AtheroNova Inc.
Form 10-Q
August 05, 2014

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, DC 20549**

**FORM 10-Q**

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended June 30, 2014

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 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 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

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

As of July 29, 2014 there were 4,808,748 shares of the issuer’s common stock, $0.0001 par value per share, outstanding.

**TABLE OF CONTENTS**

**Part I – Financial Information**

**Item 1. Financial Statements**

**ATHERONOVA INC.**

**Condensed Consolidated Balance Sheets**

| | June 30, 2014 (unaudited) | December 31, 2013 |
|---|---|---|
| **Assets** | | |
| Current Assets | | |
| Cash | $319,779 | $266,210 |
| Other current assets | 31,123 | 22,438 |
| Total Current Assets | 350,902 | 288,648 |
| Equipment, net | 7,510 | 7,405 |
| Deposits and other assets | 8,917 | 12,777 |
| Total Assets | $367,329 | $308,830 |
| **Liabilities and Stockholders' Deficiency** | | |
| Current Liabilities: | | |
| Accounts payable and accrued expenses | $1,412,642 | $811,404 |
| Interest payable | 123,086 | 76,462 |
| Derivative liabilities | 2,348,484 | -- |
| Current portion of 2.5% Senior secured convertible note, net of discount of $0 as of June 30, 2014 and $37,377 as of December 31, 2013 | 427,500 | 390,123 |
| Total Current Liabilities | 4,311,712 | 1,277,989 |
| Senior secured convertible notes, net of current portion | 2,660,167 | 1,170,333 |
| Discount on convertible notes | (2,080,795) | (807,200) |
| Senior secured convertible notes, net of discount | 579,372 | 363,133 |
| Research and development costs payable in common stock | 155,074 | 1,170,712 |
| **Stockholders' Deficiency:** | | |
| Preferred stock $0.0001 par value, 10,000,000 shares authorized, none outstanding at June 30, 2014 and December 31, 2013 | -- | -- |
| Common stock $0.0001 par value, 100,000,000 shares authorized, 4,770,207 and 4,158,402 outstanding at June 30, 2014 and December 31, 2013, respectively | 477 | 416 |
| Additional paid in capital | 22,953,135 | 19,526,374 |
| Accumulated deficit | (27,632,441) | (22,029,794) |

| | | |
|---|---|---|
| Total stockholders' deficiency | (4,678,829 ) | (2,503,004 ) |
| Total Liabilities and Stockholders' Deficiency | $367,329 | $308,830 |

See accompanying notes to condensed consolidated financial statements.

**ATHERONOVA INC.**

**Condensed Consolidated Statements of Operations**

**(Unaudited)**

**For the three and six month periods ended June 30, 2014 and 2013**

| | Three months ended | | Six months ended | |
|---|---|---|---|---|
| | **June 30, 2014** | **2013** | **June 30, 2014** | **2013** |
| **Revenue, net** | **$--** | **$--** | $-- | $-- |
| **Operating expenses:** | | | | |
| Research and development | 833,893 | 438,157 | 1,401,046 | 872,916 |
| Research and development-related party | 155,074 | 1,198,297 | 1,137,097 | 1,198,297 |
| General and administrative expenses | 710,951 | 669,847 | 1,225,456 | 1,737,824 |
| Total operating expenses | 1,699,918 | 2,306,301 | 3,763,599 | 3,809,037 |
| **Loss from operations** | (1,699,918) | (2,306,301) | (3,763,599) | (3,809,037) |
| **Other income (expenses):** | | | | |
| Other income (expense) | 292 | 697 | 618 | 2,093 |
| Interest expense | (254,143) | (260,323) | (736,553) | (381,518) |
| Private placement costs | -- | -- | (3,340,030) | -- |
| Change in fair value of derivative liabilities | 2,484,433 | -- | 2,239,082 | -- |
| **Net income (loss) before income taxes** | 530,664 | (2,565,927) | (5,600,482) | (4,188,462) |
| Provision for income taxes | -- | -- | 2,165 | 1,365 |
| **Net income (loss)** | $530,664 | $(2,565,927) | $(5,602,647) | $(4,189,827) |
| Basic income (loss) per share | $0.11 | $(0.64) | $(1.26) | $(1.07) |
| Diluted income (loss) per share | $0.10 | $(0.64) | $(1.26) | $(1.07) |
| Basic weighted average shares outstanding | 4,618,409 | 4,003,358 | 4,415,392 | 3,900,847 |
| Diluted weighted average shares outstanding | 5,156,956 | 4,003,358 | 4,415,392 | 3,900,847 |

See accompanying notes to condensed consolidated financial statements.

4

**ATHERONOVA INC.**

(A Development Stage Company)

**Condensed Consolidated Statements of Stockholders' Deficiency**

**For the period from December 31, 2013 through June 30, 2014 (unaudited)**

| Description | Common Stock Shares | Common Stock Amount | Additional Paid-in Capital | Accumulated Deficit | Total Stockholders' Deficiency |
|---|---|---|---|---|---|
| Balance – December 31, 2013 | 4,158,402 | $ 416 | $19,526,374 | $(22,029,794) | $(2,503,004) |
| Fair value of common stock issued for services | 6,535 | 1 | 23,394 | -- | 23,395 |
| Fair value of vested options and warrants | -- | -- | 249,528 | -- | 249,528 |
| Fair value of modified warrants to induce purchase of 6% Secured convertible notes | -- | -- | 564,849 | -- | 564,849 |
| Common stock issued for reverse split | 34,316 | 4 | (4) | -- | -- |
| Fair value of common stock issued upon conversion of notes payable and accrued interest | 148,849 | 14 | 436,301 | -- | 436,315 |
| Fair value of common stock issued for services-related party | 422,105 | 42 | 2,152,693 | -- | 2,152,735 |
| Net loss | -- | -- | -- | (5,602,647) | (5,602,647) |
| Balance – June 30, 2014 | 4,770,207 | $ 477 | $22,953,135 | $(27,632,441) | $(4,678,829) |

See accompanying notes to condensed consolidated financial statements.

