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): October 23, 2007

MEDICINOVA, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction

001-33185 (Commission File Number) 33-0927979 (IRS Employer

of incorporation)

4350 La Jolla Village Drive, Suite 950

Identification No.)

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)

Check 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 provisions:

- " 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 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(e) On October 25, 2007, MediciNova, Inc. (the **Company**) announced a proposed public offering of 6,000,000 shares (the **Proposed Offering**) of the Company s common stock (**Common Stock**). The proposed sale of 6,000,000 shares of Common Stock by the Company, plus the potential exercise of the Company s outstanding stock options and warrants, would cause the Company s outstanding Common Stock to exceed the authorized number of shares of Common Stock under the Company s Restated Certificate of Incorporation. In order to reduce this risk, and pursuant to an Undertaking Concerning Exercise of Stock Options (**Undertaking Agreement**), five executive officers of the Company have each agreed not to exercise any stock options they hold to purchase Common Stock until such time that the number of authorized shares of Common Stock has been increased to a number not less than the sum of: (i) the number of outstanding shares of Common Stock; (ii) all shares underlying any outstanding stock option or warrant to purchase Common Stock; plus (iii) 1,000,000 shares. The Undertaking Agreements are conditioned upon the Company concluding the Proposed Offering within 120 days of October 23, 2007. The five executive officers providing an Undertaking Agreement to the Company, and their respective number of shares of Common Stock issuable upon stock options subject to the Undertaking Agreement, are as follows: (i) Shintaro Asako, 190,064; (ii) Richard Gammans, Ph.D., 322,752; (iii) Yuichi Iwaki, M.D., Ph.D., 394,503; (iv) Kenneth Locke, Ph.D., 282,908; and (v) Masatsune Okajima, 175,064.

The form of Undertaking Agreement is filed as Exhibit 10.1 to this Current Report and incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Description

10.1 Form of Undertaking Agreement

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.

Dated: October 26, 2007.

MEDICINOVA, INC.

By: /s/ Shintaro Asako Shintaro Asako Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit

DescriptionForm of Undertaking Agreement 10.1