## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

## **FORM 10-Q**

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED June 30, 2012

# □ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE TRANSITION PERIOD FROM TO

Commission file number: 001-33185

# **MEDICINOVA, INC.**

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)

4350 La Jolla Village Drive, Suite 950 San Diego, CA (Address of Principal Executive Offices) (I.R.S. Employer Identification No.)

33-0927979

92122 (Zip Code)

Accelerated filer

Smaller reporting company

 $\times$ 

(858) 373-1500 (Registrant's Telephone Number, Including Area Code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 🗵 No 🗆

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a small reporting company. See definition of "accelerated filer", "large accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Non-accelerated filer (Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes 🗆 No 🗵

As of August 8, 2012, the registrant had 16,163,565 shares of Common Stock (\$0.001 par value) outstanding.

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## PART I. FINANCIAL INFORMATION

## ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS.

## MEDICINOVA, INC. (a development stage company) CONSOLIDATED BALANCE SHEETS

	June 30, 2012 (Unaudited)	December 31, 2011
Assets	(,	
Current assets:		
Cash and cash equivalents	\$ 7,258,530	\$ 15,093,124
Prepaid expenses and other current assets	634,428	614,540
Total current assets	7,892,958	15,707,664
Goodwill	9,600,241	9,600,241
In-process research and development	4,800,000	4,800,000
Investment in joint venture	679,399	650,000
Property and equipment, net	62,209	29,425
Total assets	\$ 23,034,807	\$ 30,787,330
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 440,107	\$ 718,882
Accrued expenses	742,950	1,515,815
Accrued compensation and related expenses	209,317	599,087
Current deferred revenue	1,815,203	863,510
Total current liabilities	3,207,577	3,697,294
Deferred tax liability	1,956,000	1,956,000
Long-term deferred revenue	—	1,636,490
Total liabilities	5,163,577	7,289,784
Stockholders' equity:		
Preferred stock, \$0.01 par value; 3,000,000 and 500,000 shares authorized at June 30, 2012 and December 31,		
2011, respectively; 220,000 shares issued at June 30, 2012 and December 31, 2011	2,200	2,200
Common stock, \$0.001 par value; 100,000,000 and 30,000,000 shares authorized at June 30, 2012 and		
December 31, 2011, respectively; 16,187,615 and 16,127,615 shares issued at June 30, 2012 and		
December 31, 2011, respectively, and 16,163,565 and 16,088,015 shares outstanding at June 30, 2012 and		
December 31, 2011, respectively	16,188	16,128
Additional paid-in capital	310,497,442	309,998,251
Accumulated other comprehensive loss	(61,728)	(56,845)
Treasury stock, at cost; 24,050 shares at June 30, 2012 and 39,600 shares at December 31, 2011	(1,161,816)	(1,189,705)
Deficit accumulated during the development stage	(291,421,056)	(285,272,483)
Total stockholders' equity	17,871,230	23,497,546
Total liabilities and stockholders' equity	\$ 23,034,807	\$ 30,787,330

See accompanying notes.

## MEDICINOVA, INC. (a development stage company)

## CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

(Unaudited)

	Three months ended June 30,					Period from September 26, 2000 (inception) to June 30,
	2012	2011	2012	2011	2012	
Revenues	\$ 493,623	\$ —	\$ 684,797	\$ —	\$ 2,243,024	
Operating expenses:						
Cost of revenues		—	—		1,258,421	
Research and development	1,483,939	2,040,060	3,362,400	4,663,958	165,403,963	
General and administrative	1,297,888	1,682,246	3,483,860	4,034,722	109,006,384	
Total operating expenses	2,781,827	3,722,306	6,846,260	8,698,680	275,668,768	
Operating loss	(2,288,204)	(3,722,306)	(6,161,463)	(8,698,680)	(273,425,744)	
Impairment charge on investment securities		—	—		(1,735,212)	
Other expense	(81)	(31,494)	(5,047)	(83,869)	(364,672)	
Interest expense		(943,745)	—	(1,596,132)	(3,605,818)	
Other income	6,935	16,197	17,937	41,603	19,138,329	
Loss before income taxes	(2,281,350)	(4,681,348)	(6,148,573)	(10,337,078)	(259,993,117)	
Income taxes					(64,817)	
Net loss	(2,281,350)	(4,681,348)	(6,148,573)	(10,337,078)	(260,057,934)	
Accretion to redemption value of redeemable convertible preferred stock	—	—	—	—	(98,445)	
Deemed dividend resulting from beneficial conversion feature on Series						
C redeemable convertible preferred stock					(31,264,677)	
Net loss applicable to common stockholders	\$ (2,281,350)	\$ (4,681,348)	\$ (6,148,573)	\$(10,337,078)	\$(291,421,056)	
Basic and diluted net loss per common share	\$ (0.14)	\$ (0.31)	\$ (0.38)	\$ (0.74)		
Shares used to compute basic and diluted net loss per common share	16,143,125	15,319,273	16,115,570	13,941,172		
Net loss applicable to common stockholders	\$ (2,281,350)	\$ (4,681,348)	(6,148,573)	\$(10,337,078)	\$(291,421,056)	
Other comprehensive loss, net of tax:						
Foreign currency translation adjustments	1,905	2,314	(4,883)	(5,343)	(61,728)	
Comprehensive loss	\$ (2,279,445)	\$ (4,679,034)	\$ (6,153,456)	\$(10,342,421)	\$(291,482,784)	

See accompanying notes.

## MEDICINOVA, INC. (a development stage company) CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	Six months ended June 30,		Period from September 26, 2000 (inception) to June 30,	
	2012	2011	to June 30, 2012	
Operating activities:			•	
Net loss	\$ (6,148,573)	\$(10,337,078)	\$(260,057,934)	
Adjustments to reconcile net loss to net cash used in operating activities:		222.440	50.040.000	
Non-cash stock-based compensation	361,521	333,110	50,042,802	
Deferred revenue	(684,797)		1,815,203	
Depreciation and amortization	16,552	23,906	1,961,976	
Amortization of premium/discount on investment securities, convertible debt, debt discount				
and issuance costs	—	752,125	(1,099,365)	
Impairment charge, net on investment securities and ARS Put	_		1,735,212	
Loss on disposal of assets Impairment of sublease	—	—	10,637	
Changes in operating assets and liabilities:			35,259	
Prepaid expenses and other assets	(19,888)	(12 117)	(507 470)	
Accounts payable, income tax payable, accrued expenses and deferred rent	(405,921)	(13,117) (228,529)	(597,479) 915,621	
Accrued compensation and related expenses	(389,771)	85,274	113,176	
Restricted assets	(505,771)	(17)	5,982	
	(7,270,877)			
Net cash used in operating activities	(7,270,677)	\$ (9,384,326)	(205,118,910)	
Investing activities:			(2,020,705)	
Cash paid for acquired business, net of acquired cash	_		(2,829,785)	
Purchases of investment securities	—		(377,205,766)	
Maturities or sales of investment securities	(49,336)	—	377,918,240	
Acquisition of property and equipment Investment in joint venture		—	(2,326,926)	
	(680,000)		(680,000) 256,845	
Proceeds from sales of property and equipment	(720, 220)			
Net cash used in investing activities	(729,336)	<u>\$                                    </u>	(4,867,392)	
Financing activities:				
Proceeds from issuance of common stock and units, net of issuance costs	137,730	7,973,634	131,316,352	
Proceeds from issuance of convertible preferred stock, net of issuance costs		—	85,572,825	
Proceeds from ARS loan	_	_	17,605,485	
Net proceeds from debt	—		14,670,000	
Proceeds from conversion of convertible notes		76,473	1,881,253	
Purchase of treasury stock, net of employee stock purchases	27,889	4,005	(1,195,598)	
Repayments of debt	_	(15,000,000)	(15,000,000)	
Repayments of ARS loan	105.010		(17,605,485)	
Net cash provided by (used in) financing activities	165,619	(6,945,888)	217,244,832	
Net increase/ (decrease) in cash and cash equivalents	(7,834,594)	(16,330,214)	7,258,530	
Cash and cash equivalents, beginning of period	15,093,124	28,252,204		
Cash and cash equivalents, end of period	\$ 7,258,530	\$ 11,921,990	\$ 7,258,530	
Supplemental disclosure of investing and financing activities:				
Issuance of warrants	\$ —	\$ —	\$ 2,882,258	
Conversion of convertible preferred stock into common stock upon initial public offering	\$ —	\$ —	\$ 43,515,677	
Restricted assets, cash unrestricted upon conversion of convertible notes	\$ —	\$ 76,473	\$ 1,881,815	
Supplemental disclosures of cash flow information:				
Income taxes paid	\$ —	\$ 5,468	\$ 63,784	
Interest paid	\$ —	\$ 1,088,926	\$ 2,487,343	

See accompanying notes.

## MEDICINOVA, INC. (a development stage company) Notes to Consolidated Financial Statements (Unaudited)

#### **1. Interim Financial Information**

#### 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 serious diseases with unmet medical needs 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 which we believe provide significant commercial opportunity for the Company.

#### **Basis of Presentation**

We have prepared the accompanying unaudited consolidated financial statements in accordance with accounting principles generally accepted in the U.S. for interim financial information. Accordingly, they do not include all of the information and disclosures required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments of a normal recurring nature necessary for the fair presentation of our financial position, results of operations and cash flow for the interim periods presented have been included. Operating results for the three and six months ended June 30, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012 or for any other period. For further information, see the financial statements and disclosures thereto for the year ended December 31, 2011 in our Annual Report on Form 10-K as filed with the Securities and Exchange Commission on March 29, 2012.

#### **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."

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 the Company's product candidates 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 acquisition with Avigen, Inc. ("Avigen").

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.

#### **Revenue Recognition and Deferred Revenue**

In October 2011, we entered into an agreement with Kissei Pharmaceutical Co., Ltd., or Kissei, to perform research and development services relating to MN-221 in exchange for a non-refundable upfront payment of \$2.5 million. Under the terms of the agreement, we are responsible for all costs to be incurred in the performance of these services which are expected to be completed in 2012 and 2013. We assessed the deliverables in accordance with the authoritative guidance and concluded the existence of one deliverable, which was research and development services. As such, we will recognize as revenue the \$2.5 million payment as the research and development services are performed. In the three and six months ended June 30, 2012 we recorded revenue relating to this agreement of \$0.5 million and \$0.7 million, respectively. The amount received from Kissei, net of the amount recorded as revenue, is recorded on the balance sheet at June 30, 2012 as current deferred revenue.

#### Concentrations and Credit Risk

We maintain cash balances at various financial institutions and such balances commonly exceed the \$250,000 insured amount by the Federal Deposit Insurance Corporation. We also maintain money market funds at various financial institutions which are not federally insured, although they are invested primarily in U.S. government securities.

We have not experienced any losses in such accounts and management believes that we do not have significant credit risk with respect to such cash and cash equivalents. We have sustained operating losses since inception and expect such losses to continue over the next several years. Management plans to continue financing operations with equity issuances, debt arrangements, or a combination thereof.