**ATHERONOVA INC.**

**Condensed Consolidated Statements of Cash Flows**

**(Unaudited)**

**For the six month periods ended June 30, 2014 and 2013**

| | Six months ended June 30, | |
|---|---|---|
| | **2014** | **2013** |
| **Operating Activities:** | | |
| Net loss | $(5,602,647) | $(4,189,827) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Loss on settlement of payables and accrued interest | 4,654 | 6,980 |
| Amortization of debt discount | 670,282 | 357,723 |
| Depreciation | 2,036 | 2,298 |
| Fair value of vested options and warrants | 249,528 | 533,973 |
| Fair value of common stock issued for services | 1,005,418 | 1,198,297 |
| Fair value of warrant modifications | 564,849 | -- |
| Research and development costs payable in common stock | 155,074 | -- |
| Fair value of shares transferred or sold to employees, directors and vendors by controlling stockholder | -- | 481,400 |
| Cost of private placement | 2,681,066 | -- |
| Change in fair value of derivative liabilities | (2,239,082) | -- |
| Changes in operating assets and liabilities: | | |
| Other assets | (4,825) | 4,469 |
| Accounts payable and accrued expenses | 662,857 | (230,739) |
| **Net cash used in operating activities** | (1,850,790) | (1,835,426) |
| **Investing Activities** | | |
| Purchase of equipment | (2,141) | (1,920) |
| **Net cash used in investing activities** | (2,141) | (1,920) |
| **Financing Activities** | | |
| Proceeds from issuance of common stock | -- | 267,047 |
| Proceeds from sale of 6% senior secured convertible notes-net | 1,906,500 | -- |
| **Net cash provided by financing activities** | 1,906,500 | 267,047 |
| **Net change in cash** | 53,569 | (1,570,299) |
| **Cash - beginning balance** | 266,210 | 2,744,046 |
| **Cash - ending balance** | **$319,779** | **$1,173,747** |
| **Supplemental disclosure of cash flow information:** | | |
| Cash paid for income taxes | $2,165 | $1,365 |
| **Supplemental disclosure of non-cash investing and financing transactions:** | | |
| Conversion of convertible notes and accrued interest payable to common stock | $436,315 | $169,765 |
| Accrued research and development costs paid in shares of common stock | $1,170,712 | $-- |
| Derivative liability created on issuance of convertible notes and warrants | $4,587,566 | $-- |

See accompanying notes to condensed consolidated financial statements.

**ATHERONOVA INC.**

**Notes to Condensed Consolidated Financial Statements**

**Three and Six Months Ended June 30, 2014 and 2013 (Unaudited)**

The accompanying unaudited 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, 2014 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, 2013, which are included in the Company's Report on Form 10-K for such year filed on February 27, 2014. The condensed consolidated balance sheet as of December 31, 2013 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.

On April 22, 2014, the Company effected a 1-for-10 reverse stock split through the amendment of its certificate of incorporation. As a result, all share and per share amounts have been retroactively restated as of the beginning of the earliest period presented to effect the reverse stock split.

On June 10, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU)2014-10 (ASU 2014-10), *Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation.* ASU 2014-10 eliminates the requirement to present inception-to-date information about income statement line items, cash flows, and equity transactions, and clarifies how entities should disclose the risks and uncertainties related to their activities. ASU 2014-10 also eliminates an exception provided to development stage entities in Consolidations (ASC Topic 810) for determining whether an entity is a variable interest entity on the basis of the amount of investment equity that is at risk. The presentation and disclosure requirements in Topic 915 are no longer required for interim and annual reporting periods beginning after December 15, 2014. The revised consolidation standards will take effect in annual periods beginning after December 15, 2015, however, early adoption is permitted. The Company adopted the provisions of ASU 2014-10 for this quarterly report on Form 10-Q for the period ended June 30, 2014.

**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.

***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 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. As reflected in the accompanying condensed consolidated financial statements, the Company had a net loss of $5,602,647 and negative cash flow from operations of $1,850,790 for the period ended June 30, 2014 and stockholders' deficiency of $4,678,829 at June 30, 2014. 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. As a result, the Company's independent registered public accounting firm, in its report on the Company's December 31, 2013 financial statements, has raised substantial doubt about the Company's ability to continue as a going concern.

Management is currently in the process of exploring equity placements of securities by the Company to accredited investors, funds and institutional investors. The Company received $1,906,500 through the sale of its 6% Secured Convertible Notes as of February 2014. Management believes that current funds will be sufficient to fund operations through August 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. Additionally, the Company has filed a registration statement on form S-1 for a possible sale of equity to generate sufficient funds to continue operations for the next 12 to 15 months. 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. Intercompany transactions and balances have been eliminated in consolidation.

***Accounting for Share based Research and Development Costs***

Under its research and development (R&D) agreements, the Company is obligated to issue shares of common stock if milestones are met by the R&D vendor. It is the Company's policy to recognize expense for these shares when it is estimated that there is a high probability of meeting the milestone. The Company accrues the share based expense based upon the estimated percentage of completion of the milestone. The shares are valued at the market price at the end of the period and revalued at each period until issued. At June 30, 2014, approximately 83,824 shares of common stock were expected to be issued pursuant to the agreement with a fair value of $155,074. Accordingly, a liability was recorded as part of "Research and development costs-payable in stock" in the accompanying balance sheet below long term liabilities as such liability is only payable in shares of common stock.

***Reclassifications***

The condensed consolidated financial statements include a reclassification of consulting fees in prior periods to properly compare to current period presentation. Such reclassification did not change the reported net loss during that period.

In presenting the Company's statement of operations for the three and six month periods ended June 30, 2013, the Company reclassified consulting fees of $140,076 and $251,911, respectively, that were previously reflected as operating expenses to research and development expenses.

***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, determined using the treasury stock method. 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 June 30, 2014 and 2013 follows:

| | June 30, 2014 | June 30, 2013 |
|---|---|---|
| Average common shares outstanding-basic | 4,618,409 | 4,003,358 |
| Effect of dilutive securities- Warrants | 516,797 | -- |

| | | |
|---|---|---|
| Employee and director stock options | 21,750 | -- |
| Average diluted shares | 5,156,956 | 4,003,358 |

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 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 tables set forth the shares excluded from the diluted calculation for the periods presented as follows:

| | Three months ended June 30, 2014 | Three months ended June 30, 2013 |
|---|---|---|
| Senior secured Convertible notes | 1,236,212 | 550,977 |
| Warrants | 711,467 | 835,544 |
| Employee and director stock options | 527,200 | 520,950 |
| Total potentially dilutive shares | 2,474,879 | 1,907,471 |

| | Six months ended June 30, 2014 | Six months ended June 30, 2013 |
|---|---|---|
| Senior secured Convertible notes | 1,236,212 | 550,977 |
| Warrants | 1,228,264 | 835,544 |
| Employee and director stock options | 548,950 | 520,950 |
| Total potentially dilutive shares | 3,013,426 | 1,907,471 |

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 probability based 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 has derivative liabilities relating to conversion price adjustments on convertible notes and warrants issued in February 2014. Accordingly, the Company has calculated the value of the derivative liabilities as of the date of issuance of the notes and warrants and has revalued them as of the period ending June 30, 2014.

***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 Financial Accounting Standards Board (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.

The following table presents certain liabilities of the Company measured and recorded at fair value on the Company's condensed consolidated balance sheets on a recurring basis and their level within the fair value hierarchy as of June 30, 2014.

| | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| Fair Value of Derivative Liability | $ -- | $2,348,484 | $ -- | $2,348,484 |

There was no corresponding derivative liability as of December 31, 2013.

At June 30, 2014 and December 31, 2013, the fair values of cash and cash equivalents, and accounts payable approximate their carrying values.

***Recently Issued Accounting Standards***

As discussed in Note 1, on June 10, 2014, the FASB issued ASU 2014-10, *Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation*. ASU 2014-10 eliminates the requirement to present inception-to-date information about income statement line items, cash flows, and equity transactions, and clarifies how entities should disclose the risks and uncertainties related to their activities. ASU 2014-10 also eliminates an exception provided to development stage entities in Consolidations (ASC Topic 810) for determining whether an entity is a variable interest entity on the basis of the amount of investment equity that is at risk. The presentation and disclosure requirements in Topic 915 are no longer required for interim and annual reporting periods beginning after December 15, 2014. The revised consolidation standards will take effect in annual periods beginning after December 15, 2015, however, early adoption is permitted. The Company adopted the provisions of ASU 2014-10 for this quarterly report on Form 10-Q for the period ended June 30, 2014

In April 2014, the FASB issued ASU 2014-08, "*Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360)."* ASU 2014-08 amends the requirements for reporting discontinued operations and requires additional disclosures about discontinued operations. Under the new guidance, only disposals representing a strategic shift in operations or that have a major effect on the Company's operations and financial results should be presented as discontinued operations. This new accounting guidance is effective for annual periods beginning after December 15, 2014. The Company is currently evaluating the impact of adopting ASU 2014-08 on the Company's results of operations or financial condition.

