AtheroNova Inc.
Form 10-Q
May 10, 2013

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-Q

þ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2013

OR

¨ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _______ to _______

Commission file number 000-52315

AtheroNova Inc.
(Exact Name of Registrant as Specified in Its Charter)

Delaware	20-1915083
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

2301 Dupont Drive, Suite 525, Irvine, CA 92612
(Address of principal executive offices and zip code)

(949) 476-1100
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.Yes þ No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).Yes þ No ¨

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	¨	Smaller reporting company	þ

Indicate by check mark whether the registrant is a shell company (as defined by Rule 12b-2 of the Exchange Act). Yes ¨ No þ

As of May 6, 2013 there were 38,659,782 shares of the issuer’s common stock, $0.0001 par value per share, outstanding.

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Part I – Financial Information
Item 1. Financial Statements

ATHERONOVA INC.
(A Development Stage Company)
Condensed Consolidated Balance Sheets

	March 31, 2013 (unaudited)	December 31, 2012
Assets		
Current Assets		
Cash	$ 2,082,400	$ 2,744,046
Other Current Assets	11,420	17,622
Total Current Assets	2,093,820	2,761,668
Equipment, net	7,323	8,514
Deposits and other assets	23,777	23,777
Total Assets	$ 2,124,920	$ 2,793,959
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable and accrued expenses	$ 545,490	$ 603,629
Interest payable	48,033	37,016
Total Current Liabilities	593,523	640,645
2.5% Senior secured convertible notes	1,762,833	1,762,833
Discount on convertible notes	(1,291,853)	(1,402,030)
2.5% Senior secured convertible notes, net of discount	470,980	360,803
Stockholders' Equity:		
Preferred stock $0.0001 par value, 10,000,000 shares authorized, none outstanding at March 31, 2013 and December 31, 2012	--	--
Common stock $0.0001 par value, 100,000,000 shares authorized, 38,082,875 and 37,223,640 outstanding at March 31, 2013 and December 31, 2012, respectively	3,797	3,711
Additional paid in capital	16,895,592	16,003,872
Deficit accumulated during the development stage	(15,838,972)	(14,215,072)
Total stockholders' equity	1,060,417	1,792,511
Total Liabilities and Stockholders' Equity	$ 2,124,920	$ 2,793,959

See accompanying notes to condensed consolidated financial statements.

ATHERONOVA INC.

(A Development Stage Company)
Condensed Consolidated Statements of Operations
(Unaudited)
For the three month periods ended March 31, 2013 and 2012,
And for the period from December 13, 2006 (Inception) through March 31, 2013

	Three months ended March 31, 2013	2012	Cumulative From Inception
Revenue, net	$--	$--	$--
Operating expenses:			
Research and development	322,924	161,305	2,182,260
General and administrative expenses	1,179,812	743,086	7,912,899
Impairment charge-intellectual property	--	--	572,868
Total operating expenses	1,502,736	904,391	10,668,027
Loss from operations	(1,502,736)	(904,391)	(10,668,027)
Other income (expenses):			
Other income	1,396	204	7,778
Merger-related expenses	--	--	(323,294)
Cancellation of related-party debt	--	--	100,000
Interest expense	(121,195)	(62,566)	(2,000,709)
Private Placement Costs	--	--	(2,148,307)
Cost to induce conversion of 12% notes	--	--	(866,083)
Gain on extinguishment of derivative liability	--	--	909,368
Change in fair value of derivative liabilities	--	1,727,274	(839,569)
Total other income (expense)	(119,799)	1,664,912	(5,160,816)
Net income (loss) before income taxes	(1,622,535)	760,521	(15,828,843)
Provision for income taxes	1,365	565	10,129
Net income (loss)	$(1,623,900)	$759,956	$(15,838,972)
Basic income (loss) per share	$(0.04)	$0.03	
Diluted income (loss) per share	$(0.04)	$0.02	
Basic weighted average shares outstanding	37,983,368	28,426,926	
Diluted weighted average shares outstanding	37,983,368	31,615,602	

See accompanying notes to condensed consolidated financial statements.

ATHERONOVA INC.
(A Development Stage Company)
Condensed Consolidated Statements of Stockholders' Equity
For the period from December 31, 2012 through March 31, 2013 (unaudited)

Description	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Deficit Accumulated During Development Stage	Total Stockholders' Equity
Balance – December 31, 2012	37,223,640	$3,711	$16,003,872	$(14,215,072)	$1,792,511
Common stock issued upon exercise of warrants	859,235	86	149,961	--	150,047
Fair value of vested options and warrants	--	--	260,359	--	260,359
Fair value of shares transferred or sold to employees and directors by controlling stockholder	--	--	481,400	--	481,400
Net loss	--	--	--	(1,623,900)	(1,623,900)
Balance – March 31, 2013	38,082,875	$3,797	$16,895,592	$(15,838,972)	$1,060,417

See accompanying notes to condensed consolidated financial statements.

ATHERONOVA INC.
(A Development Stage Company)
Condensed Consolidated Statements of Cash Flows
(Unaudited)
For the three month periods ended March 31, 2013 and 2012,
And for the period from December 13, 2006 (Inception) through March 31, 2013

	Three months ended March 31,		Cumulative From Inception
	2013	2012	
Operating Activities:			
Net income (loss)	$(1,623,900)	$759,956	$(15,838,972)
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Loss on settlement of payables and accrued interest	--	--	98,733
Amortization of debt discounts	110,177	56,528	1,819,666
Depreciation	1,191	675	8,696
Fair value of vested options and warrants	260,359	221,675	2,832,115
Fair value of common stock issued for services	--	70,100	519,100
Fair value of shares transferred or sold to employees, directors and vendors by controlling stockholder	481,400	123,050	604,450
Impairment charge-intellectual property	--	--	572,867
Cost of private placement	--	--	2,148,307
Cost to induce conversion of 12% notes	--	--	866,083
Gain on conversion of debt	--	--	(909,368)
Change in fair value of derivative liabilities	--	(1,727,274)	839,569
Cancellation of debt	--	--	(100,000)
Changes in operating assets and liabilities:			
Other current assets	6,202	5,696	(35,197)
Accounts payable and accrued expenses	(47,122)	151,533	790,915
Net cash used in operating activities	(811,693)	(338,061)	(5,783,036)
Investing Activities			
Purchase of equipment	--	(1,999)	(16,019)
Investment in intellectual property	--	--	(372,867)
Cash received from reverse merger	--	--	1,281
Net cash used in investing activities	--	(1,999)	(387,605)
Financing Activities			
Proceeds from issuance of common stock	150,047	--	4,729,502
Proceeds from 12% convertible notes-net	--	--	645,200
Repayment of convertible notes-short term	--	--	(15,000)
Proceeds from sale of 2.5% senior secured convertible notes, net	--	--	2,893,339
Net cash provided by financing activities	150,047	--	8,253,041
Net change in cash	(661,646)	(340,060)	2,082,400
Cash - beginning balance	2,744,046	616,067	--
Cash - ending balance	$2,082,400	$686,783	$2,082,400
Supplemental disclosure of cash flow information:			
Cash paid for interest	--	$--	$32,666
Cash paid for income taxes	$1,365	$565	$10,129

Supplemental disclosure of non-cash investing and financing transactions:			
Stockholder notes issued in exchange for intellectual property	$--	$--	$200,000
Conversion of convertible notes payable to common stock	$--	$--	$2,020,851
Derivative liability created on issuance of convertible notes and warrants	$--	$--	$1,500,000
Reclass of accounts payable to related party notes	$--	$--	$100,000
Fair value of warrants and beneficial conversion feature associated with issued convertible notes	$--	$--	$1,556,720
Common stock issued to settle accounts payable	$--	$--	$96,747
Fair value of derivative liability extinguished upon modification of the 2.5% convertible notes	$--	$--	$3,472,549

See accompanying notes to condensed consolidated financial statements.