#### **Recent Accounting Pronouncements**

In June 2011, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2011-05, *Presentation of Comprehensive Income*. The guidance requires an entity to present items of net income and other comprehensive income, or OCI, and total comprehensive income either in a single continuous statement of comprehensive income or two separate but continuous statements. We will no longer be allowed to present OCI in the statement of stockholders' equity. Earnings per share would continue to be based on net income. Although existing guidance related to items that must be presented in OCI has not changed, companies will be required to display reclassification adjustments for each component of OCI in both net income and OCI. Also, companies will need to present the components of other comprehensive income in their interim and annual financial statements. This guidance is required to be implemented retrospectively during interim and annual periods beginning after December 15, 2011. The adoption of this update did not have a material impact on our consolidated financial statements.

In May 2011, the FASB issued ASU 2011-04, *Amendments to Achieve Common Fair Value Measurements and Disclosures Requirements in U.S. GAAP and IFRSs*, which clarified and amended the wording used to describe many of the requirements for measuring fair value and for disclosing information about fair value measurements. The FASB also clarified the intent of existing fair value measurement requirements. The new and revised disclosures are required to be implemented prospectively during interim and annual periods beginning after December 15, 2011. The adoption of this update did not have a material impact on our consolidated financial statements.

#### 2. Avigen Transaction

On December 18, 2009, we acquired 100% of the outstanding shares of Avigen, a biopharmaceutical company whose potential product candidate was a therapeutic for Central Nervous System, or CNS, disorders. Under the terms of the acquisition, we issued \$29.4 million in secured convertible notes that matured on June 18, 2011. Holders of the notes could convert their notes into our common stock at an initial conversion price of \$6.80 per share. At the maturity of the convertible notes, the remaining holders would be paid the same per share amount as the Avigen shareholders that elected to receive cash at the acquisition closing, plus accrued interest. As part of the acquisition consideration, the former Avigen shareholders were also entitled to receive approximately \$0.04 per share, which was paid in two increments in 2010, and rights under contingent payment rights issued as part of the acquisition consideration. The amount paid in the two installments was net of a reconciliation of Avigen expenses and a letter of credit after expiry. Under the first and second installments, we paid \$140,119 and \$73,449, respectively, to Avigen shareholders who elected payment in convertible notes in lieu of a cash payment. We have included Avigen's business operations in our consolidated financial statements since the acquisition date and we have accounted for the acquisition under the acquisition method of accounting.

### 3. Joint Venture

We entered into an agreement to form a joint venture company with Zhejiang Medicine Co., Ltd. and Beijing Make-Friend Medicine Technology Co., Ltd. effective September 27, 2011. The joint venture agreement provides for the joint venture company, Zhejiang Sunmy Bio-Medical Co., Ltd. ("Zhejiang Sunmy"), to develop and commercialize MN-221 in China. A sublicense, which will require the consent of the licensor, will be required for us to license MN-221 to Zhejiang Sunmy. In accordance with the joint venture agreement, in March 2012 we paid \$680,000 for a 30% interest in Zhejiang Sunmy. The other parties to the joint venture agreement provided funding for their combined 70% interest and are responsible for future funding of Zhejiang Sunmy's activities. We have not entered into the sublicense of MN-221 with Zhejiang Sunmy as of the date of this report. Zhejiang Sunmy is a variable interest entity for which we are not the primary beneficiary as we do

not have a majority of the board seats and we will not have power to direct or significantly influence the actions of the entity. We therefore account for the activities of Zhejiang Sunmy under the equity method whereby we absorb any loss or income generated by Zhejiang Sunmy according to our percentage ownership. At June 30, 2012 we reflect a long-term asset on our consolidated balance sheet which represents our investment in Zhejiang Sunmy, net of our portion of any generated loss or income.

#### 4. Fair Value Measurements

As defined in the authoritative guidance for fair value measurements and disclosures under ASC 820, 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 June 30, 2012, cash equivalents (instruments with maturities of three months or less at the date of purchase) were \$1.7 million and primarily invested in money market accounts. The fair value of our cash equivalents 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 June 30, 2012 we did not hold financial instruments measured at fair value on a non-recurring basis.

#### 5. Long-term Debt

In May 2010, we entered into a loan and security agreement, or the Loan Agreement, with Oxford Finance Corporation, or Oxford, under which we borrowed \$15.0 million at a stated interest rate of 12.87 percent. Our obligations under the Loan Agreement were secured by a first priority security interest on substantially all of our assets, other than our intellectual property, and we also agreed not to pledge or otherwise encumber our intellectual property assets. Our obligations under the Loan Agreement also contained certain restrictive covenants.

Pursuant to the Loan Agreement, we issued to Oxford a warrant to purchase up to 198,020 shares of our common stock, par value \$0.001 per share. The warrant is exercisable, immediately, in whole or in part, has a per share exercise price of \$6.06 and may be exercised on a cashless basis. The warrant will terminate on the earlier of May 10, 2017 or the closing date of a merger or consolidation transaction in which we are not the surviving entity. In addition, the warrant and debt instrument are immediately separable and were issued separately. We accounted for the warrant as a component of stockholders' equity as the agreement requires settlement in shares and under no provision of the agreement are we required to settle the warrant in cash.

We accounted for the interest on the debt using the effective interest method wherein we treated the debt issuance costs paid directly to Oxford and the relative fair value of the warrants issued to Oxford as a discount on the debt (or a contra liability) and we treated the debt issuance costs paid to third parties (primarily legal fees) as an other asset in our consolidated balance sheet. The amortization of the debt discount was recorded as interest expense and the amortization of the debt issuance costs paid to third parties was recorded as other expense in our consolidated statements of operations and comprehensive loss.

On April 1, 2011, we entered into an agreement with Oxford under which we made an early repayment of the loan in-full and wherein Oxford agreed to waive the early payment penalty of \$0.4 million.

#### 6. Net Loss Per Share

Net loss per common share is presented as basic and diluted net loss per common share. Basic net loss per common share is calculated by dividing the net loss attributable to common stockholders by the weighted average number of common shares outstanding for the period, without consideration for common stock equivalents. Diluted net loss per common share is

computed by dividing the net loss attributable to common stockholders by the weighted average number of common stock 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 common share when their effect is dilutive. For the three and six months ended June 30, 2012, 2,205,692 and 2,200,000 of potentially dilutive securities, respectively, and for the three and six months ended June 30, 2011, 29,401 and 73,989 of potentially dilutive securities, respectively, were excluded from determining diluted net loss per common share because of their anti-dilutive effect.

#### 7. Accumulated Other Comprehensive Loss

The table below sets forth the changes to our accumulated other comprehensive loss for the six months ended June 30, 2012 and June 30, 2011:

			For the six months ended June 30, 2011		
Beginning balance	\$	(56,845)		\$	(55,702)
Foreign currency translation adjustments		(4,883)			(5,343)
Ending balance	\$	(61,728)		\$	(61,045)

## 8. Balance Sheet Details

#### Accrued Expenses

A substantial portion of our ongoing research and development activities are performed under agreements 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, financial and consulting services. We accrue for costs incurred as the services are provided. Accrued expenses consist of the following:

	June 30, 2012	December 31, 2011
Research and development costs	\$408,381	\$ 615,792
Professional services fees	130,755	100,823
Joint venture capital contribution payable	—	650,000
Other	203,814	149,200
	\$742,950	\$1,515,815

## 9. Stock-Based Compensation

For the three months ended June 30, 2012 and 2011, stock-based compensation expense (or credit) related to stock options and the employee stock purchase plan (or ESPP), was approximately \$(566,000) and \$158,000, respectively, and was recorded as a component of general and administrative expense (approximately \$(432,000) and \$115,000, respectively) and research and development expense (approximately \$(134,000) and \$43,000, respectively). For the six months ended June 30, 2012 and 2011, stock-based compensation expense related to stock options and the employee stock purchase plan (or ESPP), was approximately \$362,000 and \$333,000, respectively, and was recorded as a component of general and administrative expense (approximately \$214,000 and \$245,000, respectively) and research and development expense (388,000, respectively).

During the three months ended June 30, 2012 and 2011, 60,000 and 29,998 stock options were exercised, respectively, from which proceeds of approximately \$138,000 and \$66,000, respectively were received. During the six months ended June 30, 2012 and 2011, 60,000 and 31,915 stock options were exercised, respectively, from which proceeds of approximately \$138,000 and \$74,200, respectively, were received. As of June 30, 2012, there was \$1.3 million of unamortized compensation expense related to unvested stock option awards which is expected to be recognized over a remaining weighted-average vesting period of 2.58 years.

During the three and six months ended June 30, 2012, options to purchase 15,000 shares of common stock were granted. During the three and six months ended June 30, 2011, options to purchase 4,000 shares of common stock were granted. The exercise price of the options granted was equal to market value on the date of grant.

As share-based compensation expense recognized in the accompanying consolidated statements of operations and comprehensive loss included expense related to stock option awards ultimately expected to vest, such expense should be reduced for estimated forfeitures. The authoritative guidance for compensation expense requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. As we have a small number of employees, we did not estimate any forfeitures during 2011, or during the six months ended June 30, 2012. We will adjust our stock-based compensation expense should any forfeitures occur.

The MediciNova, Inc. 2007 ESPP permits full-time employees to purchase our common stock through payroll deductions (not to exceed 15% of each employee's compensation) at the lower of 85% of fair market value at the beginning or the end of each six-month ESPP offering period. For the three and six months ended June 30, 2012, the number of shares of common stock issued under the ESPP were 15,550, and for the three and six months ended June 30, 2012, the number of shares of common stock issued under the ESPP were 15,550, and for the three and six months ended June 30, 2011, the number of shares of common stock issued under the ESPP were 1,826. Shares of common stock available for future issuance at June 30, 2012 and 2011 were 269,442 and 272,301, respectively.

The Company uses the Black-Scholes option valuation model for determining the estimated fair value and the stock-based compensation for stock-based awards to employees. The following table provides the assumptions used in the Black-Scholes option-pricing model for the three and six months ended June 30, 2012 and 2011. The ESPP assumptions for the three months ended June 30, 2012 and 2011 are actual amounts, and for the six months ended June 30, 2012 and 2011 are weighted average amounts.

	Three Months Ended June 30, 2012	Three Months Ended June 30, 2011	Six Months Ended June 30, 2012	Six Months Ended June 30, 2011
Stock Options assumptions:		. <u></u>	. <u></u>	
Risk-free interest rate	0.51%	1.84%	0.51%	1.84%
Expected volatility of common stock	78.58%	76.84%	78.58%	76.84%
Dividend yield	0.0%	0.0%	0.0%	0.0%
Expected term (in years)	5.0	4.40	5.0	4.40
ESPP assumptions:				
Risk-free interest rate	0.16%	0.12%	0.43%	0.14%
Expected volatility of common stock	74.34%	78.0%	76.11%	78.0%
Dividend yield	0.0%	0.0%	0.0%	0.0%
Expected term (in years)	0.5	0.5	0.5	0.5

### 10. Income Taxes

In accordance with the authoritative guidance for income taxes under ASC 740, a deferred tax asset or liability is determined based on the difference between the financial statements 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 assets unless, based upon the available evidence, it is more likely than not that the deferred tax assets will be realized.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. We have had no accrued interest or penalties since implementation of guidance on accounting for uncertainty in income taxes.