On May 28, 2014, the FASB issued ASU 2014-09 , "*Revenue from Contracts with Customers"*. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current U.S. GAAP and replace it with a principle-based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. The ASU also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for reporting periods beginning after December 15, 2016, and early adoption is not permitted. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. Management has not yet determined the effect of adopting ASU 2014-09 on our ongoing financial reporting.

Other 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. SENIOR SECURED CONVERTIBLE NOTES PAYABLE**

Convertible notes payable consist of the following as of June 30, 2014 and December 31, 2013:

| | June 30, 2014 | December 31, 2013 |
|---|---|---|
| a.2010 2.5% Convertible Notes | $427,500 | $427,500 |
| b.2012 2.5% Convertible Notes | 753,667 | 1,170,333 |
| c.2014 6% Convertible Notes | 1,906,500 | -- |
| | 3,087,667 | 1,597,833 |
| Less Valuation Discount | (2,080,795) | (844,577 ) |
| | 1,006,872 | 753,256 |
| Less Current Portion | (427,500 ) | (390,123 ) |
| Convertible Notes Payable, net | $579,372 | $363,133 |

***a. 2010 2.5% 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 190,880 shares of our common stock at an exercise price equal to approximately $2.90 per share, as amended, (the "Capital Raise Transaction"). 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 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 note holders may be entitled to foreclose on any of such assets or exercise other rights generally available to a secured creditor under California and Delaware law. In addition, under a Subsidiary Guarantee, AtheroNova Operations guaranteed all of our obligations under the Original Notes.

On July 6, 2011, we entered into the First Amendment and Exchange Agreement under which the Original Notes were exchanged for the Amended and Restated 2.5% Senior Secured Convertible Notes (the "first Amended Notes").

On June 15, 2012, we entered into the Second Amendment and Exchange Agreement pursuant to which the First Amended Notes were exchanged for the Second Amended and Restated 2.5% Senior Secured Convertible Notes (the "Second Amended Notes"). The Second Amended Notes accrued 2.5% interest per annum with a maturity of four years after the closing of the original Capital Raise Transaction in 2010. 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 Second Amended Notes greatly restrict the ability of the 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.

As of December 31, 2013, the outstanding balance of the notes amounted to $427,500, unpaid interest of $31,453 and unamortized note discount of $37,375.

In May 2014, the Second Amended Notes were amended with the consent of the holder thereof to extend the maturity date from May 12, 2014 to September 12, 2014. All other terms and conditions of the Second Amended Notes remain unchanged.

During the period ended June 30, 2014, the Company recognized interest expense of $5,373 for the 2.5% interest rate and $37,375 to amortize the discount associated with the Second Amended Notes. The aggregate principal balance of the Second Amended Notes outstanding, unpaid interest and unamortized note discount as of June 30, 2014 amounted to $427,500, $44,900 and none, respectively.

***b. 2012 2.5% Convertible Notes***

During 2012, the Company issued $1,498,333 of its 2.5% convertible notes ("2012 Notes") that are due in 2016. The 2012 Notes are convertible into common stock at a per share price of $2.90 per share. As the market price on the date of the issuance of the 2012 Notes ranged between $5.80 and $8.00 per share, the Company recorded 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 note's conversion 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. As of December 31,

2013, the outstanding balance on the 2012 Notes amounted to $1,170,333 and unamortized discount $807,202.

During the period ended June 30, 2014, $416,667 in aggregate principal amount of the 2012 Notes was converted at a per share price of $2.90 into 143,678 shares of the Company's common stock. The Company also issued 5,171 shares of its common stock with a market value of $19,647 to settle accrued but unpaid interest associated with the converted 2012 Notes of $14,994. The issuance of these shares of common stock resulted in an additional charge of $4,653 that has been reflected as part of interest expense in the accompanying statement of operations. The Company also recorded interest expense of $270,439 to amortize the corresponding note discount of the converted notes.

During the period ended June 30, 2014, the Company recognized interest expense of $11,759 and $117,360 to amortize the note discount. The aggregate balance of the 2012 Notes outstanding, unpaid interest and unamortized note discount as of June 30, 2014 amounted to $753,667, $33,701 and $419,405 respectively.

Total 2.5% convertible notes purchased and held by Europa were $1,094,167 at both June 30, 2014 and December 31, 2013. Europa is an entity controlled by Knoll Capital Management of which Mr. Knoll, one of our directors, is the managing director.

***c. 2014 6% Convertible Notes***

In January and February 2014, we entered into Securities Purchase Agreements with approximately 31 accredited investors (the "Investors"), pursuant to which the Investors, on February 12, 2014, purchased from us (i) 6% Senior Secured Convertible Notes (the "6% Notes") for a cash purchase price of $1,906,500, and (ii) Common Stock Purchase Warrants pursuant to which the Investors may purchase up to 414,457 shares of our common stock at an exercise price equal to approximately $2.30 per share (the "6% Notes Placement"). The 6% Notes have a three year term and are convertible into common stock at any time at the lesser of i) $2.30 per share and ii) seventy percent of the average of the three lowest daily volume-weighted average prices ("VWAPs") occurring during the 20 consecutive trading days immediately preceding the applicable conversion date. The associated warrants are exercisable at $2.30 per share. The warrants may be exercised on a cashless basis under which a portion of the shares subject to exercise are not issued in payment of the purchase price, based on the then fair market value of the shares.

The 6% Notes accrue 6% interest per annum and do not require periodic cash interest payments, 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 6% Notes), the holder of each 6% 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 6% Note principal plus accrued interest may be payable.

The 6% Notes and associated warrants include an anti-dilution provision that allows 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, as applicable, and, as such, were accounted for as derivative liability. The value of the derivative liability at the date of issuance was $4,443,569, of which $1,906,500 was reflected as a note discount and the remaining balance of $2,537,069 has been reflected in the statement of operations as part of cost of the private placement (see Note 4 below for further discussion of Derivative Liability).

We also entered into a Security Agreement and an Intellectual Property Security Agreement with the Investors and AtheroNova Operations, pursuant to which all of our obligations under the 6% Notes are secured by security interests in all of our assets and the assets of AtheroNova Operations, including intellectual property on a pari passu basis with the 2.5% Senior Secured Convertible Notes outstanding. Upon an event of default under the 6% Notes or associated agreements, the 6% Note holders may be entitled to foreclose on any of such assets or exercise other rights generally available to a secured creditor under California and Delaware law. In addition, under a Subsidiary Guarantee, AtheroNova Operations guaranteed all of our obligations under the 6% Notes.

