

MEDICINOVA, INC.  
4350 LA JOLLA VILLAGE DRIVE, SUITE 950  
SAN DIEGO, CA 92122

December 14, 2009

VIA EDGAR AND FACSIMILE

Securities and Exchange Commission  
100 F Street, N.E.  
Washington, DC 20549  
Attention: Jeffrey Riedler and Nandini Acharya

Re: MediciNova, Inc.  
Registration Statement on Form S-3 (File No. 333-163116)

Dear Commissioners:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, MediciNova, Inc., a Delaware corporation (the "Company"), hereby respectfully requests acceleration of the effective date of its Registration Statement on Form S-3 (File No. 333-163116) so that such Registration Statement may be declared effective at 12:00 p.m. on December 16, 2009 or as soon as practicable thereafter.

We request that we be notified of such effectiveness by a telephone call to David E. Schulman of Dechert LLP at (202) 261-3440 and that such effectiveness also be confirmed in writing.

The Company hereby acknowledges that (i) should the Securities and Exchange Commission (the "Commission") or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing; (ii) the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for adequacy and accuracy of the disclosure in the filing; and (iii) the Company may not assert this action as defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Very truly yours,

MediciNova, Inc.

By: /s/ Shintaro Asako  
Name: Shintaro Asako  
Title: Chief Financial Officer and Secretary