UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-A/A

(Amendment No. 1)

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

MEDICINOVA, INC.

(Exact name of registrant as specified in its charter)

<u>Delaware</u> (State of incorporation or organization) <u>33-0927979</u> (I.R.S. Employer Identification No.)

4275 Executive Square, Suite 650 La Jolla, CA 92037 (Address of principal executive offices) (Zip Code)

Securities to be registered pursuant to Section 12(b) of the Exchange Act:

Title of Each Class to be so Registered

Name of Each Exchange on Which Each Class is to be Registered

None

None

If this Form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), check the following box.

If this Form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), check the following box.

Securities Act registration statement file number to which this form relates: None

Securities to be registered pursuant to Section 12(g) of the Exchange Act: Series A Participating Preferred Stock Purchase Rights

Item 1. Description of Registrant's Securities to be Registered.

MediciNova, Inc. (the "Company") hereby amends, by supplementing with the information set forth below, its Form 8-A initially filed with the Securities and Exchange Commission on November 29, 2006:

On June 10, 2010, the Series A Participating Preferred Stock Purchase Rights (the "Rights") expired and the Rights Agreement, dated as of November 24, 2006 (the "Agreement"), entered into by and between the Company and American Stock Transfer & Trust Company, as Rights Agent, was terminated. The Agreement provided a three-year sunset after 2007 pursuant to which the Rights would automatically expire and the Agreement would terminate in the event the Agreement was not ratified by the Company's stockholders and Board of Directors during that period. The Rights expired at the Company's annual meeting of stockholders on June 10, 2010.

Item 2. Exhibits.

ExhibitDescription4.1Rights Agreement, dated November 24, 2006, by and between MediciNova, Inc. and American Stock Transfer & Trust Company
(incorporated herein by reference to Exhibit 4.1 to the Company's Form 8-A filed on November 29, 2006).

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SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereto duly authorized.

MEDICINOVA, INC.

Date: March 21, 2014

By: <u>/s/ Yuichi Iwaki</u> Name: Yuichi Iwaki, M.D., Ph.D. Title: President & Chief Executive Officer

EXHIBIT INDEX

Exhibit Description

4.1 Rights Agreement, dated November 24, 2006, by and between MediciNova, Inc. and American Stock Transfer & Trust Company (incorporated herein by reference to Exhibit 4.1 to the Company's Form 8-A filed on November 29, 2006).