CRYSTALRESEARCH ASSOCIATES
-FACTS WITHOUT FICTION-

AtheroNova Inc.

AHRO-OTC.BB

Quarterly Update *January 31, 2013*

Company Description

AtheroNova Inc. ("AtheroNova" or "the Company") is a biotechnology company focused on the research and development of compounds that safely regress atherosclerotic plaque and improve patients' lipid profiles. Atherosclerotic plaque is a buildup of fat, cholesterol, and other substances. These plaque deposits, which progressively narrow and block the arteries, are the main underlying cause of cardiovascular disease, including heart attack, stroke, and peripheral artery disease (PAD). The Company's most advanced candidate, AHRO-001, works to significantly reduce the incidence and severity of plaque by employing a bile salt to dissolve existing plaque deposits as well as prevent new deposits from forming. Bile salts are an FDA-approved natural compound used to dissolve gallstones. AHRO-001 is progressing toward Phase I human clinical trials in Russia with the support of AtheroNova's research and development partner, Russia-based OOO CardioNova, Ltd. AtheroNova plans to develop its patent-pending technology in multiple applications, including cardiovascular disease, stroke, PAD, dementia/Alzheimer's, and erectile dysfunction—all of which have been linked to atherosclerosis.

Key Points

- AtheroNova's licensing partner OOO CardioNova has filed an Investigational New Drug (IND) application for AHRO-001 with Russia's Ministry of Healthcare, bringing the candidate one step closer to clinical trials. OOO CardioNova's parent company, the Maxwell Biotech Group, has agreed to fund Phase I and Phase II clinical trials in Russia.
- Pending regulatory approval, AtheroNova anticipates that Phase I trials could be completed in 2013, followed by a Phase II clinical study. The Company also plans to file an IND in the U.S. during 2013.
- In late 2012, AtheroNova received a Notice of Issuance from the U.S. Patent and Trademark Office for a patent covering its method of treating atherosclerosis using a bile acid. AtheroNova plans to expand its intellectual property into additional indications and has filed patent applications across 10 product families since its inception.
- Driven by a high prevalence of cardiovascular disease and limited therapeutic options, the global lipid regulator market reached $38.7 billion in revenues in 2011 (Source: IMS Health). Currently, lipid regulators, specifically statins, are the most effective method available for reducing serum cholesterol levels. At commonly prescribed dosages, however, they are not effective at significantly reducing atherosclerotic plaques, have drawbacks with tolerability, and may pose complications with long-term use.
- In preclinical studies at UCLA and Cedars-Sinai to date, use of AHRO-001 has led to a 95% reduction in innominate arterial plaque formation versus the control group. The compound has not shown morbidity, adverse effects, or mortality, and was well tolerated at high doses. An additional study is ongoing at UCLA to observe the effects of AHRO-003 on atherosclerotic lesion development in mice.
- As of September 30, 2012, AtheroNova's cash position was $386,787. In October 2012, the Company completed a private placement of its common stock, raising a net cash amount of over $2 million. A further $1.5 million was received upon the placement of additional 2.5% senior convertible notes.

AtheroNova Inc.
2301 Dupont Dr.
Suite 525
Irvine, CA 92612
Phone: (949) 476-1100
Fax: (949) 476-1122
www.atheronova.com

Ticker (Exchange)	AHRO (OTC.BB)
Recent Price (01/31/2013)	$0.45
52-week Range	$0.39 - $1.20
Shares Outstanding*	~35.2 million
Market Capitalization	~$15.8 million
Average 3-month Volume	21,862
Insider Owners + >5%	39%
Institutional Owners	7%
EPS (Qtr. ended 09/30/2012)	($0.03)
Employees	5

** As of November 5, 2012.*

Recent Events and Financial Results

An overview of the Company's recent news announcements is provided below, referring the reader to AtheroNova's website for complete press releases (www.atheronova.com).

- *On January 8, 2013*, the Company announced that it appointed Joan E. Shaw, MT (ASCP) (medical technologist, certified by the American Society for Clinical Pathology) as senior director of clinical operations as part of AtheroNova's goal of advancing its lead compound into clinical trials. Ms. Shaw's biography is provided on page 8.

- *On December 18, 2012*, AtheroNova announced that it appointed Mark K. Wedel, M.D., J.D., as senior vice president of clinical affairs and chief medical officer due to his experience in the development and clinical affairs of lipid-modulating drugs. Dr. Wedel's biography is provided on page 7.

