 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, 2009, \$24.6 million of our ARS consisted primarily of government-guaranteed student loan securities and \$1.8 million of our ARS consisted of private placement securities.

The continued 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 2009, 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. For the year ended December 31, 2009, we liquidated \$1.3 million of ARS, 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. At December 31, 2009, our outstanding ARS Loan balance was \$17.6 million. 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.

	÷	mmon k Price
	High	Low
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		
Fiscal year ended December 31, 2009		
First quarter	\$3.20	\$1.43
Second quarter	\$4.25	\$1.93
Third quarter	\$7.46	\$4.00
Fourth quarter		

## **Holders of Common Stock**

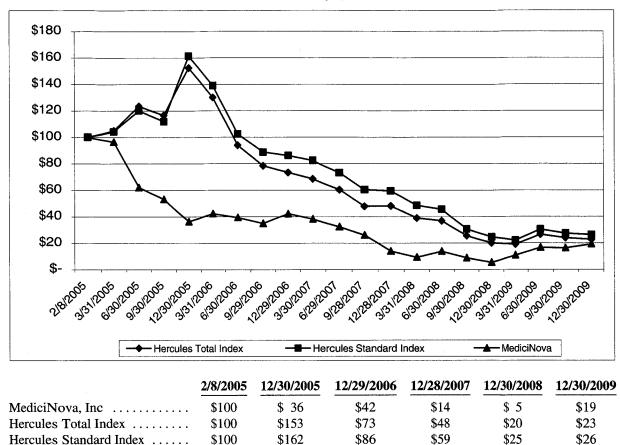
As of March 22, 2010, there were approximately 6,000 holders of record of our common stock.

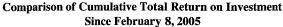
## **Dividend Policy**

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.



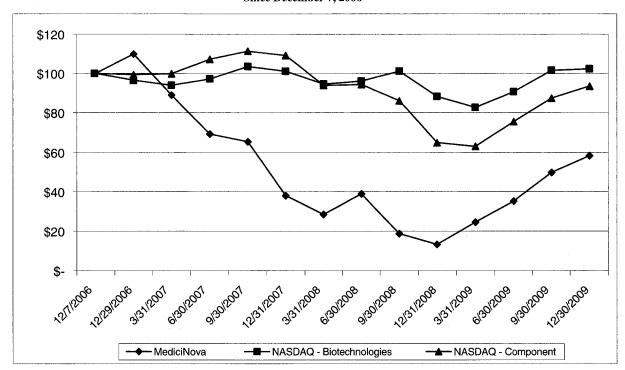


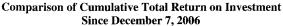
\* No cash dividends have been declared or paid on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

\$162

\$100

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.





\* 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.

	12/7/2006	12/31/2007	12/31/2008	12/31/2009
MediciNova, Inc	\$100	\$ 38	\$13	\$ 58
NASDAQ Biotechnologies Index	\$100	\$101	\$88	\$102
NASDAQ Composite Index	\$100	\$109	\$65	\$ 93

## **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, 2009, 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, 2009 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, 2009.

Based on our market capitalization as of June 30, 2009, we qualify as a smaller reporting company under the Securities Act of 1933, as amended, and the Exchange Act for the fiscal year ended December 31, 2009. As a result of qualifying as a smaller reporting company, this annual report does not include an attestation report of our registered independent public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered independent 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 sheet of MediciNova, Inc. and subsidiaries (a development stage company) (the Company) as of December 31, 2009, and the related consolidated statements of operations, stockholders' equity and cash flows for the year ended December 31, 2009 and for the period from September 26, 2000 (inception) through December 31, 2009. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. The cumulative statements of operations and cash flows for the period from September 26, 2000 (inception) through December 31, 2008 and the statements of stockholders' equity for the period from September 26, 2000 (inception) to December 31, 2000 and for each of the years in the eight-year period ended December 31, 2008, were audited by other auditors whose report has been furnished to us, and our opinion insofar as it relates to the amounts included for the period September 26, 2000 through December 31, 2008 is based solely on the report of the other auditors.

We conducted our audit 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. An audit includes 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, based on our audit and the report of other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of MediciNova, Inc. and subsidiaries (a development stage company) as of December 31, 2009, and the results of their operations and their cash flows for the year ended December 31, 2009 and for the period from September 26, 2000 (inception) to December 31, 2009, in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

San Diego, California March 24, 2010

# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders MediciNova, Inc.

We have audited the accompanying consolidated balance sheet of MediciNova, Inc. (a development stage company) as of December 31, 2008, and the related consolidated statements of operations, and cash flows for the years ended December 31, 2008 and 2007 and for the period from September 26, 2000 (inception) through December 31, 2008 (not included herein), and 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 the results of its consolidated operations and its cash flows for the years ended December 31, 2008 and 2007, and the period from September 26, 2000 (inception) through December 31, 2008 (not included herein), and the consolidated statements of stockholders' equity for the period from September 26, 2000 (inception) to December 31, 2008 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,			31,
	200	9		2008
Assets		- <u></u> ,		
Current assets:				
Cash and cash equivalents	\$ 19,24	1,581	\$	19,297,284
Investment securities-current (Note 3)	24,25			
ARS put—current (Note 3)		7,007		
Prepaid expenses and other current assets	86	9,649		718,317
Total current assets	46,92	3,224	í.	20,015,601
Restricted cash (Notes 1 and 2)	30,04			
In-process research and development (Notes 1 and 2)		0,000		
Restricted investment (Notes 1 and 2)		6,499		_
Restricted letter of credit (Notes 1 and 2) Goodwill (Notes 1 and 2)		0,042 2,205		
Property and equipment, net		2,203 3,547		368,299
Long-term investments (Note 3)		5,425		24,047,314
ARS put—long-term (Note 3)	,			5,792,701
Total assets	\$ 04.32	6 007	¢ .	50,223,915
10111 23013	\$ 94,32		ф. 	50,225,915
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	\$ 1,30	0,271	\$	392,572
ARS loan payable	17,60			
Escrow holdback (Notes 1 and 2)		4,045		· · · · · · · · · · · · ·
Accrued expenses	1,27	6,036		1,011,916
Income taxes payable	1 1 4			9,748
Accrued compensation and related expenses		6,960		765,147
Total current liabilities	22,42			2,179,383
Management transition plan liability (Note 2)		6,499		
Deferred tax liability (Note 8) Convertible notes (Notes 1 and 2)		6,000		
Total liabilities	54,31	3,433		2,179,383
Commitments and contingencies (Note 6) Stockholders' equity:				
Preferred stock, \$0.01 par value; 500,000 shares authorized at December 31, 2009				
and December 31, 2008; no shares outstanding at December 31, 2009 and				
December 31, 2008				
Common stock, \$0.001 par value; 30,000,000 shares authorized at December 31,				
2009 and December 31, 2008; 12,172,510 and 12,072,027 shares issued at				
December 31, 2009 and December 31, 2008, respectively, and 12,122,217 and				
11,984,713 shares outstanding at December 31, 2009 and December 31, 2008,				
respectively		2,170	07	12,072
Additional paid-in capital   Accumulated other comprehensive loss	288,65	2,712 4,914)	4	76,361,775
Treasury stock, at cost; 50,293 shares at December 31, 2009 and 87,314 shares at	(0	+,914)		(29,744)
December 31, 2008	(1.23	5,395)		(1,317,362)
Deficit accumulated during the development stage	(247,35			26,982,209
Total stockholders' equity	40,01			48,044,532
		······································		
Total liabilities and stockholders' equity	ə 94,32	6,907	<u>э</u> :	50,223,915

See accompanying notes to consolidated financial statements.

### CONSOLIDATED STATEMENTS OF OPERATIONS

	Years	ended Decemb	er 31,	Period from September 26, 2000 (inception) to December 31,
	2009	2008	2007	2009
Revenues	\$	\$ —	\$	\$ 1,558,227
Operating expenses:				
Cost of revenues			—	1,258,421
Research and development	10,873,169	13,827,651	42,121,095	144,545,867
General and administrative	10,366,291	8,773,695	11,372,873	89,026,998
Total operating expenses	21,239,460	22,601,346	53,493,968	234,831,286
Operating loss	(21,239,460)	(22,601,346)	(53,493,968)	(233,273,059)
Gain/(impairment charge), net on investment				
securities and ARS put	310,250	(1,259,984)		(949,734)
Foreign exchange loss	(13,622)	(88,159)		(101,781)
Other income, net	580,949	2,038,219	4,610,724	18,377,163
	(7,007)	(13,559)	(20,000)	(40,566)
Net loss	(20,368,890)	(21,924,829)	(48,903,244)	(215,987,977)
Accretion to redemption value of redeemable convertible preferred stock Deemed dividend resulting from beneficial	<u>.</u>	_		(98,445)
conversion feature on Series C redeemable				
convertible preferred stock				(31,264,677)
Net loss applicable to common stockholders	\$(20,368,890)	\$(21,924,829)	\$(48,903,244)	\$(247,351,099)
Basic and diluted net loss per common share	\$ (1.68)	\$ (1.82)	\$ (4.16)	
Shares used to compute basic and diluted net loss per share	12,105,835	12,072,027	11,752,139	

See accompanying notes to consolidated financial statements.

### CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Convertible preferred stock	rtible d stock	Comme	Common stock	Additional paid-in	Deferred	Accumulated other comprehensive	E	dudev	sto	
	Shares	Amount	Shares	Amount	capital	Compensation	loss	stock	stage	equity	
Issuance of common stock for cash to founders at \$1.00 per											
share in September		 \$	50,000	\$ 50	\$ 49,950	\$9	Ş	\$ \$	 \$	\$ 50,000	_
Issuance of Series A convertible preferred stock at \$10 per											
share in October	500,000	5,000		-	4,995,000	1	ł	1		5,000,000	_
Net loss and comprehensive loss		Ì	ļ				1	I	(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	]	I	4,995,000	1		1		5,000,000	_
Net loss and comprehensive loss	١	l		1	1				(1,794,734)	) (1,794,734)	~
Balance at December 31, 2001	1.000,000	10,000	50,000	50	10,039,950		1		(1,996,059)	8,053,941	
Net loss and comprehensive loss	,	1						ŀ	(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 obout the of of issuance over the store of \$1,002.453 in March Amril											
May and December	107.500	1.075	I		9,655,472	I	1		1	9,656,547	
Net loss and comprehensive loss			ļ						(6, 209, 130)	) (6,209,130)	<u> </u>
Balance at December 31, 2003	1,107,500	11,075	50,000	50	19,695,422		1	ļ	(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,	107 650	2001			LYC V31 L1					17 156 104	
February, March, April and May	000,001	1,00,1	1	I	24 040 014					34 060 016	
Stock-based compensation related to founders' warrants		I	I	ł	016'600'910		ļ		1	04,000,40	_
Deferred employee stock-based compensation	1	ł	1	1	1,419,300	(1,419,300)	]				
Amortization of deferred employee stock-based	I	Ι			1.	224,579				224,579	_
Deemed dividend resulting from beneficial conversion feature on Series C redeemable convertible preferred											
stock		•	l		31,264,677		1	I	(31,264,677)	-	
Accretion to redemption value of redeemable convertible											
preferred stock	1					1	I	ļ	(78,756)		
Net loss and comprehensive loss									(48,272,603)	(48,2/2,603)	<b>.</b>
Balance at December 31, 2004	1,291,150	12,912	50,000	50	103,603,582	(1,194,721)	1	1	(94,752,701)	) 7,669,122	

# CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY-(Continued)

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

# CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY-(Continued)

	Conve	Convertible	c	4	Additional		Accumulated other		Deficit accumulated during the	Total
	preferred stock Shares Amour	ea stock Amount	Common stock Shares Amo	Amount	paid-in capital	Deferred Compensation	comprehensive loss	Treasury stock	development stage	stockholders' equity
Cashless warrant exercises of 260,000 in										
February, April and August			260,000	260	(200)			I	Ι	
per share in March and August	1	1	275,000	275	274,725	I		ļ		275,000
Write off balance of deferred employee stock-based compensation as of										
	1	1	j		(799,439)	799,439			-	
Uption exercises of 1,400 shares at \$10.00 per share in May and August	I		1,400	2	13,998			ļ		14,000
Amortization of deferred employee stock-										
based compensation \$10.30	I				2,090,182	wante	-	ļ	l	2,090,182
May, June, July, September and										
October Comprehensive loss:	1		I	I	I	I	I	(1,382,425)	1	(1,382,425)
Net loss	I			Ι				]	(35,689,611)	(35,689,611)
loss			I		I		(34,017)			(34,017)
Total Comprehensive loss			I			-		I		(35,723,628)
Balance at December 31, 2006			10,421,985	10,422	258,611,697	Name in the second s	(49,205)	(1,437,870)	(156,154,136)	100,980,908
Cashless warrant exercises of 650,047 in January and September	1		650,047	650	(650)	I		l	1	I
February	ļ	I	1,000,000	1,000	10,638,600	I	ł	-	-	10,639,600
Employee stock-based compensation Issuance of shares under an employee stock					3,939,416	I	ł	l	I	3,939,416
purchase plan at \$6.72	1	-		1	1	ł	I	33,782		33,782
Net lossAccumulated other comprehensive	I		(5)	I	I		I	1	(48,903,244)	(48,903,244)
	I	I	I		-		(82,261)	I		(82,261)
Total comprehensive loss	1		-		1		1	I		(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

# CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY-(Continued)

	Conv preferr	Convertible preferred stock	Common stock	stock	Additional paid-in	Deferred	Accumulated other comprehensive	Treasury	Deficit accumulated during the development	Total stockholders'
	Shares	Amount	Shares	Amount	capital	Compensation	loss			equity
Employee stock-based compensation		 			3,172,712	.1		I	I	3,172,712
Issuance of shares under an employee stock purchase plan at \$2.33 average	I		I		I		ł	86,726	ļ	86,726
Comprehensive loss:		1	1	l			I	I	(21,924,829)	(21,924,829)
Accumulated other comprehensive loss		I	.	-	ł	I	101,722			101,722
Total comprehensive loss	1			1	Ι					(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
Employee stock-based compensation	I			ł	2,371,636					2,371,636
Option exercises	1	1	100,483	98	406,259		unitada		1	406,357
Fair value of redemption feature of Avigen purchase (Note 2)	I	-		I	9,513,042		I	I	I	9,513,042
Issuance of shares under an employee stock purchase plan at \$2.21 average		-	-	I	1		I	81,967	I	81,967
Comprehensive loss:		ļ	I	l	ł	I			(20,368,890)	(20,368,890)
Accumulated other comprehensive loss				1			(35,170)		-	(0/1,05)
Total comprehensive loss			12,172,510	\$12,170	\$288,652,712	 	\$ (64,914)	\$(1,235,395)	<u>(1,235,395)</u> <u>(247,351,099)</u>	(20,404,060) \$ 40,013,474

See accompanying notes to consolidated financial statements.

