

Corporate Overview

Lipid Sciences, Inc. (NASDAQ: LIPD) is a development-stage biotechnology company that is researching and developing products and processes to treat major medical indications, such as cardiovascular disease, HIV and other viral infections in which lipids, or fat components, play a key role. The Company's technologies are based on patented processes and drugs that selectively and rapidly remove lipids from arterial plaque and lipid-enveloped viruses.

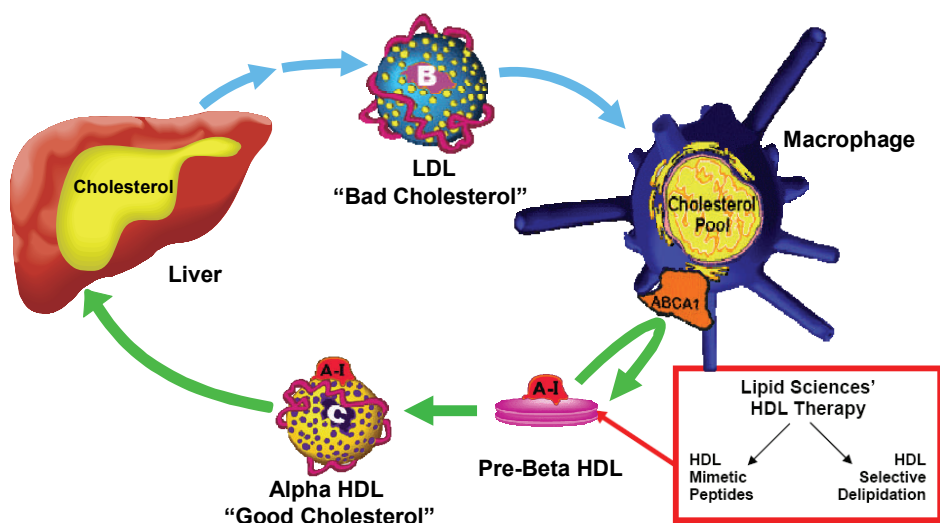
The Company's **HDL Therapy platform** (HDL Mimetic Peptides and HDL Selective Delipidation) aims to develop treatments to reverse atherosclerosis, a disease caused by the build-up of cholesterol-filled plaques in the vascular system and, most critically, in the coronary arteries. If left untreated, these plaques are highly vulnerable to rupture and to blood clot formation, which can result in a fatal myocardial infarction (heart attack). The regression of such plaques may have a major impact on reducing the risk of acute coronary events and strokes.

The Company's **Viral Immunotherapy platform** focuses on the removal of the lipid coatings from lipid-enveloped viruses and other lipid-containing infectious agents by applying Lipid Sciences' proprietary delipidation technologies. The Company believes that removing the virus' protective lipid coating enhances the processing and presentation of viral proteins to stimulate the body's immune system to effectively fight the disease. Conditions that could potentially be impacted by these technologies include HIV, SARS and influenza, and a broad range of animal health applications - a diverse market affecting both food and companion animals.

HDL Therapy Platform

The past decade has brought about an intense focus on the lowering of LDL (bad cholesterol) for the treatment of atherosclerotic cardiovascular disease. Even with effective LDL drug therapy such as statins, 75% of patients are still having a heart attack. As a result of this still unmet clinical need, the search began for new therapies to treat cardiovascular disease. The target of our HDL Therapy platform (HDL Mimetic Peptides and HDL Selective Delipidation) is the reversal of atherosclerosis, a disease caused by the buildup of cholesterol-filled plaques in the coronary, cerebral, and peripheral vessel walls. Left untreated, these plaques are highly vulnerable to rupture and blood clot formation, which can result in a fatal heart attack or stroke. Both our HDL Mimetic Peptide and HDL Selective Delipidation process are intended to increase reverse cholesterol transport, thereby reversing the buildup of arterial plaque. The regression of such plaques may have a major impact on reducing the risk of acute coronary events and strokes.

HDL Therapy: Reverse Cholesterol Transport



Cardiovascular disease is the #1 killer of men and women in the U.S.

80 million Americans suffer from some form of cardiovascular disease.

Someone is having a heart attack every 15 seconds.....with greater than a 20% chance of having another within 18 months.