- *On November 15, 2012*, the Company announced that it received a Notice of Issuance for its patent application for "Dissolution of Arterial Plaque" (now U.S. Patent No. 8,304,383). This represented a major milestone for AtheroNova as the Company develops its intellectual property for lipid modulation and reduction, including the use of hyodeoxycholic acid for atherosclerotic plaque lesions.

- *On November 13, 2012*, AtheroNova announced that its Russian licensing partner, OOO CardioNova, formally submitted an Investigational New Drug (IND) application to the Ministry of Health of the Russian Federation (Minzdrav) for AHRO-001. This filing represented the first step in the process of obtaining approval in Russia to conduct Phase I human clinical trials.

- *On November 7, 2012*, AtheroNova announced that Fred Knoll, the principal and portfolio manager of Knoll Capital Management, was named to the Company's Board of Directors. His biography is provided on page 8.

Third Quarter 2012 Financial Results

On November 13, 2012, AtheroNova reported financial results for the three and nine months ended September 30, 2012.

For the Three Months Ended September 30, 2012

As a development-stage company, AtheroNova reported no revenues for the quarter ended September 30, 2012.

The Company's research and development (R&D) expenses were $184,868 in the third quarter 2012, up from $88,270 in the corresponding 2011 period. AtheroNova reported that the rise in R&D expenses was the result of preparations for Phase I and II clinical trials, including compound development and production of clinical-grade active pharmaceutical ingredient (API), offset by lower costs for preclinical testing versus the prior year's period.

The Company's general and administrative (G&A) expenses were $474,131 in the period ended September 30, 2012, down from $797,078 in the third quarter 2011, primarily due to lower stock-based compensation expenses.

AtheroNova's interest expenses decreased to $78,292 during the three months ended September 30, 2012, down from $401,446 in the corresponding timeframe in 2011. The Company attributed the decrease to recognized discount amortization on senior convertible notes in the 2011 period that was not repeated in the current quarter, offset in part by interest on the outstanding 12% bridge notes.

AtheroNova's gain on conversion of debt for the third quarter 2012 was $0 versus $811,393 during the same 2011 period, which reflected the value of convertible notes before a $446,600 conversion of note principal in July 2011. The Company reported $0 in change in fair value of derivative liabilities in the quarter ended September 30, 2012, versus such expenses of nearly $3.5 million in the same three months of 2011, reflecting a revaluation of the derivative liabilities associated with the convertible notes and warrants issued and outstanding during 2011.

AtheroNova reported a net loss of $737,157, or ($0.03) per diluted share, for the third quarter 2012 versus a net loss of over $3.9 million, or ($0.15) per diluted share, for the same 2011 timeframe.

Financial Results for the Nine Months Ended September 30, 2012

AtheroNova's revenues were $0 during the first nine months of 2011 and 2012.

The Company's R&D expenses were $560,439 in the nine months ended September 30, 2012, up from $271,645 in the corresponding 2011 timeframe. AtheroNova attributed the increase to preparations for Phase I and Phase II clinical trials, offset slightly by the completion of the laboratory phase of preclinical testing in 2011.

AtheroNova's G&A expenses rose to nearly $1.8 million in the first nine months of 2012, up from roughly $1.6 million for the year-ago period. The increase was the result of higher costs for consultants, investor relations, stock-based compensation, and other costs.

Interest expense rose to $683,432 in the nine months ended September 30, 2012, up from $594,922 in the equivalent 2011 timeframe.

The Company reported a $618,366 gain on modifications of senior notes and warrants in the first nine months of 2012 (with no comparable figure for the same 2011 period). AtheroNova reported a gain on conversion of debt of $97,975 in the first nine months of 2012, down from $811,393 in the corresponding 2011 period. The Company reported a change in fair value of derivative liabilities of roughly $2.6 million for the nine-month period in 2012, down from over $3.9 million for the first nine months of 2011. The decrease was attributed to revaluation and elimination of certain derivative liabilities.

AtheroNova reported a net income of $361,956, or $0.01 per diluted share, for the first nine months of 2012 versus net income of roughly $2.3 million, or $0.08 per diluted share, for same 2011 period.

As of September 30, 2012, the Company's cash position was $386,787.

Company Background

AtheroNova Inc. ("AtheroNova" or "the Company") is focused on discovering, researching, developing, and licensing pharmaceuticals to modulate lipid profiles and reduce or eliminate atherosclerosis—a thickening of the arteries that occurs when fat, cholesterol, and other substances build up in the walls of the arteries and form plaque deposits. These plaque deposits are believed to come from weaknesses or imperfections in the arterial walls or may develop at the site of arterial inflammations. Atherosclerosis is the main cause of many cardiovascular diseases, including heart attack, stroke, and peripheral artery disease (PAD). More money is spent attempting to treat cardiovascular disease than any other disease. The condition is so prevalent that cardiovascular disease is the leading cause of morbidity, disability, and mortality in industrialized countries, with atherosclerosis being the primary fundamental pathology.