#### **11.** Commitments and Contingencies

#### Legal Proceedings

On March 3, 2011, we received a letter in which certain allegations were made from a former employee who had been terminated in January 2011 pursuant to a planned reduction-in-force. On July 8, 2011, the former employee filed a lawsuit in the Superior Court of the State of California, County of San Diego, asserting certain claims related to the Company's work environment and the employee's termination, and on December 12, 2011 the court granted our motion to compel arbitration. Discovery is currently ongoing and an arbitration date has not yet been scheduled. We have engaged legal counsel in this matter, and based on our current assessment, we do not expect its outcome to have a material adverse effect on our business, financial condition or results of operations.

We may become involved in various disputes and legal proceedings which arise in the ordinary course of business. Our assessment of the likely impact of our pending litigation may change over time. An adverse result in any of these matters may occur which could harm our business and result in a material liability.



## 12. Stockholders' Equity

## Stock Options

We grant stock options to our employees, officers, directors and consultants under the MediciNova, Inc. Amended and Restated 2004 Stock Incentive Plan. A summary of the changes in stock options outstanding during the six months ended June 31, 2012 is as follows:

	Stock Options	Weighted Average Exercise Price	
Outstanding at December 31, 2011	3,092,671	\$	5.52
Granted	15,000		2.59
Exercised	60,000		2.30
Cancelled	289,757		2.68
Outstanding at June 30, 2012	2,757,914	\$	5.90
Exercisable at June 30, 2012	2,110,719	\$	6.61

There was no aggregate intrinsic value of stock options outstanding and options exercisable at June 30, 2012. The weighted average contractual life of options outstanding at June 30, 2012 was 7.0 years and the weighted average contractual life of exercisable options at June 30, 2012 was 6.4 years.

#### **Convertible** Notes

At the closing of the Avigen acquisition, we and American Stock Transfer & Trust Company, LLC, as trustee, entered into an agreement whereby \$29.4 million, which represented the initial principal amount of secured convertible notes we issued under the terms of the Avigen acquisition, was deposited with a trust agent for the benefit of the holders and us.

Prior to the maturity of the convertible notes on June 18, 2011, holders of the convertible notes could submit irrevocable conversion notices 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 we would issue the number of whole shares of common stock issuable upon conversion and the trustee would in turn release to us the respective amount of restricted cash to cover the stock issuance. \$1.9 million of the convertible notes were converted to 276,655 shares of our common stock. All remaining convertible notes expired on June 18, 2011 and the principal was repaid in full.

## Firm Commitment Underwritten Public Offering

On March 23, 2011, we completed a firm-commitment underwritten public offering of 2,750,000 units at a price to the public of \$3.00 per unit for gross proceeds of \$8.25 million. Each unit consists of one share of common stock, and a warrant to purchase one share of common stock. The shares of common stock and warrants are immediately separable and were issued separately. On March 24, 2011, the underwriter exercised 50,666 units of its 412,500 unit overallotment. The warrants are exercisable immediately upon issuance, have a five-year term and an exercise price of \$3.56 per share. The warrants are indexed to our stock and do not permit net-cash settlement. On March 29, 2011, we received net proceeds of \$7.7 million, after underwriter discount and underwriter expenses and no warrants exercised. In accordance with the authoritative guidance, the warrants were classified as equity instruments as they contain no provisions which may require cash settlement.

#### Kissei Stock Purchase

In October 2011, pursuant to a stock purchase agreement by and between us and Kissei, Kissei purchased for \$7.5 million (i) an aggregate of 800,000 shares of our common stock, par value \$0.001 per share, at a price of \$2.50 per share, which approximated the fair value of our common stock at the time of the transaction, and (ii) 220,000 shares of our Series B Convertible Preferred Stock, or Series B Preferred, par value \$0.01 per share, at a price of \$25.00 per share, which approximated the fair value of our common stock at the time of the transaction, and (ii) 220,000 shares of our Series B Convertible Preferred Stock, or Series B Preferred, par value \$0.01 per share, at a price of \$25.00 per share, which approximated the fair value of our preferred stock on an as converted basis at the time of the transaction. The purchase agreement contains customary representations, warranties and covenants and a standstill agreement from Kissei that terminates if Kissei beneficially owns less than three percent of our outstanding voting stock. Each share of the Series B Preferred is convertible into 10 shares of common stock. The Series B Preferred ranks pari passu (on an as-if-converted-to-common-stock basis) with the common stock in liquidation and dividend rights. The holders of the Series B Preferred do not have voting rights, and the consent of a majority of the outstanding Series B Preferred is required for certain actions of the Company.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited consolidated financial statements and notes thereto included in this Quarterly Report on Form 10-Q and the audited financial statements and notes thereto as of and for the year ended December 31, 2011 included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC, on March 29, 2012. Past operating results are not necessarily indicative of results that may occur in future periods.

This Quarterly Report on Form 10-Q contains forward-looking statements that are subject to risks and uncertainties, many of which are beyond our control. Our actual results may differ from those anticipated in these forward-looking statements as a result of various factors, including those set forth in Part II of this Quarterly Report on Form 10-Q under the caption "Item 1A. Risk Factors" and under the caption "Item 1A. Risk Factors" in our Annual Report on Form 10-K, and the differences may be material. Forward-looking statements discuss matters that are not historical facts. Forward-looking statements include, but are not limited to, statements regarding our plans, strategies, objectives, product development programs, clinical trials, industry, financial condition, liquidity and capital resources, future performance and other statements that are not historical facts. Such forward-looking statements preceded by, followed by or that otherwise include the words "may," "might," "will," "intend," "should," "could," "can," "would," "expect," "believe," "estimate," "anticipate," "predict," "potential," "plan" or similar words. For such 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 hereof. We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

#### **Overview and Recent Developments**

We are a development stage biopharmaceutical company focused on acquiring and developing novel, small molecule therapeutics for the treatment of serious diseases with unmet medical needs 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, which we believe provide significant commercial opportunity for the Company. We were incorporated in Delaware in September 2000.

We have sustained operating losses since our inception. At June 30, 2012, our accumulated deficit from inception was \$291.4 million, including \$50.0 million of non-cash stock-based compensation expenses related to stock-based awards to employees. We expect to incur substantial operating losses for at least the next several years as we continue to invest in certain of our existing product development programs, primarily MN-221 for the treatment of acute exacerbations of asthma and chronic obstructive pulmonary disease, or COPD, exacerbations, and, over the long-term, if we are successful in expanding our research and product development programs and/or acquiring or in-licensing products, technologies or businesses that are complementary to our own. While there can be no assurances given, we believe that our working capital at June 30, 2012, will be sufficient to fund our operating requirements through at least March 31, 2013, assuming that we operate our business in accordance with our current operating plan and do not commence any new clinical trials. This belief is based on assumptions that could prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. If adequate funds are not available, we may be required to delay, reduce the scope of or terminate one or more of our product development programs, and/or implement other operating cost reductions, any of which could result in the termination of license rights related to any of our product candidates.

We have acquired licenses to eight compounds for the development of ten product candidates, which include clinical development for the treatment of acute exacerbations of asthma, multiple sclerosis (MS) and other central nervous system (CNS) disorders, bronchial asthma, interstitial cystitis (IC), solid tumor cancers, generalized anxiety disorders/insomnia, preterm labor and urinary incontinence. Two of such compounds have been in preclinical development for the treatment of thrombotic disorders. In addition, we have expanded our development program for MN-221 for the treatment of COPD exacerbations.

We entered into an agreement to form a joint venture company with Zhejiang Medicine Co., Ltd. and Beijing Make-Friend Medicine Technology Co., Ltd. effective September 27, 2011. The joint venture agreement provides for the joint venture company, Zhejiang Sunmy, to develop and commercialize MN-221 in China. A sublicense , which will require the consent of the licensor, will be required for us to license MN-221 to Zhejiang Sunmy. In accordance with the joint venture agreement, in March 2012, we paid \$680,000 for a 30% interest in Zhejiang Sunmy. The other parties to the joint venture agreement provided funding for their combined 70% interest and are responsible for future funding for Zhejiang Sunmy's activities. We have not entered into the sublicense of MN-221 with Zhejiang Sunmy as of the date of this report. There is no assurance the

sublicense will be executed and there is no assurance that Zhejiang Sunmy will be able to proceed with the development of MN-221 in China. Zhejiang Sunmy is considered a variable interest entity for which we are not the primary beneficiary as we will not have a majority of the board seats and we will not have any power to direct or significantly influence the actions of Zhejiang Sunmy. We absorb any loss and income generated by Zhejiang Sunmy according to our percentage ownership.

At present, we are focusing our resources on the following prioritized product development programs:

- MN-221 for the treatment of acute exacerbations of asthma and COPD exacerbations, for which we initiated a Phase 2 clinical trial (MN-221-CL-007) in the first quarter of 2009 to evaluate the safety and efficacy of MN-221 in patients with acute exacerbations of asthma treated in the emergency room. On March 21, 2012, we announced completion of the 176 patient enrollment of the Phase 2 MN-221-CL-007 clinical trial and on May 23, 2012, we announced that preliminary trial results did not statistically meet the primary endpoint, improvement in FEV1 (Forced Expiratory Volume in One Second) compared to placebo. However, MN-221 showed a significant benefit over placebo for FEV1, and the trial also demonstrated both a reduction in hospital admissions with MN-221 added to standard drug treatments, and a significant improvement in clinical symptoms with MN-221 treated patients. Additionally, the safety profile of MN-221 continues to be positive as no safety/tolerability issues of clinical significance were observed. Given the positive MN-221 efficacy and safety data displayed, our current goal is to advance the development of the MN-221 program, and we have announced that an End-of-Phase 2 meeting pertaining to the development of MN-221 for the treatment of acute exacerbations of asthma has been scheduled with the U.S, Food and Drug Administration in the fourth quarter of 2012. In 2010 we completed MN-221 COPD development, which included a Phase 1b clinical trial in patients with stable, moderate to severe COPD. In the first quarter of 2012 we initiated an additional Phase 1b/2a COPD clinical trial (MN-221–CL-012) that has commenced enrollment and has an anticipated trial completion in the third quarter of 2012.
- MN-166, an ibudilast-based product development, for which we continue to pursue discussions with potential partners and other strategic collaborations. An MN-166 Phase 2 clinical trial in MS was completed in Eastern Europe in 2008 wherein positive safety and neuroprotective efficacy indicators were obtained, thus, directing next stage development towards a Phase 2b progressive MS indication. Limited animal safety and product manufacturing and stability development has been completed. In the area of drug addiction, a Phase 1b/2a opioid withdrawal clinical trial funded by the National Institute on Drug Abuse, or NIDA, was completed at the end of 2010. A Phase 1b NIDA-funded clinical trial in methamphetamine-dependent volunteers with expert investigators at UCLA initiated in the fourth quarter of 2010 and is currently enrolling patients. In addition, a headache and pain specialist in Australia initiated an investigator sponsored Phase 2 clinical trial of ibudilast as a potential new pharmacotherapy for medication overuse headache that is expected to complete enrollment at the end of 2012. We intend to enter into additional strategic alliances to support further clinical development of MN-166.