Additionally, several of the individuals or entities who participated in this offering were also existing holders of warrants to purchase 542,246 shares of common stock. As an incentive for their participation, the expiration dates of these warrants were extended to ten years from the date of each respective warrant’s original issuance while all other remaining provisions stayed the same. At the date of modification, the difference in the fair value of these warrants before and after the modification amounted to $564,849 using the Black-Scholes Merton valuation and was included as a cost of the private placement in the accompanying statement of operations. Furthermore, in August 2013, the Company agreed to issue similar warrants to participants of a private placement sale of our common stock held at that time. As a result, we issued warrants to purchase an additional 40,000 shares of our common stock with the same terms and conditions as the warrants issued in the note placement. These warrants included an anti-dilution provision that allows 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, and, as such, were accounted for as derivative liability. Upon their issuance, the fair value of these warrants was determined to be $143,997 using a probability based weighted average Black-Scholes Merton valuation and was recorded as a derivative liability upon issuance and included in the cost of the private placement in the accompanying statement of operations (see Note 4 below for further discussion of derivative liability).

As a result of this offering, the Company recognized private placement costs in the aggregate of $3,340,030 to account for the following (i) commission and fees paid of $70,720; (ii) issuance of 6,535 shares of common stock to a placement agent with a fair value of $23,395; (iii) fair value of warrants modified of $564,849; (iv) fair value of warrants issued of $143,997; and (v) fair value of the note's conversion feature and warrants accounted as derivative liability of $2,537,069.

As of June 30, 2014, Europa held $300,000 in aggregate principal amount of the 6% Notes . Europa is an entity controlled by Knoll Capital Management of which Mr. Knoll, one of our directors, is the managing director.

**4. DERIVATIVE LIABILITY**

In April 2008, the FASB issued a pronouncement which provides guidance on determining what types of instruments or embedded features in an instrument held by a reporting entity can be considered indexed to its own stock for the purpose of evaluating the first criteria of the scope exception in the pronouncement on accounting for derivatives. This pronouncement was effective for financial statements issued for fiscal years beginning after December 15, 2008. The adoption of these requirements can affect the accounting for warrants and many convertible instruments with provisions that protect holders from a decline in the stock price (or "down-round" provisions). For example, warrants with such provisions will no longer be recorded in equity. Down-round provisions reduce the exercise price of a warrant or convertible instrument if a company either issues equity shares for a price that is lower than the exercise price of those instruments or issues new warrants or convertible instruments that have a lower exercise price.

We determined that the 6% Notes and related warrants issued to the Investors in February 2014 and the additional 40,000 warrants issued to the August 2013 Investors concurrent with the issuance of the 6% Notes and related warrants contained provisions that protect holders from declines in the stock price or otherwise could result in modification of the exercise price under the respective convertible debt and warrant agreements. As a result, these instruments were recorded as derivative liability and valued using a probability based weighted-average Black-Scholes-Merton valuation with the following assumptions:

| | June 30, 2014 (Unaudited) | February 12, 2014 (Issuance) (Unaudited) |
|---|---|---|
| Conversion Feature : | | |
| Risk-free interest rate | 0.88 % | 0.74 % |
| Expected volatility | 198% | 211 % |
| Expected life (in years) | 2.63 | 3.00 |
| Expected dividend yield | 0.00 % | 0.00 % |

| | | | | |
|---|---|---|---|---|
| Warrants : | | | | |
| Risk-free interest rate | 2.53 | % | 2.80 | % |
| Expected volatility | 198% | | 211 | % |
| Expected weighted average life (in years) | 9.58 | | 10 | |
| Expected dividend yield | 0.00 | % | 0.00 | % |
| | | | | |
| Fair Value : | | | | |
| Conversion feature | $1,508,202 | | $2,951,785 | |
| Warrants | 840,282 | | 1,635,781 | |
| | $2,348,484 | | $4,587,566 | |

The risk-free interest rate was based on rates established by the Federal Reserve Bank. The Company uses the historical volatility of its common stock based upon the expected term of the instrument, and the expected life of the instrument is determined by the expiration date of the instrument. The expected dividend yield was based on the fact that the Company has not paid dividends to common stockholders in the past and does not expect to pay dividends to common stockholders in the future.

The Company measured the aggregate fair value of the conversion feature and the warrants issued on the date of issuance of February 12, 2014 as $4,587,566. At June 30, 2014, the aggregate fair value of the derivative liabilities amounted to $2,348,483. As a result, the Company recorded the change in fair value of the derivative liabilities of $2,239,083 in the accompanying statement of operations for the six months ending June 30, 2014.

**5.STOCKHOLDERS' EQUITY**

**Common Stock**

On February 12, 2014, in satisfaction of the equity portion of a compensation arrangement with an accredited broker who assisted in the placement of the 6% Notes, we issued 6,535 shares of our common stock, with a fair value of $23,395. This cost was recorded as a cost of the private placement in our statement of operations.

In May 2014, the Company issued 422,105 shares of its common stock valued at $2,152,693 to CardioNova pursuant to the terms of a licensing agreement to which the Company is a party, in connection with a milestone achievement in February 2014 (see Note 6).

In April and May 2014, The Company issued a total of 34,316 shares of our common stock to adjust for the round lot treatment for stockholders holding under 500 shares of our common stock as approved by the stockholders in effectuating the 1-for-10 reverse stock split effective as of April 22, 2014.

**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 7,362,964 shares, as amended, 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 six months ended June 30, 2014, a total of 10,000 options to purchase shares of the Company's common stock were granted under the 2010 Plan. Additionally, options to purchase 22,500 shares of the Company's common stock originally granted outside of the 2010 Plan were cancelled in accordance with the grant terms. There were options outstanding to purchase a total of 556,450 shares granted under the 2010 Plan as well as outside the 2010 Plan as of June 30, 2014. There were 292,297 shares reserved for future grants under the 2010 Plan

as of June 30, 2014.

A summary of the status of the Company's stock options as of March 31, 2014 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, 2013 | 568,950 | $ 8.320 | 4.849 | $ 86,271 |
| Granted | 10,000 | 3.800 | 7.000 | -- |
| Exercised | -- | -- | -- | -- |
| Cancelled | (30,000 ) | (5.000 ) | -- | -- |
| Outstanding at June 30, 2014 | 548,950 | $ 8.423 | 4.321 | $ 0 |
| Exercisable at June 30, 2014 | 390,105 | $ 9.042 | 3.809 | $ 0 |

In March 2014, the Company granted options to purchase 10,000 shares of common stock to a consultant to the Company. The options have an exercise price of $3.80 per share, vest over a three month period and expire seven years form the date of grant. During the period ended June 30, 2014, the Company recognized compensation costs of $17,921 based on the fair value of options that vested using the Black-Scholes-Merton calculation and presented as part of general and administrative expense in the accompanying statement of operations.

During the six months ended June 30, 2014, the Company recognized $231,607 of compensation costs as part of general and administrative expense related to the vesting of options granted in prior periods. As of June 30, 2014, future compensation cost related to non-vested options is estimated to be approximately $487,000. The weighted average period over which it is expected to be recognized is approximately 2.50 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 and six months ended June 30, 2014 and 2013:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | 2014 | 2013 | 2014 | 2013 |
| Expected volatility | 198% | 218% | 198% - 201% | 113% - 226% |
| Dividend yield | -- | -- | -- | -- |
| Expected term (in years) | 6.25 | 6.25 | 6.25 | 6.25 |
| Risk-free interest rate | 2.73% | 2.05% | 2.73% | 1.38 - 2.05% |

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. In the prior periods, 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. Starting in April of 2013, the Company determined that its stock price had matured and there was a consistent level of trading activity, as such, the Company used the volatility percentage of its common 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. 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.