### CONSOLIDATED STATEMENTS OF CASH FLOWS

	Voors	anded Decemb	o <b>n 21</b>	Period from September 26, 2000 (inception)
		ended Decemb		to December 31,
	2009	2008	2007	2009
Operating activities: Net loss Adjustments to reconcile net loss to net cash used in operating activities:	\$(20,368,890)	\$(21,924,829)	\$(48,903,244)	\$(215,987,977)
Non-cash stock-based compensation	2,371,636	3,172,712	3,939,416	46,307,598
Depreciation and amortization	219,202	305,018	516,013	1,795,298
Amortization of premium/discount on marketable securities		(691,706)		
(Gain)/impairment charge, net on investment securities and ARS Put	(310,250)	1,259,984		949,734
Loss on disposal of assets	11,997			11,997
Impairment of sublease				35,259
Changes in operating assets and liabilities:	(114 202)	1 725 205	4 225 282	(822 700)
Prepaid expenses and other assets	(114,383)	1,725,295	4,225,382	(832,700)
rent	890,854	(5,109,397)	(3,678,280)	2,305,090
Accrued compensation and related expenses	285,672	144,543	212,600	1,050,819
Net cash used in operating activities		·····		(166,841,302)
	(17,014,102)	(21,116,560)	(43,838,089)	(100,641,502)
Investing activities:	(0.071.740)			(2.271.740)
Cash paid for acquired business, net of acquired cash Purchases of investment securities	(2,371,749)		(41 712 645)	(2,371,749)
Maturities or sales of investment securities	1,252,846	(2,000,000) 23,550,000	(41,712,645) 85,662,087	(377,205,766) 349,806,297
Acquisition of property and equipment	(16,447)		(380,709)	
Proceeds from sales of property and equipment			62,024	256,845
Net cash provided by / (used in) investing activities	(1,135,350)	21,550,000	43,630,757	(31,767,319)
Financing activities:				
Net proceeds from the sale of common stock	406,357		10,672,374	121,296,923
Sale of preferred stock, net of issuance costs			10,072,374	80,216,971
Proceeds from ARS loan, net	17,605,485			17,605,485
Purchase of treasury stock, net of employee stock purchases		86,726		(1,269,177)
Net cash provided by financing activities	18,093,809	86,726	10,672,374	217,850,202
Net increase / (decrease) in cash and cash equivalents Cash and cash equivalents, beginning of period	(55,703) 19,297,284	18,778,938	10,444,442 8,334,496	19,241,581 
Cash and cash equivalents, end of period	\$ 19,241,581	\$ 19,297,284	\$ 18,778,938	\$ 19,241,581
Supplemental disclosure of non-cash investing and financing activities: Conversion of convertible preferred stock into common stock upon				
initial public offering	<u>\$                                    </u>	<u>\$                                    </u>	<u>\$                                    </u>	\$ 43,515,677
Unrealized loss on marketable securities available-for-sale	<u>\$</u>	\$	\$ (39,813)	\$ (89,018)
Supplemental disclosure of non-cash operating and investing activities: Reclassification of current marketable securities available-for-sale to	¢	¢(04 047 214)	¢	¢ (24.047.21.4)
long-term investments	<u>\$                                    </u>	\$(24,047,314)	<u>Ф                                    </u>	<u>\$ (24,047,314)</u>
Supplemental disclosures of cash flow information: Income taxes paid	\$ 9,434	\$ 24,528	\$ —	\$ 33,962
Interest paid	\$ 235,364	*	\$	\$ 235,364
Supplemental disclosure of investing activities related to business	φ <i>μυσ</i> ,σ04	φ	Ψ	φ <u>233,304</u>
acquisition:				
Fair value of assets acquired	\$ 36,687.706	\$ —	\$	\$ 36,687,706
Liabilities assumed			\$	\$ (1,008,687)
Deferred tax liability	\$ (1,956,000)	\$	\$	\$ (1,956,000)
Fair value of total merger consideration (Note 2)	\$(42,865,224)	\$ —	\$	\$ (42,865,224)

See accompanying notes to consolidated financial statements.

### 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, in connection with preparation of the consolidated financial statements we operate under one reporting segment and are considered to be in the development stage, under the authoritative guidance for development stage entities, Accounting Standards Codification ("ASC") 915 (formerly Statement of Financial Accounting Standards ("SFAS") No. 7.)

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 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.

Avigen Transaction. On December 18, 2009, Absolute Merger, Inc., a wholly-owned subsidiary of ours, merged with and into Avigen, Inc., or Avigen, with Avigen continuing as the surviving entity and wholly-owned subsidiary of ours, or the Merger. Under the terms of the merger agreement, Avigen shareholders, at their election, received an amount per share either in cash, convertible notes issued by us or a combination thereof, upon closing. Of the 29,852,115 shares of Avigen common stock outstanding, approximately 17% of Avigen shareholders elected to receive cash at closing in the amount of approximately \$1.19 per share with an additional \$0.04 per share expected to be paid in two increments on June 30, 2010 and after November 30, 2010, while the remaining 83% elected to receive convertible notes issued by us. See Notes to Consolidated Financial Statements – Note 2, Avigen Transaction, for additional information on the merger.

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, 2010. 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.

### **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.

### Notes to Consolidated Financial Statements

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 Japanese yen.

On August 17, 2009, Absolute Merger, Inc., a wholly-owned subsidiary of MediciNova, Inc. was incorporated under the General Corporation Law of the State of Delaware for the purpose of facilitating the Merger (the "Merger") with Avigen, Inc. ("Avigen"). See Notes to Consolidated Financial Statements- Note 2. Avigen Transaction, for more information regarding the merger.

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, 2009 consisted of money market funds.

### **Investment Securities and ARS Put**

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. Such investments are carried at fair value, with unrealized gains and losses, if any, included as a separate component of stockholders' equity. The cost of marketable securities available-for-sale is based on the specific identification method. At December 31, 2009, there were no marketable securities available for sale recorded on our consolidated balance sheets.

Our investment securities, are trading securities, and consist of auction rate securities ("ARS"), all of which had AAA ratings at the time of purchase, that principally represent interests in government-guaranteed student loans, insurance notes and portfolios of securities (primarily commercial paper), and these securities have been designate as trading securities. 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, as required by ASC 820, authoritative guidance for fair value measurement and disclosures, we

### **Notes to Consolidated Financial Statements**

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. At December 31, 2009, \$24.6 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, 2009, \$24.3 million of ARS subject to the UBS settlement (described below) have been classified as current assets given the estimated time frame in which we can readily convert these securities into cash. The remaining \$2.1 million of ARS have been classified as long-term assets given the estimated time frame in which we can readily convert these securities into cash.

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. Our ARS Loan balance at December 31, 2009 was \$17.6 million, with an effective average interest rate of 1.29 percent charged, or approximately \$235,000 of interest charged, on the no net cost loan.

We elected to measure the ARS Put under the fair value option of ASC 825, authoritative guidance on financial instruments, 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 5% 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 loss of \$3.2 million in our consolidated statement of operations. In addition, we recorded the ARS Put as a current asset in our consolidated balance sheet as the ARS Put is exercisable beginning June 2010.

### **Restricted** Cash

Restricted cash consists of cash held in a separate trust account, managed by a third-party, in connection with the \$32.4 million of cash funded by Avigen and the \$3.0 million of cash paid by us, or the First Payment Consideration, less the \$6.0 million paid out to Avigen shareholders who elected a cash payout at the merger closing date—see Notes to Consolidated Financial Statements – Note 2. Avigen Transaction for further information.

### Notes to Consolidated Financial Statements

### **Restricted** Investment

Restricted investment consists of cash held in an irrevocable grantor trust, or rabbi trust, which is intended to fund benefit obligations under the Avigen, Inc. Management Transition Plan, or MTP. These funds represent reserves for benefits eligible to terminated employees as defined by the MTP. The cash equivalents in the rabbi trust is reported at fair value and classified as restricted investment in current assets. Upon termination of the trust, the merger agreement provides that these funds be paid to the former Avigen stockholders on a pro rata basis—see Notes to Consolidated Financial Statements – Note 2. Avigen Transaction for further information.

### **Restricted Letter of Credit**

Restricted letter of credit consists of cash provided as a credit guarantee and security for an irrevocable letter of credit related to the original lease of office space which expires November 30, 2010. Any funds remaining after the letter of credit expires will revert to the escrow holdback account described below.

### Convertible Notes

At the closing of the Merger, we and American Stock Transfer & Trust Company, LLC, as trustee, entered into an indenture. Under the terms of a separate trust agreement, \$29.4 million, which represents the initial principal amount of the convertible notes, or Convertible Notes, or 83% of the First Payment Consideration, was deposited with a trust agent for the benefit of the holders and us (the amount of such deposit together with interest accrued and capitalized thereon, the Property). Provided no event of default has occurred and is continuing, we will be able to direct the investment and reinvestment of the Property in certain approved investment options, including certain money market funds. At the maturity of the Convertible Notes on June 18, 2011, the 18-month anniversary of the closing of the Merger, we will use the Property to pay the principal amount of, and accrued interest on, the remaining Convertible Notes. At acquisition date, we recorded the Convertible Notes in our consolidated balance sheet at fair value—see Notes to Consolidated Financial Statements – Note 2. Avigen Transaction for further information on the valuation of the Convertible Notes.

### Escrow Holdback

At the closing of the merger, we and Avigen funded in cash and letter of credit \$1,500,000 in a separate escrow account, or Second Payment Consideration, pursuant to an escrow agreement. The Second Payment Consideration is considered the "Escrow Holdback". We (Avigen and us) identified certain additional liabilities of approximately \$400,000 prior to closing of the Merger. As such, in accordance with the procedures set forth in the escrow agreement, \$400,000 was released from the escrow account in satisfaction of these additional liabilities. As a result, the Second Payment Consideration is estimated to be no more than approximately \$1.1 million, or \$0.04 per share. At acquisition date, we recorded the Escrow Holdback in our consolidated balance sheet at fair value—see Notes to Consolidated Financial Statements – Note 2. Avigen Transaction for further information on the valuation of the Escrow Holdback.

### **Concentration** of Credit Risk

Financial instruments that potentially subject us to a significant concentration of credit risk consist primarily of cash, cash equivalents and investment securities. 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.

### Notes to Consolidated Financial Statements

Additionally, we have established guidelines regarding diversification of our investments and their maturities, which are designed to maintain safety and liquidity.