Upon completion of proof-of-concept Phase 2 clinical trials, we intend to enter into strategic alliances with leading pharmaceutical or biotech companies to support further clinical development, and plan to maintain certain commercialization rights in selected markets. As a result of the outcome of the Phase 2b trial of MN-221 for the treatment of acute exacerbations of asthma, we may seek to raise addition capital and/or enter into a collaboration and conduct a Phase 3 development program. We may also pursue potential partners and potential acquirers of license rights to our programs in markets outside the U.S. In addition, we continue to limit activities for the balance of our existing product development programs in order to focus on our prioritized product development programs. For our remaining product development programs, we plan to conduct development activities only to the extent deemed necessary to maintain our license rights or maximize value while pursuing a variety of initiatives to monetize such programs.

Our eight non-prioritized product development programs consist of the following:

- MN-001 for the treatment of bronchial asthma, for which we initiated a Phase 3 clinical program in the fourth quarter of 2006 that we subsequently
  terminated in the second quarter of 2007, and for which we developed prototypes of once-per-day oral dosing formulations;
- MN-001 for the treatment of interstitial cystitis, for which we completed a Phase 2 clinical trial in the first quarter of 2007;
- MN-029 for the treatment of solid tumors, for which we completed one Phase 1 clinical trial in the second quarter of 2006 and one Phase I clinical trial in the fourth quarter of 2007;
- MN-305 for the treatment of generalized anxiety disorder/insomnia, for which we completed a Phase 2 clinical trial for the treatment of generalized anxiety disorder in the second quarter of 2006 and a Phase 2 clinical trial for the treatment of insomnia in the fourth quarter of 2007;
- MN-221 for the treatment of preterm labor, for which we completed a Phase 1 clinical trial to investigate the pharmacokinetic profile of MN-221 in healthy pregnant women not in labor in the second quarter of 2007;
- MN-246 for the treatment of urinary incontinence, for which we completed a Phase 1 clinical trial in the fourth quarter of 2006 and a Phase 1 food effects study in the first quarter of 2007;
- MN-447 for the treatment of thrombotic disorders, which remains in preclinical development; and
- MN-462 for the treatment of thrombotic disorders, which remains in preclinical development.

#### Avigen Transaction

On December 18, 2009, we acquired Avigen, a biopharmaceutical company whose potential product candidate was a therapeutic for central nervous system ("CNS") disorders. Under the terms of the acquisition, we issued \$29.4 million in secured convertible notes that matured on June 18, 2011. Holders of the notes could convert their notes into our common stock at an initial conversion price of \$6.80 per share. At the maturity of the convertible notes, the remaining holders would be paid the same per share amount as the Avigen shareholders that elected to receive cash at the acquisition closing, plus accrued interest. As part of the acquisition consideration, the former Avigen shareholders were also entitled to receive approximately \$0.04 per share, which was paid in two increments in 2010, and rights under contingent payment rights issued as part of the acquisition consideration.

Our consolidated financial statements include Avigen's operations following the completion of the acquisition. We recorded \$4.8 million of IPR&D related to Avigen's AV411 asset and we recorded \$9.6 million of goodwill related to the excess purchase price over the assigned values of the net assets acquired. The goodwill was primarily a result of the conversion feature related to the convertible notes issued pursuant to the acquisition agreement. Our annual test date for IPR&D and goodwill impairment is December 31. We operate as one reporting segment and during the six months ended June 30, 2012 and through the date of this report, there were no triggering events, market conditions or other factors such as adverse clinical trial results that would indicate possible or actual impairment of IPR&D or goodwill.

#### Long-term Debt

In May 2010 we entered into the Loan Agreement with Oxford under which we borrowed \$15.0 million at a stated annual interest rate of 12.87 percent. The financing was used to satisfy working capital needs, including the continued clinical development of MN-221. Pursuant to the Loan Agreement, we issued to Oxford a warrant to purchase up to 198,020 shares of our common stock, par value \$0.001 per share, at an exercise price of \$6.06 per share. We accounted for the warrant as a component of stockholders' equity as the agreement requires settlement in shares and under no provision of the agreement are we required to settle the warrant in cash.

We accounted for the interest on the debt under the effective interest method wherein we treated the debt issuance costs paid directly to Oxford and the relative fair value of the warrants issued to Oxford as a discount on the debt, and we treated the debt issuance costs paid to third parties as an asset. The amortization of the debt discount was recorded as interest expense and the amortization of the debt issuance costs paid to third parties was recorded as other expense in our consolidated statements of operations and comprehensive loss.

On April 1, 2011, we entered into an agreement with Oxford, under which we made an early repayment of the loan in-full and wherein Oxford waived the prepayment penalty of \$0.4 million.

#### **Reduction-in-Force**

In January 2011, we had a reduction-in-force to reduce costs. We believe that we remain adequately staffed given our research and development focus and utilization of external resources.

## Firm Commitment Underwritten Public Offering

On March 23, 2011, we completed a firm-commitment underwritten public offering of 2,750,000 units at a price to the public of \$3.00 per unit for gross proceeds of \$8.25 million. Each unit consists of one share of common stock, and a warrant to purchase one share of common stock. The shares of common stock and warrants are immediately separable and were issued separately. On March 24, 2011, the underwriter exercised 50,666 units of its 412,500 unit overallotment. The warrants are exercisable immediately upon issuance, have a five-year term and an exercise price of \$3.56 per share. The warrants are indexed to our stock and do not permit net-cash settlement. On March 29, 2011, we received net proceeds of \$7.7 million, after underwriter discount and underwriter expenses and no warrants exercised. In accordance with the authoritative guidance, the warrants were classified as equity instruments as they contain no provision which may require cash settlement.

#### Lease Amendments

On July 6, 2011, we entered into a fifth amendment (the "Fifth Lease Amendment") of our lease agreement (the "Lease"), with 4350 La Jolla Village LLC (the "Landlord"). The Fifth Lease Amendment amended the Lease of our headquarters located at 4350 La Jolla Village Drive, Suite 950, San Diego, California, 92122, and extended the Lease term, with respect to 5,089 square feet, from August 31, 2011 to May 31, 2012. The Fifth Lease Amendment provided that we will



pay the Landlord a monthly base rent of \$12,468 for the premises during the nine-month extension period. On March 19, 2012, we entered into a sixth amendment of the Lease (the "Sixth Lease Amendment"), which extends the lease term through February 28, 2013, and provides that we will pay the Landlord a monthly base rent of \$12,672 for the premises during the term of the Sixth Lease Amendment.

#### Kissei Stock Purchase

In October 2011, pursuant to a stock purchase agreement by and between us and Kissei, Kissei purchased for \$7.5 million (i) an aggregate of 800,000 shares of our common stock, par value \$0.001 per share, at a price of \$2.50 per share, which approximated the fair value of our common stock at the time of the transaction, and (ii) 220,000 shares of our Series B Convertible Preferred Stock, par value \$0.01 per share, at a price of \$25.00 per share, which approximated the fair value of our preferred stock on an as converted basis at the time of the transaction. The purchase agreement contains customary representations, warranties and covenants and a standstill agreement from Kissei that terminates if Kissei beneficially owned less than three percent of our outstanding voting stock. Each share of the Series B Preferred Stock is convertible into 10 shares of common stock. The Series B Preferred ranks pari passu (on an as-if-converted-to-common-stock basis) with the common stock in liquidation and dividend rights. The holders of the Series B Preferred do not have voting rights, and the consent of a majority of the outstanding Series B Preferred is required for certain actions of the Company.

#### Kissei Services Agreement

In October 2011, we entered into an agreement with Kissei to perform research and development services relating to MN-221 in exchange for a nonrefundable upfront payment of \$2.5 million. Under the terms of the agreement, we are responsible for all costs to be incurred in the performance of these services which are expected to be completed in 2012 and 2013. We assessed the deliverables in accordance with the authoritative guidance and concluded the existence of one deliverable, which was research and development services. As such, we will recognize as revenue the \$2.5 million payment as the research and development services are performed.

#### **Critical Accounting Policies and Estimates**

Our management's discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with principles generally accepted in the U.S. The preparation of the consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the related disclosure of contingent liabilities. We review our estimates 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 to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates.

Our significant accounting policies and estimates are the same as those noted in our Annual Report on Form 10-K for the year ended December 31, 2011, as filed with the SEC on March 29, 2012.

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

In the three and six months ended June 30, 2012, we recorded revenue relating to the Kissei services agreement of \$0.5 million and \$0.7 million, respectively, based on the development services we performed during that period. All expenses incurred during the six months ended June 30, 2012, related to these development services have been recorded as research and development expenses. In addition to the revenue recorded in the six months ended June 30, 2012, our revenues to date have been from development services revenues under service agreements pursuant to which we billed consulting fees and our pass-through clinical contract costs. The primary costs associated with these revenues were the clinical contract costs we incurred and passed-through to our customers.

#### **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 development programs, costs associated with non-clinical activities, such as regulatory expenses, and pre-commercialization manufacturing development activities. We use external service providers to manufacture our compounds 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. Research and development expenses include fees paid to consultants, contract research organizations, contract manufactures 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 include

costs of compensation and other expenses for research and development personnel, supplies, facility costs and depreciation. Research and development costs are expensed as incurred based on certain contractual factors such as estimates of work performed, milestones achieved, patient enrollment and experience with similar contracts. As actual costs become known, accruals are adjusted. To date, our accrued research and development expenses have not differed significantly from the actual expenses incurred.