**Warrants**

A summary of the status of our issued and outstanding warrants as of June 30, 2014 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, 2013 | 853,946 | $ 3.770 | 2.665 | $ 783,258 |
| Granted | 454,457 | 2.300 | 9.667 | -- |
| Exercised | -- | -- | -- | -- |
| Cancelled | (80,139) | (5.973) | -- | -- |
| Outstanding at June 30, 2014 | 1,228,264 | $ 3.987 | 7.039 | $ 0 |
| Exercisable at June 30, 2014 | 1,228,264 | $ 3.987 | 7.039 | $ 0 |

In February 2014, pursuant to the issuance of the 6% Notes, the Company issued warrants to purchase 414,457 shares of common stock. The warrants are exercisable at $2.30/share and will expire in ten years. The Company also issued warrants to purchase 40,000 shares of common stock to purchasers in the August 2013 private placement. The warrants have an exercise price of $2.30 per share, vest immediately and expire 10 years from date of grant. See Note 3 for further discussion.

**6. 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”) became 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. A Joint Steering Committee was subsequently established between both entities and determined the final clinical protocols and approved a research budget of $3.8 million.

Pursuant to the agreement, common stock equal to specified percentages of the approved research budget of $3.8 million would be issued to CardioNova upon achievement of four milestones in the research plan. Through December 31, 2013, the Company had issued a total of 199,730 of non-refundable shares of common stock representing the first two milestones and 30% of the total budget with a fair value of $1,198,297, or $6.00 per share. Additionally, the Company determined that the achievement of the third milestone was probable and the percentage of achievement at 80% complete, therefore accrued additional research and development expense – related party of $1,170,712 as of December 31, 2013. There had been no work performed with respect to the fourth and last milestone through that date.

In February 2014, the third milestone was achieved. Pursuant to the agreement, the Company issued 422,105 shares of common stock to CardioNova with a fair value of $2,152,736. As a result, the Company recorded $982,024 in additional Research and development expense to account for the remaining fair value of the shares issued as $1,170,712 was already accrued in 2013.

As of June 30, 2014, the Company determined that the achievement of the final milestone was probable and the percentage of achievement at 15% complete. Accordingly, the Company accrued additional research and development

expense-related party in the accompanying statement of operations of $155,074 and $155,074 for the three and six months ended June 30, 2014, respectively.

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 purchased a total of 27,526 shares of our common stock for a cash purchase price of $9.70 per share. This transaction took place in two installments. The first installment, which took place in December 2011, was for the issuance of 15,464 shares upon receipt of $150,000 as specified in the License Agreement. The second installment of 12,062 shares was issued in June 2013 upon the receipt of the final $117,000 due upon shipment of clinical product used in the initial Phase 1 trial, which occurred in June 2013.

***Research Agreements***

We have a research agreement signed in September 2012, and amended in April 2013 and again in September 2013, with a major university in Southern California to conduct contract research in additional compounds covered under our issued patents. 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 $236,323, to be paid in four installments over the length of the study. The process is ongoing and to date, the entire $236,323 has been expensed in prior periods. As of June 31, 2014, $81,662 is still outstanding pending issuance of final research reports and is reported as part of Accounts payable and accrued expenses in the accompanying balance sheet.

We have additional studies authorized in February and April 2014 for toxicology and other metabolic evaluations with expected aggregate cost of approximately $738,000, that are in various stages of planning or active execution of their protocols. The process is ongoing and to date, $349,785 and $521,965 has been expensed to Research and development costs on the accompanying statement of operations for the three and six month periods ended June 30, 2014, respectively. The remaining $216,035 will be recorded in future periods once service has been rendered.

We also have a research agreement finalized in March 2014 with an Australian hospital/research institution for a metabolic study of AHRO-001 in a standard animal model used in evaluation of plaque regression. The study plan has been completed and a pilot study to measure tolerability is expected to be undertaken in the 3rd quarter of 2014, with the main study to commence after successful completion of the pilot study. The total cost of approximately $187,400 will be recognized as Research and development costs in the Company’s statement of operations in future periods once services have been rendered.

***Formulation Development Agreement***

We have a development agreement entered into in February 2014 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 Active Pharmaceutical Ingredient to manufacture clinical trial pharmaceutical products for use in the next clinical trial conducted in Russia. The total expected cost of the project is $220,650, as amended, to be paid in progress installments over the length of the manufacturing and packaging process. The process is ongoing and to date, $67,715 and $160,309 has been recorded as part of Research and development costs on the accompanying statement of operations for the three and six month periods ending June 30, 2014, respectively. The remaining $60,341 will be recorded in future periods once service has been rendered.

***Bioanalytical Analysis Agreements***

We have analysis agreements for our next clinical trial in Russia entered into in May 2014, as amended, with several analytical laboratories to perform specialized serum analyses for biomarkers of certain gene expressions activated in previous non-human experiments when exposed to our Active Pharmaceutical Ingredient. The expected aggregate cost of these agreements is approximately $339,400 to be paid in installments upon progress completion points as the analyses are performed. The process is ongoing and to date, $96,047 has been recorded as part of Research and development costs on the accompanying statement of operations for both the three and six month periods ended June 30, 2014. The remaining $243,353 will be recorded in future periods once services have been rendered.

**7. RELATED PARTY TRANSACTIONS**

Accounts payable includes $65,917 and $50,841 as of June 30, 2014 and December 31, 2013, respectively, that are payable to officers and directors of the Company.

As of June 30, 2014, Europa held $1,094,167 in aggregate principal amount of the 2.5% Notes and $300,000 in aggregate principal of the 6% Notes. Europa is an entity controlled by Knoll Capital Management of which Mr. Knoll, one of our directors, is the managing directors.

**8. SUBSEQUENT EVENTS**

On July 29, 2014, the Company issued 14,453 shares of its common stock upon conversion of $15,000 of principal and $393 of accrued interest thereon of its 6% Notes originally issued on February 12, 2014.

On July 29, 2014, the Company issued 24,088 shares of its common stock upon conversion of $25,000 of principal and $654 of accrued interest thereon of its 6% Notes originally issued on February 12, 2014.

**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 six months ended June 30, 2014 and 2013. 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 ("MD & A") are forward looking statements that involve risks and uncertainties and are based upon judgments concerning various factors that are beyond our control. You can identify forward-looking statements by the use of forward-looking terminology including "believes," "expects," "may," "will," "should," "seeks," "intends," "plans," "pro forma," "estimates," "anticipates" or the negative of these words and phrases or other variations of these words and phrases or comparable terminology. 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 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. The business of AtheroNova Operations, pharmaceuticals and pharmaceutical intellectual property, became our business upon consummation of the merger.

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 clinical trials to demonstrate the efficacy of our intellectual property 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 intellectual property 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, corporate infrastructure costs and research costs. We expect that our operating expenses will increase as we initiate production of API sufficient to use in toxicology studies, formulation development and tableting quantities necessary 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 following represents a discussion of our operations for the periods presented.