AtheroNova is researching patent-pending applications of bile salts (natural compounds that have been used previously to dissolve gallstones) to regress atherosclerotic plaques (atheromas) via a process called delipidization, which dissolves plaque in artery walls and removes it by natural body processes. The Company's most advanced compound, AHRO-001, is being developed as a novel regression treatment of atherosclerotic plaque. AHRO-001 is intended to dissolve existing atherosclerotic plaques as well as prevent the formation of new ones. The Company seeks to market its product against currently approved therapies, which merely stabilize the disease. It is this potential for plaque regression that AtheroNova believes could distinguish AHRO-001 from other atherosclerosis treatments on the market and candidates in development.

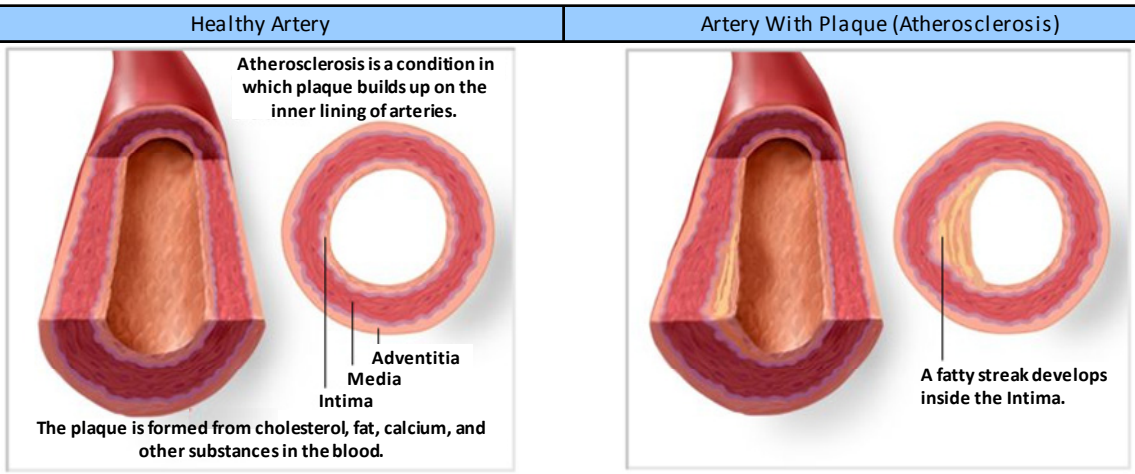
Formation of Atherosclerosis

Cholesterol deposits or "plaque" accumulate in arteries over time and can be related to diet, heredity, and other blood chemistry factors. Plaque accumulations are the sum of the low-density lipoprotein (LDL) cholesterol that circulates within a person's blood. It is believed that a higher LDL reading translates into plaque accumulations in the arteries. High-density lipoprotein (HDL) cholesterol is considered the "good" cholesterol and can assist in transporting LDL out of the bloodstream to the digestive system for elimination by the body.

Atherosclerotic plaques usually form a protective barrier known as a "fibrous cap," which may result from inflammation of the arterial wall due to formation of the deposit. The fibrous cap is the body's attempt to stabilize the deposit and stop it from abruptly breaking loose. In certain situations, the plaque may rupture regardless and greatly restrict or altogether block blood flow, leading to a heart attack or stroke. If the plaque remains stable, it reduces the available space within the arteries, which restricts blood flow (as illustrated in Figure 1). This can result in conditions such as hypertension, kidney failure, macular degeneration, PAD, and erectile dysfunction. There is also evidence to suggest that cognitive impairment may be a sign of reduced blood supply to the brain.

Figure 1

ATHEROSCLEROSIS: HEALTHY ARTERY VERSUS AN ARTERY WITH PLAQUE



Source: AtheroNova Inc.

Current Standards of Care

Current atherosclerosis and coronary artery disease (CAD) treatments consist of various therapeutic classes, the most widely prescribed being statins. To date, statins represent the most effective method of reducing serum cholesterol levels, though they are ineffective at reducing plaque. It has long been believed that a patient who exhibits the genetic, dietetic, or disease characteristics prone to plaque accumulations should initially be put on a course of lifestyle and diet changes in order to attempt to control blood cholesterol levels. If such measures prove unsuccessful, then the standard course for treatment is a statin, whereby a patient is directed to remain on the drug throughout his/her lifetime. The very nature of statins is to reduce the amount of cholesterol circulating in the bloodstream, which is largely believed to slow or prevent the formation of atherosclerotic plaques—of which cholesterol is a major component. If the statin proves to be ineffective, other measures must be taken, such as drug-eluting stents, catheterization, and balloon angioplasty—though none of these have proven entirely effective at stabilizing or reducing plaque in the arteries.