ATHERONOVA INC.

(A Development Stage Company)
Notes to Condensed Consolidated Financial Statements
Three Months Ended March 31, 2013 and 2012
(Unaudited)

The accompanying condensed consolidated financial statements of AtheroNova Inc. and subsidiary (“AtheroNova,” “we,” “us, “our” and “our Company”) have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and the rules and regulations of the Securities and Exchange Commission. Accordingly, the unaudited condensed consolidated financial statements do not include all information and footnotes required by accounting principles generally accepted in the United States of America for complete annual financial statements. In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments, consisting of only normal recurring adjustments, considered necessary for a fair presentation. Interim operating results are not necessarily indicative of results that may be expected for the year ending December 31, 2013 or for any other interim period. These unaudited condensed consolidated financial statements should be read in conjunction with the Company’s audited financial statements as of and for the year ended December 31, 2012, which are included in the Company’s Report on Form 10-K for such year filed on April 1, 2013. The condensed consolidated balance sheet as of December 31, 2012 has been derived from the audited financial statements included in the Form 10-K for that year.

1. ORGANIZATION

Z&Z Medical Holdings, Inc. (“Z&Z Nevada”) was incorporated under the laws of the State of Nevada on December 13, 2006 (Inception). On November 30, 2009, a separate corporation named Z&Z Medical Holdings, Inc. (“Z&Z Delaware”) was incorporated under the laws of the State of Delaware and on March 3, 2010 Z&Z Nevada was merged into Z&Z Delaware. On May 13, 2010, pursuant to an Agreement and Plan of Merger dated March 26, 2010 and our subsidiary, Z&Z Merger Corporation, merged with and into Z&Z Delaware and the surviving subsidiary corporation changed its name to AtheroNova Operations, Inc. (“AtheroNova Operations”).

As a result of the merger AtheroNova is now engaged, through AtheroNova Operations, in development of pharmaceutical preparations and pharmaceutical intellectual property. The Company will continue to be a development stage company for the foreseeable future.

These condensed consolidated financial statements reflect the historical results of AtheroNova Operations prior to the merger and that of the combined company following the merger, and do not include the historical financial results of AtheroNova prior to the completion of the merger. Common stock and the corresponding capital amounts of the Company pre-merger have been retroactively restated as capital stock shares reflecting the exchange ratio in the merger and subsequent 1-for-200 reverse stock split effected on June 23, 2010.

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The summary of significant accounting policies presented below is designed to assist in understanding the Company's condensed consolidated financial statements. Such financial statements and accompanying notes are the representation of the Company's management, who is responsible for their integrity and objectivity.

Use of Estimates

In preparing these condensed consolidated financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the condensed consolidated financial statements and the reported amount of revenues and expenses during the reporting periods. Actual results could differ from those estimates. Significant estimates and assumptions included in the Company's condensed consolidated financial statements relate to the valuation of long-lived assets, accrued other liabilities, and valuation assumptions related to share based payments and derivative liability.

Going Concern

The accompanying condensed consolidated financial statements have been prepared under the assumption that the Company will continue as a going concern. Such assumption contemplates the realization of assets and satisfaction of liabilities in the normal course of business. The Company is in the development stage and has not generated any revenues from operations to date, and does not expect to do so in the foreseeable future. The Company has incurred operating losses and negative operating cash flows since inception and has financed its working capital requirements through recurring sales of its convertible notes and equity securities. These factors, among others, raise substantial doubt about the Company's ability to continue as a going concern. The condensed consolidated financial statements do not include any adjustments that might be necessary should the Company be unable to continue as a going concern.

Management is currently in the process of exploring private placements of securities by the Company to accredited investors, funds and institutional investors. The Company had warrants to purchase an aggregate of 859,235 exercised during the three months ended March 31, 2013, receiving gross proceeds of $150,047. Management believes that current funds plus the recently concluded financing activities will be sufficient to fund operations through February 2014. Significant additional capital will be needed to advance the Company's research and development and clinical trials as well as providing general working capital. There can be no assurances that sufficient subsequent funding, if any at all, will be raised by this or future offerings or that the cost of such funding will be reasonable.

In light of the foregoing, management will continue to seek funding through short-term and long-term loans, grants and other such funds available from private and public sources established to further research in health care and advancement of science. Management continues to meet with representatives of private and public sources of funding to continue the ongoing process of capital development sufficient enough to cover negative cash flows expected in future periods and will continue to do so in the coming months.

Principles of Consolidation

The condensed consolidated financial statements include the accounts of the Company and its majority-owned subsidiary. All significant intercompany transactions and balances have been eliminated in consolidation.

Earnings and Loss per Share

The Company's computation of earnings per share ("EPS") includes basic and diluted EPS. Basic EPS is measured as the income (loss) available to common stockholders divided by the weighted average common shares outstanding for the period. Diluted EPS is similar to basic EPS but presents the dilutive effect on a per share basis of potential common shares (e.g., warrants and options) as if they had been converted at the beginning of the periods presented, or issuance date, if later. Potential common shares that have an anti-dilutive effect (i.e., those that increase income per share or decrease loss per share) are excluded from the calculation of diluted EPS.

Income (loss) per common share is computed by dividing net income (loss) by the weighted average number of shares of common stock outstanding during the respective periods. Basic and diluted (loss) per common share is the same for periods in which the company reported an operating loss because all warrants and stock options outstanding are anti-dilutive.

A reconciliation of basic and diluted shares for the three months ended March 31, 2013 and 2012 follows:

	March 31, 2013	March 31, 2012
Average common shares outstanding-basic	37,983,368	28,426,926
Effect of dilutive securities-		
Warrants	--	2,918,439
Employee and director stock options	--	270,237
Average diluted shares	37,983,368	31,615,602

There were no adjustments to net loss required for purposes of computing diluted earnings per share.

Warrants, options and other potentially dilutive securities that are antidilutive and have been excluded from the dilutive calculations when their exercise or conversion price exceeds the average stock market price during the period or the effect would be anti-dilutive when applied to a net loss during the period(s) presented. The following table sets forth the shares excluded from the diluted calculation for the three month periods presented as follows:

	March 31, 2013	March 31, 2012
Senior secured Convertible notes	6,078,734	3,294,314
Warrants	8,355,437	3,331,281
Employee and director stock options	5,634,498	4,286,761
Total potentially dilutive shares	20,068,669	10,912,356

Such securities could potentially dilute earnings per share in the future.

Derivative financial instruments

The Company evaluates all of its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair value and is then re-valued at each reporting date, with changes in the fair value reported in the consolidated statements of operations. For stock-based derivative financial instruments, the Company uses a weighted-average Black-Scholes-Merton option pricing model to value the derivative instruments at inception and on subsequent valuation dates. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within 12 months of the balance sheet date.

The Company had derivative liabilities in 2012 relating to purchase price adjustments on certain convertible notes and warrants issued in 2010. These agreements were modified in 2012 eliminating the reset provision and the corresponding derivate liabilities.

