NEW STUDIES CONDUCTED BY SPHERIX SUPPORT USE OF D-TAGATOSE TO REDUCE AND STABILIZEATHEROSCLEROTIC PLAQUES

BETHESDA, MD (April 18, 2012) – Spherix Incorporated (NASDAQ: SPEX) – an innovator in biotechnology for therapy in diabetes, metabolic syndrome and atherosclerosis, and provider of technical and regulatory consulting services to food, supplement, biotechnology and pharmaceutical companies – today announced results from its recently completed studies using near-infrared spectroscopy on autopsy samples from humans who had confirmed cardiovascular disease. Results showed that these atherosclerotic plaques had abnormally high amounts of macrophages and reduced levels of collagen and elastin. Reducing collagen and elastin weakens the plaques and contributes to plaque rupture, myocardial infarction and/or stroke (see Figure).1

Importantly, these findings show the relevance of Spherix’s newly completed study involving D-tagatose and LDLR-/- mice, which are predisposed to developing atherosclerosis and mimic the pathogenesis of atherosclerosis in humans. Similar to what was found in the human study, infrared spectrometric imaging of diseased vascular samples from mice given an atherogenic diet containing high amounts of sucrose showed increases in macrophages and reductions in collagen and elastin content. The mice fed an atherogenic diet containing D-tagatose but not sucrose showed significantly fewer plaques and infrared spectrometric imaging of the plaques that developed revealed fewer macrophages, and more collagen and elastin. These results suggest that D-tagatose not only reduces the number of plaques formed, but also may stabilize atherosclerotic plaques.

LDL cholesterol particles imbedded within atherosclerotic plaques have been reported to attract circulating monocytes into the lesion, thereby leading to the accumulation of macrophages in the plaque and weakening of atherosclerotic lesions.2 Diets high in fat, cholesterol and carbohydrates promote the development of atherosclerosis in both animals and humans by increasing triglycerides and LDL cholesterol in the blood. Dr. Robert Lodder, President of Spherix remarked, “We know that our drug candidate, SPX-106T, significantly reduces the number of atherosclerotic plaques in animal models. These new results, however, are very exciting because they not only support Spherix’s previous findings, but also open the door to new therapeutic opportunities.”

“It is encouraging to note that D-tagatose has a beneficial effect on atherosclerosis and Spherix is successfully providing experimental evidence that our two drug candidates in combination therapy, SPX-106T, work synergistically to produce the desired therapeutic activity needed to advance SPX-106T through clinical and regulatory development,” said Dr. Claire Kruger, Spherix’s Chief Executive Officer. “SPX-106T is consistent with our business strategy to develop combination drugs that affect multiple pathways to disease.”

About Spherix
Spherix Incorporated was launched in 1967 as a scientific research company under the name Biospherics Research. The Company now leverages its scientific and technical expertise and experience through its two subsidiaries – Biospherics Incorporated and Spherix Consulting, Inc. Biospherics is dedicated to developing and licensing/marketing proprietary therapeutic products for treatment of diabetes, metabolic syndrome and atherosclerosis. Biospherics is exploring new drugs and combinations for treatment of high triglycerides, a risk factor for atherosclerosis, myocardial infarction, and stroke, and would like a pharmaceutical partner to continue development of D-tagatose as a treatment for diabetes. Spherix’s Consulting subsidiary provides scientific and strategic support for suppliers, manufacturers, distributors and retailers of conventional foods, biotechnology-derived foods, medical foods, infant formulas, food ingredients, dietary supplements, food contact substances, pharmaceuticals, medical devices, consumer products and industrial chemicals and pesticides. For more information, please visit www.spherix.com.

**Forward-Looking Statements**

This release contains forward-looking statements which are made pursuant to provisions of Section 21E of the Securities Exchange Act of 1934. Investors are cautioned that such statements in this release, including statements relating to planned clinical study design, regulatory and business strategies, plans and objectives of management and growth opportunities for existing or proposed products, constitute forward-looking statements which involve risks and uncertainties that could cause actual results to differ materially from those anticipated by the forward-looking statements. The risks and uncertainties include, without limitation, risks that product candidates may fail in the clinic or may not be successfully marketed or manufactured, we may lack financial resources to complete development of our products, the FDA may interpret the results of studies differently than us, competing products may be more successful, demand for new pharmaceutical products may decrease, the biopharmaceutical industry may experience negative market trends, our continuing efforts to develop products may be unsuccessful, our common stock could be delisted from the Nasdaq Capital Market, and other risks and challenges detailed in our filings with the U.S. Securities and Exchange Commission. Readers are cautioned not to place undue reliance on any forward-looking statements which speak only as of the date of this release. We undertake no obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect events or circumstances that occur after the date of this release or to reflect the occurrence of unanticipated events.

![Human Weakened Atherosclerotic Plaque](image)

Figure: Human Weakened Atherosclerotic Plaque

Representative cross-section of an atherosclerotic plaque in the coronary artery of a human that died of a myocardial infarction. The atherosclerotic plaque fills the entire left portion of the artery, is separated from the central cavity by the fibrous cap, and restricts blood flow in the artery.