Significant drawbacks to statins have largely been related to their tolerability in the prescribed dosage as well as the potential complications that can result from long-term use, which may include muscle weakness and pain (which have shown to be the most common), dizziness, headaches, extreme fatigue and flu-like symptoms, diarrhea/constipation, swelling of the ankles, liver dysfunction with elevation of the liver enzymes, and neurological conditions. These side effects may recede as patients become accustomed to taking the medications.

ASTEROID and SATURN Studies

AtheroNova has developed its compounds under the premise that atherosclerosis is a story of largely unsuccessful drug therapies. This belief is validated by published data from the following studies: ASTEROID and SATURN. The ASTEROID study tested the maximum 40 mg dose of rosuvastatin (Crestor®) administered to patients for two years, ultimately demonstrating only a 6.7% reduction in plaque. The SATURN study compared the two best-selling statins (Lipitor® and Crestor®) to each other. In a large double-blind, multicenter, randomized trial, it was confirmed that while Crestor® significantly lowered LDL levels when compared to Lipitor®, it was not superior in decreasing atherosclerosis as measured by intravascular ultrasonography, which was the primary endpoint. The study did not show a significant difference between the two products in clinical events.

AtheroNova's Lead Pipeline Candidate: AHRO-001

AtheroNova is developing a product that it believes could become a new standard of care for patients prone to plaque accumulations. The Company is preparing to enter human Phase I trials to explore the ability of bile salts to dissolve (regress) a statistically significant portion of atheromas in test subjects in a way that is both safe and effective. AtheroNova's most advanced compound in development, AHRO-001, is a bile salt administered via pill or tablet. Through a process called delipidization, the compound is designed to dissolve plaque within the walls of the arteries and, subsequently, safely remove it from the body through natural metabolic processes. The Company is initially targeting individuals with soft vulnerable plaque, as the volume of plaque that one accumulates over a lifetime can remain until death, with no truly effective way to reduce it. AHRO-001 works in a manner that some have likened to "nature's detergent."

AtheroNova is developing AHRO-001 to directly compete with statins that largely lower cholesterol and stabilize plaque. In preclinical studies, AHRO-001 did not show adverse effects, including morbidity or mortality. Also, it was well tolerated at high doses—something that has been confirmed by other compounds in this family, mainly, ursodeoxycholic acid (also known as UDCA or ursodiol). UDCA, a naturally occurring bile acid and a very close compound to AHRO-001, is used in a drug for gallstone dissolution and is the only U.S. Food and Drug Administration (FDA)-approved drug to treat primary biliary cirrhosis (PBC), with millions of patients taking it without significant side effects.

The Company has completed studies at Cedars-Sinai and UCLA that were successful at verifying plaque and cholesterol reduction as well as safety. AtheroNova is conducting additional academic research, including a study of the effects of AHRO-003 supplementation on atherosclerotic lesion development in mice at UCLA's Lusis Laboratory. Should the Company prove successful in safely and effectively regressing soft, vulnerable plaque via

delipidization, it would become the first entity with a proven method to do so and could represent a new treatment for the millions of patients currently seeking to manage their risk for atherosclerosis. As well, AtheroNova could provide new hope to patients who have genetic, dietetic, or disease predisposition to the potentially catastrophic "first event"—where a patient's first atherosclerotic event is a fatal heart attack or stroke.

Progression to Commence Phase I Trials

In Russia, AtheroNova's licensing partner OOO CardioNova, Ltd. has filed an Investigational New Drug (IND) application with the Ministry of Healthcare of the Russian Federation (Minzdrav). The IND is the first step in the process of gaining approval to conduct Phase I human clinical trials in Russia. AtheroNova expects the application to be reviewed and potentially approved in early 2013 (Source: AtheroNova press release, November 13, 2012).

The planned Phase I trial is designed to be a randomized, placebo-controlled, double-blind study. The primary objective is to evaluate the safety, tolerability, and pharmacokinetics of a dose of orally administered AHRO-001, as well as of multiple ascending doses, in patients with mild to moderate hypercholesterolemia (excess cholesterol in the bloodstream). The secondary goal is to evaluate the safety, tolerability, and pharmacokinetics of any potential drug interactions between AHRO-001 and atorvastatin (the active ingredient in the blockbuster cholesterol drug Lipitor®). Pending positive results, AtheroNova may continue with a multicenter Phase II study to further evaluate the safety and efficacy of AHRO-001 in hypercholesterolemic patients.