Fair value of financial instruments

Effective January 1, 2008, fair value measurements are determined by the Company’s adoption of authoritative guidance issued by the FASB, with the exception of the application of the statement to non-recurring, non-financial assets and liabilities as permitted. The adoption of the authoritative guidance did not have a material impact on the Company’s fair value measurements. Fair value is defined in the authoritative guidance as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. A fair value hierarchy was established, which prioritizes the inputs used in measuring fair value into three broad levels as follows:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs, other than the quoted prices in active markets, are observable either directly or indirectly.

Level 3—Unobservable inputs based on the Company’s assumptions.

The Company is required to use observable market data if such data is available without undue cost and effort.

At March 31, 2013 and December 31, 2012, the fair values of cash and cash equivalents, and accounts payable approximate their carrying values.

Recently Issued Accounting Standards

Recent accounting pronouncements did not or are not believed by management to have a material impact on the Company's present or future consolidated financial statements.

3. 2.5% SENIOR SECURED CONVERTIBLE NOTES PAYABLE

Convertible notes payable consist of the following as of March 31, 2013 and December 31, 2012:

	March 31, 2013	December 31, 2012
2010 Convertible Notes	$427,500	$427,500
2012 Convertible Notes	1,335,333	1,335,333
	$1,762,833	$1,762,833
Less Valuation Discount	(1,291,853)	(1,402,030)
Convertible Notes Payable, net	$470,980	$360,803

2010 Convertible Notes

On May 13, 2010, we entered into a Securities Purchase Agreement with W-Net Fund I, L.P. (“W-Net”), Europa International, Inc. (“Europa”) and MKM Opportunity Master Fund, Ltd. (“MKM” and together with W-Net and Europa, the “Purchasers”), pursuant to which the Purchasers, on May 13, 2010, purchased from us (i) 2.5% Senior Secured Convertible Notes (the “Original Notes”) for a cash purchase price of $1,500,000, and (ii) Common Stock Purchase Warrants pursuant to which the Purchasers may purchase up to 1,908,798 shares of our common stock at an exercise price equal to approximately $0.39 per share (the “Capital Raise Transaction”).

The Original Notes accrued 2.5% interest per annum with a maturity of 4 years after the closing of the Capital Raise Transaction. No cash interest payments were required, except that accrued and unconverted interest is due on the maturity date and on each conversion date with respect to the principal amount being converted, provided that such interest may be added to and included with the principal amount being converted. If there is an uncured event of default (as defined in the Original Notes), the holder of each Original Note may declare the entire principal and accrued interest amount immediately due and payable. Default interest will accrue after an event of default at an annual rate of 12%. If there is an acceleration, a mandatory default amount equal to 120% of the unpaid Original Note principal plus accrued interest may be payable.

The Original Notes greatly restrict the ability of our company and AtheroNova Operations to issue indebtedness or grant liens on our or its respective assets without the Original Note holders’ consent. They also limit and impose financial costs on our acquisition by any third party.

On May 13, 2010, we also entered into a Security Agreement and an Intellectual Property Security Agreement with the Purchasers and AtheroNova Operations, pursuant to which all of our obligations under the Original Notes are secured by first priority security interests in all of our assets and the assets of AtheroNova Operations, including intellectual property. Upon an event of default under the Original Notes or such agreements, the Original Note holders may be entitled to foreclose on any of such assets or exercise other rights available to a secured creditor under California and Delaware law. In addition, under a Subsidiary Guarantee, AtheroNova Operations will guarantee all of our obligations under the Original Notes.

On July 6, 2011, we entered into the First Amendment and Exchange Agreement with each of W-Net, Europa and MKM pursuant to which the Purchasers agreed to exchange the Original Notes for the Amended and Restated 2.5% Senior Secured Convertible Notes (the "Amended Notes"). The Amended Notes had the same terms as the Original Notes (as described above), except that each Amended Note was convertible at any time into common stock at a per share conversion price of $0.29, subject to adjustment.

On June 15, 2012, the Company entered into the Second Amendment and Exchange Agreement with each W-Net, Europa and MKM pursuant to which the Purchasers agreed to exchange the Amended Notes for Second Amended and Restated 2.5% Senior Secured Convertible Notes (the "Second Amended Notes"). The Second Amended Notes have the same terms as the Amended Notes (as described above) except as follows: (i) each Second Amended Note has an automatic conversion provision and removal of the applicable beneficial ownership limitations effective the later of 61 days following the Company's notice to the Purchasers of its application to list or quote its securities on a national securities exchange or the date immediately prior to the effective date of the Company's listing or quotation of its securities on the applicable exchange; (ii) the price-based anti-dilution provisions contained in the Amended Notes have been removed; and (iii) under the Securities Purchase Agreement, as currently amended, if we met two specified operating benchmarks during the first twenty-nine months after the closing of the first Original Note purchase, an additional $1,500,000 in note purchases, substantially in the form of the Second Amended Notes (without warrants), could be requested by us from the Purchasers. The determination of whether we had met the benchmarks was solely at the discretion of the Purchasers. If the benchmarks were determined to have been achieved, then we could have required the Purchasers to make the additional $1,500,000 of note purchases. If such benchmarks were not attained in the 29-month period or we did not exercise the option to request the additional notes, then the Purchasers, in their discretion, during the next 10 days may elect to purchase up to $1,500,000 of notes, substantially in the form of the Second Amended Notes (without warrants), having an initial conversion price which is 100% of the conversion price in the Second Amended Notes. On July 23, 2012 the Purchasers notified us of their intention of putting the additional $1,500,000 in notes in 3 tranches.

During the period ended March 31, 2013, the Company recognized interest expense of $2,671 for the 2.5% interest rate of the Second Amendment Note, and $26,719 to amortize the note discount. The aggregate balance of the Second Amendment Notes outstanding and unamortized note discount as of March 31, 2013 amounted to $427,500 and $117,533, respectively.

2012 Convertible Notes

On July 23, 2012 the Purchasers notified us of their intention of putting the additional $1,500,000 in notes substantially in the form of the Second Amended Notes (the "2012 Notes") in 3 tranches. The first $500,000 was put to us and we issued 2012 Notes on September 4, 2012. These 2012 Notes mature on September 3, 2016. The second tranche of $498,333 was put to us and we issued 2012 Notes on October 1, 2012. The final tranche of $500,000 was put to us and we issued 2012 Notes on October 31, 2012 for an aggregate issuance of $1,498,333. The 2012 Notes are convertible into common stock at a per share price of $0.29 per share. As the market price on the date of the issuance of the 2012 Notes ranged between $0.58 and $0.80 per share, the Company calculated a beneficial conversion feature up to the face value of the 2012 Notes in the aggregate of $1,498,333 representing the difference between the market price and the exercise price on the date of issuance. The beneficial conversion feature was recorded as a valuation discount and is being amortized over the term of the 2012 Notes.

During the period ended March 31, 2013, the Company recognized interest expense of $83,458 to amortize the note discount and $8,347 for the 2.5% interest rate of the 2012 Notes. The aggregate balance of the 2012 Notes outstanding and unamortized note discount as of March 31, 2013 amounted to $1,335,333 and $1,174,320 respectively.

Convertible notes purchased and held by Europa were $1,094,167 at both March 31, 2013 and December 31, 2012. Europa is an entity controlled by Knoll Capital Management of which Mr. Knoll, one of our directors, is the managing director.

4. STOCKHOLDERS' EQUITY

Common Stock

In January and February 2013, holders of warrants to purchase 672,855 shares of our common stock at $0.223 per share exercised the warrants, resulting in cash proceeds of $150,047 and issuance of the shares upon receipt of the purchase price.