**Results of Operations**

**Three months ended June 30, 2014 Compared to the three months ended June 30, 2013**

| | Quarters ended June 30, | | Increase |
|---|---|---|---|
| | **2014** | **2013** | **(decrease)** |
| **Costs and expenses:** | | | |
| Research and development: | | | |
| Share-based compensation | $155,074 | $1,198,297 | $(1,043,223) |
| Other research and development expenses | 833,893 | 438,157 | 395,736 |
| **Total research and development expenses** | **988,967** | **1,636,454** | **(647,487)** |
| General and administrative: | | | |
| Share-based compensation | 91,589 | 273,614 | (182,025) |
| Other general and administrative expenses | 619,362 | 396,233 | 223,129 |
| **Total general and administrative expenses** | **710,951** | **669,847** | **41,104** |
| Interest expense | (254,143) | (260,323) | (6,180) |
| Change in fair value of derivative liabilities | 2,484,433 | -- | (2,484,433) |
| Other income (expense) | 292 | 697 | 405 |
| **Total other income (expense)** | **2,230,582** | **(259,626)** | **(2,490,208)** |
| **Net income (loss)** | **$530,664** | **$(2,565,927)** | **$(3,096,591)** |

During the three month periods ended June 30, 2014 and 2013, 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 quarter ended June 30, 2014, research and development expenses decreased to $988,967 from $1,636,454 in the same period in 2013. This decrease is primarily due to the recognition of a significantly greater expense amount for the CardioNova Phase 1 progress in 2013 when compared to the Phase 1b progress to date in 2014. Partially offsetting this decrease was an increase in expenses associated with toxicology work due to the continuing progress on several non-human toxicology studies.

General and administrative costs increased to $710,951 in the second quarter of 2014 compared to $669,847 for the quarter ended June 30, 2013, or an increase of $41,104. The increase in costs in 2014 is due to the legal costs associated with the preparation and filing of our S-1 registration statement as well as costs associated with the reverse stock split effectuated on April 22, 2014. These increases were mostly offset by lower stock based compensation expense for our officers, directors and consultants upon the vesting of several stock option grants as well as the fair value of shares transferred or sold to employees, directors and vendors by a controlling stockholder in 2013.

For the quarter ended June 30, 2014, interest expense of $254,143 declined slightly when compared to $260,323 in the quarter ended June 30, 2013. Recording of amortization of the 6% note discount in the current year very closely paralleled the expense of unamortized 2.5% note discount recorded upon conversion in the same period in 2013.

Change in fair value of derivative liabilities increased to $2,484,433 for the quarter ended June 30, 2014 due to the revaluation of derivative liabilities on the 6% senior convertible notes and associated warrants at the balance sheet date of June 30, 2014. There was no comparable activity in the three months ended June 30, 2013.

Net income for the quarter ended June 30, 2014 was $530,664 compared to a net loss of $2,565,927 for the quarter ended June 30, 2013 due to revaluation of the derivative liabilities in the current year and lower stock based compensation in research and development. This increase was partially offset by the increased expenses relating to increased toxicology and development testing, and increased legal costs. There were no gains recognized on the revaluation of derivative liabilities in the comparable period in the prior year.

**Six months ended June 30, 2014 Compared to the six months ended June 30, 2013**

| | Six months ended June 30, | | Increase |
|---|---|---|---|
| | **2014** | **2013** | **(decrease)** |
| **Costs and expenses:** | | | |
| Research and development: | | | |
| Share-based compensation | $1,137,097 | $1,198,297 | $(61,200) |
| Other research and development expenses | 1,401,046 | 872,916 | 528,130 |
| **Total research and development expenses** | **2,538,143** | **2,071,213** | **466,930** |
| General and administrative: | | | |
| Share-based compensation | 249,528 | 1,001,873 | (752,345) |
| Other general and administrative expenses | 975,928 | 735,951 | 239,977 |
| **Total general and administrative expenses** | **1,225,456** | **1,737,824** | **(512,368)** |
| Interest expense | (736,553) | (381,518) | 355,035 |
| Private placement costs | (3,340,030) | -- | 3,340,030 |
| Change in fair value of derivative liabilities | 2,239,082 | -- | (2,239,082) |
| Other income (expense) | (1,547) | 728 | 2,275 |
| **Total other income (expense)** | **(1,839,048)** | **(380,790)** | **1,458,258** |
| **Net loss** | **$(5,602,647)** | **$(4,189,827)** | **$(1,412,820)** |

During the six month periods ended June 30, 2014 and 2013, 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 six months ended June 30, 2014 and 2013, research and development expenses increased to $2,538,143 from $2,071,231. This increase is primarily the result of expenses associated with the toxicology testing program undertaken to support regulatory filings in the United States for AHRO-001 and increased costs for patent filing, prosecution and related costs when compared to the same period in the prior year.

General and administrative costs decreased to $1,225,599 in the six months ended June 30, 2014 compared to $1,737,824 for the six months ended June 30, 2013, or a decrease of $512,368. The decrease in costs incurred in 2014 is due primarily to lower share-based compensation costs as there were no below market purchases or gifts of stock involving a controlling stockholder as were recorded in 2013 as well as reduced costs recorded in the current year with a number of option grants reaching full vesting. Partially offsetting the decreased share based compensation were increased expenses for legal and professional costs for the preparation of reverse stock split documentation as well as the registration statement on form S-1 filed in March 2014.

For the six month period ended June 30, 2014 interest expense was $736,553 compared to $381,518 in the six month period ended June 30, 2013. This change is due to recognition of the note discounts on a higher outstanding Senior Note balance in the current year when compared to 2013 as well as the associated additional interest expense recorded.

For the six months ended June 30, 2014 private placement costs increased to $3,340,030 with no comparable expense in the same period of 2013. This increase is due to recognition of the fair value of the embedded derivative in the 6% Notes and warrants issued in the current period with variable conversion price and exercise price, net of the principal amount of $1,906,500. Additionally, expenses in the current period included the cost of cash and equity commissions totaling $94,115 paid to an accredited broker that assisted in the placement of a portion of the note offering.

Change in fair value of derivative liabilities was income of $2,239,082 in the six months ended June 30, 2014 for the change in the fair value during the period in which the 6% Notes and warrants were issued and outstanding. The fair value of these variable financial instruments is computed at the end of each periodic reporting date and any change is recorded as income or expense in the current period. There was no comparable charge in the same period of 2013.

Net loss for the six month period ended June 30, 2014 was $5,602,647 compared to $4,189,827 for the six month period ended June 30, 2013 due to the private placement costs recognized for the 6% Notes and warrants issued in the February 2014 offering, the cost of the research and development paid and payable through the issuance of our common stock and generally higher operating costs associated with our research and development.

**Liquidity and Capital Resources**

We had stockholders deficiency of $4,678,829 at June 30, 2014, and have incurred accumulated deficit of $27,632,441 primarily as a result of our losses from operations and the non-cash costs relating to the accounting of debt, derivative and warrant issuances as well as research and development costs paid and expected to be paid through the issuance of our common stock. 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 12 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 six months ended June 30, 2014, we had a net increase in cash and cash equivalents of $53,569. This increase resulted largely from net cash generated in the 6% Note financing of $1,906,500 largely offset by cash used in operating activities of $1,850,790. Total liquid resources as of June 30, 2014 were $319,779 compared to $266,210 at December 31, 2013.