In the U.S., AtheroNova completed a pre-IND meeting with the FDA in October 2011, where the FDA provided guidance on a clear development plan, including Phase I and Phase II protocol outlines. The Company is incorporating guidance from the FDA and is conducting U.S. toxicology studies. AtheroNova expects to file an IND with the FDA in 2013.

Phase I and Phase II human clinical studies in Russia are being sponsored by OOO CardioNova, a subsidiary of the Russian biotech venture capital firm Maxwell Biotech Group (http://maxwellbio.com). Initial funding of $900,000 from a total allocation of $3.8 million for the studies was provided by Maxwell to OOO CardioNova to start Phase I. Additionally, Maxwell has enlisted OCT (http://www.oct-clinicaltrials.com), a full-service clinical studies contract research organization (CRO) based in St. Petersburg, Russia, as a contract partner.

Ample supply of the active ingredient for AHRO-001 has been manufactured and delivered for the manufacture of clinical supplies for both Phase I and Phase II studies. AtheroNova is working with Pennsylvania-based Frontage Laboratories, Inc. (http://www.frontagelab.com) for the formulation, compounding, and tabletization of AHRO-001. The enteric coated tablet formulation development as well as the excipient compatibility is complete, while excipient stability R&D is in progress. As well, the delivery of the clinical supply remains on schedule (Source: AtheroNova's Investor Presentation, January 24, 2013).

The Company has also added key leadership in recent months as it prepares to enter clinical trials (overviewed on pages 7-8), including Dr. Mark K. Wedel as its senior vice president of clinical affairs and chief medical officer and Joan E. Shaw as senior director of clinical operations.

Market Opportunity

If successfully approved and marketed, AtheroNova's product candidate could be positioned to address one in three individuals—or greater than 82 million adults (39.9 million men; 42.7 million women)—who have one or more types of cardiovascular disease. As an ultimate goal of ridding the entire body of plaque, the Company conservatively believes that if it is able to achieve regression with minimal side effects, its product could become a significant disruptive technology.

In 2011, global lipid regulator spending reached $38.7 billion, driven by a high prevalence of cardiovascular disease and limited therapeutic options (Source: IMS Health MIDAS, December 2011). However, the lipid regulator market is expected to decline following the patent protection expiration of several leading medicines, such as atorvastatin (Pfizer's Lipitor®) in 2011, which could lead to increased generic competition (Source: Visiongain's *Statins: World*

Market Outlook 2011-2021, 2011). In addition, due to the recent regulatory failure of some next-generation therapies, very few new branded products are expected to enter the category in the near term. IMS Health expects the total market for lipid regulators to decline to $31 billion by 2015 due to lower-cost generics coming to the market. Despite this decline, lipid regulators would still represent the fourth largest therapeutic area behind oncology, diabetes, and respiratory illnesses (Source: IMS Institute for Healthcare Informatics, *The Global Use of Medicines: Outlook Through 2015*, 2011).

Establishing an Intellectual Property Portfolio for Lipid Modulation and Reduction

AtheroNova is focused on developing a comprehensive intellectual property portfolio to protect its lipid modulation and reduction technologies going forward, including for various compounds and administration techniques for treating atherosclerosis. In November 2012, AtheroNova achieved its first major step toward this goal with the receipt of a Notice of Issuance for its patent application #12/024,908, entitled "Dissolution of Arterial Plaque" (now U.S. Patent No. 8,304,383). This patent protects the Company's lead candidate, AHRO-001, and aims to cover the use of hyodeoxycholic acid for atherosclerotic plaque lesions. AtheroNova's partner, OOO CardioNova, submitted a similar filing on the Company's behalf in the Eurasian markets.

As well, AtheroNova has filed additional patent applications across 10 product families since its inception, including for obesity, lipomas, and adiposities. To this end, in October 2012, the Company announced it was supporting an additional preclinical study at UCLA's David Geffen School of Medicine to assess the expansion of indications that could be treated by AtheroNova's compounds.