On February 4, 2013, a director of the Company and a holder of a warrant to purchase 336,427 shares of our common stock at $0.223 exercised the warrant on a "cashless exercise" basis, resulting in issuance of 186,380 shares of our common stock and cancellation of the remaining 150,047 shares purchasable under the warrant.

On March 12, 2013, a controlling stockholder sold a total of 1,624,999 shares of common stock to directors of the Company at a below-market price. This was considered a contribution to capital and compensation expense totaling $422,500 was recognized to account for the difference between the market price of the Company's stock at the date of the transaction and the purchase price.

On March 18, 2013, a controlling stockholder transferred a total of 95,000 shares of common stock to directors, officers and employees of the Company. This was considered a contribution to capital and compensation expense totaling $54,900 was recognized based upon the market value of the shares on the date of transfer.

Stock Options

The Company has a stockholder-approved stock incentive plan for employees under which it has granted stock options. In May 2010, the Company established the 2010 Stock Incentive Plan (the "2010 Plan"), which provides for the granting of awards to officers, directors, employees and consultants to purchase or acquire up to 4,362,964 shares of the Company's common stock. The awards have a maximum term of 10 years and vest over a period determined by the Company’s Board of Directors and are issued at an exercise price determined by the Board of Directors. Options issued under the 2010 Plan will have an exercise price equal to or greater than the fair market value of a share of the Company’s common stock at the date of grant. The 2010 Plan expires on May 20, 2020 as to any further granting of options. In the three months ended March 31, 2013, a total of 227,500 options to purchase shares of the Company’s common stock were granted under the 2010 Plan. Additionally, options to purchase 800,000 shares of the Company’s common stock were granted by the Company's Board of Directors outside of the 2010 Plan. There were options outstanding to purchase a total of 5,634,498 shares granted under the 2010 Plan as well as outside the 2010 Plan as of March 31, 2013. There were 77,964 shares reserved for future grants under the 2010 Plan as of March 31, 2013.

A summary of the status of the Company's stock options as of March 31, 2013 and changes during the period then ended is presented below:

	Shares	Weighted average exercise price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2012	4,606,998	$ 0.987	5.189	$ 119,241
Granted	1,027,500	$ 0.483	6.917	--
Exercised	--	--	--	--
Cancelled	--	--	--	--
Outstanding at March 31, 2013	5,634,498	$ 0.895	5.302	$ 248,123
Exercisable at March 31, 2013	2,439,814	$ 0.944	4.702	$ 148,112
Weighted-average fair value of options granted during the three month period ended March 31, 2013	$ 0.398			

In February 2013, the Company issued options to purchase 187,500 shares of common stock to members of the Company's Board of Directors valued at $67,647 using the Black-Scholes-Merton calculation. The options have an exercise price of $0.425 per share, vest over a four year period and expire seven years from the date of grant. During the period ended March 31, 2013, the Company recognized compensation costs of $18,282 based on the vesting of these options.

In February 2013, the Company issued options to purchase 840,000 shares of common stock to consultants with an estimated fair value of approximately $400,000 using the Black-Scholes-Merton calculation. The options have an exercise price of $0.425 up to $0.50 per share, vest over a four year period and expire seven years from the date of grant. During the period ended March 31, 2013, the Company recognized compensation costs of $14,266 based on the fair value of options that vested.

In May 2011, the Company granted a consultant a total of 1,500,000 options to purchase shares of the Company's common stock subject to achievement of certain development milestones. The options have an average amended exercise price $1.01 per share, become fully vested upon the achievement of the milestones and will expire in seven years from grant date. The Company is valuing the vested options at each reporting date in accordance with current accounting guidance which require option awards issued to non-employees be based upon the current market price upon achievement or percentage of achievement of the development milestones using an option pricing model. For the three months ending March 31, 2013, the Company has recognized a total of $60,441 in compensation costs pursuant to the achievement of the milestones.

During the three months ended March 31, 2013, the Company recognized $153,870 of compensation costs related to the vesting of options granted in prior periods. As of March 31, 2013, the total compensation cost related to non-vested options awards not yet recognized is $1,564,928. The weighted average period over which it is expected to be recognized is approximately 3.75 years.

The following table shows the weighted average assumptions the Company used to develop the fair value estimates for the determination of the compensation charges in the three months ended March 31, 2013 and 2012:

	Three months ended March 31,	
	2013	2012
Expected volatility	113%	123%
Dividend yield	--	--
Expected term (in years)	6.25	4.25
Risk-free interest rate	1.38%	0.90%

To compute compensation expense, the Company estimated the fair value of each option award on the date of grant using the Black-Scholes-Merton option pricing model for employees, and calculated the fair value of each option award at the end of the period for non-employees. The Company based the expected volatility assumption on a volatility index of peer companies as the Company did not have sufficient historical market information to estimate the volatility of its own stock. The expected term of options granted represents the period of time that options are expected to be outstanding. The Company estimated the expected term of stock options by using the simplified method. The expected forfeiture rates are based on the historical employee forfeiture experiences. To determine the risk-free interest rate, the Company utilized the U.S. Treasury yield curve in effect at the time of grant with a term consistent with the expected term of the Company's awards. The Company has not declared a dividend on its common stock since its inception and has no intentions of declaring a dividend in the foreseeable future and therefore used a dividend yield of zero.

Future unamortized compensation expense on the outstanding options at March 31, 2013 is approximately $2,139,000.

Warrants

In January 2013, the Company issued warrants to purchase 50,000 shares of common stock to a consultant valued at $13,500 using the Black-Scholes-Merton calculation with the following assumptions: volatility rate of 114%, expected term of 2.5 years, risk free interest rate of 0.40% and expected dividend yield of 0%. The warrants have an exercise price of $0.50 per share, vest immediately and expire 2.5 years from date of grant. During the period ended March 31, 2013, the Company recognized compensation costs of $13,500 based upon the vesting of these warrants.

As of March 31, 2013 there are warrants to purchase 8,355,437 shares of our common stock outstanding with expiration dates ranging from August 2013 through November 2017 and exercise prices ranging from $0.22 to $1.64.

A summary of the status of our warrants as of March 31, 2013 and changes during the period then ended is presented below:

	Shares	Weighted average exercise price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding at December 31, 2012	9,314,720	$ 0.377	2.665	$ 783,258
Granted	50,000	$ 0.500	3.00	--
Exercised	(859,235)	--	--	--
Cancelled	(150,047)	--	--	--

Outstanding at March 31, 2013	8,355,438	$ 0.488	2.422	$	1,084,973
Exercisable at March 31, 2013	8,355,438	$ 0.488	2.422	$	1,084,973

5. COMMITTMENTS

CardioNova Agreement

In October 2011, we entered into two definitive agreements with OOO CardioNova, a wholly-owned subsidiary of Maxwell Biotech Group, a Russian biotech fund, covering our AHRO-001 compound. The agreements cover a territory represented by the Russian Federation, the Ukraine and various countries in central Asia (the “Territory”).

Under the licensing agreement OOO CardioNova (“CardioNova”) will become an equity investor in our company in exchange for the funding of Phase 1 and 2 human clinical trials conducted by a Clinical Research Organization (“CRO”) located in Russia. Terms of the agreement specify that a Joint Steering Committee be established between both entities to determine the final clinical protocols and research budget, which is expected to total approximately $3.8 million. Upon acceptance of the development plan, common stock equal to 10% of the research budget will be issued to CardioNova at a 20-day weighted average price prior to the signature of the initial term sheet, or $0.97 per share.