### **Business Combinations**

Our consolidated financial statements include an acquired business's operations after the completion of the acquisition. We account for acquired businesses using the acquisition method of accounting. The acquisition method of accounting requires, among other things, that assets acquired and liabilities assumed be recognized at their fair values as of the acquisition date and that the fair value of acquired in-process research and development (IPR&D) be recorded on the balance sheet. Also, transaction costs are expensed as incurred. Any excess of the purchase price over the assigned values of the net assets acquired is recorded as goodwill. In connection with the Avigen transaction we recorded, at fair value, IPR&D and goodwill—See Notes to Consolidated Financial Statements – Note 2. Avigen Transaction for a more detailed discussion on IPR&D and goodwill.

### Fair Value

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. The carrying amount of our ARS Loan also approximates its fair value due to the loan's short-term nature. We are required to measure certain assets and liabilities at fair value, either upon initial measurement or for subsequent accounting or reporting. We use fair value in the initial measurement of net assets acquired in a business combination and when accounting for and reporting on investment securities and certain financial instruments or assets. We estimate fair value using an exit price approach, which requires, among other things, that we determine the price that would be received to sell an asset or paid to transfer a liability in an orderly market of market participants, considering the highest and best use of assets and, for liabilities, assuming the risk of non-performance will be the same before and after the transfer. Many, but not all, of our financial instruments are carried at fair value. In addition, as required under accounting rules for business combinations, most of the assets acquired and liabilities assumed from Avigen on December 18, 2009 have been recorded at their estimated fair values as of the acquisition date. For additional information on the valuation approach to determine fair value, including a description of the inputs used, see Long Lived Assets below and Notes to Consolidated Financial Statements - Note 2. Avigen Transaction. Also, for information on fair value for our financial instruments, see Notes to Consolidated Financial Statements - Note 3. Fair Value Measurements - Other Than Intangibles and Goodwill.

### **MEDICINOVA, INC.**

### (a development stage company)

### Notes to Consolidated Financial Statements

The following table presents our financial instruments measured at fair value on a recurring basis classified by the fair value measurements and disclosures valuation hierarchy (in thousands):

		As of Decen	aber 31, 20	09
		Fair Value	Measurem	ents Using
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$19,242	\$19,242	<u>\$</u>	<u>\$                                    </u>
Current assets:				
Investment securities (ARS)	\$24,255	\$	\$	\$24,255
ARS Put	2,557	_		2,557
Total current assets	\$26,812	<u>\$                                    </u>	<u>\$</u>	\$26,812
Long-term investments:				
Investment securities (ARS)	\$ 2,085	<u>\$                                    </u>	<u>\$</u>	\$ 2,085
Total long-term investments	\$ 2,085	<u>\$                                    </u>	<u>\$</u>	\$ 2,085

	As	of Decem	ber 31, 20	08
		Fair Va	lue Measu	rements
	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$19,297	\$19,297	<u>\$</u>	<u>\$                                    </u>
Long-term investments:				
Investment securities (ARS)	\$24,047	\$	\$	\$24,047
ARS Put	5,793			5,793
Total long-term investments	\$29,840	\$	<u>\$</u>	\$29,840

The carrying amount of our ARS Loan as of December 31, 2009 and 2008 approximates its fair value due to its short term nature.

The following table presents our financial instruments measured at fair value on a non-recurring basis classified by the fair value measurements and disclosures valuation hierarchy (in thousands):

		As of Decer	nber 31, 20	09
		Fair Value	e Measuren	ents Using
	Total	Level 1	Level 2	Level 3
Current liabilities:				
Escrow holdback	\$ 1,094	\$—	\$	\$ 1,094
Total current liability	\$ 1,094	<u>\$</u>	\$ <u> </u>	\$ 1,094
Non-current liability:				
Convertible notes	\$29,258	<u>\$</u>	<u>\$</u>	\$29,258
Total non-current liability	\$29,258	<u>\$</u>	\$	\$29,258

There were no financial instruments measured at fair value on a non-recurring basis at December 31, 2008.

### MEDICINOVA, INC.

### (a development stage company)

### Notes to Consolidated Financial Statements

The judgments made in determining an estimate of fair value can materially impact our results of operations.

### **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. We also lease office space in Tokyo, Japan under a lease that expires in May 2011. Furthermore, pursuant to our acquisition of Avigen we acquired a month-to-month lease for 4,000 square feet of office space in Alameda, California. We vacated the Alameda premises on March 8, 2010 and we were released from our month-to-month lease by the landlord.

### Long-Lived Assets and Impairment of Long-Lived Assets

We review long-lived assets, including property and equipment, and other intangible assets, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable and we perform impairment testing for goodwill and IPR&D at least annually. When it is determined that impairment has occurred, a charge to operations will be recorded. Impairment on property and equipment or other intangible assets, if any, is assessed using discounted cash flows. Impairment on goodwill is assessed on our overall market capitalization, as we operate as one reporting segment. Impairment on IPR&D is assessed on a fair value cost approach.

The fair value of intangible assets is determined on a level 3 basis in which significant unobservable inputs were utilized primarily using the "income approach," which starts with a forecast of all the expected future net cash flows, some of which are more certain than others. Some of the more significant estimates and assumptions inherent in the intangible asset impairment estimation process include: the amount and timing of projected future cash flows; the discount rate selected to measure the risks inherent in the future cash flows; and the assessment of the asset's life cycle and the competitive trends impacting the asset, including consideration of any technical, legal, regulatory or economic barriers to entry, as well as expected changes in standards of practice for indications addressed by the asset.

### **Revenue Recognition**

We recognized no revenues for each of the years in the three-year period ended December 31, 2009.

### **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.

### **Notes to Consolidated Financial Statements**

### Income Taxes

In accordance with the authoritative guidance for income taxes under ASC 740 (formerly SFAS No. 109), 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.

Effective January 1, 2007, we adopted the authoritative guidance on accounting for uncertainty in income taxes, which prescribes a comprehensive model for how we should recognize, measure, present and disclose in our financial statements for uncertain tax positions that we have taken or expect to take on a tax return. The cumulative effect of adopting the guidance on accounting for uncertainty in income taxes resulted in no adjustment to retained earnings as of January 1, 2007.

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 since implementation of guidance on accounting for uncertainty in income taxes.

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, 2009, income taxes relate to service 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 the authoritative guidance for equity under ASC 505 (formerly EITF Issue No. 96-18.)

The exercise price of stock options granted during the years ended December 31, 2009, 2008 and 2007 were equal to market value on the date of grant. During the years ended December 31, 2009, 2008 and 2007, options to purchase 521,373, 615,540 and 151,000 shares of common stock, respectively, were granted and stock-based compensation expense for such stock options is reflected in operating results during fiscal years 2009, 2008 and 2007. 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 E Decemb	
	2009	2008
Risk-free interest rate	1.79%	3.00%
Expected volatility of common stock	70.00%	69.00%
Dividend yield		0.00%
Expected option term (in years)	4.13	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, the volatility of stock prices of certain peers within our industry sector and management's judgment. We

### Notes to Consolidated Financial Statements

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 term of employee stock options is based on the simplified method for "plain vanilla options" as provided by the authoritative guidance on stock compensation, as we concluded that our historical stock option exercise experience does not provide a reasonable basis for us to estimate the expected term.

As stock-based compensation expense recognized in the accompanying consolidated statement of operations for the years ended December 31, 2009, 2008 and 2007 were based on awards ultimately expected to vest, such expense should be reduced for estimated forfeitures. The authoritative guidance for compensation under ASC 718 (formerly 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 and our stock options vest monthly; therefore, we did not estimate any forfeitures in 2009, and we 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, 2009, 2008 and 2007, estimated as of the grant date using the Black-Scholes option valuation model, was \$1.53 per option, \$2.37 per option and \$5.27 per option, respectively.

For the years ended December 31, 2009, 2008 and 2007, stock-based compensation expense related to stock options was \$2.4 million, \$3.2 million and \$3.9 million, respectively, and was recorded as a component of general and administrative expense (\$1.9 million, \$1.8 million and \$3.0 million, respectively) and research and development expense (\$0.5 million, \$1.4 million and \$0.9 million, respectively). There were 100,483 stock options exercised during the year ended December 31, 2009, from which proceeds of \$0.4 million were received. No stock options were exercised during the years ended December 31, 2008 and 2007.

As of December 31, 2009, there was \$2.3 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 1.4 years, on a straight-line basis.