AtheroNova Continues to Strengthen its Leadership

In recent months, AtheroNova has focused on expanding and strengthening its leadership team as the Company seeks approval for and prepares to initiate clinical trials. In particular, AtheroNova has appointed Dr. Wedel as its senior vice president of clinical affairs and chief medical officer. Dr. Wedel has expertise in the development and clinical affairs of lipid-modulating drugs. As well, the Company has selected Ms. Shaw as senior director of clinical operations. Ms. Shaw brings extensive clinical operations experience, including for AstraZeneca's ASTEROID trial for the statin Crestor®. AtheroNova also expanded its Board of Directors with the addition of Mr. Knoll, the principal and portfolio manager of Knoll Capital Management.

Mark K. Wedel, M.D., J.D., Senior Vice President of Clinical Affairs and Chief Medical Officer

Between 2009 and 2010, Dr. Wedel served as chief medical officer and vice president of clinical development for Santaris Pharma A/S in San Diego, California, responsible for planning the strategic clinical development of several locked nucleic acid oligonucleotides, including lipid-lowering agents directed at apolipoprotein B and PCSK9. He was also responsible for obtaining FDA approval for the first micro RNA oligonucleotide used in a hepatitis C infected man and assembling Santaris' Medical Advisory Board and clinical research staff. Between 2002 and 2008, Dr. Wedel held the position of chief medical officer and senior vice president of clinical development with ISIS Pharmaceuticals, Inc., where he oversaw the clinical research activities of 13 drugs in all phases of clinical development. He developed safety and medical affairs profiles for all drugs under development and was instrumental in the development and licensing of ISIS' flagship drug, a lipid-lowering antisense inhibitor of apolipoprotein B, to Genzyme Corporation. Between 1996 and 2002, Dr. Wedel served as executive director of Alliance Pharmaceuticals, a company developing liquid ventilation in acute lung injury. At Alliance, he was responsible for successfully leading the company through Phase II and III clinical trials, working directly with the FDA throughout the clinical process. Dr. Wedel's career also includes consulting positions with the U.S. Department of Justice, serving as medical director for the Intensive Care Unit of Scripps Clinic and Research Foundation, and serving as head of pulmonary medicine at Park Nicollet Medical Center. Dr. Wedel holds a B.S. in chemistry and biology from Valparaiso University, an M.D. from the Johns Hopkins University School of Medicine, and a J.D. from Thomas Jefferson School of Law. He is Board certified in internal medicine, chest medicine, critical care medicine, and sleep disorders medicine. He is the author of one book and more than 50 professional publications and articles.

Joan E. Shaw, MT (ASCP), Senior Director of Clinical Operations

Ms. Shaw brings more than 20 years of drug development experience leading to successful New Drug Application (NDA) submissions and product launches for organizations such as AstraZeneca PLC (AZN-NYSE) and DuPont Pharmaceuticals Company (now part of Bristol-Myers Squibb Company [BMY-NYSE]). Between 2002 and 2012, she served in multiple areas of AstraZeneca, ultimately serving as executive director of clinical operations in the Wilmington, Delaware, headquarters. For the last two years, Ms. Shaw was the executive director of continuous improvement, leading a team of Master Black Belts to define efficiencies in the drug development process. Her group was responsible for identifying, planning, and implementing critical continuous improvement projects across R&D to deliver value and improve productivity while introducing and integrating Lean Six Sigma and Kaizen methodologies within AstraZeneca's global R&D division. As executive director of U.S. study delivery, she provided direct oversight and life cycle management, guiding over 1,500 researchers that conducted and supported 100 to 150 Phase I through Phase IV studies in the cardiovascular, central nervous system (CNS), respiratory, inflammation, oncology, gastrointestinal, and pain areas. She was also the clinical project director for the $3 billion product Seroquel, and led the development and submission of four new indications and a sustained-release formulation for that drug. She managed a $190 million clinical budget and 250 deployed staff in four global locations to deliver an integrated global clinical plan for Seroquel. From 1982 through 2002, she led the Discovery and Development Project Management Department at DuPont Pharmaceuticals, which conducted research, development, and delivery of pharmaceuticals and radiopharmaceuticals that are used in the treatment of HIV, cardiovascular disease, CNS disorders, cancer, and inflammatory diseases. She was responsible for planning the strategic clinical development of several new drugs, including ReVia, Cozaar, and Sustiva. As project management director for a new indication for ReVia (naltrexone), she had direct responsibility for the approval and launch of ReVia for alcoholism in the U.S. and Canada and eight additional countries, as well as the approval of new formulation and packaging in an additional 13 countries. Ms. Shaw holds an M.S. (clinical chemistry), B.S. (medical technology), and a Lean Six Sigma Black Belt, and is a licensed medical technologist (MT), certified by the American Society for Clinical Pathology (ASCP). She is a co-patent holder for the new indications for Seroquel.