Additional common stock issuances of 20%, 40%, and 30% of the approved budget shall be issued upon the approval of the Joint Steering Committee of the Phase 1 protocol, announcement of Phase 1 results and announcement of Phase 2 results, respectively. Each tranche will be priced at the lower of the weighted 20-day average price immediately prior to each issuance event, or $0.97 per share, whichever is lower.

If CardioNova successfully develops and commercializes AHRO-001 in the Territory, we will be entitled to receive a quarterly royalty, based on net sales during the period using an escalating scale. The royalty agreement shall remain in force for the period in which intellectual property rights for AHRO-001 are in full force and effect in the Territory.

Under the Securities Purchase Agreement, CardioNova will purchase up to 275,258 shares of our common stock for a cash purchase price of $0.97 per share. This transaction will take place in two installments. The first installment, which took place in December 2011, was for the issuance of 154,639 shares upon receipt of $150,000 as specified in the License Agreement. The 2nd installment of 120,619 shares will occur upon delivery of the final clinical product to be used in the Phase 1 and 2 clinical trials, which is expected to occur in the 2nd quarter of 2013.

Research Agreements

We have a research agreement signed in September 2012 with a major university in Southern California to conduct contract research in additional compounds covered under our patents pending. This agreement calls for payment of all research costs relating to the study of dosage and efficacy of bile salts on the atherosclerotic plaque in a non-human model. The total potential cost of the project is $193,326, to be paid in four installments over the estimated one year length of the study. The process is ongoing and to date, $154,661 has been expensed, of which $38,665 has been recorded as part of Research and Development costs on the accompanying statement of operations for the three-month period ended March 31, 2013.

We have a testing agreement signed in September 2012 for testing of the oral toxicity of AHRO-001 in a non-human model. The study is scheduled to be completed in June 2013 with a total cost of approximately $510,000. The agreement can be terminated anytime and there are no commitments or guarantees other than to reimburse costs incurred prior to termination. The process is ongoing and to date, $249,845 has been expensed, of which $133,300 has been recorded as part of Research and Development costs on the accompanying statement of operations for the three-month period ended March 31, 2013.

Formulation Development Agreement

We have a development agreement with a Pennsylvania-based Clinical Research Organization (‘CRO”) specializing in formulation and manufacturing of clinical research grade pharmaceutical products. The agreement calls for the CRO to use our API to formulate and manufacture Phase 1 and 2 clinical trial pharmaceutical products. The total expected cost of the project is $395,500, as amended, to be paid in progress installments over the length of the development and compounding process. The process is ongoing and to date, $332,973 has been paid on progress payments under the agreement of which was $114,126 has been recorded as part of Research and Development costs on the accompanying statement of operations for the three-month period ending March 31, 2013.

6. RELATED PARTY TRANSACTIONS

Accounts payable includes $4,200 and $17,533 as of March 31, 2013 and December 31, 2012, respectively, that are payable to officers and directors of the Company.

7. SUBSEQUENT EVENTS

On April 19, 2013, one of the Purchasers of the 2012 Notes elected to convert principal in the amount of $165,000 at a per share price of $0.29 per share into 568,965 shares of our common stock. In addition, the Company issued 7,942 shares of our common stock with a market value of $4,765 to settle $2,303 of accrued interest relating to the 2012 Note. The issuance of these common shares will result in an additional charge of $2,462 that will be reflected as part of interest expense in the consolidated statement of operations.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

This discussion summarizes the significant factors affecting our operating results, financial condition and liquidity and cash flows for the three and nine months ended September 30, 2012 and 2011. The discussion and analysis that follows should be read together with the condensed consolidated financial statements and the notes to the financial statements included elsewhere in this report. Except for historical information, the matters discussed in this Management's Discussion and Analysis of Financial Condition and Results of Operations are forward looking statements that involve risks and uncertainties and are based upon judgments concerning various factors that are beyond our control. Our actual results could differ materially from the results anticipated in any forward-looking statements as a result of a variety of factors, including those discussed in the section of our annual report on Form 10-K captioned "Risk Factors."

Overview

Z&Z Medical Holdings, Inc. ("Z&Z Nevada") was incorporated in the State of Nevada on December 13, 2006 with contributed intellectual property from its founders. Z&Z Nevada was engaged in developing the contributed intellectual property while seeking sources of funding to conduct further research and development. In November 2009 we incorporated a separate company, Z&Z Medical Holdings Inc. in Delaware ("Z&Z Delaware") and merged Z&Z Nevada into Z&Z Delaware in March 2010. On March 26, 2010 we entered into a merger agreement between us, Z&Z Delaware and Z&Z Merger Corporation, our wholly-owned subsidiary and on May 13, 2010, Z&Z Delaware merged into Z&Z Merger Corporation and became our operating subsidiary. Concurrent with the merger, Z&Z Delaware changed its name to AtheroNova Operations Inc. ("AtheroNova Operations") and we changed our name to AtheroNova Inc. The business of AtheroNova Operations, pharmaceuticals and pharmaceutical intellectual property, became our business upon consummation of the merger. Concurrent with the closing of the merger we consummated a capital raise transaction, in which we sold to investors $1,500,000 in 2.5% Senior Secured Convertible Notes and Common Stock Purchase Warrants to purchase 1,908,798 shares of our commons stock.

We have developed intellectual property, covered by our pending patent applications, which uses certain pharmacological compounds uniquely for the treatment of atherosclerosis, which is the primary cause of cardiovascular diseases. Atherosclerosis occurs when cholesterol of fats are deposited and form as plaques on the walls of the arteries. This buildup reduces the space within the arteries through which blood can flow. The plaque can also rupture, greatly restricting or blocking blood flow altogether. Through a process called delipidization, such compounds dissolve the plaques so they can be eliminated through normal body processes and avoid such rupturing or restriction of blood flow. Such compounds may be used both to treat and prevent atherosclerosis.

In the near future, we plan to continue studies and preparation for human clinical trials to demonstrate the efficacy of our IP and related Active Pharmaceutical Ingredient ("API"). Ultimately, we plan to use or license our technology to various licensees throughout the world who may use it in treating or preventing atherosclerosis and other medical conditions or sublicense the IP or API to other such users. Our potential licensees may also produce, market or distribute products which utilize or add our compounds and technology in such treatment or prevention.

General

Operating expenses consist primarily of payroll and related costs, formulation development, corporate infrastructure costs and research costs. We expect that our operating expenses will increase as we initiate toxicology studies necessary to support filing of a New Drug Application (NDA) with the United States Food and Drug Administration, support costs for Phase 1 and 2 clinical trials, advancing our business plan, in addition to the added costs of operating as a public company.

Historically, we have funded our working capital needs primarily through the sale of shares of our capital stock and debt financing.

The merger was accounted for as a reverse merger (recapitalization) with AtheroNova Operations deemed to be the accounting acquirer, and our company deemed to be the legal acquirer. Accordingly, the following discussing represents a discussion of the operations of our wholly-owned subsidiary, AtheroNova Operations for the periods presented.

Results of Operations

Three-month Period ended March 31, 2013 vs. 2012

	Quarters ended March 31,		
	2013	2012	Increase (decrease)
Costs and expenses:			
Research and development:			
Share-based compensation	$ -	$ -	$ -
Other research and development expenses	322,924	161,305	161,619
Total research and development expenses	322,924	161,305	161,619
General and administrative:			
Share-based compensation	728,259	414,825	313,434
Other general and administrative expenses	451,553	328,261	123,292
Total general and administrative expenses	1,179,812	743,086	436,426
Interest expense	(121,195)	(62,566)	58,629
Change in fair value of derivative liabilities	-	1,727,274	1,727,274
Other income (expense)	31	(361)	(392)
Total other income (expense)	(121,164)	1,664,347	1,785,511
Net income (loss)	$ (1,623,900)	$ 759,956	$ 2,383,856

Three months ended March 31, 2013 Compared to the three months ended March 31, 2012

During the three month periods ended March 31, 2013 and 2012, we did not recognize any revenues. We are considered a development stage company and do not expect to have revenues relating to our products in the foreseeable future, if at all.