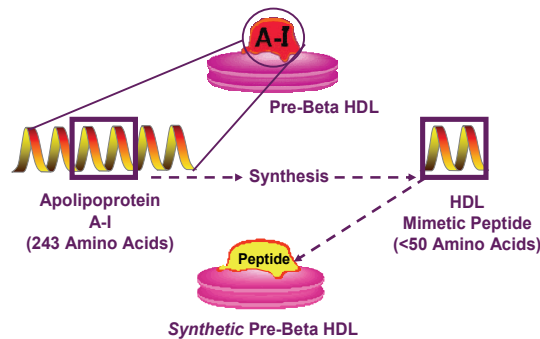
The process of removing excess lipids from the arterial wall to reduce plaque buildup by HDL for transport to the liver for excretion from the body is known as Reverse Cholesterol Transport. Lipid Sciences' HDL Therapy makes this natural process more effective by selectively targeting the HDL particles and changing them into a form that's a very efficient transporter of lipids. The regression of arterial plaques may have a major impact on reducing the risk of heart attacks and strokes.

HDL Mimetic Peptides -- The New Frontier

The design objective of Lipid Sciences' innovative HDL Mimetic Peptide development program is to develop a drug that mimics the two principal properties of HDL and its major protein component, ApoA-I—simultaneous reduction of inflammation and reduction in atherosclerotic plaque. Atherosclerosis is characterized by both inflammation and the build-up of plaque.

The Company's lead HDL Mimetic Peptide candidate, LSI-518P, has already demonstrated the ability to reduce proximal aortic atherosclerosis by 20% after 4 weeks of treatment ($p < 0.11$), and by 32% ($p < 0.01$) after 8 weeks of treatment when compared to a placebo (saline) group in a well-accepted, ApoE knockout mouse model. In addition, expression of endothelial cell and monocyte anti-inflammatory markers, VCAM-1 and CD11b, respectively, was significantly reduced by LSI-518P *in vitro* ($p < 0.05$). The combination of these important results--targeting inflammation and plaque build-up--makes LSI-518P an ideal HDL mimetic peptide candidate with the potential to be an effective therapeutic agent for HDL therapy in patients with cardiovascular disease.

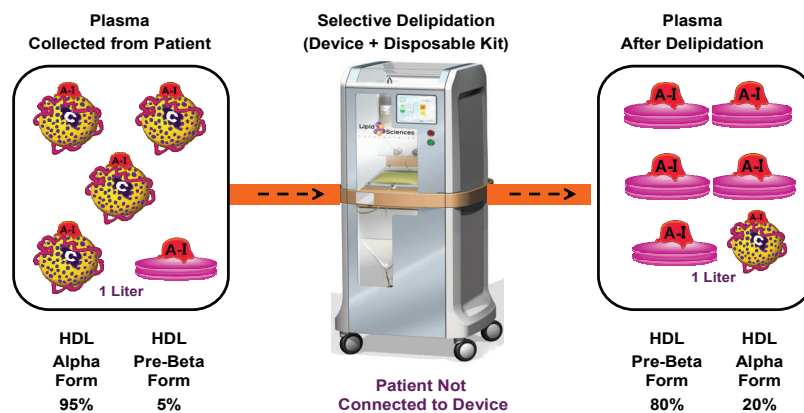
Synthetic HDL: HDL Mimetic Peptides



HDL Selective Delipidation - - "Energized HDL"

Our proprietary HDL Selective Delipidation process is intended to have a major impact on reducing the risk of acute coronary events and strokes. The results of our 'first in man' clinical trial, which was conducted at the Washington Hospital Center (Washington, D.C.) to evaluate safety and feasibility of our Plasma Delipidation System in subjects with prior Acute Coronary Syndrome, indicated a strong trend of effectiveness. The intravascular ultrasound measurements in the 28-patient study showed that the average total atheroma volume in the target coronary arteries decreased by 5.31% in the treatment group versus a 1.33% increase in the placebo group. The effect on the average of the 10 mm most-diseased arterial segments was a 7.34% decrease for the treated group as compared to a 2.10% decrease in the placebo group. While not statistically significant due to the small number of patients enrolled, these results are, nevertheless, a strong indication of the potential of this therapy to reverse coronary artery disease in only seven weeks of treatment.