Fred Knoll, Director

Since 1987, Mr. Knoll has been the principal and portfolio manager at Knoll Capital Management, an investment company managing funds over the last two decades in areas such as emerging growth companies, restructurings, and China. During the 1980s and early 1990s, he was chairman of the Board of Directors of Telos Corporation, a computer systems integration company, served as investment manager for General American Investors, was the U.S. representative on investments in leveraged buyouts and venture capital for Murray Johnstone, Ltd. of Glasgow, UK, and headed the New York investment group of Robert Fleming, Inc. (a leading UK merchant bank that was subsequently acquired by JP Morgan [JPM-NYSE]), where he managed a venture capital fund and the U.S. research team. Mr. Knoll started his investment career as an investment analyst at Capital Research (Capital Group) in the early 1980s and held positions in sales and marketing with Wang Inc. and Data General, and in software engineering with Computer Sciences Corporation (CSC-NYSE) in the late 1970s. Mr. Knoll holds a B.S. in electrical engineering and computer science from the Massachusetts Institute of Technology (MIT), a B.S. in management from the Sloan School at MIT, and an MBA from Columbia University in finance, and was a member of the Columbia University's International Fellows Program.

Headquarters and Employees

AtheroNova is a Delaware corporation formed in 1997, with headquarters in Irvine, California. On May 13, 2010, pursuant to an Agreement and Plan of Merger dated March 26, 2010, a subsidiary, Z&Z Merger Corporation, merged with and into Z&Z Delaware and the surviving subsidiary corporation changed its name to AtheroNova Operations, Inc. The parent company is now AtheroNova Inc.

As of January 2013, AtheroNova had two full-time employees and three contract employees.

Key Points to Consider

- AtheroNova Inc. has developed intellectual property for a class of compounds with the potential to reduce the incidence and severity of atherosclerosis—a disease in which the buildup of cholesterol, fats, or other fatty substances in and along the walls of arteries causes thickening, hardening, and blockage. Atherosclerosis is the main cause of cardiovascular disease.

- Regression and stabilization of atherosclerotic plaque, in conjunction with lipid modulation, could become a new standard for treating patients with cardiovascular disease. Current standards of care, such as statins, represent the most effective method to date for preventing atherosclerosis. However, at commonly prescribed dosage levels, statins are ineffective at reducing plaque and carry significant drawbacks related to their tolerability. Furthermore, complications can result from long-term use. Other standards of care, including drug eluting stents, catheterization, and balloon angioplasty, do not reduce plaque volume.

- In the U.S., there are roughly 82 million individuals presenting with some form of cardiovascular disease, supporting a $38.7 billion U.S. market for lipid regulators (as of 2011).

- AtheroNova seeks to become the standard for reducing or eliminating atherosclerosis. The Company's most advanced product candidate, AHRO-001, works to significantly reduce the incidence and severity of plaque by dissolving existing atherosclerotic plaque deposits and removing them by natural body processes (via a method called delipidization) as well as preventing the formation of new plaque deposits.

- AtheroNova is currently preparing to commence Phase I clinical trials for AHRO-001 in Russia with its partner, OOO CardioNova, Ltd., during 2013, pending approval of an Investigational New Drug (IND) application by Russia's Ministry of Healthcare. The Company has arranged funding for Phase I and Phase II trials.

- Initial preclinical study data conducted at UCLA showed that, following exposure to AHRO-001, mice with very high levels of plaque had a 95% reduction in the amount of innominate arterial plaque versus the control group. On the safety side, blood tests for the group that was given AHRO-001 demonstrated no toxicity.

    - Only one marketed statin, rosuvastatin (Crestor®), has been able to show statistically significant measurable regression of atherosclerotic plaque in coronary arteries. According to AtheroNova, these results were achieved on patients taking the maximum approved dosage for two years.

- AHRO-001 has not shown morbidity, adverse effects, or mortality in preclinical proof of principal and mechanism of action studies and is well tolerated at high doses.

- AtheroNova is conducting additional academic research, including a study of the effects of AHRO-003 supplementation on atherosclerotic lesion development in mice at UCLA's Lusis Laboratory.

- In late 2012, the Company received a Notice of Issuance for its primary patent application for the dissolution of arterial plaque. AtheroNova plans to employ its intellectual property to develop multiple pharmaceutical-grade applications for its compounds, potentially in the areas of obesity, hypertension, diabetes, peripheral artery disease (PAD), localized transdermal fat dissolution, and the dissolutions of lipomas.