For the quarters ended March 31, 2013 and 2012, research and development expenses increased to $322,924 from $161,305. This increase is primarily the result of the cost of final formulation development and production costs of Phase 1 clinical trial material, toxicology work and continuing pre-clinical work for additional products in development. Toxicology work is still ongoing and will continue to represent a significant portion of research and development expenditures in future periods.

General and administrative costs increased to $1,179,812 in the first quarter of 2013 compared to $743,086 for the quarter ended March 31, 2012, or an increase of $436,726. The increase in costs incurred in 2013 is due to a significant increase in consulting fees associated with the expansion of work on clinical protocols, project management and medical advisory consultants as well as stock-based compensation for shares purchased by directors from a controlling stockholder when compared to the same period of the prior year.

For the quarter ended March 31, 2013 interest expense was $121,195 compared to $62,566 in the quarter ended March 31, 2012. This increase is due to both a higher outstanding balance on the convertible notes as well as increased amortization due to the discount recorded on the 2012 Notes issuance, which occurred in the 3rd and 4th quarters of 2012, as well as the remaining amortization of the Second Amended Notes issuance.

Change in fair value of derivative liabilities was $1,727,274 in the three months ended March 31, 2012. There was no such charge in 2013 as the derivative liabilities were eliminated in 2012.

Net loss for the quarter ended March 31, 2013 was $1,623,900 compared to net income of $759,956 for the quarter ended March 31, 2012 due to the gains generated in 2012 for the revaluation of derivative liabilities partially offset by operating expenses. No comparable derivative liability gains were recorded in the current quarter, additional amortization expense was recognized in the current quarter and operating expenses associated with research and development as well as stock-based compensation expenses increased in the current period.

Liquidity and Capital Resources

We had stockholders equity of $1,060,417 at March 31, 2013, and have incurred a deficit during the development stage of $15,838,972 primarily as a result of our losses from operations and the non-cash costs relating to the accounting of debt, derivative and warrant issuances. These losses have been incurred through a combination of research and development activities as well as patent work related to our technology, expenses related to the merger and to public reporting obligations and the costs to supporting all of these activities. We expect to continue to incur additional losses for at least the next twelve months and for the foreseeable future. These factors, among others, raise substantial doubt about our ability to continue as a going concern. The condensed consolidated financial statements do not include any adjustments that might be necessary should we be unable to continue as a going concern.

We have financed our operations since inception primarily through equity and debt financings. During the three months ended March 31, 2013, we had a net decrease in cash and cash equivalents of $661,646. This decrease resulted largely from net cash used in operating activities of $811,693, partially offset by $150,047 raised through the exercise of outstanding warrants for cash. Total liquid resources as of March 31, 2013 were $2,082,400 compared to $2,744,046 at December 31, 2012.

As of March 31, 2013, we had working capital of $1,500,297 compared to working capital of $2,121,023 at December 31, 2012.

Our available working capital and capital requirements will depend upon numerous factors, including progress of our research and development programs, our progress in and the cost of ongoing and planned nonclinical and clinical testing, the timing and cost of obtaining regulatory approvals, the cost of filing, prosecuting, defending, and enforcing patent claims and other intellectual property rights, in-licensing activities, competing technological and market developments, the resources that we devote to developing manufacturing and commercializing capabilities, the status of our competitors, our ability to establish collaborative arrangements with other organizations and our need to purchase additional capital equipment.

Our continued operations will depend on whether we are able to raise additional funds through various potential sources, such as equity and debt financing, other collaborative agreements, strategic alliances, and our ability to realize the full potential of our technology in development. Such additional funds may not become available on acceptable terms and there can be no assurance that any additional funding that we do obtain will be sufficient to meet our needs in the long term. Through September 30, 2012, a significant portion of our financing has been through private placements of common stock and warrants and debt financing. Unless our operations generate significant revenues and cash flows from operating activities, we will continue to fund operations from cash on hand and through sources of capital similar to those previously described. We can give no assurances that any additional capital that we are able to obtain will be sufficient to meet our needs. We believe that we will continue to incur net losses and negative cash flows from operating activities for the foreseeable future.

During January and February 2013, 2 holders of warrants exercised their warrants to purchase 560,713 shares of our common stock and 112,142 shares of our common stock, resulting in cash proceeds to us of $125,039 and $25,008, respectively.

There can be no assurances that sufficient subsequent funding, if any at all, will be raised by these or future discussions or the cost of such investments will be reasonable. Furthermore, we will need additional financing thereafter to complete development and commercialization of our products. There can be no assurances that we can successfully complete development and commercialization of our products.

These matters raise substantial doubt about our ability to continue as a going concern. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We have reported a net operating loss of $1,502,736 and non-operating expenses of $119,799 in the three months ended March 31, 2013 compared to a net operating loss of $904,391 and non-operating income of $1,664,912 for the three month period ended March 31, 2012. The net loss attributable to common shares from date of inception, December 13, 2006 to March 31, 2013, amounts to $15,838,972. Management believes that we will continue to incur net losses through at least March 31, 2014.

2.5% Senior Secured Convertible Notes Payable

On May 13, 2010, we entered into a Securities Purchase Agreement with W-Net Fund I, L.P. ("W-Net"), Europa International, Inc. ("Europa") and MKM Opportunity Master Fund, Ltd. ("MKM" and together with W-Net and Europa, the "Purchasers"), pursuant to which the Purchasers, on May 13, 2010, purchased from us (i) 2.5% Senior Secured Convertible Notes for a cash purchase price of $1,500,000 (the "Original Notes"), and (ii) Common Stock Purchase Warrants pursuant to which the Purchasers may purchase up to 1,908,798 shares of our common stock at an exercise price equal to approximately $0.39 per share (the "Capital Raise Transaction"). A portion of the proceeds from the Capital Raise Transaction were used to pay $250,000 owed by us to the two principal holders of our common stock, W-Net and Europa, and to reimburse them for legal and accounting fees and other expenses incurred by them and our company in connection with the merger and the Capital Raise Transaction. The net proceeds available to us for our operations were reduced by such payments.

The Original Notes accrued 2.5% interest per annum with a maturity of 4 years after the closing of the Capital Raise Transaction. No cash interest payments were required, except that accrued and unconverted interest is due on the maturity date and on each conversion date with respect to the principal amount being converted, provided that such interest may be added to and included with the principal amount being converted. If there is an uncured event of default (as defined in the Original Notes), the holder of each Original Note may declare the entire principal and accrued interest amount immediately due and payable. Default interest will accrue after an event of default at an annual rate of 12%. If there is an acceleration, a mandatory default amount equal to 120% of the unpaid Original Note principal plus accrued interest may be payable.

The warrants may be exercised on a cashless basis under which a portion of the shares subject to the exercise are not issued in payment of the purchase price, based on the then fair market value of the shares.