The following table summarizes our research and development expenses for the periods indicated for each of our product development programs. 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			nths ended e 30,	Six mont Jun	hs ended e 30,
Candidate	Product Development Program	2012	2011	2012	2011
MN-221	Acute exacerbations of asthma/COPD	\$1,267	\$ 1,487	\$2,512	\$3,432
MN-166	Multiple sclerosis/other CNS disorders	153	238	317	389
MN-001	Bronchial asthma	34	27	155	31
MN-001	Interstitial cystitis	4	11	34	16
MN-029	Solid tumors	23	28	64	44
MN-305	Generalized Anxiety Disorder/insomnia	—	1	2	1
MN-221	Preterm labor				2
MN-246	Urinary incontinence	2	1	5	2
MN-447	Thrombotic disorders		39	6	46
MN-462	Thrombotic disorders				—
Unallocated		1	208	267	701
Total resear	ch and development	\$1,484	\$ 2,040	\$3,362	\$4,664

Since 2007 we have focused our resources on the development of our two prioritized product development programs, MN-221 for the treatment of acute exacerbations of asthma, and MN-166 for the treatment of MS. In the third quarter of 2009, we initiated an expansion of the development program for MN-221 to evaluate MN-221 for the treatment of COPD exacerbations. On March 21, 2012, we announced completion of the 176 patient enrollment of the Phase 2 MN-221-CL-007 clinical trial and on May 23, 2012, we announced preliminary trial results. In the second quarter of 2008 we completed the Phase 2 clinical trial of MN-166 for the treatment of MS. We continue to pursue discussions with potential partners, including government funding agencies, to secure a strategic collaboration. As such, we do not plan to undertake any further significant clinical development of MN-166 until such time that we secure a strategic collaboration to advance the combined ibudilast-based development program. We expect our research and development expenses to increase in connection with clinical trials primarily related to MN-221 for the treatment of acute exacerbations of asthma and COPD exacerbations, and any other development activities that it may initiate.

We will continue 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 while pursuing a variety of initiatives to monetize such product development. As a result, we expect that research and development expenses will remain low for the remainder of our existing product candidates in the foreseeable future.

## General and Administrative

Our general and administrative costs primarily consist of salaries, benefits and consulting and professional fees related to our administrative, finance, human resources, business development, legal, information systems support functions, facilities and insurance costs. General and administrative costs are expensed as incurred.

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 product development programs or otherwise in connection with increased business development activities related to partnering, out-licensing or product disposition.

#### **Other Expense**

Other expense consists of accretion related to the convertible notes, amortization of debt issuance costs paid to third parties and net foreign exchange gains and losses related to vendor invoices denominated in foreign currencies to the extent that there are differences between the exchange rate at the transaction date and the exchange rate at the invoice settlement date, or the balance sheet date if the transaction had not yet been settled.

#### **Interest Expense**

Interest expense consists of interest charged on our long-term debt based on the effective interest method and amortization of debt discount. In the first half of 2012, we held no debt and had no interest expense.

#### **Other Income**

Other income consists of interest earned on our cash, cash equivalents and investments.

#### **Results of Operations**

#### Comparison of the Three Months Ended June 30, 2012 and 2011

#### Revenues

Revenue for the three months ended June 30, 2012 was \$0.5 million. There was no revenue for the three months ended June 30, 2011. The revenue recorded in the second quarter of 2012 related to the development services we performed under the Kissei services agreement during that period.

#### Research and Development

Research and development expenses for the three months ended June 30, 2012 were \$1.5 million, a decrease of \$0.5 million when compared to \$2.0 million for the three months ended June 30, 2011. This decrease in research and development expenses primarily related to a decrease of \$0.3 million in spending on our prioritized asset MN-221 for the treatment of acute exacerbations of asthma and COPD due primarily to the completion of the CL-007 clinical trial in March, 2012 and a \$0.2 million decrease in stock based compensation.

#### General and Administrative

General and administrative expenses for the three months ended June 30, 2012 were \$1.3 million, a decrease of \$0.4 million when compared to \$1.7 million for the three months ended June 30, 2011. This decrease in general and administrative expenses was due primarily to a \$0.5 million decrease in stock-based compensation expense, partially offset by an increase in compensation expense related to employee bonuses.

#### Other Expense

Other expense for the three months ended June 30, 2012 was \$81, as compared to approximately \$31,000 for the three months ended June 30, 2011. In the second quarter of 2011, other expense primarily consisted of accretion related to convertible notes and amortization of debt issuance costs paid to third parties. We held no debt or convertible notes in the second quarter of 2012.

#### Interest Expense

Interest expense for the three months ended June 30, 2011 was \$0.9 million, consisting of interest on our debt under the effective interest method and writeoff of debt related costs pursuant to the early repayment of our debt with Oxford. In the second quarter of 2012, we held no debt and had no interest expense.

#### Other Income

Other income for the three months ended June 30, 2012 was approximately \$7,000, as compared to approximately \$16,000 for the three months ended June 30, 2011. The decrease is due to a decrease in interest income on lower cash equivalents.

#### Comparison of the Six Months Ended June 30, 2012 and 2011

#### Revenues

Revenue for the six months ended June 30, 2012 was \$0.7 million. There was no revenue for the six months ended June 30, 2011. The revenue recorded in the first half of 2012 related to the development services we performed under the Kissei services agreement during that period.

#### Research and Development

Research and development expenses for the six months ended June 30, 2012 were \$3.4 million, a decrease of \$1.3 million when compared to \$4.7 million for the six months ended June 30, 2011. This decrease in research and development expenses primarily related to a decrease of \$2.1 million in spending on our prioritized asset MN-221 for the treatment of acute exacerbations of asthma and COPD due primarily to the completion of the CL-007 clinical trial in March 2012, and \$0.2 million decrease in compensation expense related to employee bonuses, salaries and occupancy, partially offset by an increase in spending of \$1.0 million for our Phase 1b/2a COPD clinical trial (MN-221–CL-012).

#### General and Administrative

General and administrative expenses for the six months ended June 30, 2012 were \$3.5 million, a decrease of \$0.5 million when compared to \$4.0 million for the six months ended June 30, 2011. This decrease in general and administrative expenses was due primarily to \$0.5 million decrease in compensation expense related to employee bonuses, salaries, and severance.

#### Other Expense

Other expense for the six months ended June 30, 2012 was approximately \$5,000, as compared to approximately \$84,000 for the six months ended June 30, 2011. In the first half of 2011, other expense primarily consisted of accretion related to convertible notes and amortization of debt issuance costs paid to third parties. In the first half of 2012, other expense consisted of net foreign exchange losses related to vendor invoices denominated in foreign currencies. We held no debt or convertible notes in the first half of 2012.

#### Interest Expense

Interest expense for the six months ended June 30, 2011 was \$1.6 million and consisted of interest on our debt under the effective interest method and write-off of debt related costs pursuant to the early repayment of our debt with Oxford. In the first half of 2012, we held no debt and had no interest expense.

#### Other Income

Other income for the six months ended June 30, 2012 was approximately \$18,000, as compared to approximately \$42,000 for the six months ended June 30, 2011. The decrease is due to a decrease in interest income on lower cash equivalents.

#### Liquidity and Capital Resources

We incurred losses of \$2.3 million and \$6.1 million for the three and six months ended June 30, 2012, and we have incurred losses of \$17.7 million, \$20.2 million and \$20.4 million for the years ended December 31, 2011, 2010, and 2009, respectively. We have an accumulated deficit of \$291.4 million as of June 30, 2012. Additionally, we have used net cash of \$7.3 million, \$13.3 million, \$17.7 million and \$17.0 million to fund our operating activities for the six months ended June 30, 2012 and for the years ended December 31, 2011, 2010, and 2009, respectively. Our operating losses to date have been funded primarily through the private placement of our equity securities, the public sale of our common stock, long-term debt, development agreements with partners and the exercise of founders' warrants, net of treasury stock repurchases.

On March 23, 2011, we announced a firm-commitment underwritten public offering of 2,750,000 units at a price to the public of \$3.00 per unit for gross proceeds of \$8.25 million. Each unit consists of one share of common stock, and a warrant to purchase one share of common stock. The shares of common stock and warrants are immediately separable and were issued separately. On March 24, 2011, the underwriter exercised 50,666 units of its 412,500 unit overallotment.

In October 2011, pursuant to a stock purchase agreement by and between us and Kissei, Kissei purchased (i) an aggregate of 800,000 shares of our common stock, par value \$0.001 per share, at a price of \$2.50 per share, and (ii) 220,000 shares of our Series B Convertible Preferred Stock, par value \$0.01 per share, at a price of \$25.00 per share. In October we received gross proceeds of \$7.5 million related to this purchase agreement.

In October 2011, we entered into an agreement with Kissei to perform research and development services relating to MN-221 in exchange for a nonrefundable upfront payment of \$2.5 million. We are responsible for all costs incurred in the performance of these services which are expected to be completed in 2012 and 2013. We assessed the deliverables in accordance with the authoritative guidance and concluded the existence of one deliverable, which was research and development services. As such, we will recognize as revenue the \$2.5 million payment as the research and development services are performed. In the three and six months ended June 30, 2012 we recorded revenue relating to this agreement of \$0.5 million and \$0.7 million, respectively. The amount received from Kissei net of the amount recorded as revenue is included on the balance sheet at June 30, 2012 as deferred revenue.

Our current cash and cash equivalents are our principal sources of liquidity. We expect to utilize our cash and cash equivalents to fund our operations, including research and development of our product development candidates and clinical trials. It is our belief that we will have sufficient cash to fund our operations through at least March 31, 2013, assuming that we operate our business in accordance with our current operating plan and do not commence any new clinical trials. This belief is based on assumptions that could prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. We have had, and will continue to have, an ongoing need to raise additional cash from outside sources to fund our operations including the activities required to bring future products to market. We have an established history of raising capital through equity and debt and management plans to continue financing operations with equity issuances, debt arrangements, or a combination thereof. If adequate funds are not available, we might be required to delay, reduce the scope of or terminate one or more of our product development programs and/or implement other operating cost reductions, any of which could result in the termination of license rights related to any of our product candidates.

Because of the numerous risks and uncertainties associated with development and commercialization of our products, we are unable to estimate the exact amount of our working capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- progress in, and the costs of, future planned clinical trials and other research and development activities;
- the scope, prioritization and number of our product development programs;
- our obligations under our license agreements, pursuant to which we may be required to make future milestone payments upon the achievement of
  various milestones related to clinical, regulatory or commercial events;
- our ability to establish and maintain strategic collaborations, including licensing and other arrangements, and to complete acquisitions of additional product candidates;
- the time and costs involved in obtaining regulatory approvals;
- the costs of securing manufacturing arrangements for clinical or commercial production of our product candidates;
- the costs associated with expanding our management, personnel, systems and facilities;
- the costs associated with any litigation;
- the costs associated with the operations or wind-down of any business we may acquire;
- the costs involved in filing, prosecuting, enforcing and defending patent claims and other intellectual property rights; and
- the costs of establishing or contracting for sales and marketing capabilities and commercialization activities if we obtain regulatory approval to market our product candidates.

#### **Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements.

#### ITEM 3. 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. Our risk associated with fluctuating interest rates is limited to our investments in interest rate sensitive financial instruments and 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.

Cash and cash equivalents as of June 30, 2012 were \$7.3 million and were primarily invested in money market interest bearing accounts and money market funds. A hypothetical 10% adverse change in the average interest rate on our cash and cash equivalents would have had no material effect on net loss for the three and six months ended June 30, 2012.

#### ITEM 4. CONTROLS AND PROCEDURES.

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that the information required to be disclosed in our filings under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is (1) recorded, processed, summarized and reported within the time periods specified in SEC's rules and forms, and (2) accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our procedures or our internal controls will prevent or detect all errors and all fraud. Any internal control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of our controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected.

