

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) May 21, 2010

SPHERIX® INCORPORATED

(Exact name of registrant as specified in its charter)

<u>Delaware</u>	<u>0-5576</u>	<u>52-0849320</u>
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)
<u>6430 Rockledge Drive, Suite 503, Bethesda, MD</u>		<u>20817</u>
(Address of principal executive offices)		(Zip Code)
Registrant's telephone number, including area code	<u>301-897-2540</u>	

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Section 2 – Financial Information.

Item 2.02. Results of Operations and Financial Condition.

On May 21, 2010, the Registrant issued a press release regarding its financial results for the quarter ended March 31, 2010. A copy of the press release is attached hereto as Exhibit 99.1.

The information provided in this Current Report on Form 8-K is being provided pursuant to Item 2.02 of Form 8-K. The information in this report shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except as shall be expressly set forth by specific reference in such a filing.

Section 9 – Financial Statements and Exhibits.

Item 9.01. Financial Statements and Exhibits.

Exhibit 99.1 – Press Release dated May 21, 2010.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Spherix Incorporated
(Registrant)

By:

/s/ Robert L. Clayton
Robert L. Clayton
Chief Financial Officer

/s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer

Date: May 21, 2010

Investor Relations
Phone: (301) 897-2564
Email: info@spherix.com

SPHERIX ANNOUNCES FIRST QUARTER 2010 FINANCIAL RESULTS

BETHESDA, MD, May 21, 2010 - Spherix Incorporated (NASDAQ CM: SPEX), an innovator in biotechnology for diabetes therapy, and a provider of technical and regulatory consulting services to food, supplement, biotechnology and pharmaceutical companies, today reported results for the three months ended March 31, 2010.

Recent and Upcoming Highlights

- **D-Tagatose as a Treatment for Type 2 Diabetes**
 - The phase 3 efficacy trial will complete very soon (Q3 2010), following the successful conclusion of enrollment in January 2010
 - Announced encouraging blinded interim Phase 3 clinical trial data that suggested a reduction in variability of HbA1c levels, the primary endpoint of the trial
 - Reported positive preliminary interim Phase 2 (Dose Range) clinical trial data suggesting a dose-proportional reduction of HbA1c levels using various doses of D-tagatose lower than the dose used in the current Phase 3 trial
 - Conducted a second round of Medical Advisory Board meetings to provide clinical guidance for the development program for D-tagatose as a treatment for Type 2 diabetes

- **Health Sciences Consulting**
 - Recent and upcoming trade and professional shows:
 - 2010 Annual Meeting, American Association for the Advancement of Science, February 2010, San Diego, CA
 - 49th Annual Meeting, Society of Toxicology, March 2010, Salt Lake City, UT
 - Institute of Food Technologists, Wellness 10 Conferences, March 2010, Chicago, IL
 - 9th Vahouny Fiber Symposium, June 9, 2010, Bethesda, MD
 - American Society of Pharmacognosy, Phytochemical Society of North America, July 10-14, 2010, St. Petersburg Beach, FL
 - 2010 IFT Annual Meeting & Food Expo, July 12-20, 2010, Chicago, IL

- **Corporate**
 - \$6.3 million capital raise completed in November 2009
 - Career pharmaceutical executive Thomas B. Peter appointed to the Company's Board of Directors, and Dr. Robert J. Vander Zanden elected Chairman of the Board
 - Contracted Leisa Dennehy to spearhead Commercial and Corporate Development including marketing and business development for D-tagatose and to oversee investor and public relations for Spherix
 - Appointed Ram R. Nimmagudda, Ph.D., Director of New Business Development
 - Signed a full-scale, manufacturing supply agreement with Inalco S.p.A. of Milan, Italy to provide commercial scale quantities of D-tagatose
 - Terminated agreement with Arla Foods Ingredients Amba; Regained rights to all non-pharmaceutical uses of D-tagatose in U.S.
 - Recent and upcoming trade shows/investor conferences in 2010:
 - BIO Annual Meeting, Chicago, IL, May 3-6, 2010
 - ENDO Society Annual Meeting, June 19-22, San Diego
 - American Diabetes Association Annual Meeting, Orlando, FL, June 25-29, 2010

Financial Results for the Three Months Ended March 31, 2010

Revenue and direct costs are directly related to the Company's health sciences consulting segment. The Company's consulting business provides technical and regulatory consulting services to biotechnology and pharmaceutical companies, as well as critical technical support for the Company's own R&D activities.

The Company's ongoing research and development activities are focused on the development of D-tagatose, a potential new treatment for Type 2 diabetes. D-Tagatose is believed to depress elevations of blood sugar levels in diabetic patients by increasing glycogen synthesis while decreasing glycogen utilization, resulting in an improvement of blood sugar control and modulation of HbA1c. Two clinical trials are being conducted by the Company, both on the use of D-tagatose as a treatment for Type 2 diabetes under a Food and Drug Administration ("FDA") Investigational New Drug application: a Phase 3 trial to determine safety and efficacy; and a Phase 2 Dose Range trial to evaluate the effectiveness of D-tagatose at lower doses. R&D costs for the three months ended March 31, 2010 were less than those of the comparable period in 2009. This difference is primarily related to additional costs incurred in 2009 in connection with the expansion of the Phase 3 trial to India. The Dose Range trial and the efficacy portion of the Phase 3 trial are expected to be completed in mid- to late-2010, and the safety portion of the Phase 3 trial is expected to be completed in early 2011.

