

AtheroNova Inc.  
Form POS AM  
May 05, 2011

As filed with the Securities and Exchange Commission on May 4, 2011 Registration No. 333-167866

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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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POST EFFECTIVE AMENDMENT NO. 1 TO FORM S-1  
REGISTRATION STATEMENT  
UNDER THE  
SECURITIES ACT OF 1933

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ATHERONOVA INC.  
(Exact Name of Registrant as Specified in its Charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)	2834 (Primary Standard Industrial Classification Code Number)	20-1915083 (I.R.S. Employer Identification No.)
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2301 Dupont Drive, Suite 525

Irvine, CA 92612  
(949) 476-1100

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Mark Selawski, Chief Financial Officer  
AtheroNova Inc.  
2301 Dupont Drive, Suite 525  
Irvine, CA 92612  
(949) 476-1100

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copy to:

Louis Wharton, Esq.  
Stubbs Alderton & Markiles, LLP  
15260 Ventura Boulevard, 20th Floor  
Sherman Oaks, California 91403  
(818) 444-4500

Approximate date of commencement of proposed sale to the public: Not applicable.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant too

Rule 415 under the Securities Act of 1933 check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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

Large Accelerated Filer  Accelerated Filer

Non-Accelerated Filer  (Do not check if smaller reporting company) Smaller Reporting Company

Deregistration of Securities

On September 28, 2010, the Securities and Exchange Commission (“SEC”) declared effective a registration statement on Form S-1 (File No. 333-167866) of AtheroNova Inc. (“we” or “our”) initially filed with the SEC on June 29, 2010, which filing was subsequently amended on September 9, 2010 (the “Registration Statement”), originally registering the resale by the selling stockholders identified in the prospectus of an aggregate of 1,805,825 shares of our common stock. This offering has been terminated. Pursuant to the undertaking contained in the Registration Statement, we file this post-effective amendment to the Registration Statement to terminate the Registration Statement and deregister all of the shares of our common stock that remain unsold as of the date hereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Irvine, State of California, on May 4, 2011.

ATHERONOVA INC.  
(Registrant)

By: /s/ Mark Selawski  
Mark Selawski  
Chief Financial Officer & Secretary

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
* Thomas W. Gardner	Chief Executive Officer and President (Principal Executive Officer)	May 4, 2011
* Mark Selawski	Chief Financial Officer & Secretary (Principal Financial and Accounting Officer)	May 4, 2011
* Boris Ratiner, M. D.	Director	May 4, 2011
* Chaim Davis	Director	May 4, 2011
* Gary Freeman	Director	May 4, 2011
Alexander Polinsky	Director	May 4, 2011
Paul DiPerna	Director	May 4, 2011

\*By: /s/ Mark Selawski  
Mark Selawski, as Attorney-in-Fact