- AtheroNova has recently expanded its leadership team as it prepares to enter the clinical stage. The Company has selected Mark K. Wedel, M.D., J.D. as its senior vice president of clinical affairs and chief medical officer due to his expertise in the development of lipid-modulating drugs. As well, the Company has appointed Joan E. Shaw, MT (ASCP) as senior director of clinical operations, who brings extensive clinical operations experience, including with AstraZeneca's ASTEROID trial for the statin Crestor®.

- As of September 30, 2012, the Company's cash position was $386,787. Subsequent to September 30, additional funding of approximately $3.5 million was secured (as described on page 1).

Risks

This Quarterly Update has been prepared by AtheroNova Inc. ("AtheroNova" or "the Company") with the assistance of Crystal Research Associates, LLC ("CRA") based upon information provided by the Company. CRA has not independently verified such information. Some of the information in this Update relates to future events or future business and financial performance. Such statements constitute forward-looking information within the meaning of the Private Securities Litigation Act of 1995. Such statements can only be predictions and the actual events or results may differ from those discussed due to the risks described in AtheroNova's statements on Forms 10-K, 10-Q, and 8-K, as well as other forms filed from time to time.

The content of this report with respect to AtheroNova has been compiled primarily from information available to the public released by the Company through news releases, Annual Reports, and U.S. Securities and Exchange Commission (SEC) filings. AtheroNova is solely responsible for the accuracy of this information. Information as to other companies has been prepared from publicly available information and has not been independently verified by AtheroNova or CRA. Certain summaries of activities and outcomes have been condensed to aid the reader in gaining a general understanding. CRA assumes no responsibility to update the information contained in this report. In addition, CRA's compensation by the Company for its first year of service in creating the base Executive Informational Overview® and for updates is forty-two thousand U.S. dollars and fifty thousand restricted shares. For more complete information about AtheroNova as well as the risks involved in an investment in the Company, please refer to Crystal Research Associates' base report, the Executive Informational Overview® (EIO) dated June 6, 2012, and located on Crystal Research Associates' website at www.crystalra.com.

Investors should also carefully consider the risks and information about AtheroNova's business described in the Company's Form 10-K filed with the SEC on March 16, 2012:
http://www.sec.gov/Archives/edgar/data/1377053/000143774912002448/athero_10k-123111.htm.

Investors should not interpret the order in which considerations are presented in this or other filings as an indication of their relative importance. The risks and uncertainties overviewed in AtheroNova's Form 10-K are not the only risks that the Company faces. Additional risks and uncertainties not presently known to AtheroNova or that it currently believes to be immaterial may also adversely affect the Company's business. If any such risks and uncertainties develop into an actual event, AtheroNova's business, financial condition, and results of operations could be materially and adversely affected, and the trading price of the Company's shares could decline.

This report is published solely for information purposes and is not to be construed as an offer to sell or the solicitation of an offer to buy any security in any state. Past performance does not guarantee future performance. Additional information about AtheroNova and its public filings, as well as copies of this report, can be obtained in either a paper or electronic format by calling (949) 476-1100.

Intentionally Blank.

CRYSTALRESEARCH
ASSOCIATES

QUARTERLY UPDATE: January 31, 2013

About Our Firm: Crystal Research Associates, LLC is an independent research firm that provides institutional-quality research on small- and mid-cap companies. Our firm's unique and novel product, the Executive Informational Overview® (EIO), is free of investment ratings, target prices, and forward-looking financial models. The EIO presents a crystal clear, detailed report on a company (public or private) in a manner that is easily understood by the Wall Street financial community. The EIO details a company's product/technology/service offerings, market size(s), key intellectual property, leadership, growth strategy, competition, risks, financial statements, key events, and other such fundamental information.

Crystal Research Associates is led by veteran Wall Street sell-side analyst Jeffrey Kraws, who is well known by the international financial media for his years of work on Wall Street and for providing consistent award-winning analyses and developing long-term relationships on both the buy-side and sell-side. He has been consistently ranked on Wall Street among the Top Ten Analysts for pharmaceutical stock performance in the world for almost two decades as well as ranked as the Number One Stock Picker in the world for pharmaceuticals by Starmine and for estimates from Zacks. Additionally, Mr. Kraws has been 5-Star Ranked for top biotechnology stock performance by Starmine.

Corporate Headquarters:
880 Third Avenue, 6th Floor
New York, NY 10022
Office: (212) 851-6685
Fax: (609) 395-9339

Satellite Office Location:
2500 Quantum Lakes Drive, Suite 203
Boynton Beach, FL 33426
Office: (561) 853-2234
Fax: (561) 853-2246