### Comprehensive Income (Loss)

The authoritative guidance for comprehensive income under ASC 220 (formerly SFAS No. 130) 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,			
	2009	2008	2007	
Beginning Balance	\$(29,744)	\$(131,466)	\$ (49,205)	
Currency translation	(35,170)	101,722	6,757	
Unrealized loss on marketable securities			(89,018)	
Ending Balance	\$(64,914)	\$ (29,744)	\$(131,466)	

### Notes to Consolidated Financial Statements

As of December 31, 2009, 2008 and 2007, our comprehensive loss was \$20,404,060, \$21,823,107 and \$48,985,505, 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. For the year ended December 31, 2009, there were 4,821,330 potentially dilutive securities excluded from determining diluted earnings per share because of their anti-dilutive effect, of which 4,330,300 potentially dilutive securities were based on the assumption that all of the convertible notes issued pursuant to the Avigen merger were converted at the closing date. There were no potentially dilutive securities for the years ended December 31, 2007.

### New Accounting Standards Not Yet Adopted

In October 2009, the FASB ratified Accounting Standards Update, or ASU, 2010-13, which eliminates the residual method of allocation and the requirement to use the relative selling price method when allocating revenue in a multiple deliverable arrangement. When applying the relative selling price method, the selling price for each deliverable shall be determined using vendor specific objective evidence of selling price, if it exists, otherwise third-party evidence of selling price. If neither vendor specific objective evidence nor third-party evidence of selling price exists for a deliverable, companies shall use its best estimate of the selling price for that deliverable when applying the relative selling price method. ASU 2010-13 shall be effective in fiscal years beginning on or after June 15, 2010, with earlier application permitted. Companies may elect to adopt this guidance prospectively for all revenue arrangements entered into or materially modified after the date of adoption, or retrospectively for all periods presented. We do not believe the adoption of this accounting standard will have a material effect on our consolidated results of operations or financial condition.

In March 2010, the FASB issued ASU No. 2010-11, "Derivatives and Hedging (Topic 815): Scope Exception Related to Embedded Credit Derivatives". The FASB believes this ASU clarifies the type of embedded credit derivative that is exempt from embedded derivative bifurcation requirements. Specifically, only one form of embedded credit derivative qualifies for the exemption—one that is related only to the subordination of one financial instrument to another. As a result, entities that have contracts containing an embedded credit derivative feature in a form other than such subordination may need to separately account for the embedded credit derivative feature. The amendments in the ASU are effective for each reporting entity at the beginning of its first fiscal quarter beginning after June 15, 2010. Early adoption is permitted at the beginning of each entity's first fiscal quarter beginning after March 5, 2010. We do not believe the adoption of this accounting standard will have a material effect on our consolidated results of operations or financial condition.

### 2. Avigen Transaction

On December 18, 2009 we acquired 100% of the outstanding shares of Avigen, a biopharmaceutical company that had focused on identifying and developing differentiated products to treat patients with serious disorders, whose potential product candidate is AV411, a glial attenuator and ibudalist small molecule

### Notes to Consolidated Financial Statements

therapeutic, for CNS disorders. The primary reasons for the Avigen acquisition were to combine the ibudalist development programs each company was respectively pursuing, to utilize the preclinical and clinical data for AV411 as support for the development pathway of MN-166 resulting in cost savings for us, and to capture a potential financing opportunity given Avigen's cash balance prior to the Merger.

The aggregate Merger consideration consisted of a First Payment Consideration of \$35.4 million of which \$3.0 million was funded in cash by us and \$32.4 million was funded in cash by Avigen, and a reduced Second Payment Consideration of \$1.1 million of which \$0.6 million was funded in cash by Avigen and \$0.5 million is to be funded upon the release of the restricted letter of credit, which is recorded as such in our consolidated balance sheet, by the letter of credit's beneficiary. The cash payments were deposited in a separate trust account and are considered restricted cash by us. Of the 29,852,115 shares of Avigen common stock outstanding at the closing date, approximately 17% of Avigen shareholders elected to receive cash. Thereby, the First Payment Consideration was reduced by the number of shareholders who elected to receive cash, or \$6.0 million, resulting in \$29.4 million of Convertible Notes at face value to be issued by us. The \$1.1 million Second Payment Consideration acts as an escrow holdback and is neither paid out in cash to the 17% of Avigen shareholders who elected cash nor issued as Convertible Notes by us until the respective holdback period lapses on June 30, 2010 and November 30, 2010 for the restricted letter of credit. The Convertible Notes can be converted into shares of our common stock at a conversion price of \$6.80 per share. At the date of closing, our closing stock price was \$7.99, resulting in a beneficial conversion feature on the Convertible Notes issued pursuant to the First Payment Consideration and the Convertible Notes to be issued pursuant to the Second Payment Consideration. In addition to the First and Second Payment Considerations, the Merger agreement includes a Contingent Payment Rights Agreement, or CPR Agreement, between us, Avigen and American Stock Transfer & Trust Company, LLC, as rights agent. The CPR Agreement sets forth the rights that former Avigen stockholders will have with respect to each CPR held after the closing of the Merger. The CPR Agreement provides for the payment of the following amounts on a pro rata basis:

- if the first milestone payment under Avigen's agreement with Genzyme, or the Genzyme Agreement, is received before August 18, 2011, \$6,000,000 or such lesser cash amount paid by Genzyme;
- if the first milestone payment has not occurred and the Parkinson's Product, as defined in the Genzyme Agreement, is sold or otherwise disposed of by us before August 18, 2011, 50 percent of the net proceeds of such sale or disposition received before August 18, 2011; and
- if the trust established pursuant to Avigen's Management Transition Plan, or Avigen's MTP, is terminated, the amount remaining in such trust upon termination (less any payments required to be made under Avigen's Management Transition Plan Trust Agreement), such amount currently estimated at \$550,000.

With respect to the first two contingent payment rights described above, we have not ascribed any value to them as we have deemed them not probable and we cannot determine when, or if, the related milestones will be achieved or the events triggering the commencement of payment obligations will occur. With respect to the contingent payment rights related to Avigen's MTP, as none of the assets will revert to us, we have recorded a restricted investment and a corresponding liability in our consolidated balance sheet.

We have included Avigen's business operations in our consolidated financial statements since the acquisition date and we have accounted for the Merger under the acquisition method of accounting. Included in our consolidated statement of operations is approximately \$4,000 of operating expenses since the acquisition date of December 18, 2009. Acquisition method of accounting requires that assets acquired and liabilities assumed are

### Notes to Consolidated Financial Statements

recognized at their fair values as of the acquisition date, that the fair value of acquired in-process research and development (IPR&D) is recorded on the balance sheet, all transaction costs are expensed as incurred and any excess of the purchase price over the assigned values of net assets acquired is recorded as goodwill. In addition, Avigen's historical stockholder's equity accounts were eliminated.

For the year ended December 31, 2009, we expensed \$1.8 million of transaction costs as they were incurred. The estimated fair value of the aggregate Merger consideration ("Purchase Price") was as follows (table in thousands):

First Payment Consideration (Convertible Notes issued by us)	\$29,258
Second Payment Consideration (Escrow Holdback)	1,094
Cash paid by us	3,000
Conversion Feature related to First Payment Convertible Notes	
Conversion Feature related to Second Payment Convertible Notes	286
Total Purchase Price	\$42,865

The fair value of the First Payment Consideration and Second Payment Consideration and the related fair value of their respective beneficial conversion feature, was based on a binomial option pricing model ("BOPM"). Assumptions used in the BOPM included the maturity date of the Convertible Notes, time between nodes, volatility, face value of the Convertible Notes at the closing date and the risk-free rate. The maturity date utilized was 1.5 years based on the maturity of the notes in June 2011. As our projected period was 1.5 years, we used the average of the one and two year U.S. Treasury bonds as of the closing date and we based volatility on the historical volatility of publicly-traded comparable companies to Avigen and our stock price volatility. To calculate the fair value of the Convertible Notes and their respective beneficial conversion feature under the BOPM we first had to generate a price tree, which is produced by working forward from the date of closing to the Convertible Notes maturity date. At each step it is assumed that the Convertible Notes will move up or down by a specific factor of volatility. In the second step of the BOPM we had to determine the option value at each final node, which is the intrinsic or exercise value. The intrinsic value is calculated by subtracting the conversion price, or \$6.80 per share, from the expected stock price as determine in the aforementioned step. The third step of the BOPM was to calculate option value at each node, starting at the end node, working back to the first node of the price tree, where the result would be the value of the option, discounted by the risk-free rate. In the last step of the BOPM we determined the fair value of the Convertible Notes without the conversion feature. To calculate the value of the Convertible Notes without the conversion feature, we multiplied the expected payments from the Convertible Notes by a discount factor, that discount factor being one divided by one plus the discount rate raised to the power of time. We then applied to the result a lack of marketability discount for the conversion feature using a protective put model to account for the lower degree of liquidity which would detract from the face value of the Convertible Notes.