#### **Evaluation of Disclosure Controls and Procedures**

As required by Rule 13a-15(b) of the Exchange Act, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the quarter covered by this report. Based on the foregoing, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level.

#### Changes in Internal Control over Financial Reporting

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

#### PART II. OTHER INFORMATION

## ITEM 1. LEGAL PROCEEDINGS.

On March 3, 2011, we received a letter in which certain allegations were made from a former employee who had been terminated in January 2011 pursuant to a planned reduction-in-force. On July 8, 2011, the former employee filed a lawsuit in the Superior Court of the State of California, County of San Diego, asserting certain claims related to the Company's work environment and the employee's termination, and on December 12, 2011, the court granted our motion to compel arbitration. Discovery is currently ongoing and an arbitration date has not yet been scheduled. We have engaged legal counsel in this matter. Based on our current assessment, we do not expect its outcome to have a material adverse effect on our business, financial condition and results of operations.

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.

#### ITEM 1A. RISK FACTORS.

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2011, which could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results. There have been no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2011 other than the addition of the following risk factor:

## If we are unsuccessful with our End-of-Phase 2 meeting with the FDA pertaining to the development of MN-221 for the treatment of acute exacerbations of asthma, we may be unable to develop and commercialize this product candidate.

On May 23, 2012 we announced that preliminary trial results of the 176 patient enrollment of the Phase 2 MN-221-CL-007 clinical trial did not statistically meet the primary endpoint, improvement in FEV1 (Forced Expiratory Volume in One Second) compared to placebo. However, given the positive MN-221 efficacy and safety data displayed in this trial and other clinical trials of MN-221, we have scheduled an End-of-Phase 2 meeting with the FDA pertaining to the development of MN-221 for the treatment of acute exacerbations of asthma. An unsuccessful End-of-Phase 2 meeting with the FDA could significantly delay or materially and adversely impact our future development of MN-221, including the development and costs and timing for future trials and/or materially and adversely impact our ability to raise the capital necessary to advance development and fund our ongoing operations.

#### ITEM 6. EXHIBITS.

Exhibit <u>Number</u> 2.1(3)	<u>Description</u> Agreement and Plan of Merger dated as of August 20, 2009 by and among Registrant, Absolute Merger, Inc. and Avigen, Inc. (attached as Annex A to the joint proxy statement/prospectus).
3.1	Restated Certificate of Incorporation of the Registrant, as amended.
3.2(1)	Amended and Restated Bylaws of the Registrant.
3.3(5)	Certificate of Designation, Preferences and Rights of the Series B Convertible Preferred Stock.
4.1(2)	Specimen of Common Stock Certificate.
4.2(1)	Amended and Restated Registration Rights Agreement by and among the Registrant, its founders and the investors named therein, dated September 2, 2004.
4.3(3)	Form of Indenture by and between Registrant and American Stock Transfer and Trust Company, LLC (attached as Annex C to the joint proxy statement/prospectus).
4.4(3)	Form of Convertible Note (included in Exhibit 4.3).
4.5(4)	Warrant dated May 10, 2010 issued to Oxford Finance Corporation.
4.6(6)	Form of Warrant to Purchase Common Stock.
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 for the period ended March 31, 2012.
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 for the period ended March 31, 2012.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350 (Section 906 of the Sarbanes-Oxley Act of 2002).
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350 (Section 906 of the Sarbanes-Oxley Act of 2002).
101(*)	The following financial statements from the MediciNova, Inc. Quarterly Report on Form 10-Q for the quarter
	21

## Exhibit

#### Number

Description ended June 30, 2012 formatted in Extensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations and Comprehensive Loss; (iii) Consolidated Statements of Cash Flows; and (iv) the notes to the consolidated financial statements.

- (1) Filed with the Registrant's Registration Statement on Form S-1 filed October 1, 2004 and incorporated herein by reference.
- (2) Filed with the Registrant's Current Report on Form 10-K filed February 15, 2007 and incorporated herein by reference.
- (3) Filed with the Registration Statement on Form S-4 initially filed September 17, 2009 and incorporated herein by reference.
- (4) Filed with the Registrant's Current Report on Form 8-K filed May 14, 2010 and incorporated herein by reference.
- (5) Filed with the Registrant's Current Report on Form 8-K filed September 27, 2011 and incorporated herein by reference.
- (6) Filed with the Registrant's Current Report on Form 8-K filed March 24, 2011 and incorporated herein by reference.
- (\*) Pursuant to Rule 406T of Regulation S-T, this interactive data file is deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, is deemed not filed for purposes of section 18 of the Exchange Act of 1934, and otherwise is not subject to liability under these sections.

## SIGNATURES

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

## MEDICINOVA, INC.

Date: August 9, 2012	By:	/s/ Yuichi Iwaki
		Yuichi Iwaki, M.D., Ph.D. President and Chief Executive Officer (on behalf of the registrant and as the registrant's Principal Executive Officer)
	By:	/s/ Michael Gennaro
	<u> </u>	Michael Gennaro Chief Financial Officer (on behalf of the registrant and as the registrant's Principal Financial Officer)

Exhibit

## INDEX TO EXHIBITS

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- 101(\*)The following financial statements from the MediciNova, Inc. Quarterly Report on Form 10-Q for the quarter ended June 30, 2012 formatted in<br/>Extensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations and<br/>Comprehensive Loss; (iii) Consolidated Statements of Cash Flows; and (iv) the notes to the consolidated financial statements.

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#### **RESTATED CERTIFICATE OF INCORPORATION**

#### OF

#### **MEDICINOVA, INC.**

MediciNova, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

A. The Corporation was incorporated pursuant to an original Certificate of Incorporation of the Corporation filed with the Secretary of State of the State of Delaware on September 26, 2000. The Certificate of Incorporation of the Corporation was restated and filed with the Secretary of State of Delaware on December 7, 2000, amended and filed with the Secretary of State of Delaware on August 1, 2001, further restated and filed with the Secretary of State of Delaware on March 5, 2003, further restated and filed with the Secretary of State of Delaware on June 11, 2003 and further restated and filed with the Secretary of State of Delaware on September 2, 2004.

B. This Restated Certificate of Incorporation (i) has been duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware by the board of directors and stockholders of the Corporation and (ii) restates, integrates and further amends the provisions of the Certificate of Incorporation of the Corporation.

C. The Certificate of Incorporation of the Corporation shall be amended and restated to read in full as follows:

#### ARTICLE I

The name of the Corporation is MediciNova, Inc.

## ARTICLE II

The registered agent and the address of the registered office in the State of Delaware are: The Corporation Trust Company, 1209 Orange Street, Wilmington, County of New Castle, 19801.

#### ARTICLE III

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware (the "DGCL").

### ARTICLE IV

A. <u>Authorized Stock</u>. The Corporation is authorized to issue two classes of stock to be designated respectively Preferred Stock ("Preferred Stock") and Common Stock ("Common Stock"). The total number of all shares of all classes of capital stock the Corporation shall have authority to issue is two hundred five million (205,000,000). The total number of shares of Preferred Stock the Corporation shall have authority to issue is five million (5,000,000). The total number of shares of Common Stock the Corporation shall have authority to issue is two hundred million (200,000,000). The Preferred Stock shall have a par value of \$0.01 per share and the Common Stock shall have a par value of \$0.001 per share. The number of authorized shares of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the then outstanding shares of Common Stock, without a vote of the holders of Preferred Stock, or of any series thereof, unless a vote of any such holders of Preferred Stock is required pursuant to the provisions established by the Board of Directors of the Corporation (the "Board of Directors") in the resolution or resolutions providing for the issue of such Preferred Stock, and if such holders of such Preferred Stock are so entitled to vote thereon, then, except as may otherwise be set forth in this Restated Certificate of Incorporation, the only stockholder approval required shall be the affirmative vote of a majority of the combined voting power of the Common Stock and the Preferred Stock so entitled to vote.

B. <u>Preferred Stock</u>. The shares of Preferred Stock may be issued from time to time in one or more series, as determined by the Board of Directors. The Board of Directors is expressly authorized to provide for the issue, in one or more series, of all or any of the remaining shares of the Preferred Stock and, in the resolution or resolutions providing for such issue, to establish for each such series the number of its shares, the voting powers, full or limited, of the shares of such series and the qualifications, limitations, or restrictions thereof. The Board of Directors is also expressly authorized (unless forbidden in the resolution or resolutions providing for such issue) to increase or decrease (but not below the number of shares of such series then outstanding) the number of shares of any series subsequent to the issue of shares of that series. In case the number of shares of any such series shall be so decreased, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series.

#### C. Common Stock.

1. <u>Relative Rights of Preferred Stock and Common Stock</u>. All preferences, voting powers, relative, participating, optional or other special rights and privileges, and all qualifications, limitations, or restrictions, of the Common Stock are expressly made subject and subordinate to those that may be fixed with respect to any shares of the Preferred Stock.

2. <u>Voting Rights</u>. Except as otherwise required by law or this Restated Certificate of Incorporation, each holder of Common Stock shall have one vote in respect of each share of stock held by such holder of record on the books of the Corporation for the election of directors and on all matters submitted to a vote of stockholders of the Corporation.

3. <u>Dividends</u>. Subject to the preferential rights of the Preferred Stock, the holders of shares of Common Stock shall be entitled to receive, when and if declared by the Board of Directors, out of the assets of the Corporation which are by law available therefor, dividends payable either in cash, in property or in shares of capital stock.

4. <u>Dissolution, Liquidation or Winding Up</u>. In the event of any dissolution, liquidation or winding up of the affairs of the Corporation, after distribution in full of the preferential amounts, if any, to be distributed to the holders of shares of the Preferred Stock, holders of Common Stock shall be entitled, unless otherwise provided by law or this Restated Certificate of Incorporation, to receive all of the remaining assets of the Corporation of whatever kind available for distribution to stockholders ratably in proportion to the number of shares of Common Stock held by them respectively.

The Corporation is to have perpetual existence.

#### ARTICLE V

#### ARTICLE VI

A. <u>Number of Directors</u>. The authorized number of directors of the Corporation shall be determined from time to time by resolution adopted by the affirmative vote of a majority of the entire Board of Directors at any regular or special meeting of such Board of Directors, within any limits prescribed in the bylaws of the Corporation.

B. <u>Classes of Directors</u>. The Board of Directors, other than those directors elected by the holders of any series of Preferred Stock as provided for or fixed pursuant to the provisions of Article IV of this Restated Certificate of Incorporation, shall be divided into three classes, designated Class I, Class II and Class III, as nearly equal in number as possible, and the term of office of directors of one class shall expire at each annual meeting of stockholders, and in all cases as to each director such term shall extend until his or her successor shall be elected and shall qualify or until his or her earlier resignation, removal from office, death or incapacity. Additional directorships resulting from an increase in number of directors shall be apportioned among the classes as equally as possible. The initial term of office of directors of Class I shall expire at the annual meeting of stockholders in 2006 and the initial term of office of directors of Class III shall expire at the annual meeting of stockholders in 2007. At each annual meeting of stockholders a number of directors equal to the number of directors of the class whose term expires at the time of such meeting (or, if less, the number of directors properly nominated and qualified for election) shall be elected to hold office until the third succeeding annual meeting of stockholders after their election.

