

AtheroNova Inc.  
Form SC 13G/A  
February 12, 2016

**SECURITIES  
AND  
EXCHANGE  
COMMISSION  
Washington,  
D.C. 20549**

**SCHEDULE  
13G/A**

Under the  
Securities  
Exchange Act of  
1934

(Amendment No.  
2)\*

AtheroNova, Inc.  
(Name of Issuer)

Common Stock,  
\$0.0001 par  
value  
(Title of Class of  
Securities)

047438304  
(CUSIP Number)

December 31,  
2015  
(Date of event  
which requires  
filing of this  
statement)

Check the  
appropriate box  
to designate the  
rule pursuant to  
which this  
Schedule 13G is

filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

(Page 1 of 6  
Pages)

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\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

<b>1</b>	NAMES OF REPORTING PERSONS
<b>2</b>	Empery Asset Management, LP CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP
<b>3</b>	SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION
<b>4</b>	Delaware
<b>5</b>	SOLE VOTING POWER
<b>6</b>	SHARED VOTING POWER
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	116,373 shares of Common Stock
<b>7</b>	SOLE DISPOSITIVE POWER
<b>8</b>	SHARED DISPOSITIVE POWER
<b>9</b>	116,373 shares of Common Stock AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING

PERSON

116,373 shares of  
Common Stock

CHECK BOX

IF THE

AGGREGATE

AMOUNT IN ..

**10**

ROW (9)

EXCLUDES

CERTAIN

SHARES

PERCENT OF

CLASS

REPRESENTED BY

**11**

AMOUNT IN ROW

(9)

1.32 %

TYPE OF

REPORTING

**12**

PERSON

PN

<b>1</b>	NAMES OF REPORTING PERSONS
	Ryan M. Lane
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP
<b>3</b>	SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION
<b>4</b>	United States
<b>5</b>	SOLE VOTING POWER
	SHARED VOTING POWER
<b>6</b>	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
<b>7</b>	116,373 shares of Common Stock SOLE DISPOSITIVE POWER
	SHARED DISPOSITIVE POWER
<b>8</b>	116,373 shares of Common Stock
<b>9</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

10	116,373 shares of Common Stock CHECK BOX IF THE AGGREGATE AMOUNT IN .. ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)
11	
12	1.32% TYPE OF REPORTING PERSON  IN

<b>1</b>	NAMES OF REPORTING PERSONS
	Martin D. Hoe
<b>2</b>	CHECK THE APPROPRIATE BOX IF A MEMBER (b) " OF A GROUP
<b>3</b>	SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION
<b>4</b>	United States
<b>5</b>	SOLE VOTING POWER
	SHARED VOTING POWER
<b>6</b>	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
<b>7</b>	116,373 shares of Common Stock SOLE DISPOSITIVE POWER
	SHARED DISPOSITIVE POWER
<b>8</b>	116,373 shares of Common Stock
<b>9</b>	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

116,373 shares of  
Common Stock  
CHECK BOX  
IF THE  
AGGREGATE  
AMOUNT IN ..  
**10** ROW (9)  
EXCLUDES  
CERTAIN  
SHARES  
PERCENT OF  
CLASS  
REPRESENTED BY  
**11** AMOUNT IN ROW  
(9)

1.32%  
TYPE OF  
REPORTING  
**12** PERSON

IN



This Amendment No. 2 (this "Amendment") amends the statement on Schedule 13G filed on December 23, 2014 (the "Original Schedule 13G," as amended by Amendment No. 1 to the Original Schedule 13G filed on January 12, 2015, the Original Schedule 13G, as amended, the "Schedule 13G"), with respect to shares of Common Stock, par value \$0.0001 (the "Common Stock"), of AtheroNova, Inc. (the "Company"). Capitalized terms used herein and not otherwise defined in this Amendment have the meanings set forth in the Schedule 13G. This Amendment amends and restates Items 4 and 5 in their entirety as set forth below.

**Item 4. OWNERSHIP.**

The information as of the date of the event which requires filing of this statement required by Items 4(a) – (c) is set forth in Rows 5 – 11 of the cover page for each Reporting Person hereto and is incorporated herein by reference for each such Reporting Person. The percentage set forth in Row 11 of the cover page for each Reporting Person is based on 8,809,139 shares of Common Stock issued and outstanding as of November 10, 2014, as represented in the Company's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 19, 2014.

The Investment Manager, which serves as the investment manager to the Empery Funds, may be deemed to be the beneficial owner of all shares of Common Stock held by the Empery Funds. Each of the Reporting Individuals, as Managing Members of the General Partner of the Investment Manager with the power to exercise investment discretion, may be deemed to be the beneficial owner of all shares of Common Stock held by the Empery Funds. The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of shares of Common Stock owned by another Reporting Person. Each of the Reporting Individuals hereby disclaims any beneficial ownership of any such shares of Common Stock.

**Item 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.**

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]

CUSIP No. 047438304 13G Page 6 of 6 Pages

SIGNATURES

After reasonable inquiry and to the best of our knowledge and belief, the undersigned certify that the information set forth in this statement is true, complete and correct.

DATED: February 12, 2016

EMPERY ASSET MANAGEMENT, LP

By: EMPERY AM GP, LLC, its General Partner

By: /s/ Ryan M. Lane

Name: Ryan M. Lane

Title: Managing Member

/s/ Ryan M. Lane

Ryan M. Lane

/s/ Martin D. Hoe

Martin D. Hoe