On May 13, 2010, we also entered into a Security Agreement and an Intellectual Property Security Agreement with the Purchasers and AtheroNova Operations, pursuant to which all of our obligations under the Original Notes are secured by first priority security interests in all of our assets and the assets of AtheroNova Operations, including intellectual property. Upon an event of default under the Original Notes or such agreements, the Original Note holders may be entitled to foreclose on any of such assets or exercise other rights available to a secured creditor under California and Delaware law. In addition, under a Subsidiary Guarantee, AtheroNova Operations will guarantee all of our obligations under the Original Notes.

The Original Notes and warrants issued in connection therewith included an anti-dilution provision that allowed for the automatic reset of the conversion or exercise price upon any future sale of common stock instruments at or below the current conversion or exercise price.

On July 6, 2011, we entered into the First Amendment and Exchange Agreement with each of W-Net, Europa and MKM pursuant to which the Purchasers agreed to exchange the Original Notes for the Amended and Restated 2.5% Senior Secured Convertible Notes (the "Amended Notes"). The Amended Notes had the same terms as the Original

Notes (as described above), except that each Amended Note is convertible at any time into common stock at a per share conversion price of $0.29, subject to adjustment.

On June 15, 2012, we entered into the Second Amendment and Exchange Agreement with each W-Net, Europa and MKM pursuant to which the Purchasers agreed to exchange the Amended Notes for Second Amended and Restated 2.5% Senior Secured Convertible Notes (the "Second Amended Notes"). The Second Amended Notes have the same terms as the Amended Notes (as described above) except as follows: (i) each Second Amended Note has an automatic conversion provision and removal of the applicable beneficial ownership limitations effective the later of 61 days following our notice to the Purchasers of our application to list or quote our securities on a national securities exchange or the date immediately prior to the effective date of the listing or quotation of our securities on the applicable exchange; (ii) the price-based anti-dilution provisions contained in the Amended Notes have been removed; and (iii) under the Securities Purchase Agreement, as currently amended, if we met two specified operating benchmarks during the first twenty-nine months after the closing of the first Original Note purchase, an additional $1,500,000 in note purchases, substantially in the form of the Second Amended Notes (without warrants), could be requested by us from the Purchasers. The determination of whether we had met the benchmarks was solely at the discretion of the Purchasers. If the benchmarks were determined to have been achieved, then we could have required the Purchasers to make the additional $1,500,000 of note purchases. If such benchmarks were not attained in the 29-month period or we did not exercise the option to request the additional notes, then the Purchasers, in their discretion, during the next 10 days could elect to purchase up to $1,500,000 of notes, substantially in the form of the Second Amended Notes (without warrants), having an initial conversion price which is 100% of the conversion price in the Second Amended Notes. On July 23, 2012 the Purchasers notified us of their intention of putting the additional $1,500,000 in notes in 3 tranches. The first $500,000 was put to us and we issued notes (substantially in the form of the Second Amended Notes) (the "2012 Notes" and together with the Original Notes, the Amended Notes and the Second Amended Notes, the "Senior Notes") on September 4, 2012. These 2012 Notes mature on September 3, 2016. The second tranche of $498,333 was put to us and we issued Additional Notes on October 1, 2012. These 2012 Notes mature on September 30, 2016. The final tranche of $500,000 was put to us and we issued 2012 Notes on October 31, 2012. These 2012 Notes mature on October 30, 2016. In addition, the 1,908,798 warrants to purchase shares of our common stock issued in conjunction with the Original Notes were also amended to remove the reset provision in the warrants' exercise price. All other existing terms of such warrants did not change.

From issuance through March 31, 2013, the Purchasers exercised their option to convert a portion of the Senior Notes into our common stock. During the year ended December 31, 2010, principal in the amount of $98,049 and accrued interest in the amount of $965 was converted at a per share price of approximately $0.39 into 249,488 and 2,456 shares, respectively, of our common stock. During the year ended December 31, 2011, principal on the amount of $446,600 was converted at a per share price of $0.29 into 1,540,000 shares of our common stock. In addition, we also issued 45,164 shares of our common stock with a market value of $27,098 to settle $13,098 of accrued interest relating to the Senior Notes. During the year ended December 31, 2012, principal on the amount of $690,851 was converted at a per share price of $0.29 into 2,382,245 shares of our common stock. In addition, we also issued 111,475 shares of our common stock with a market value of $72,278 to settle $32,401 of accrued interest relating to these notes. The aggregate balance of the Senior Notes outstanding as of March 31, 2013 amounted to $1,762,833.

The Senior Notes may not be prepaid, or forced by us to be converted in connection with an acquisition of our company, except in a limited case more than a year after the applicable note issuance where the average of our stock trading price for 30 days on a national trading market other than the OTC Bulletin Board ("OTCBB") is at least three times the conversion price, in which event, and subject to the satisfaction of certain other requirements, the Senior Note holders may elect to receive at least double the unpaid principal amounts in cash and other requirements are satisfied. In such a limited case acquisition, there could also be a forced cashless exercise of the warrants subject to similar requirements and optional cash payments to the warrant holders of at least double the exercise prices of their warrants.

The Senior Notes greatly restrict the ability of our company and AtheroNova Operations to issue indebtedness or grant liens on our or its respective assets without the Senior Note holders' consent. They also limit and impose financial costs on our acquisition by any third party.

Each of the Amended Notes and warrants had, until being amended in June 2012, included an anti-dilution provision that allowed for the automatic reset of the conversion or exercise price upon any future sale of common stock instruments at or below the current conversion or exercise price. We considered the current Financial Accounting Standards Board guidance of "Determining Whether an instrument Indexed to an Entity's Own Stock" which indicates that any adjustment to the fixed amount (either conversion price or number of shares) of the instrument, regardless of the probability or whether or not within the issuers' control, means the instrument is not indexed to the issuers' own stock. Accordingly, we determined that as the conversion price of the Amended Notes and the strike price of the warrants may have fluctuated based on the occurrence of future offerings or events, such prices were not fixed amounts. As a result, we determined that the conversion features of the Amended Notes and the warrants are not considered indexed to our stock and characterized the value of the Amended Notes and the warrants as derivative liabilities upon issuance.

Commitments

Development Commitments

In October 2011, we entered into two definitive agreements with OOO CardioNova, a wholly-owned subsidiary of Maxwell Biotech Group, a Russian biotech fund, covering our AHRO-001 compound. The agreements cover a territory represented by the Russian Federation, the Ukraine and various countries in central Asia (the "Territory").

Under the licensing agreement OOO CardioNova ("CardioNova") will become an equity investor in our company in exchange for the funding of Phase 1 and 2 human clinical trials conducted by a Clinical Research Organization ("CRO") located in Russia. Terms of the agreement specify that a Joint Steering Committee be established between both entities to determine the final clinical protocols and research budget, which is expected to total approximately $3.8 million. Upon acceptance of the development plan, common stock equal to 10% of the research budget will be issued to CardioNova at a 20-day weighted average price prior to the signature of the initial term sheet, or $0.97 per share.

Additional common stock issuances of 20%, 40%, and 30% of the approved budget shall be issued upon the approval of the Joint Steering Committee of the Phase 1 protocol, announcement of Phase 1 results and announcement of Phase 2 results, respectively. Each tranche will be priced at the lower of the weighted 20-day average price immediately prior to each issuance event, or $0.97 per share, whichever is lower.

If CardioNova successfully develops and commercializes AHRO-001 in the Territory, we will be entitled to receive a quarterly royalty, based on net sales during the period using an escalating scale. The royalty agreement shall remain in force for the period in which intellectual property rights for AHRO-001 are in full force and effect in the Territory.