As of June 30, 2014, we had a working capital deficit of $1,622,326, when excluding the derivative liability of $2,348,484 compared to a working capital deficit of $989,341 at December 31, 2013.

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 our ability 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 or at

all 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 June 30, 2014, 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 February 2014, we realized gross proceeds of $1,906,500 from the sale of our 6% Secured Convertible Notes to 31 accredited investors. We paid fees and commissions of $70,720 to an accredited broker for their participation in the note placement.

There can be no assurances that sufficient subsequent funding, if any at all, will be raised by these or future discussions or that the cost of such investments will be reasonable. Furthermore, we will need additional financing thereafter to complete the development and commercialization of our products. There can be no assurances that we can successfully complete the 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 $1,699,918 in the three months ended June 30, 2014, compared to a net operating loss of $2,306,301 for the three month period ended June 30, 2013. We have reported a net operating loss of $3,763,599, and non-operating expenses of $1,836,883, in the six months ended June 30, 2014, compared to a net operating loss of $3,763,599, and non-operating expenses $379,425 in the six months ended June 30, 2013. Management believes that we will continue to incur net losses through at least June 30, 2015.

**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 “Senior Notes”), and (ii) Common Stock Purchase Warrants pursuant to which the Purchasers may purchase up to 190,880 shares of our common stock at an exercise price equal to approximately $3.90 per share. The warrants may be exercised on a cashless basis by choice of the holder at any time. On May 13,2010, we also entered into a Security Agreement and an Intellectual Security Agreement with the Purchasers and AtheroNova Operations, pursuant to which all of our obligations under the Senior Notes are secured by first priority security interest in all of our assets and the assets of AtheroNova Operations, including intellectual property. Upon event of default under the Senior Notes or such agreements, the Senior Note holders may be entitled to foreclose on any of such assets or exercise the rights available to a secured creditor under California and Delaware law. In addition, under a Subsidiary Guarantee, AtheroNova Operations guaranteed all of our obligations under the Senior Notes. As discussed in Note 3 to the financial statement included elsewhere in this quarterly report on Form 10-Q, we have twice amended the terms and conditions of the Senior Notes and, in 2012, we issued an additional $1,500,000 in Senior Notes under the same amended terms and conditions. The Senior Notes accrue 2.5% interest per annum with a maturity of four years after issuance. No periodic 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.

From issuance through December 31, 2013, the Purchasers exercised their option to convert a portion of the Senior Notes into our common stock. During that period, aggregate principal of $1,400,500 and accrued interest of $48,767 was converted into 474,070 and 20,704 shares, respectively, of our common stock. During the period ended June 30, 2014, principal in the amount of $416,667 was converted at a per share price of $2.90 into 143,678 shares of our common stock. In addition, we also issued 5,170 shares of our common stock with a market value of $19,646 to settle $14,994 of accrued interest relating to these notes. The aggregate balance of the Senior Notes outstanding as of June 30, 2014 amounted to $1,181,167, of which, $427,500 is presented as part of current liabilities in the accompanying balance sheet.

The Senior Notes may not be prepaid, or forced by us to be converted in connection with an acquisition of us, except in limited cases. The Senior Notes greatly restrict the ability of us 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.

On May 9, 2014, the holder of the Senior Note issued on May 13, 2010 signed an agreement extending the maturity date from May 12, 2014 to September 12, 2014.

**6% Secured Convertible Notes Payable**

In February 2014, we entered into Securities Purchase Agreements with approximately 31 accredited investors (the "Investors"), pursuant to which the Investors, on February 12, 2014, purchased from us (i) 6% Senior Secured Convertible Notes (the "6% Notes") for a cash purchase price of $1,906,500, and (ii) Common Stock Purchase Warrants pursuant to which the Investors may purchase up to 414,457 shares of our common stock at an exercise price equal to approximately $2.30 per share (the "6% Notes Placement"). In connection with this note placement, we paid fees and commissions of $70,720 and issued 6,535 shares of common stock, with a fair value of $23,395, to an accredited broker that assisted in this note placement. The 6% Notes have a three year term and are convertible into common stock at any time at the lesser of i) $2.30 per share and ii) seventy percent of the average of the three lowest daily volume-weighted average prices ("VWAPs") occurring during the 20 consecutive trading days immediately preceding the applicable conversion date. The associated warrants are exercisable at $2.30 per share. The warrants may be exercised on a cashless basis under which a portion of the shares subject to exercise are not issued in payment of the purchase price, based on the then fair market value of the shares. Additionally, as an incentive, the life of existing warrants held by participants in the 6% Notes Placement were extended to ten years from the date of each respective warrant's original issuance.

The 6% Notes accrue 6% interest per annum, and do not require cash interest payments, 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 6% Notes), the holder of each 6% 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 6% Note principal plus accrued interest may be payable.

On February 12, 2014, we also entered into a Security Agreement and an Intellectual Property Security Agreement with the Investors and AtheroNova Operations, pursuant to which all of our obligations under the 6% Notes are secured by security interests in all of our assets and the assets of AtheroNova Operations, including intellectual property on a pari passu basis with the 2.5% Senior Secured Convertible Notes outstanding. Upon an event of default under the 6% Notes or such agreements, the 6% 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 guaranteed all of our obligations under the 6% Notes.

The 6% Notes and associated warrants include an anti-dilution provision that allows 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, as applicable. We considered the current Financial Accounting Standards Board (FASB) 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 in the issuers’ control, means the instrument is not indexed to the issuers own stock. Accordingly, we determined that the conversion price of the 6% Notes and the strike price of the associated warrants contain conversion or exercise prices, as applicable, that may fluctuate based on the occurrence of future offerings or events, and, as such, are not fixed amounts. As a result, we determined that the conversion features of the 6% Notes and the associated warrants are not considered indexed to our own stock and characterized the fair value of the 6% Notes and the associated warrants as derivative liabilities upon issuance.

As of June 30, 2014, Europa held $300,000 in aggregate principal amount of the 6% Notes. Europa is an entity controlled by Knoll Capital Management of which Mr. Knoll, one of our directors, is the managing director.

**Commitments**

***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”) became 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. A Joint Steering Committee was subsequently established between both entities and determined the final clinical protocols and approved a research budget of $3.8 million.

Pursuant to the agreement, common stock equal to specified percentages of the approved research budget of $3.8 million would be issued to CardioNova upon achievement of four milestones in the research plan. Through December 31, 2013, we had issued a total of 199,730 of non-refundable shares of common stock representing the first two milestones and 30% of the total budget with a fair value of $1,198,297, or $6.00 per share. Additionally, we determined that the achievement of the third milestone was probable and the percentage of achievement at 80% complete, therefore accrued additional research and development expense – related party of $1,170,712 as of December 31, 2013. There had been no work performed with respect to the fourth and last milestone through that date.

In the period ending June 30, 2014, the third milestone was achieved and, in accordance with the licensing agreement, we issued a total of 422,105 of non-refundable shares of common stock with a fair value of $2,152,735. In December 31, 2013, we had recorded $1,170,712 of these costs. Accordingly, during the three and six month periods ending June 30, 2014, $0 and $983,023 was recorded to research and development expense - related party, respectively. Additionally, as of June 30, 2014, we determined that the achievement of the final milestone was probable and the percentage of achievement at 15% complete. Accordingly, we accrued additional research and development expense-related party in the accompanying statement of operations of $155,074 and $155,074 for the three and six months ended June 30, 2014, respectively.