The First Payment Consideration was recorded on our consolidated balance sheet as Convertible Notes at its fair value of \$29.3 million. The \$0.2 million difference between fair value and face value will be accreted to interest expense through the Convertible Note period. At acquisition-date, following ASC 805, the fair value of the conversion feature was accounted for within equity and will not be re-measured during interim periods and subsequent settlements (conversions to our stock) will be accounted for in equity.

The Second Payment Consideration was recorded on our consolidated balance sheet as an Escrow Holdback at its fair value of \$1.1 million. At acquisition-date, although this contingent consideration was recorded as a liability following ASC 805, the fair value of the conversion feature was accounted for within equity and will not

### Notes to Consolidated Financial Statements

be re-measured during interim periods and subsequent settlements for those who elected Convertible Notes (conversions to our stock) will be accounted for in equity.

Based on a third-party valuation, as of the date of closing, amounts of estimated fair value of assets acquired and liabilities assumed at the acquisition date were as follows (table in thousands):

Cash and cash equivalents	\$ 628
Restricted cash	30,046
Restricted investment	676
Restricted letter of credit	500
Identifiable intangible assets	4,800
Accrued interest	2
Prepaid expenses	35
Deferred tax liability	(1,956)
MTP liability	(676)
Accounts payable	(236)
Accrued compensation	(96)
Identifiable net assets acquired and liabilities assumed	33,723
Goodwill	9,142
Total purchase price	\$42,865

The carrying value of all assets acquired, except for identifiable intangible assets discussed below, and all liabilities assumed approximates fair value.

*Identifiable intangible assets*. Identifiable intangible assets acquired have been attributed as follows: (table in thousands):

IPR&D	\$4,800
Genzyme Agreement	
Total	\$4,800

*IPR&D*. The fair value attributed to IPR&D represents an estimate of fair value of in-process technology related to Avigen's AV411 program, which at the Merger closing date, had not received U.S. Food and Drug Administration ("FDA") approval for any indication. As such, pursuant to ASC 805, amortization of the IPR&D will not occur until it reaches market feasibility. Although we plan to integrate the two ibudalist-based development programs (our MN-166 and the acquired AV411) and pursue discussions with potential partners to secure a strategic collaboration to advance clinical development of the combined development programs, the fair value for the AV411 IPR&D was determined using the income approach, although the cost and market approaches were also reviewed. Under the income approach we used a multi-period excess earning method in which the forecast of all expected future cash flows was predicated on a collaboration partner structure in which revenue streams were generated in the short-term by milestone payments and royalty payments in the long-term. As several significant milestones need to be achieved prior to expected commercialization, a probability adjustment was applied to the forecasted revenue to account for the risk associated with being able to successfully commercialize. We also applied a discount rate on the overall valuation based on the industry composite weighted average cost of capital to account for the perceived risk of the technology with respect to

### Notes to Consolidated Financial Statements

successful commercialization, market acceptance and growth and profitability. To validate the reasonableness of the IPR&D fair value under the income approach, we also valued the technology under the cost and market approaches. Under the cost approach we estimated the cost to re-create the technology's preclinical and clinical data package, which this cost was considered a savings benefit by us and was part of our rationale for doing the Merger. Under the market approach we considered the formal and informal bids that Avigen received while it marketed its AV411 program for sale. After reviewing the results derived from all three approaches, we concluded that the income approach was a reasonable basis to fair value IPR&D.

*Genzyme Agreement*. In the event the first milestone is not reached and we can dispose of the respective Parkinson's product or FDA approval is received on the respective Parkison's product, then, the Genzyme Agreement could potentially have value. At the date of closing, however, we are unable to estimate the likelihood that we will be able to sell or dispose of our rights under the Genzyme Agreement and we are unable to estimate the likelihood of the respective Parkinson's product receiving FDA approval. Because we cannot determine the probability of selling or disposing of the Parkinson's product and we are unable to determine the probability that the Parkinson's product will receive FDA approval, we have not ascribed any value to this contingent asset at the acquisition date as its fair value cannot be reasonably estimated.

*Goodwill.* The authoritative guidance for business combinations requires that contingent consideration be recognized at acquisition-date fair value as part of the consideration transferred. As such, as stated above, we included in the purchase price the fair value of the aggregate Merger consideration, which included both the Convertible Notes associated with the First and Second Payment Considerations, the cash paid by us and the beneficial conversion feature on the Convertible Notes. The goodwill is primarily a direct result of the fair value of the beneficial conversion feature of the Convertible Notes. We were willing to set the conversion price of the Convertible Notes issued and to be issued at \$6.80 per share, which at acquisition-date was less than our closing stock price, as we viewed the Merger as a financing opportunity given the cash balance held by Avigen prior to the Merger. We also believe that the cost for a development stage company to raise \$30 million in today's economic environment exceeds the goodwill recorded on our books. To-date, we have raised approximately \$1.7 million as a result of the conversions that have taken place in January and February 2010.

We tested goodwill for impairment at December 31, 2009, utilizing a market based approach in which our total market capitalization was significantly higher than our goodwill carrying value; thus, noting, no impairment. We also tested IPR&D for impairment at December 31, 2009, utilizing a cost approach in which the total cost to re-create the technologies preclinical and clinical data package was significantly higher than our IPR&D carrying value; thus, noting no impairment.

The accompanying consolidated statement of operations for the year ended December 31, 2009, includes the operations of Avigen from the date of acquisition. Assuming the acquisition of Avigen had occurred January 1, 2009 and 2008, the pro forma unaudited condensed results of operations would have been as follows (in thousands, except per share amounts):

	Year Ending December 31,	
	2009	2008
Revenues	\$ 144	\$ 7,100
Operating Expenses		
Net Loss	\$(29,978	) \$(47,024)
Basic and diluted net loss per common share	\$ (1.82	) \$ (2.86)

### **MEDICINOVA, INC.**

### (a development stage company)

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The above proforma unaudited results of operations do not include proforma adjustments relating to costs of integration or post-integration cost reductions that may be incurred or realized by us in excess of actual amounts incurred or realized through December 31, 2009.

### 3. Fair Value Measurements - Other Than Intangibles and Goodwill

As defined in the authoritative guidance for fair value measurements and disclosures under ASC 820 (formerly 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, ASC 820 prescribes a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels which are 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, 2009, cash and cash equivalents (instruments with maturities of three months or less at the date of purchase) were \$19.2 million and primarily invested in money market accounts. At December 31, 2009, restricted cash and restricted investments were \$30.7 million and primarily invested in money market funds. We measure our cash equivalents, restricted cash and restricted investments 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.

At December 31, 2009, we held investment securities-current of \$24.3 million consisting of Auction Rate Securities ("ARS"), all of which had AAA ratings at the time of purchase, that principally represent interests in government-guaranteed student loans and we held an ARS Put (as defined below) in the amount of \$2.6 million. In August 2008, UBS AG and its affiliates ("UBS"), the brokerage firm through which we purchased the majority of our ARS, entered into a settlement with the Securities and Exchange Commission ("SEC"), the New York Attorney General and other state agencies. Pursuant to 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 ("ARS Rights Offer"). As part of the ARS Rights Offer, we received the right to sell to UBS our ARS held in accounts with UBS at par value 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, 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 ("ARS Loan"). Under the terms of the ARS Loan, UBS may demand full or partial payment of the ARS Loan, at its sole option and without cause, at any time. If at any time UBS exercises its right to terminate the credit line agreement governing the ARS Loan, then UBS is required to provide, as soon as reasonably possible, alternative financing on substantially the same terms and conditions as those under the credit line agreement and the agreement will remain in full force and effect until such time as such alternative financing has been established. 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

### Notes to Consolidated Financial Statements

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. At June 30, 2009, the ARS associated with the ARS Rights Offer and the ARS Put were reclassified out of long-term assets to current assets due to the time frame in which they can be readily converted to cash.

At December 31, 2009, the carrying cost of the ARS Loan, which approximates its fair value due to its short-term nature, was \$17.6 million. For the three months and year ended December 31, 2009, \$50,000 and \$350,000, respectively, of our current investment securities were redeemed at par value, with the proceeds being used to pay down the outstanding balance of the ARS Loan.

At December 31, 2009, we held long-term investments of \$2.1 million which consisted of ARS that principally represent interests of government-guaranteed student loan securities, insurance notes and portfolios of securities (primarily commercial paper).

