

Zadini Giorgio C.
Form SC 13D/A
October 12, 2010

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

(Amendment No. 2)*

AtheroNova Inc.

(Name of Issuer)

Common Stock, par value \$0.0001 per share

(Title of Class of Securities)

047438 205

(CUSIP Number)

Giorgio Zadini
c/o AtheroNova Inc.
2301 Dupont Drive, Suite 525
Irvine, California 92612
(949) 476-1100

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

September 17, 2010

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box ..

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

*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 disclosures provided in a prior cover page.

The information required on 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 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).

CUSIP No. 047438 205

Page 2 of 4

1 NAME OF REPORTING PERSON
 SS. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
 Giorgio Zadini

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A
 GROUP*

(a) ..

(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS*
 OO

5 CHECK BOX OF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO
 ITEMS 2(d) or 2(e) ..

6 CITIZENSHIP OR PLACE OF ORGANIZATION
 United States of America

	7	SOLE VOTING POWER 5,836,372
NUMBER OF SHARES	8	SHARED VOTING POWER
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	9	SOLE DISPOSITIVE POWER 5,836,372
	10	SHARED DISPOSITIVE POWER

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
 5,836,372

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
 SHARES* ..

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
 25.7% (1)

14 TYPE OF REPORTING PERSON*
 IN

(1) Based on a total of 22,687,553 shares of the Company's common stock outstanding as of September 7, 2010.

This Schedule 13D/A ("Schedule 13D/A") amends the following sections of the Schedule 13D filed with the Securities and Exchange Commission on May 24, 2010 and amended on June 28, 2010 ("Schedule 13D").

Item 3. Source and Amount of Funds or Other Consideration.

Item 3 of Schedule 13D is supplemented and amended by the information below.

On September 9, 2010, the Reporting Person transferred 42,500 shares of Common Stock to certain parties as bona fide gifts. From September 6, 2010 through September 17, 2010, the Reporting Person sold an aggregate of 199,250 shares of Common Stock to various purchasers.

Item 5. Interest in Securities of the Issuer.

Item 5 of Schedule 13D is supplemented and amended by the information below.

Reference is made to the disclosure set forth under Item 3 this Schedule 13D/A, which disclosure is incorporated herein by reference.

As of September 17, 2010, the Reporting Person beneficially owned 5,836,372 shares of Common Stock (the "Shares"). Since 22,687,553 shares of Common Stock were outstanding as of September 17, 2010, the Shares constitute approximately 25.7% of the shares of Common Stock issued and outstanding.

The Reporting Person has the sole power to vote or direct the vote of, and to dispose of or direct the disposition of, the Shares.

Transactions by the Reporting Person in Common Stock effected in the past 60 days are described in Item 3 above.

Page 3 of 4

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information set forth in this Schedule 13D/A is true, complete and correct.

Dated: October 11, 2010

/s/ Giorgio Zadini
Giorgio Zadini