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SPHERIX PHASE 2 TRIAL WITH D-TAGATOSE DETERMINES MINIMUM DOSE FOR HBA1C AND TRIGLYCERIDES

- Significant Reduction In Triglycerides Observed-

BETHESDA, MD (December 9, 2010) – Spherix Incorporated (NASDAQ: SPEX), an innovator in biotechnology for therapy in diabetes, metabolic syndrome and atherosclerosis; and providers of technical and regulatory consulting services to food, supplement, biotechnology and pharmaceutical companies, today announced that its Phase 2 diabetes clinical trial, designed to determine the minimum dose of D-tagatose capable of reducing HbA1c, found that the minimum dose capable of affecting HbA1c (7.5 g three-times daily, or TID) was within the range of doses tested (2.5, 5.0, and 7.5 g TID), with the 2.5 and 5.0 g doses producing similar responses to one another, and the 7.5 g dose producing a greater response.

In addition, by the end of the six-month trial, the 7.5 g dose reduced serum triglycerides vs. the 2.5 g dose by -42 mg/dl from a mean of 180 mg/dl in the Evaluable Efficacy (EE) population. The reduction in serum triglycerides became statistically significant in the Intent-To-Treat (ITT) population at three months of treatment (-31 mg/dl, $p=0.03$) and the reduction essentially held steady at the six-month end-of-study visit (-29 mg/dl).

In the single-blind study designed to establish the minimum dose capable of causing a beneficial effect, three different doses of D-tagatose were administered to patients orally with meals TID. The comparator was the 2.5 g dose. The study was designed with a minimum of 34 patients in each of the three groups for a total of 102 evaluable patients. The primary endpoint for the study was reduction in HbA1c after six months of treatment. In the minimum dose range, D-tagatose produced a -0.3% reduction in HbA1c in the 7.5 g dose group vs. the 2.5 g dose group in the EE population, from a mean randomization HbA1c of 7.4%. The reduction of the 7.5 g dose was 0.2% more than the 2.5 g dose in the ITT population.

Unlike other drugs, D-tagatose lowered triglycerides without elevating LDL. In fact, D-tagatose in the 7.5 g dose reduced LDL vs. the 2.5 g dose by -11 mg/dl by the third month of treatment, although the difference was not statistically significant. The reduction essentially held steady at the six-month end-of-study visit (-10 mg/dl). HDL was unchanged, increasing only between 0.3 and 1.4 mg/dl over the entire course of the study vs. comparator. Analysis of patient subgroups in the U.S. and India with elevated body mass and/or HbA1c is in progress.

“The decrease in triglycerides of more than 20% in patients with a mean serum triglycerides level that is not even in the High category supports our decision to begin an aggressive drug development program with D-tagatose in hypertriglyceridemia, atherosclerosis and the metabolic syndrome,” said Dr. Claire L. Kruger, CEO of Spherix. “We are encouraged by the statistically significant reduction in triglycerides in the ITT population, which is usually difficult to achieve because patients in this population need only receive a single dose in the entire trial in order to qualify. However, this token dose requirement allows a larger number of patients into the ITT population, which in turn makes it easier to detect a smaller change with statistical significance in a minimum dose range finding trial.”

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 development of D-tagatose and recently completed a Phase 3 clinical trial to study the use of D-tagatose as a treatment for Type 2 diabetes. Biospherics is actively

seeking a pharma partner to continue the diabetes development while exploring D-tagatose as a potential treatment for 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 D-tagatose, 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 D-tagatose 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, including our current report on Form 8-K filed on October 10, 2007. 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.

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