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 purchased a total of 27,526 shares of our common stock for a cash purchase price of $9.70 per share. This transaction took place in two installments. The first installment, which took place in December 2011, was for the issuance of 15,464 shares upon receipt of $150,000 as specified in the License Agreement. The second installment of 12,062 shares was issued in June 2013 upon the receipt of the final $117,000 due upon shipment of clinical product used in the initial Phase 1 trial, which occurred in June 2013.

***Research Agreements***

We have a research agreement signed in September 2012, and amended in April 2013 and again in September 2013, with a major university in Southern California to conduct contract research in additional compounds covered under our issued patents. 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 $236,323, to be paid in four installments over the length of the study. The process is ongoing and to date, the entire $236,323 has been expensed in prior periods. As of June 30, 2014, $81,662 is still outstanding pending issuance of final research reports and is reported as part of Accounts payable and accrued expenses in the accompanying balance sheet.

We have additional studies authorized in February and April 2014 for toxicology and other metabolic evaluations with expected aggregate cost of approximately $738,000, that are in various stages of planning or active execution of their protocols. The process is ongoing and to date, $349,785 and $521,965 has been expensed to Research and development costs on the accompanying statement of operations for the three and six month periods ended June 30, 2014, respectively. The remaining $216,035 will be recorded in future periods once service has been rendered.

We also have a research agreement finalized in March 2014 with an Australian hospital/research institution for a metabolic study of AHRO-001 in a standard animal model used in evaluation of plaque regression. The study plan has been completed and a pilot study to measure tolerability is expected to be undertaken in the third quarter of 2014, with the main study to commence after successful completion of the pilot study. The total expected cost of approximately $187,400 (based on current currency exchange rates) will be recognized as Research and development costs in our statement of operations in future periods once services have been rendered.

***Formulation Development Agreement***

We have a development agreement entered into in February 2014 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 Active Pharmaceutical Ingredient to manufacture clinical trial pharmaceutical products for use in the next clinical trial conducted in Russia. The total expected cost of the project is $220,650, as amended, to be paid in progress installments over the length of the manufacturing and packaging process. The process is ongoing and to date, $67,715 and $160,309 has been recorded as part of Research and development costs on the accompanying statement of operations for the three and six month periods ending June 30, 2014, respectively. The remaining $60,341 will be recorded in future periods once service has been rendered.

***Bioanalytical Analysis Agreements***

We have analysis agreements for our next clinical trial in Russia entered into in May 2014, as amended, with several analytical laboratories to perform specialized serum analyses for biomarkers of certain gene expressions activated in previous non-human experiments when exposed to our Active Pharmaceutical Ingredient. The expected cost of these agreements is approximately $339,400 to be paid in installments upon progress completion points as the analyses are performed. The process is ongoing and to date, $96,047 has been recorded as part of Research and development costs on the accompanying statement of operations for both the three and six month periods ended June 30, 2014. The remaining $243,353 will be recorded in future periods once services have been rendered.

**Summary of Contractual Commitments**

**Employment Agreements**

On April 28, 2014, the Compensation Committee of our Board of Directors approved one year contracts for our Chief Executive and Chief Financial Officers and on May 7, 2014, we executed such agreements. The descriptions of these agreements included in our Current Report on Form 8-K (File No. 000-52315) filed on May 13, 2014 are incorporated herein by reference. Such descriptions are not complete and are qualified in their entirety by reference to the agreements, copies of which are attached as Exhibits 10.1 and 10.2 to this Quarterly report on Form 10-Q and are incorporated herein by reference.

**Off-Balance Sheet Arrangements**

None.

**Critical Accounting Policies**

In December 2001, the SEC requested that all registrants discuss their most “critical accounting policies” in MD&A. The SEC indicated that a “critical accounting policy” is one which is both important to the portrayal of a 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 materially 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 issue 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 FASB 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 FASB 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 grants 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 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.

***Accounting for Share based Research and Development Costs***

Under our research and development (R&D) agreements, we are obligated to issue shares of common stock if milestones are met by the R&D vendor. It is our policy to recognize expense for these shares when it is estimated that

there is a high probability of meeting the milestone. We accrue the share based expense based upon the estimated percentage of completion of the milestone. The shares are valued at the market price at the end of the period and revalued at each period until issued. At June 30, 2014, we have recorded an accrual of $155,074 reflecting our estimate of approximately 15% progress on the milestone deemed achievable at that time.

***Recently Issued Accounting Standards***

On June 10, 2014, the FASB has issued ASU 2014-10, *Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation*. The amendments in this ASU remove all incremental financial reporting requirements from U.S. GAAP for development stage entities, including the removal of Topic 915, *Development Stage Entities*, from the FASB *Accounting Standards Codification*™. In addition, the ASU: (*a*) adds an example disclosure in Topic 275, *Risks and Uncertainties*, to illustrate one way that an entity that has not begun planned principal operations could provide information about the risks and uncertainties related to the company's current activities; and (*b*) removes an exception provided to development stage entities in Topic 810, *Consolidation*, for determining whether an entity is a variable interest entity. For public business entities, the presentation and disclosure requirements in Topic 915 will no longer be required for the first annual period beginning after December 15, 2014. The revised consolidation standards are effective one year later, in annual periods beginning after December 15, 2015. Early adoption is permitted.

In April 2014, the FASB issued ASU 2014-08, *"Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360)."* ASU 2014-08 amends the requirements for reporting discontinued operations and requires additional disclosures about discontinued operations. Under the new guidance, only disposals representing a strategic shift in operations or that have a major effect on our operations and financial results should be presented as discontinued operations. This new accounting guidance is effective for annual periods beginning after December 15, 2014. We are currently evaluating the impact of adopting ASU 2014-08 on our results of operations or financial condition.

On May 28, 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers*. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current U.S. GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. The ASU also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for reporting periods beginning after December 15, 2016, and early adoption is not permitted. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. Management has not determined the effect of adopting ASU 2014-09 on our ongoing financial reporting.

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 June 30, 2014, 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 it in such reports is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Our disclosure controls and internal controls over financial reporting were designed to provide only reasonable assurance that such disclosure controls and 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 June 30, 2014, there were no changes in internal controls over financial reporting in connection with the evaluation required by paragraph (d) of Rule 13a-15 or 15d-15 under the Exchange Act that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

**Part II – Other Information**

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

In May 2014, we issued 422,105 shares of our common stock valued at $2,152,693 to OOO CardioNova pursuant to the terms of a licensing agreement to which we are a party, in connection with a milestone achieved in February 2014.

In making the stock issuances described above without registration under the Securities Act of 1933, as amended (the "Securities Act"), the Company 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 |
|---|---|
| 3.1 | Certificate of Amendment of Amended and Restated Certificate of Incorporation of AtheroNova Inc. |
| 10.1 | Management Consulting Agreement dated May 7, 2014, between AtheroNova Inc. and Thomas Gardner. |
| 10.2 | Employment Agreement dated May 7, 2014, between AtheroNova Inc. and Mark Selawski. |
| 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: August 5, 2014

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

(Principal financial and accounting officer)