Under the Securities Purchase Agreement, CardioNova will purchase up to 275,258 shares of our common stock for a cash purchase price of $0.97 per share. This transaction will take place in two installments. The first installment, which took place in December 2011, was for the issuance of 154,639 shares upon receipt of $150,000 as specified in the License Agreement. The 2nd installment of 120,619 shares will occur upon delivery of the final clinical product to be used in the Phase 1 and 2 clinical trials, which is expected to occur in the 2rd quarter of 2013.

Research and Development Projects

We have a research agreement signed in September 2012 with a major university in Southern California to conduct contract research in additional compounds covered under our patents pending. This agreement calls for payment of all research costs relating to the study of dosage and efficacy of bile salts on the atherosclerotic plaque in a non-human model. The total potential cost of the project is $193,326, to be paid in installments over the length of the study. To date, $154,661 has been paid based on the achievement benchmarks under the agreement.

We have a testing agreement signed in September 2012 for the testing of the oral toxicity of HDCA in a non-human model. The study is scheduled to be completed in June 2013 with total costs of approximately $510,000. The agreement can be terminated anytime and there are no commitments or guarantees other than to reimburse costs incurred prior to termination. The process is ongoing and to date, $249,845 has been recognized, of which $133,300 has been recorded as part of Research and Development costs on the accompanying statement of operations for the three-month period ending March 31, 2013.

We have a development agreement with a Pennsylvania-based Clinical Research Organization (‘CRO”) specializing in formulation and manufacturing of clinical research grade pharmaceutical products. The agreement calls for the CRO to use our API to formulate and manufacture Phase 1 and 2 clinical trial pharmaceutical products. The total expected cost of the project is $395,500, as amended, to be paid in progress installments over the length of the development and compounding process. The process is ongoing and to date, $332,973 has been recognized based upon the progress of the development and compounding process.

Summary of Contractual Commitments

Employment Agreements

Employment agreements with our Chief Executive Officer and Chief Financial Officer are incorporated by reference to Exhibits 10.1 and 10.2 to the Current Report on Form 8-K (File No. 000-52315) filed with the Securities Exchange Commission (“SEC”) on September 3, 2010.

Off-Balance Sheet Arrangements

We have not entered into any off-balance sheet arrangements.

Critical Accounting Policies

In December 2001, the SEC requested that all registrants discuss their most “critical accounting policies” in management’s discussion and analysis of financial condition and results of operations. The SEC indicated that a “critical accounting policy” is one which is both important to the portrayal of the company’s financial condition and results and requires management’s most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. On an ongoing basis, management evaluates its estimates and judgment, including those related to revenue recognition, accrued expenses, financing operations and contingencies and litigation. Management bases its estimates and judgment on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates under different assumptions or conditions. The following represents a summary of our critical accounting policies.

Research and Development Expenses

All research and development costs are expensed as incurred and include costs of consultants and contract research facilities who conduct research and development on our behalf and on behalf of AtheroNova Operations. We have contracted with third parties to facilitate, coordinate and perform agreed upon research and development of our technology. We have expensed all costs associated with the conduct of the laboratory research as well as the costs associated with peripheral clinical researchers as period costs.

Stock-Based Compensation

We periodically issues stock options and warrants to employees and non-employees in non-capital raising transactions for services and for financing costs. We account for stock option and warrant grants issued and vesting to employees based on the authoritative guidance provided by the Financial Accounting Standards Board whereas the value of the award is measured on the date of grant and recognized over the vesting period. We account for stock option and warrant grants issued and vesting to non-employees in accordance with the authoritative guidance of the Financial Accounting Standards Board whereas the value of the stock compensation is based upon the measurement date as determined at either a) the date at which a performance commitment is reached, or b) at the date at which the necessary performance to earn the equity instruments is complete. Non-employee stock-based compensation charges generally are amortized over the vesting period on a straight-line basis. In certain circumstances where there are no future performance requirements by the non-employee, option grants are immediately vested and the total stock-based compensation charge is recorded in the period of the measurement date.

The fair value of our common stock option and warrant grant is estimated using the Black-Scholes-Merton option pricing model, which uses certain assumptions related to risk-free interest rates, expected volatility, expected life of the common stock options, and future dividends. Compensation expense is recorded based upon the value derived from the Black-Scholes-Merton option pricing model, and based on actual experience. The assumptions used in the Black-Scholes-Merton option pricing model could materially affect compensation expense recorded in future periods.

Derivative Financial instruments

We evaluate all of our financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair value and is re-valued at each reporting date, with changes in fair value reported in the condensed consolidated statement of operations. For stock-based derivative financial instruments, we use the Black-Scholes-Merton option pricing model to value the derivatives instruments at inception and on subsequent valuation dates. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified in the balance e sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within 12 months of the balance sheet date.

Recently Issued Accounting Standards

Recent accounting pronouncements did not or are not believed by management to have a material impact on our present or future consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosure About Market Risk

As a “smaller reporting company” as defined by Rule 229.10(f)(1), we are not required to provide the information required by this Item 3.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of March 31, 2013, we carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")). Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of that date to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and to ensure that information required to be disclosed by us in such reports is accumulated and communicated to the our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Our disclosure controls or internal controls over financial reporting were designed to provide only reasonable assurance that such disclosure controls or internal control over financial reporting will prevent all errors or all instances of fraud, even as the same are improved to address any deficiencies. The design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be only reasonable, not absolute assurance that any design will succeed in achieving its stated goals under all potential future conditions. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs.

Because of the inherent limitation of a cost-effective control system, misstatements due to error or fraud may occur and not be detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls.

Changes in Internal Control

During the quarter ended March 31, 2013, , we completed the implementation of changes designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with generally accepted accounting principles that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting. Specifically, our management thoroughly reviewed and gained fluency in the application of the relevant accounting guidance regarding accounting for derivative liabilities and modifications thereto, including, without limitation, EITF Issue No. 96-19, ASC 470-50-40 and ASC 815-15-35-4 (EITF 06-07). We believe that these steps are reasonably likely to materially improve our internal controls over financial reporting with respect to accounting for derivative liabilities and modifications thereto.

Part II – Other Information

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

On January 31, 2013 we issued 560,713 shares of our common stock upon the exercise of a warrant to purchase such shares at $0.223 per share, for cash proceeds to the company of $125,039.

On February 4, 2013, we issued 112,142 shares of our common stock upon the exercise of a warrant to purchase such shares at $0.223 per share, for cash proceeds to the company of $25,008.

On February 4, 2013, a director of the company exercised a warrant to purchase 336,427 shares of our common stock at $0.223 per share using a "cashless exercise" feature of the warrant, resulting in our issuing 186,380 shares of our common stock. There were no cash proceeds to the company in this transaction and 150,047 shares remaining under the warrant were cancelled.

In making the stock issuances described above without registration under the Securities Act of 1933, as amended (the "Securities Act"), we relied upon one or more of the exemptions from registration contained in and/or promulgated under Section 4(2) of the Securities Act as each of the stock recipients was an accredited investor and no general solicitation or advertising was used in connection with the stock issuances.

Item 6. Exhibits

Exhibit No.	Description
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) under the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002.
101.INS**	XBRL Instance.
101.SCH**	XBRL Taxonomy Extension Schema.
101.CAL**	XBRL Taxonomy Extension Calculation.
101.DEF**	XBRL Taxonomy Extension Definition.
101.LAB**	XBRL Taxonomy Extension Labels.
101.PRE**	XBRL Taxonomy Extension Presentation.

** XBRL information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ATHERONOVA INC.

Date: May 10, 2013

By: /s/Mark Selawski
Mark Selawski
Chief Financial Officer
(Principal financial and accounting officer)