At each annual election, directors chosen to succeed those whose terms then expire shall be of the same class as the directors they succeed, unless by reason of any intervening changes in the authorized number of directors, the Board of Directors shall designate one or more directorships whose term then expires as directorships of another class in order to more nearly achieve equality of number of directors among the classes.

Notwithstanding the rule that the three classes shall be as nearly equal in number of directors as possible, in the event of any change in the authorized number of directors, each director then continuing to serve as such shall nevertheless continue as a director of the class of which such director is a member until the expiration of his or her current term, or his or her prior death, resignation or removal. If any newly created directorship may, consistently with the rule that the three classes shall be as nearly equal in number of directors as possible, be allocated to either class, the Board of Directors shall allocate it to that of the available class whose term of office is due to expire at the earliest date following such allocation.

C. <u>Vacancies</u>. Except as otherwise provided for or fixed pursuant to the provisions of Article IV of this Restated Certificate of Incorporation relating to the rights of the holders of any series of Preferred Stock to elect directors, and subject to the provisions hereof, newly created directorships resulting from any increase in the authorized number of directors or any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or another cause may be filled only by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of directors in which the new directorship was created or in which the vacancy occurred, and until such director's successor shall have been duly elected and qualified or until his or her earlier resignation, removal from office, death or incapacity. Subject to the provisions of this Restated Certificate of Incorporation, no decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

D. Elections. Elections of directors need not be by written ballot unless the bylaws of the Corporation shall so provide.

#### ARTICLE VII

A. <u>Power of Stockholders to Act by Written Consent</u>. No action required or permitted to be taken at any annual or special meeting of the stockholders may be taken without a meeting, and the power of stockholders to consent in writing, without a meeting, to the taking of any action is specifically denied.

B. <u>Special Meetings of Stockholders</u>. Special meetings of the stockholders of the Corporation may be called only by the Chairman of the Board or the Chief Executive Officer of the Corporation or by a resolution adopted by the affirmative vote of a majority of the Board of Directors.

#### ARTICLE VIII

A. <u>Limitation on Liability</u>. To the fullest extent permitted by the DGCL, as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director.

B. <u>Indemnification</u>. Each person who is or was a director or officer of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, employee benefit plan or other enterprise (including the heirs, executors, administrators or estate of such person), shall be indemnified and advanced expenses by the Corporation, in accordance with the bylaws of the Corporation, to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than said law permitted the Corporation to provide prior to such amendment) or any other applicable laws as presently or hereinafter in effect. The right to indemnification and advancement of expenses hereunder shall not be exclusive of any other right that any person may have or hereafter acquire under any statute, provision of the Restated Certificate of Incorporation, bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

C. <u>Insurance</u>. The Corporation may, to the fullest extent permitted by law, purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise against any expense, liability or loss incurred by such person in any such capacity or arising out of such person's status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the DGCL.

D. <u>Repeal and Modification</u>. Any repeal or modification of the foregoing provisions of this Article VIII shall not adversely affect any right or protection existing hereunder immediately prior to such repeal or modification.

## ARTICLE IX

The Board of Directors is expressly empowered to adopt, amend or repeal the bylaws of the Corporation; *provided, however*, that any adoption, amendment or repeal of the bylaws of the Corporation by the Board of Directors shall require the approval of at least sixty-six and two-thirds percent (66-2/3%) of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any resolution providing for adoption, amendment or

repeal is presented to the Board of Directors). The stockholders shall also have the power to adopt, amend or repeal the bylaws of the Corporation; *provided*, *however*, that in addition to any vote of the holders of any class or series of stock of the Corporation required by law or by this Certificate of Incorporation, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 <sup>2</sup>/3%) of the voting power of all of the then outstanding shares of stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required for such adoption, amendment or repeal by the stockholders of any provisions of the bylaws of the Corporation.

## ARTICLE X

Notwithstanding any other provision of this Restated Certificate of Incorporation, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66<sup>2</sup>/3%) of the voting power of all of the then outstanding shares of the stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend in any respect or repeal any provision of this Article X, or any provision of Articles VI, VII, VIII or IX.

IN WITNESS WHEREOF, the Corporation has caused this certificate to be signed by its duly authorized officer this 4<sup>th</sup> day of February, 2005.

#### MEDICINOVA, INC.

By: /s/ Takashi Kiyoizumi

Takashi Kiyoizumi Chief Executive Officer

#### Certificate of Amendment of Restated Certificate of Incorporation of MEDICINOVA, INC.

#### Under Section 242 of the Delaware General Corporation Law

MediciNova, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation") hereby certifies as follows:

1. The Restated Certificate of Incorporation of the Corporation is hereby amended by changing Article IV, Section A thereof so that, as amended, said Article IV, Section A shall be and read as follows:

"A. <u>Authorized Stock</u>. The Corporation is authorized to issue two classes of stock to be designated respectively Preferred Stock ("Preferred Stock") and Common Stock ("Common Stock"). The total number of all shares of all classes of capital stock the Corporation shall have authority to issue is twenty million five hundred thousand (20,500,000). The total number of shares of Preferred Stock the Corporation shall have authority to issue is five hundred thousand (500,000). The total number of shares of Preferred Stock the Corporation shall have authority to issue is five hundred thousand (500,000). The total number of shares of Common Stock the Corporation shall have authority to issue is five hundred thousand (500,000). The total number of shares and the Common Stock the Corporation shall have authority to issue is twenty million (20,000,000). The Preferred Stock shall have a par value of \$0.01 per share. The number of authorized shares of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the then outstanding shares of Common Stock, without a vote of the holders of Preferred Stock, or of any series thereof, unless a vote of any such holders of Preferred Stock is required pursuant to the provisions established by the Board of Directors of the Corporation (the "Board of Directors") in the resolution or resolutions providing for the issue of such Preferred Stock, and if such holders of such Preferred Stock are so entitled to vote thereon, then, except as may otherwise be set forth in this Restated Certificate of Incorporation, the only stockholder approval required shall be the affirmative vote of a majority of the combined voting power of the Common Stock and the Preferred Stock so entitled to vote.

Each ten (10) shares of the Corporation's Common Stock, par value \$.001 per share, issued and outstanding as of the close of business on October 30, 2006 shall be converted and reclassified into one (1) share of the Corporation's Common Stock, par value \$.001 per share."

2. The foregoing amendment has been duly adopted in accordance with the provisions of Section 242 of the Delaware General Corporation Law by the vote of a majority of the outstanding shares of common stock of the Corporation.

IN WITNESS WHEREOF, I have signed this Certificate this 30th day of October, 2006.

/s/ YUICHI IWAKI, M.D., PH.D. YUICHI IWAKI, M.D., PH.D. Chairman & CEO

## CERTIFICATE OF DESIGNATION OF SERIES A PARTICIPATING PREFERRED STOCK

#### OF

#### MEDICINOVA, INC.

We, Yuichi Iwaki, M.D., Ph.D., the Chief Executive Officer, and David R. Snyder, the Secretary, of MediciNova, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, DO HEREBY CERTIFY:

That pursuant to the authority conferred upon the Board of Directors by the Certificate of Incorporation of the Corporation, the Board of Directors on November 24, 2006, adopted the following resolution creating a series of Two Hundred Fifty Thousand (250,000) shares of Preferred Stock, par value \$ 0.01 per share, designated as Series A Participating Preferred Stock:

RESOLVED, that pursuant to the authority vested in the Board of Directors of the Corporation in accordance with the provisions of its Certificate of Incorporation, a series of Preferred Stock of the Corporation be and it hereby is created, and that the designation and amount thereof and the powers, preferences and relative, participating, optional and other special rights of the shares of such series, and the qualifications, limitations or restrictions thereof are as follows:

1. <u>Designation and Amount</u>. The shares of such series shall be designated as "Series A Participating Preferred Stock," par value \$0.01 per share, and the number of shares constituting such series shall be Two Hundred Fifty Thousand (250,000). Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, that no decrease shall reduce the number of shares of Series A Participating Preferred Stock to a number less than that of the shares then outstanding plus the number of shares issuable upon exercise of outstanding rights, options or warrants or upon conversion of outstanding securities issued by the Corporation.

#### 2. Dividends and Distributions.

(A) Subject to the prior and superior rights of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series A Participating Preferred Stock with respect to dividends, the holders of shares of Series A Participating Preferred Stock in preference to the holders of shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of the Corporation and any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Participating Preferred Stock in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$25.00 or, (b) subject to the provision for adjustment hereinafter set forth, 1,000 times the aggregate per share amount of all cash dividends, and 1,000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock, since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Participating Preferred Stock. In the event the Corporation shall at any time after the close of business on November 24, 2006 (the "Rights Declaration Date") (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, by reclassification or otherwise, then in each such case the amount to which holders of shares of Series A Participating Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Participating Preferred Stock as provided in paragraph (A) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$25.00 per share on the Series A Participating Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Participating Preferred Stock unless the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Participating Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 30 days prior to the date fixed for the payment thereof.

3. Voting Rights. The holders of shares of Series A Participating Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series A Participating Preferred Stock shall entitle the holder thereof to 1,000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock into a greater number of shares or (iii) combine the outstanding Common Stock into a smaller number of shares, by reclassification or otherwise, then in each such case the number of votes per share to which holders of shares of Series A Participating Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock outstanding immediately prior to such event.

(B) Except as otherwise provided herein, in the Certificate of Incorporation or by law, the holders of shares of Series A Participating Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) (i) If at any time dividends on any Series A Participating Preferred Stock shall be in arrears in an amount equal to six quarterly dividends thereon, the holders of the Series A Participating Preferred Stock, voting as a separate series from all other series of Preferred Stock and classes of capital stock, shall be entitled to elect two members of the Board of Directors in addition to any Directors elected by any other series, class or classes of securities and the authorized number of Directors will automatically be increased by two. Promptly thereafter, the Board of Directors of this Corporation shall, as soon as may be practicable, call a special meeting of holders of Series A Participating Preferred Stock for the purpose of electing such members of the Board of Directors. Said special meeting shall in any event be held within 45 days of the occurrence of such arrearage.

(ii) During any period when the holders of Series A Participating Preferred Stock, voting as a separate series, shall be entitled and shall have exercised their right to elect two Directors, then and during such time as such right continues (a) the then authorized number of Directors shall remain increased by two, and the holders of Series A Participating Preferred Stock, voting as a separate series, shall remain entitled to elect the additional Directors so provided for, and (b) each such additional Director shall not be a member of any existing class of the Board of Directors, but shall serve until the next annual meeting of stockholders for the election of Directors, or until his or her successor shall be elected and shall qualify, or until his or her right to hold such office terminates pursuant to the provisions of this <u>Section 3(C)</u>.