As the Spherix approaches the end of the trials noted above, the Company is conducting a full review of the current processes and programs in order to determine the steps we should take to secure FDA approval, assuming our clinical trials are successful. National thought leaders in clinical management of diabetes, in diabetes drug development, and in FDA regulatory affairs and execution of an NDA have been engaged in advisory boards and consulting projects to advise us on our product development plan in the U.S. The FDA regulatory climate has changed substantially in the last few years, and the FDA is now tending towards requiring a much larger body of evidence to evaluate drug safety than when Spherix began its Phase 3 studies in 2007. Initial feedback suggests that, in addition to successful current clinical trials, it may be prudent to perform additional work, which may include additional clinical studies, before submission of the NDA application.

The increase in selling, general and administrative costs between 2010 and 2009 is primarily related to the expansion of the Company's market development efforts of D-tagatose as a treatment for Type 2 diabetes. The Company intends to continue expansion of its market development activities and simultaneously search for a sale, license, partner, or other strategic alliance to fully take D-tagatose through the FDA approval process and to bring D-tagatose to market.

About D-Tagatose

D-tagatose, a naturally occurring sugar, is a low-calorie, full-bulk sweetener previously approved by the Food and Drug Administration ("FDA") as a GRAS (Generally Recognized As Safe) food ingredient. It is a true sugar that looks, feels, and tastes like table sugar. During human safety studies supporting food use, the Company discovered and patented a number of health and medical uses for D-tagatose. The Company holds the patents for use of D-tagatose as a treatment for Type 2 diabetes. The use patents for D-tagatose as a treatment for Type 2 diabetes expire in 2012, not including extensions. If approved for use as a drug by the FDA, the Company believes it will be eligible for a five year New Chemical Entity ("NCE") exclusivity period following FDA approval. Similar legislation in Europe could provide seven years of market exclusivity in the European Union, if approved by the European Medicines Agency (EMA).

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 currently running a Phase 3 clinical trial to study the use of D-tagatose as a treatment for Type 2 diabetes. Its Spherix 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.

- Tables Follow -

Spherix Incorporated
Consolidated Statements of Operations

	Three Months Ended March 31,	
	2010	2009
Revenue	\$ 332,291	\$ 360,670
Operating expense		
Direct costs	119,629	130,542
Research and development expense	1,311,879	1,561,389
Selling, general and administrative expense	1,050,647	759,270
Total operating expense	2,482,155	2,451,201
 Loss from operations	 (2,149,864)	 (2,090,531)
Interest income	1,988	24,447
Loss before taxes	(2,147,876)	(2,066,084)
Income tax expense	-	-
Net loss	\$ (2,147,876)	\$ (2,066,084)
Net loss per share, basic	\$ (0.13)	\$ (0.14)
Net loss per share, diluted	\$ (0.13)	\$ (0.14)
 Weighted average shares outstanding, basic	 17,150,648	 14,357,162
Weighted average shares outstanding, diluted	17,150,648	14,357,162

Spherix Incorporated Consolidated Balance Sheets

ASSETS	March 31, 2010 (Unaudited)	December 31, 2009
Current assets		
Cash and cash equivalents	\$ 6,263,047	\$ 9,026,002
Short-term investments held to maturity	375,003	375,003
Trade accounts receivable	308,010	274,153
Other receivables	909	948
Prepaid expenses and other assets	161,619	209,255
Total current assets	7,108,588	9,885,361
Property and equipment, net	207,961	225,958
Patents, net of accumulated amortization of \$46,173 and \$44,657	6,847	8,364
Deposit	35,625	35,625
Total assets	\$ 7,359,021	\$ 10,155,308
 LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	\$ 1,224,882	\$ 1,714,140
Accrued salaries and benefits	288,044	388,665
Deferred revenue	79,604	90,915
Total current liabilities	1,592,530	2,193,720
Deferred compensation	535,000	580,000
Deferred rent	103,346	109,712
Total liabilities	2,230,876	2,883,432
Commitments and contingencies	-	-
Stockholders' equity		
Preferred stock, \$0.01 par value, 2,000,000 shares authorized; none issued and outstanding	-	-
Common stock, \$0.005 par value, 50,000,000 shares authorized; 17,231,086 issued, and 17,150,648 shares outstanding at March 31, 2010 and December 31, 2009	86,155	86,155
Paid-in capital in excess of par value	33,603,655	33,599,510
Treasury stock, 80,438 shares, at cost at March 31, 2010 and December 31, 2009	(464,786)	(464,786)
Accumulated deficit	(28,096,879)	(25,949,003)
Total stockholders' equity	5,128,145	7,271,876
Total liabilities and stockholders' equity	\$ 7,359,021	\$ 10,155,308