At December 31, 2009, our total ARS portfolio (both current and long-term) totaled \$26.3 million at fair value (\$29.6 million at par value), of which \$1.8 million at fair value (\$2.2 million at par value) consisted of private placement securities. None of the underlying collateral of our ARS portfolio consisted of subprime mortgages or collateralized debt obligations. Our ARS were designated as trading investment securities at December 31, 2008. We measure all of our ARS and the ARS Put on a recurring basis based on Level 3 criteria because neither an active primary nor active secondary market exists for these securities. The table below reconciles fair value of our ARS trading investment securities and the ARS Put at December 31, 2008 with fair value at December 31, 2009, as determined by Level 3 (unobservable) inputs:

	Fair Value at 12/31/08	Transfers in/ (out) of Level 3 1/1/09-12/31/09	Transfers in/(out) of Long-term to Current 1/1/09-12/31/09	Sales/ Redemptions 1/1/09- 12/31/09	Impairment Charge at 12/31/09	Gain at 12/31/09	Fair Value at 12/31/09
Investment							
securities(1)	\$21,055,569	\$—	\$(21,055,569)	\$	\$	\$	\$
Investment rate							
securities(2)	2,991,745			(902,846)	(3,474)	) —	2,085,425
Total long-term							
investments	\$24,047,314	<u>\$</u>	\$(21,055,569)	\$(902,846)	\$ (3,474)	)\$ —	\$ 2,085,425
Long-term asset, ARS					A		
Put(3)	\$ 5,792,701	\$	\$ (5,792,701)	\$	\$	\$	
Investment securities-							
current(1)	¢	¢	¢ 01 055 5(0	¢(250.000)	¢	<b>00 540 410</b>	<b>***</b>
current(1)	ф —	<u> </u>	\$ 21,055,569	\$(350,000)	<u> </u>	\$3,549,418	\$24,254,987
ARS Put-current(3)	<u>\$                                    </u>	<u>\$</u>	\$ 5,792,701	<u>\$                                    </u>	\$(3,235,694)	\$	\$ 2,557,007

<sup>(1)</sup> Aggregated fair value reported at December 31, 2009 reflects fair value as determined by our discounted cash flow model with liquidity discounts, 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 (five 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

### Notes to Consolidated Financial Statements

of the 91-day Treasury bills auctioned during the quarter ending December 31, 2009 (which was the Federal Family Education Loan Program special allowance rate for the quarter ending December 31, 2009) 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 2% to 23%, we calculated aggregate fair value for these securities, which ranged between \$25.8 million with a two-year maturity, \$23.3 million with a seven-year maturity and \$21.8 million with a ten-year maturity. As of December 31, 2009, these ARS continued to pay interest according to their stated interest terms, and we received a partial redemption at par value of \$350,000 on one of the securities in this portfolio. In addition, as these investment securities are trading securities, the increase of approximately \$3.5 million in the overall fair value of the ARS was a recorded as a gain, of which approximately \$2.7 million of the gain was recorded in the fourth quarter of 2009, in our consolidated statement of operations and was primarily due to the change in the assumed maturity from seven years to five years. We believe the change in maturity from seven years to five years to be reasonable after discussing with certain financial advisors the outlook of the ARS market. Pursuant to the ARS Rights Offer, the earliest date that we can redeem these investment securities at par is June 30, 2010; therefore, at June 30, 2009, we reclassified these investment securities out of long-term assets and into current assets in our consolidated balance sheets.

- (2) Aggregated fair value reported at December 31, 2009 reflects fair value as determined by our discounted cash flow model, which employed liquidity discounts ranging from 3% to 25% depending on the security type and included assumptions regarding future cash flows and the likelihood of the redemption or refinancing of such ARS. For the student loan ARS we changed assumed maturity from seven years to five years and for the private placement ARS assumed a maturity remained at seven years. We believe the assumed maturities we utilized to be reasonable after discussing with certain financial advisors the outlook of the ARS market. 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 the London Interbank Offered Rate ("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, 2009 (which was the Federal Family Education Loan Program special allowance rate for the quarter ending December 31, 2009) 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 \$2.5 million with a two-year maturity for all securities, \$2.3 million with a five-year maturity for all securities and \$2.0 million with a ten-year maturity. As of December 31, 2009, the ARS continue to pay interest according to their stated interest terms. Because these investment securities are trading securities, the approximately \$3,000 decrease in fair value was recorded as a loss in our consolidated statement of operations. In addition, because of our expectation as to when we may be required to liquidate these ARS for operating purposes, these securities are classified as long-term investments in our consolidated balance sheets.
- (3) We elected to measure the ARS Put under the fair value option of ASC 825, authoritative guidance on financial instruments (formerly SFAS No. 159), to mitigate the volatility in reported earnings due to the linkage of certain of our ARS and the ARS Put. Fair value of the ARS Put, which equaled \$2.6 million at December 31, 2009, was also determined 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 5%, an interest rate of approximately 5% which took into consideration the brokerage firm's weighted average cost of capital and a maturity of 12 months. Based on our discounted

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cash flow valuation, at December 31, 2009, we recorded an impairment charge of approximately \$3.2 million in our consolidated statement of operations, of which approximately \$2.8 million was recorded in the fourth quarter of 2009, which minimized the gain we recognized on the linked ARS. In addition, at June 30, 2009, we reclassified the ARS Put out of long-term assets to current assets because it can be exercised within 12 months.

The portion of trading gains and losses for the year ended December 31, 2009 related to our investment securities classified as trading securities which were still held at December 31, 2009 is as follows (in thousands):

Net gain recognized on trading securities	\$3,546
Net loss recognized on trading securities sold	44
Net unrealized gain on trading securities still held	\$3,590

### 4. Balance Sheet Details

### **Property and Equipment**

Property and equipment, net, consist of the following:

	December 31,			31,
		2009		2008
Leasehold improvements	\$	498,581	\$	498,581
Furniture and equipment		867,083		880,337
Software		367,146		380,245
		1,732,810		1,759,163
Less accumulated depreciation and amortization	(	1,579,263)	_(	1,390,864)
	\$	153,547	\$	368,299
Depreciation and amortization expense	\$	219,202	\$	305,018

### 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,			
		2009		2008
Research and development costs	\$	864,471	\$	740,207
Professional services fees		187,367		176,236
Other		224,198		95,473
	\$1	,276,036	\$1	,011,916
	-			

### **Notes to Consolidated Financial Statements**

### **5. Related Party Transactions**

There were no related party transactions during the three years ending December 31, 2009.

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 ASC 718, 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.

### 6. 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 2011. Furthermore, pursuant to our acquisition of Avigen we acquired a month-to-month lease for 4,000 square feet of office space in Alameda, California. We vacated the Alameda premises on March 8, 2010 and, accordingly, we were released from our month-to-month lease by the landlord. Rent expense for the years ended December 31, 2009 and 2008 was \$578,493 and \$551,234, respectively, and rent expense, net of sub-lease income for the period from September 26, 2000 (inception) to December 31, 2009 was \$3,596,442.

Future minimum payments are as follows:

Years ending December 31:	
2010	\$613,490
2011	\$385,311
Thereafter	
Total minimum payments	\$998,801

### 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.

### Notes to Consolidated Financial Statements

The amounts expended under these agreements and charged to research and development expense during the years ended December 31, 2009, 2008, 2007, and the period from September 26, 2000 (inception) to December 31, 2009 were \$0, \$100,000, \$3,000,000 and \$9,850,000, respectively. As of December 31, 2009, future potential milestone payments totaled approximately \$94.1 million, and there are no minimum royalties required under any of the license agreements. We are unable at this time to estimate with certainty the timing on when these milestone payments will occur as these payments are dependent upon the progress of our product development programs. From June 19, 2002 (the date of our first license agreement) through December 31, 2009, 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

On August 24, 2009, The Pennsylvania Avenue Funds, an Avigen stockholder, filed a complaint in Alameda County Superior Court alleging that Avigen's directors breached their fiduciary duties in connection with the proposed transaction with us. On October 15, 2009, The Pennsylvania Avenue Funds filed an amended complaint adding us as a defendant. In the amended complaint, The Pennsylvania Avenue funds alleged, among other things, that we aided and abetted the alleged breach of fiduciary duties by the Avigen directors. Avigen and Pennsylvania Avenue Funds have signed a stipulation of settlement agreement and moved the court for preliminary approval. The Court heard oral argument on the Motion for Preliminary Approval of Settlement and held a case management conference on March 8, 2010, during which the Court raised a few issues regarding the settlement provisions. The parties have addressed those concerns and will appear before the Court on April 6, 2010 for preliminary approval of the settlement and a further case management conference.