(iii) A Director elected pursuant to the terms hereof may be removed with or without cause by the holders of Series A Participating Preferred Stock entitled to vote in an election of such Director.

(iv) If, during any interval between annual meetings of stockholders for the election of Directors and while the holders of Series A Participating Preferred Stock shall be entitled to elect two Directors, there are fewer than two such Directors in office by reason of resignation, death or removal, then, promptly thereafter, the Board of Directors shall call a special meeting of the holders of Series A Participating Preferred Stock for the purpose of filling such vacancy(ies) and such vacancy(ies) shall be filled at such special meeting. Such special meeting shall in any event be held within 45 days of the occurrence of any such vacancy(ies).

(v) At such time as the arrearage is fully cured, and all dividends accumulated and unpaid on any shares of Series A Participating Preferred Stock outstanding are paid, and, in addition thereto, at least one regular dividend has been paid subsequent to curing such arrearage, the term of office of any Director elected pursuant to this <u>Section 3(C)</u>, or his or her successor, shall automatically terminate, and the authorized number of Directors shall automatically decrease by two, and the rights of the holders of the shares of the Series A Participating Preferred Stock to vote as provided in this <u>Section 3(C)</u> shall cease, subject to renewal from time to time upon the same terms and conditions.

(D) Except as set forth herein or as otherwise provided by law, holders of Series A Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock and any other capital stock of the Corporation having general voting rights as set forth herein) for taking any corporate action.

## 4. Certain Restrictions.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Participating Preferred Stock as provided in <u>Section 2</u> are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Participating Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Participating Preferred Stock;

(ii) declare or pay dividends on or make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Participating Preferred Stock except dividends paid ratably on the Series A Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Participating Preferred Stock provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Participating Preferred Stock; or

(iv) purchase or otherwise acquire for consideration any shares of Series A Participating Preferred Stock or any shares of stock ranking on a parity with the Series A Participating Preferred Stock except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective shares and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this <u>Section 4</u>, purchase or otherwise acquire such shares at such time and in such manner.

5. <u>Reacquired Shares</u>. Any shares of Series A Participating Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein.

## 6. Liquidation, Dissolution or Winding up.

(A) Upon any liquidation (voluntary or otherwise), dissolution or winding up of the Corporation, no distribution shall be made to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Participating Preferred Stock unless, prior thereto, the holders of shares of Series A Participating Preferred Stock shall have received per share, the greater of \$1,000.00 or 1,000 times the payment made per share of Common Stock, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment (the "Series A Liquidation Preference"). Following the payment of the full amount of the Series A Liquidation Preference, no additional distributions shall be made to the holders of shares of Series A Participating Preferred Stock unless, prior thereto, the holders of shares of Common Stock shall have received an amount per share (the "Common Adjustment") equal to the quotient obtained by dividing (i) the Series A Liquidation Preference by (ii) 1,000 (as appropriately adjusted as set forth in subparagraph (C) below to reflect such events as stock splits, stock dividends and recapitalization with respect to the Common Stock) (such number in clause (ii), the "Adjustment Number"). Following

the payment of the full amount of the Series A Liquidation Preference and the Common Adjustment in respect of all outstanding shares of Series A Participating Preferred Stock and Common Stock, respectively, holders of Series A Participating Preferred Stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets to be distributed in the ratio of the Adjustment Number to 1 with respect to such Preferred Stock and Common Stock, on a per share basis, respectively.

(B) In the event there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other series of Preferred Stock, if any, which rank on a parity with the Series A Participating Preferred Stock, then such remaining assets shall be distributed ratably to the holders of such parity shares in proportion to their respective liquidation preferences. In the event, following payment in full of all liquidation preferences of all shares senior to Common Stock (including the Series A Participating Preferred Stock), there are not sufficient assets available to permit payment in full of the Common Adjustment, then the remaining assets shall be distributed ratably to the holders of Common Stock.

(C) In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, by reclassification or otherwise, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

7. <u>Consolidation, Merger, etc</u>. In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash or any other property, then in any such case the shares of Series A Participating Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 1,000 times the aggregate amount of stock, securities, cash or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Participating Preferred Stock shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock that are outstanding immediately prior to such event.

8. <u>Redemption</u>. The shares of Series A Participating Preferred Stock shall not be redeemable.

9. <u>Ranking</u>. The Series A Participating Preferred Stock shall rank junior to all other series of the Corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.

10. <u>Amendment</u>. The Certificate of Incorporation and the By-Laws of the Corporation shall not be further amended in any manner which would materially alter or change the powers, preferences or special rights of the Series A Participating Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least 66-<sup>2</sup>/3% of the outstanding shares of Series A Participating Preferred Stock voting separately as a class.

11. <u>Fractional Shares</u>. Series A Participating Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Participating Preferred Stock.

IN WITNESS WHEREOF, we have executed and subscribed this Certificate and do affirm the foregoing as true under the penalties of perjury as of the 24<sup>th</sup> day of November, 2006.

/s/ Yuichi Iwaki, M.D., Ph.D. Yuichi Iwaki, M.D., Ph.D. Chief Executive Officer

Attest:

/s/ David R. Snyder David R. Snyder Secretary

#### Certificate of Amendment of Restated Certificate of Incorporation of MEDICINOVA, INC.

#### Under Section 242 of the Delaware General Corporation Law

MediciNova, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation") hereby certifies as follows:

1. The Restated Certificate of Incorporation of the Corporation is hereby amended by changing Article IV, Section A thereof so that, as amended, said Article IV, Section A shall be and read as follows:

"A. <u>Authorized Stock</u>. The Corporation is authorized to issue two classes of stock to be designated respectively Preferred Stock ("Preferred Stock") and Common Stock ("Common Stock"). The total number of all shares of all classes of capital stock the Corporation shall have authority to issue is thirty million five hundred thousand (30,500,000). The total number of shares of Preferred Stock the Corporation shall have authority to issue is five hundred thousand (500,000). The total number of shares of Common Stock the Corporation shall have authority to issue is five hundred thousand (500,000). The total number of shares apar value of \$0.01 per share and the Common Stock shall have a par value of \$0.01 per share. The number of authorized shares of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the then outstanding shares of Common Stock, without a vote of the holders of Preferred Stock, or of any series thereof, unless a vote of any such holders of Preferred Stock is required pursuant to the provisions established by the Board of Directors of the Corporation (the "Board of Directors") in the resolution or resolutions providing for the issue of such Preferred Stock, and if such holders of such Preferred Stock are so entitled to vote thereon, then, except as may otherwise be set forth in this Restated Certificate of Incorporation, the only stockholder approval required shall be the affirmative vote of a majority of the combined voting power of the Common Stock and the Preferred Stock so entitled to vote.

Each ten (10) shares of the Corporation's Common Stock, par value \$.001 per share, issued and outstanding as of the close of business on October 30, 2006 shall be converted and reclassified into one (1) share of the Corporation's Common Stock, par value \$.001 per share."

2. The foregoing amendment has been duly adopted in accordance with the provisions of Section 242 of the Delaware General Corporation Law by the vote of a majority of the outstanding shares of common stock of the Corporation.

IN WITNESS WHEREOF, I have signed this Certificate this 6th day of June, 2008.

/s/ Yuichi Iwaki YUICHI IWAKI, M.D., PH.D. President & CEO

### CERTIFICATE OF AMENDMENT OF RESTATED CERTIFICATE OF INCORPORATION OF MEDICINOVA, INC.

Under Section 242 of the Delaware General Corporation Law

MediciNova, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation") hereby certifies as follows:

1. The Restated Certificate of Incorporation of the Corporation is hereby amended by changing Article IV, Section A thereof so that, as amended, said Article IV, Section A shall be and read as follows:

"A. <u>Authorized Stock</u>. The Corporation is authorized to issue two classes of stock to be designated respectively Preferred Stock ("Preferred Stock") and Common Stock ("Common Stock"). The total number of all shares of all classes of capital stock the Corporation shall have authority to issue is one hundred three million (103,000,000). The total number of shares of Preferred Stock the Corporation shall have authority to issue is three million (3,000,000). The total number of shares of Common Stock the Corporation shall have authority to issue is one hundred million (100,000,000). The Preferred Stock shall have a par value of \$0.01 per share and the Common Stock shall have a par value of \$0.001 per share. The number of authorized shares of Common Stock or Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the then outstanding shares of Common Stock, without a vote of the holders of Preferred Stock, or of any series thereof, unless a vote of any such holders of Preferred Stock is required pursuant to the provisions established by the Board of Directors of the Corporation (the "Board of Directors") in the resolution or resolutions providing for the issue of such Preferred Stock, and if such holders of such Preferred Stock are so entitled to vote thereon, then, except as may otherwise be set forth in this Restated Certificate of Incorporation, the only stockholder approval required shall be the affirmative vote of a majority of the combined voting power of the Common Stock and the Preferred Stock so entitled to vote.

Each ten (10) shares of the Corporation's Common Stock, par value \$.001 per share, issued and outstanding as of the close of business on October 30, 2006 shall be converted and reclassified into one (1) share of the Corporation's Common Stock, par value \$.001 per share."

2. The foregoing amendment has been duly adopted in accordance with the provisions of Section 242 of the Delaware General Corporation Law by the vote of a majority of the outstanding shares of common stock of the Corporation.

IN WITNESS WHEREOF, I have signed this Certificate this 18th day of June, 2012.

/s/ Yuichi Iwaki

YUICHI IWAKI, M.D., PH.D.

President & CEO

#### MEDICINOVA, INC.

## Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 for the Period Ended June 30, 2012

I, Yuichi Iwaki, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2012 of MediciNova, Inc. (the "Registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: August 9, 2012

By: /s/ YUICHI IWAKI

Yuichi Iwaki, M.D., Ph.D. President and Chief Executive Officer (Principal Executive Officer)

## MEDICINOVA, INC.

## Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 for the Period Ended June 30, 2012

I, Michael Gennaro, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2012 of MediciNova, Inc. (the "Registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this report;

4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and

5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: August 9, 2012

By: /S/ MICHAEL GENNARO

Michael Gennaro Chief Financial Officer (Principal Financial Officer)

## CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350 (SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002)

In connection with the accompanying Quarterly Report on Form 10-Q of MediciNova, Inc. (the "Company") for the period ended June 30, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Yuichi Iwaki, as President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 9, 2012

By:

/S/ YUICHI IWAKI Yuichi Iwaki, M.D., Ph.D. President and Chief Executive Officer (Principal Executive Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and such certification is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

## CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350 (SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002)

In connection with the accompanying Quarterly Report on Form 10-Q of MediciNova, Inc. (the "Company") for the period ended June 30, 2012, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Gennaro, as Vice President and Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 9, 2012

By: /S/ MICHAEL GENNARO Michael Gennaro Chief Financial Officer (Principal Financial Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and such certification is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.