Plasma Delipidation System (PDS-2)



The technology behind our device-based delipidation therapy is sophisticated, but the process is simple. As an outpatient procedure, approximately one liter of plasma is collected from the patient. The plasma is then delipidated using our technology and a proprietary single-use disposable kit and immediately reinfused into the patient.

Viral Immunotherapy Platform

There have been significant advances in the treatment of viral diseases over the past twenty years. With respect to HIV, the most important treatment advances have been as a result of the introduction of anti-retroviral drugs. However, anti-retroviral drugs have been shown to have significant toxicity and side effects for many of the patients who take them. Over time, the virus may build up a resistance to the drugs, making them ineffective. Our Viral Immunotherapy platform focuses on the removal of lipid coatings from viruses and other lipid-containing infectious agents by application of our delipidation technologies. We believe that removing the virus' protective lipid coating stimulates a patient's immune system to more readily fight the disease.

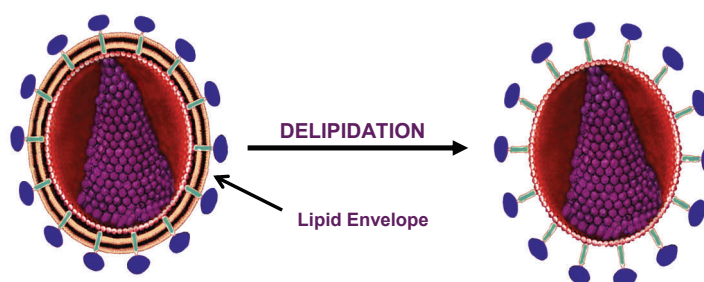
We have demonstrated a very positive therapeutic effect with our delipidated autologous virus vaccine in SIV-infected non-human primates. SIV is a well-accepted model for HIV. In a recent 22-month non-human primate study, all animals in the treatment arm responded with an average reduction in viral load in excess of 90%. While the study was not powered for statistical significance, it revealed an extremely strong trend of $p=0.1$, indicating the strong benefit of autologous delipidated viral vaccination in lowering viral loads in chronically-infected animals.

Separately, our collaboration with Elanco Animal Health achieved success in a proof-of-concept study for a preventive vaccine in a targeted animal population, marking the first key milestone in this collaboration. As a result, Elanco has exercised its right to opt in by paying a technology access fee to Lipid Sciences.

Viral Immunotherapy Process

Approximately 33 million people worldwide are currently infected with HIV.

Three million additional people become infected every year.



- Targeted Lipid Removal
- Remove 20%-60% of Lipids
- Expose New Epitopes

- Maintain Integrity of Viral Particle
- Retain >90% of Viral Proteins
- Elicit a Novel Immune Response to Treat Underlying Disease

Program Summary

HDL Therapy	Goal	Status	Key Milestones / Strategic Objectives
<p>HDL Mimetic Peptides</p> <p>LSI-518P</p> <p>"First in Class"</p>	<p>Regress Plaque</p> <p>Reduce Inflammation</p>	<p><i>In Vivo</i> Pre-Clinical</p> <p>Reduction of Atherosclerosis:</p> <ul style="list-style-type: none"> • 20% after 4 weeks • 32% after 8 weeks <p><i>In Vitro</i></p> <p>Anti-Inflammation</p>	<p>IND - Q3 2009</p> <p>Phase 1a - Q4 2009</p>
<p>R&D Investment Focus ...</p> <p>Move LSI-518P "Into the Clinic"</p>			
HDL Selective Delipidation	Reverse Atherosclerosis	Safety and Feasibility Clinical	Corporate Partnership
Viral Immunotherapy	Goal	Status	Strategic Objectives
Viral Immunotherapy	Therapeutic and Preventive Vaccine for HIV	Therapeutic Pre-Clinical Studies Completed	Grant Funding for Preventive Vaccine Program
Animal Health	Preventive Vaccine Development for Food and Companion Animals	<ul style="list-style-type: none"> • Initial Vaccine Indication Developed - Technology Access Fee Received • R&D Reimbursed by Elanco/Lilly 	Additional Animal Vaccine Development as Determined by Elanco/Lilly

Advisory Boards

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