

AtheroNova Inc.  
Form SC 13G/A  
January 12, 2015

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

**SCHEDULE  
13G/A**

Under the  
Securities  
Exchange Act of  
1934

(Amendment No.  
1)\*

AtheroNova, Inc.  
(Name of Issuer)

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

047438304  
(CUSIP Number)

December 31,  
2014  
(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
	Empery Asset Management, LP
<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
	Delaware
<b>5</b>	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
	SOLE VOTING POWER
<b>6</b>	463,790 shares of Common Stock
	833,250 shares of Common Stock issuable upon exercise of Warrants (See Item 4)*
<b>7</b>	SOLE DISPOSITIVE POWER
<b>8</b>	SHARED DISPOSITIVE POWER

463,790 shares  
of Common  
Stock

833,250 shares  
of Common  
Stock issuable  
upon exercise  
of Warrants  
(See Item 4)\*

AGGREGATE  
AMOUNT  
BENEFICIALLY  
OWNED BY EACH  
REPORTING  
PERSON

**9** 463,790 shares of  
Common Stock

833,250 shares of  
Common Stock  
issuable upon exercise  
of Warrants (See Item  
4)\*

**10** CHECK BOX  
IF THE  
AGGREGATE  
AMOUNT IN ..  
ROW (9)  
EXCLUDES  
CERTAIN  
SHARES  
PERCENT OF  
CLASS

**11** REPRESENTED BY  
AMOUNT IN ROW  
(9)

**12** 5.26 % (See Item 4)\*  
TYPE OF  
REPORTING  
PERSON

PN

\* As more fully described in Item 4, these reported securities are subject to a 4.99% blocker and the percentage set forth in row (11) gives effect to such blocker. However, as more fully described in Item 4, the securities reported in rows (6), (8) and (9) show the number of shares of Common Stock that would be issuable upon full exercise of such

reported securities and do not give effect to such blocker. Therefore, the actual number of shares of Common Stock beneficially owned by such Reporting Person, after giving effect to such blocker, is less than the number of securities reported in rows (6), (8) and (9).

<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
	United States
<b>5</b>	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
	SOLE VOTING POWER
<b>6</b>	463,790 shares of Common Stock
	833,250 shares of Common Stock issuable upon exercise of Warrants (See Item 4)*
<b>7</b>	SOLE DISPOSITIVE POWER
<b>8</b>	SHARED DISPOSITIVE POWER
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833,250 shares  
of Common  
Stock issuable  
upon exercise  
of Warrants  
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AGGREGATE  
AMOUNT  
BENEFICIALLY  
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CERTAIN  
SHARES  
PERCENT OF  
CLASS

**11** REPRESENTED BY  
AMOUNT IN ROW  
(9)

**12** 5.26% (See Item 4)\*  
TYPE OF  
REPORTING  
PERSON

IN

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reported in rows (6), (8) and (9).



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<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
	United States
<b>5</b>	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH
	SOLE VOTING POWER
	SHARED VOTING POWER
<b>6</b>	463,790 shares of Common Stock
	833,250 shares of Common Stock issuable upon exercise of Warrants (See Item 4)*
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<b>8</b>	SHARED DISPOSITIVE POWER
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reported in rows (6), (8) and (9).

This Amendment No. 1 (this "Amendment") amends the statement on Schedule 13G filed on December 23, 2014 (the "Original Schedule 13G" and 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 Item 4 in its 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 for the quarter ended September 30, 2014 filed with the Securities and Exchange Commission on November 19, 2014.

Pursuant to the terms of the reported warrants (the "Reported Warrants"), the Reporting Persons cannot exercise any of the Reported Warrants if the Reporting Persons would beneficially own, after any such exercise, more than 4.99% of the outstanding shares of Common Stock (the "Blocker"), and the percentage set forth in Row 11 of the cover page for each Reporting Person gives effect to the Blocker. Consequently, as of the date of the event which requires the filing of this statement, the Reporting Persons were not able to exercise any of the Reported Warrants due to the Blocker.

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, and underlying the Reported Warrants (subject to the Blocker) 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, and underlying the Reported Warrants (subject to the Blocker) 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.

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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: January 12, 2015

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