

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) April 1, 2010

**SPHERIX® INCORPORATED**

(Exact name of registrant as specified in its charter)

Delaware	0-5576	52-0849320
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)
6430 Rockledge Drive, Suite 503, Bethesda, MD		20817
(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 April 1, 2010, the Registrant issued a press release regarding its financial results for the year ended December 31, 2009. 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 April 1, 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:** April 1, 2010

**Investor Relations**  
**Phone: (301) 897-2540**  
**Email: info@spherix.com**

## **SPHERIX ANNOUNCES 2009 FINANCIAL RESULTS**

BETHESDA, MD, April 1, 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 year ended December 31, 2009.

### **Recent and Upcoming Highlights**

- **D-Tagatose as a Treatment for Type 2 Diabetes**
  - Announced positive blinded interim Phase 3 clinical trial data that suggest a statistically significant reduction in variability of HbA1c levels, the primary endpoint of the trial; full Phase 3 data are expected in 2010
  - Reported preliminary blinded 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 the Company's first Medical Advisory Board to provide clinical guidance for the development program for D-tagatose as a treatment for Type 2 diabetes
  - Received its first full-scale production batch of cGMP (FDA Current Good Manufacturing Practice) D-tagatose, USP (U.S. Pharmacopeia) grade from Inalco S.p.A., of Italy
  
- **Health Science Consulting**
  - Recent trade and professional shows:
    - 30<sup>th</sup> Annual Meeting of the American College of Toxicology, November 2009, Palm Springs, CA
    - 13<sup>th</sup> Annual Supply Side West "Probiotics: Market Opportunities and Consumer Trends", November 2009, Las Vegas, NV
    - 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
  
- **Corporate**
  - \$6.3 million capital raise completed in November
  - 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 long-term, 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.
  - Upcoming trade shows/investor conferences in 2Q 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 Year Ended December 31, 2009**

During 2009, the Company experienced a 32% growth in revenue over that of the prior year. This increase reflects the steady growth of the Company's Health Sciences consulting business since its launch in July 2007. The Health Sciences 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. 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. The \$2.8 million increase in research and development costs between years reflect a \$1.4 million expense for the purchase of D-tagatose and the overall expansion of the Phase 3 trial in 2009.

Following encouraging results from blinded interim analysis of both the Dose Range and the Phase 3 trials, the Company also began expansion of its market development activities in late 2009. These activities included the formation of an Advisory Board in October 2009, and the addition of Ram Nimmaguddu and Leisa Dennehy in late 2009 to spearhead commercial development of D-tagatose. 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.

The net loss for the year ended 2009 was \$9.1 million, or \$0.62 per share, compared with a net loss of \$4.1 million, or \$0.29 per share, in 2008. As of December 31, 2009, the Company's total cash, cash equivalents and short-term investments on hand was \$9.4 million, compared to \$11.3 million at December 31, 2008. Working capital as of December 31, 2009, was \$7.7 million, a decrease of \$10.8 million from working capital at December 31, 2008.

"In 2009, Spherix experienced a number of watershed moments," commented Dr. Claire Kruger, Chief Executive Officer of Spherix Incorporated. "We are confident that the passing of these milestones and our completion of future objectives will bring the Company ever closer to gaining marketing approval from the FDA and commercializing D-tagatose as a novel treatment option for patients with Type 2 diabetes. As we await the un-blinding of our pivotal Phase 3 data later this year, we will continue to be diligent in our work to elevate Spherix's visibility within the scientific, investment and pharmaceutical executive communities while remaining focused on our commitment to executing our business plan and growing shareholder value."

### **Conference Call**

Due to a number of scheduling conflicts, the management team will not be available as a whole to host a conference call today. However, Spherix will host a call on April 14, 2010, 10:00 a.m. ET to discuss the Company's financial results and provide a corporate update. To participate in the live conference call, please dial (888) 335-6390 and provide passcode 65997737. A live webcast of the call will also be available at:

<http://investor.shareholder.com/media/eventdetail.cfm?eventid=79539&CompanyID=SPEX&e=1&mediaKey=0BE4AE2289F07A8C5A9ADC0E0E241D0E>

Please allow extra time prior to the webcast to register, download and install any necessary audio software. The webcast will be archived for 1 year.

## **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](http://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**

	<b>2009</b>	<b>2008</b>
<b>Revenue</b>	\$ 1,359,110	\$ 1,025,961
Operating expense		
Direct costs	449,293	397,645
Research and development expense	6,830,957	4,004,565
Selling, general and administrative expense	3,265,137	3,135,310
Total operating expense	10,545,387	7,537,520
Loss from operations	(9,186,277)	(6,511,559)
Interest income	37,646	348,443
Interest expense	-	(2,220)
Other expense	-	(5,994)
Loss from continuing operations before taxes	(9,148,631)	(6,171,330)
Income tax benefit	-	552,803
<b>Loss from continuing operations</b>	<b>(9,148,631)</b>	<b>(5,618,527)</b>
Discontinued operations		
Income from discontinued operations	-	2,070,091
Income tax expense	-	(587,098)
Income from discontinued operations	-	1,482,993
<b>Net loss</b>	<b>\$ (9,148,631)</b>	<b>\$ (4,135,534)</b>
Net (loss) income per share, basic		
Continuing operations	\$ (0.62)	\$ (0.39)
Discontinued operations	\$ -	\$ 0.10
Net (loss) income per share, basic	\$ (0.62)	\$ (0.29)
Net (loss) income per share, diluted		
Continuing operations	\$ (0.62)	\$ (0.39)
Discontinued operations	\$ -	\$ 0.10
Net (loss) income per share, diluted	\$ (0.62)	\$ (0.29)
Weighted average shares outstanding, basic	14,713,473	14,342,953
Weighted average shares outstanding, diluted	14,713,473	14,342,953

**Spherix Incorporated**  
**Consolidated Balance Sheets**

<b>ASSETS</b>	<b>2009</b>	<b>2008</b>
Current assets		
Cash and cash equivalents	\$ 9,026,002	\$ 9,404,843
Short-term investments, held to maturity	375,003	1,894,434
Trade accounts receivable	274,153	281,342
Other receivables	948	37,223
Prepaid expenses and other assets	209,255	282,971
Total current assets	<u>9,885,361</u>	<u>11,900,813</u>
Property and equipment, net	225,958	310,365
Patents, net of accumulated amortization of \$38,588 and \$110,599	8,364	14,433
Deposit	35,625	35,625
Total assets	<u>\$ 10,155,308</u>	<u>\$ 12,261,236</u>
 <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable and accrued expenses	\$ 1,714,140	\$ 710,881
Accrued salaries and benefits	388,665	304,756
Deferred revenue	90,915	39,347
Total current liabilities	<u>2,193,720</u>	<u>1,054,984</u>
Deferred compensation	580,000	660,000
Deferred rent	109,712	136,736
Total liabilities	<u>2,883,432</u>	<u>1,851,720</u>
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 and 14,437,600 issued, 17,150,648 and 14,357,162 outstanding at December 31, 2009 and 2008, respectively	86,155	72,188
Paid-in capital in excess of par value	33,599,510	27,602,486
Treasury stock, 80,438 shares, at cost at December 31, 2009 and 2008, respectively	(464,786)	(464,786)
Accumulated deficit	<u>(25,949,003)</u>	<u>(16,800,372)</u>
Total stockholders' equity	<u>7,271,876</u>	<u>10,409,516</u>
Total liabilities and stockholders' equity	<u>\$ 10,155,308</u>	<u>\$ 12,261,236</u>