UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 12, 2008

MEDICINOVA, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-33185 (Commission File Number) 33-0927979 (IRS Employer Identification No.)

4350 La Jolla Village Drive, Suite 950 San Diego, CA 92122 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (858) 373-1500

Not Applicable

(Former name or former address, if changed since last report)

| k the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following isions: |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) |
| Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) |
| Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) |
| Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)) |

Item 2.02. Results of Operations and Financial Condition.

On May 13, 2008 (Japanese Standard Time), MediciNova, Inc. (the "Company") filed with the Osaka Securities Exchange a Japanese report referred to as "Kessan Tanshin," which contained, among other things, the Company's financial results for the quarter ended March 31, 2008 (the "Tanshin").

The Tanshin is substantially the same as the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008, except the following supplemental information is provided:

• In the Tanshin, the Company disclosed that it has not changed its estimated results of operations for the six months ending June 30, 2008 and the year ending December 31, 2008 from those previously provided in the Company's Kessan Tanshin filed with the Osaka Securities Exchange on March 18, 2008, as set forth below:

| | Revenues | Operating Loss | Net Loss |
|---------------------------|----------|----------------|----------------|
| Interim Period (6 months) | \$ — | \$(19,387,000) | \$(18,229,000) |
| Full Year | \$ — | \$(33,439,000) | \$(31,241,000) |

Expected loss per share (for full year): \$2.58*

Anticipated cash burn is less than \$30.0 million for the fiscal year ending December 31, 2008

Note to financial results forecast: The above estimates are based on certain assumptions made by the Company's management as of the date hereof. These assumptions are based on management's experience and perception of current conditions, trends, expected future developments and other factors believed to be appropriate in the circumstances. Such estimates are subject to a number of assumptions, risks and uncertainties, many of which are beyond the control of the Company and may cause the Company's actual results to differ materially from the above estimates. These risks include the risk factors detailed in the Company's filings with the Securities and Exchange Commission, including the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008. Our independent auditors have not compiled or been involved in the preparation of the forecasted financial results for fiscal year 2008. Accordingly, they assume no responsibility for the accuracy or presentation of this information.

In the Tanshin, financial statements denominated in Japanese yen are disclosed as supplementary information. The numbers were translated at 100.19 Japanese yen per U.S. dollar, which was the Telegraphic Transfer Middle Rate as per the Bank of Tokyo—Mitsubishi as of March 31, 2008.

The information in this Current Report is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section. The information in this Current Report shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

The Tanshin contains forward-looking statements that are subject to risks and uncertainties, many of which are beyond the Company's control. Forward-looking statements discuss matters that are not historical facts. The Company's actual results may differ from those expressed or implied in these forward-looking statements as a result of various factors, including those set forth in the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2008 as filed with the Securities and Exchange Commission on May 12, 2008, and the differences may be material. Factors that may cause actual results or events to differ materially from those expressed or implied by these forward-looking statements, include, but are not limited to, the risks and uncertainties inherent in clinical trials and product development and commercialization, such as the uncertainty in results of clinical trials for product candidates, the uncertainty of whether the results of clinical trials will be predictive of results in later stages of product

^{*} Using 12,102,131 shares for the weighted average number of shares in calculating expected basic and diluted net loss per share.

development, the risk of delays or failure to obtain or maintain regulatory approval, the risk of failure of the third parties upon whom the Company relies to conduct its clinical trials and manufacture its product candidates to perform as expected, the risk of increased cost and delays due to delays in the commencement, enrollment, completion or analysis of clinical trials or significant issues regarding the adequacy of clinical trial designs or the execution of clinical trials and the timing, cost and design of future clinical trials and research activities, the Company's failure to execute strategic plans or strategies successfully, the Company's collaborations with third parties, the availability of funds to complete product development plans and the Company's ability to raise sufficient capital when needed, intellectual property or contract rights, market factors (including whether uncertainties in the credit and capital markets or a further deterioration of these markets will lead to future impairments to the Company's investment portfolio), economic conditions such as interest rate and currency exchange rate fluctuations, financial condition, liquidity and capital resources and future performance. These forward-looking statements may be preceded by, followed by or otherwise include the words "believes," "expects," "anticipates," "intends," "estimates," "projects," "can," "could," "may," "will," "would" or similar expressions. For such statements, the Company claims the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. Undue reliance should not be placed on these forward-looking statements, which speak only as of the date on which they were made. The Company undertakes no obligation to update publicly or revise any forward-looking statements set forth in the Tanshin, whether as a result of new information, future events or otherwise, unless required by law.

SIGNATURES

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

MEDICINOVA, INC.

Dated: May 12, 2008 By: /s/ Shintaro Asako

Shintaro Asako Vice President and Chief Financial Officer