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.

### Notes to Consolidated Financial Statements

### 7. Redeemable Convertible Preferred Stock, Convertible Notes 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 the authoritative guidance for debt under ASC 470 (formerly EITF Issue No. 98-5), 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 anti-dilution 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.

### Notes to Consolidated Financial Statements

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 these warrants expired 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, 2009, stock options to purchase a total of 37,500 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.

### Notes to Consolidated Financial Statements

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, 2009 is as follows:

	Number of Option Shares	Weighted Average Exercise Price
Outstanding at January 1, 2009	2,579,511	\$10.59
Granted	521,373	\$ 2.77
Exercised	(100,483)	\$ 4.05
Cancelled	(944,825)	<u>\$11.42</u>
Outstanding at December 31, 2009	2,055,576	\$ 8.63
Exercisable at December 31, 2009	1,319,391	\$10.32

The weighted average contractual life of options outstanding at December 31, 2009 was 7.4 years and the weighted average contractual life of exercisable options at December 31, 2009 was 6.9 years. The intrinsic value of stock options exercised, outstanding and exerciseable during the year ended December 31, 2009 was \$0.3 million, \$2.7 million and \$0.8 million, respectively, based on the Nasdaq Global Market on such date.

### Notes to Consolidated Financial Statements

### Common Stock Reserved for Future Issuance

The following table summarizes common stock reserved for future issuance at December 31, 2009:

Common Stock under the employee stock purchase program	250,685
Common stock reserved for issuance upon conversion of convertible notes	
Common stock options outstanding (under the 2000 Plan and 2004 Plan)	2,055,576
Common stock options authorized for future grant (under the 2004 Plan)	1,968,941
	9,775,202

### **Convertible** Notes

At the closing of the Merger, we and American Stock Transfer & Trust Company, LLC, as trustee, entered into the Indenture. Under the terms of a separate trust agreement (the "Trust Agreement"), \$29.4 million, which represents the initial principal amount of the Convertible Notes, was deposited with a trust agent for the benefit of the holders and us (the amount of such deposit together with interest accrued and capitalized thereon, the "Property"). Provided no event of default has occurred and is continuing, we are able to direct the investment and reinvestment of the Property in certain approved investment options, including certain money market funds. At the maturity of the Convertible Notes on June 18, 2011, the 18-month anniversary of the closing of the Merger, we will use the Property to pay the principal amount of, and accrued interest on, the Convertible Notes.

The Convertible Notes are our secured obligation, and the Indenture does not limit our other indebtedness, secured or unsecured. The Indenture contains limited covenants, including a requirement that we deliver to holders of the Convertible Notes quarterly statements setting forth the principal amount of the Convertible Notes at the close of the fiscal quarter as well as information regarding the amount of interest capitalized to such Convertible Notes during the fiscal quarter. At December 31, 2009, \$137 was the amount of dividends capitalized on the Convertible Notes. The interest rate on the Convertible Notes is equal to the interest earned on the money market funds in the trust account, which was less than half of a percentage point. The \$0.2 million in discount will be accreted to interest expense over the conversion period of the Convertible Notes.

Holders of the Convertible Notes may submit conversion notices, which are irrevocable, instructing the trustee to convert such Convertible Notes into shares of our common stock at an initial conversion price of \$6.80 per share. Following each conversion date, which date generally is the final business day of each calendar month, we will issue the number of whole shares of common stock issuable upon conversion as promptly as practicable (and in any event within 10 business days). The trustee will in turn release to us the respective amount of restricted cash to cover the stock issuance. We will then invest the unrestricted cash into either a money market fund or a money market account. Any fractional shares (after aggregating all Convertible Notes being converted by a holder on such date) will be rounded down and we will deliver cash for the current market value of the fractional share. The Indenture includes customary anti-dilution adjustments and events of default.

As of December 31, 2009, none of the Convertible Notes were converted into our common stock.

### **Notes to Consolidated Financial Statements**

### 8. Income Taxes

The significant components of our deferred income taxes at December 31, 2009 and 2008 are as follows:

	Decemb	oer 31,
	2009	2008
Deferred Tax Assets:		
Net operating loss carry forwards	64,627,000	51,884,000
Capitalized licenses	2,559,000	2,805,000
Research tax credits	6,037,000	5,380,000
Stock Options	420,000	1,093,000
Unrealized loss on marketable securities	387,000	513,000
Other, net	305,000	257,000
Total Deferred Tax Assets	74,335,000	61,932,000
Deferred Tax Liabilities		
IPR&D	(1,956,000)	
Total Deferred Tax Liabilities	(1,956,000)	
Net deferred tax assets	72,379,000	61,932,000
Valuation Allowance	(74,335,000)	(61,932,000)
Net Deferred Tax Liability	(1,956,000)	

We have established a deferred tax liability for the book to tax basis difference related to IPR&D acquired through the acquisition of Avigen.

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, 2009, we had federal and California net operating loss carryforwards of approximately \$158.8 million and \$157.9 million, respectively. Included in these amounts are federal and California tax benefits of approximately \$22,000 attributable to stock option deductions which will be credited to equity when realized. The federal net operating loss carryforwards begin to expire in 2020, and the California net operating loss carryforwards begin to expire in 2020, we also had federal and California research tax credit carryforwards of approximately \$5.4 million and \$1 million, 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 net operating losses, or 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. We are in the process of updating our formal Section 382 analysis to determine whether such an ownership change may have occurred during the period September 26, 2000–December 31, 2009. We believe an ownership change may have occurred during this period as a result of various equity financings. If so the amount of NOL and tax credit carryforwards available for utilization would be subject to an annual limitation. 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.

### Notes to Consolidated Financial Statements

In July 2006, the FASB issued ASC 740, which clarifies the accounting for uncertainty in income taxes recognized in a company's financial statements. ASC 740 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, ASC 740 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 ASC 740 beginning January 1, 2007. The adoption of ASC 740 did not materially impact our financial condition, results of operations or cash flows. As of December 31, 2009, 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, 2009, we do not have any significant accruals for interest related to unrecognized tax benefits or tax penalties.

### 9. 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 \$149,994, \$151,488, \$155,598 and \$862,126 for the years ended December 31, 2009, 2008, 2007 and the period from September 26, 2000 (inception) to December 31, 2009, respectively.

Under the MediciNova, Inc. 2007 Employee Stock Purchase Plan ("ESPP"), 300,000 shares of our common stock have been reserved for issuance. In addition, the shares reserved will automatically increase by a number equal to the lesser of: (i) 15,000 shares, (ii) 1% of the outstanding shares of our common stock on the last day of the immediately preceding fiscal year or (iii) such lesser amount as determined by the Board. 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, 2009, 37,021 shares were issued under the ESPP, leaving 250,685 shares available for future issuance.

### Notes to Consolidated Financial Statements

### **10.** 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 2009 and 2008 are as follows (in thousands, except per share data):

	Year Ended December 31, 2009			
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Selected quarterly financial data:				
Revenue	\$ —	\$ —	\$ —	\$ —
Total operating expenses	5,265	4,945	4,943	6,086
Net loss	(4,993)	(4,665)	(4,795)	(5,916)
Net loss applicable to common stockholders	(4,993)	(4,665)	(4,795)	(5,916)
Basic and diluted net loss per common share(1)	(0.41)	(0.39)	(0.40)	(0.49)

	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)

(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.

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### CORPORATE INFORMATION

### **COMPANY OFFICERS**

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

Shintaro Asako, CPA Vice President & Chief Financial Officer

Kirk Johnson, Ph.D. Chief Scientific 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. Clinical Development Advisor to MediciNova, 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

### John K.A. Prendergast, Ph.D. President, SummerCloud Bay, Inc.

Co-founder and Chairman of the Board, Palatin Technologies, Inc.

Hiroaki Shigeta Former President and Chief Executive Officer of Nippon Roche KK

### CORPORATE HEADQUARTERS

### MediciNova, Inc.

4350 La Jolla Village Drive, Suite 950 San Diego, CA 92122 Telephone: (858) 373–1500 Fax: (858) 373–7000 www.medicinova.com

### ANNUAL MEETING

The annual stockholders' meeting will be held on Thursday, June 10, 2010 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 KPMG, LLP

### COMMON STOCK LISTING

Ticker Symbol: MNOV, The Nasdag Global Market

### 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 forwardlooking 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, 2009 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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