SPX-106T ARRESTS DEVELOPMENT OF Atherosclerotic Plaques IN MOUSE MODEL OF CARDIOVASCULAR DISEASE

BETHESDA, Md. (March 7, 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 that one of its drug candidates, SPX-106T, arrested development and reduced atherosclerotic plaque area in the aortic arch, thoracic aorta and sinus of Valsalva in mice genetically predisposed to cardiovascular disease. Atherosclerosis can lead to myocardial infarction (MI) and stroke. Each year, about 770,000 people in the United States experience their first MI, and about one-third of these events are fatal.1-3

Two groups of apolipoprotein E-deficient mice (control and SPX-106T) were each fed a Western diet (high in fat and carbohydrates) for eight weeks. In the SPX-106T group, the sucrose portion of the dietary carbohydrates was replaced with D-tagatose and SPX-106 was added at 0.1%. Plaque area was quantified at three locations: the sinus of Valsalva on top of the heart, aortic arch, and thoracic aorta (Figure 1a). SPX-106T reduced atherosclerotic plaque areas almost 5-fold in all locations (p<0.05 in thoracic aorta, p<0.01 in aortic arch and sinus of Valsalva). Photomicrographs of the sinus of Valsalva illustrate the reduction of atherosclerosis with SPX-106T (Figure 1b).

These results expand on previous work done by Spherix, which was presented at the American Association of Pharmaceutical Scientists (AAPS) 2011 national meeting in October, showing that SPX-106T significantly reduced serum cholesterol, the amount of subcutaneous, retroperitoneal, and epididymal body fat, and prevented body weight gain. These data also support Spherix’s other findings that SPX-106T reduced atherosclerotic lesion areas in the aortic arches of LDL receptor-deficient mice fed fructose and glucose.

“As we continue the development program for SPX-106T, we are gaining valuable insight into the therapeutic potential for SPX-106T. We are looking forward to bringing SPX-106T into human clinical trials in 2012,” noted Dr. Claire Kruger, CEO of Spherix.

LDL-cholesterol is a known risk factor for the development of atherosclerosis in humans.4 Spherix has previously shown that LDL-cholesterol is reduced in LDL receptor-deficient mice treated with SPX-106T.

“This is a very exciting time for Spherix,” remarked Dr. Robert Lodder, Spherix’s President. “We have now tested SPX-106T in two different genetic models and are looking into the underlying mechanisms by which SPX-106T prevents plaque development in the apolipoprotein E-deficient mice. We are also expanding the applications of SPX-106T to other indications where dyslipidemia may be a primary risk factor.”

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 actively seeking a pharmaceutical partner to continue the development of its Phase 3 compound for the treatment of diabetes, D-tagatose, while exploring new drugs and combinations for treatment of high triglycerides, a risk factor for atherosclerosis, myocardial infarction, and stroke. 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.


**Figure 1a:** SPX-106T arrests development and reduces atherosclerotic plaque area in the sinus of Valsalva, aortic arch and thoracic aorta (** = p<0.01, * = p<0.05).

**Figure 1b:** SPX-106T reduces atherosclerosis in the sinus of Valsalva. Tissues were sectioned and stained with Oil Red O. Atherosclerotic plaques are shown in red.