

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 13, 2011

**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 13, 2011, the Registrant issued a press release regarding its financial results for the quarter ended March 31, 2011. 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 13, 2011.

**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 13, 2011

Investor Relations  
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## SPHERIX ANNOUNCES FIRST QUARTER FINANCIAL RESULTS

**BETHESDA, Md. (May 13, 2011) – Spherix Incorporated (NASDAQ: SPEXD)** – 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 reported financial results for the three months ended March 31, 2011.

### Recent and Upcoming Highlights

- **Pharmaceutical Development**
  - Began a multi-unit research contract to investigate the role of D-tagatose in lowering triglycerides
  - Began preclinical animal testing of SPX10624258 in combination with D-tagatose
  - Seeking a strategic relationship with a pharmaceutical company for the continued development of D-tagatose as a treatment for Type 2 diabetes
- **Health Sciences Consulting**
  - Recent and upcoming trade and professional shows:
    - April 9, 2011: Dr. Claire Kruger, Spherix CEO, spoke at the American Dietetic Association's Nutrition News Forecast 2011 in Chicago
    - May 16, 2011: Spherix Consulting's Principal Advisor, Dr. A. Wallace Hayes, will be presenting at the American College of Toxicology's Toxicology for Industrial and Regulatory Scientists Program, to be held in Falls Church, Va.; his presentation, "Basic Principles of Toxicology," was co-authored by Dr. Kruger
- **Corporate**
  - Raised \$2.77 million in a registered direct offering of common stock and warrants
  - On May 6, 2011, effected a one for ten reverse stock split of the Company's common stock

### Financial Results for the Three Months Ended March 31, 2011

The net loss for the first quarter of 2011 was \$0.2 million or \$0.10 per share, compared with a net loss for the first quarter of 2010 of \$2.1 million or \$1.25 per share. The narrowing of the net loss was attributed mainly to lower research and development expenses, and gain on settlement of obligations of \$0.8 million of which \$0.6 million related to a settlement of future purchase obligations with the Company's manufacturer of D-tagatose and \$0.2 million related to an agreement with the Company's founders, Gilvert V. Levin and M. Karen Levin.

Spherix reported research and development (R&D) expense for the first quarter of 2011 of \$0.4 million, a decrease of \$1.0 million from R&D expense of \$1.3 million in the prior year's first quarter. R&D expenses are entirely incurred by Biospherics, the Company's pharmaceutical development subsidiary. The decrease in R&D was attributed to lower spending following completion of a Phase 3 clinical trial and a Phase 2 dose-ranging trial to develop D-tagatose for the treatment of Type 2 diabetes. First quarter 2011 R&D expense is related to the Company's preclinical trials for the use of both D-tagatose and SPX10624258 in lowering triglyceride levels. 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.

The Company had cash and cash equivalents of \$6.5 million and working capital of \$6.6 million as of March 31, 2011, compared with \$5.6 million and \$4.9 million, respectively, as of December 31, 2010. The Company raised \$2.77 million in a registered direct offering of common stock and warrants during the first quarter.

Commenting on the quarter and recent weeks, Dr. Kruger said, "We have been very pleased thus far with the progress and results of our preclinical studies with D-tagatose in the treatment of high triglycerides and other metabolic disorders. We also tested our new pipeline compound for treating dyslipidemia, SPX10624258, which was licensed from the University of Kentucky last year, in conjunction with D-tagatose and were encouraged by the results. Although it's very early to draw conclusions, it appears that the combination of the two compounds are worthy of further preclinical study. Combination therapy is an important tool in many complex disease settings, such as the metabolic syndrome. The Company also expects to conduct a human proof-of-concept trial that may begin in 2012 once a new IND is in place for the SPX10624258/D-tagatose combination. We estimate that it will likely take three or more years to complete the studies necessary to attract a pharma partner to complete the development, and an additional two to four years to complete all necessary studies for an NDA filing for D-tagatose or SPX10624258."

Dr. Kruger continued, "With respect to the Type 2 diabetes indication, we continue to actively search for an appropriate partner to develop the drug further. As we previously reported, because it would likely take several additional years of clinical trials and could cost as much as several hundred million dollars to secure FDA approval for D-tagatose as a diabetes drug, Spherix does not have the resources to continue development for this indication. We are hopeful partners will be attracted to our Phase 3 trial in Type 2 diabetes and the stellar safety record for D-tagatose," Dr. Kruger added.

Until June 2010 Biospherics' activities were limited to developing D-tagatose as a novel, first-in-class treatment for Type 2 diabetes. In June 2010 the Company announced that it will actively seek a pharma partner to continue the diabetes development and that it will also explore D-tagatose as a potential treatment for high triglycerides, a risk factor for atherosclerosis, myocardial infarction and stroke. The clinical trials in the use of D-tagatose for the treatment of Type 2 diabetes have been the primary focus of the Biospherics segment.

#### **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](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 -

### **Consolidated Statements of Operations**

(Unaudited)

	<b>Three Months Ended March 31,</b>	
	<b>2011</b>	<b>2010</b>
<b>Revenue</b>	\$ 306,303	\$ 332,291
<b>Operating expense</b>		
Direct costs	(130,296)	(119,629)
Research and development expense	(355,503)	(1,311,879)
Selling, general and administrative expense	(932,204)	(1,050,647)
Total operating expense	(1,418,003)	(2,482,155)
<b>Loss from operations</b>	(1,111,700)	(2,149,864)
Interest income	1,219	1,988
Other income	44,630	-
Gain on settlement of obligations	845,000	-
Loss before taxes	(220,851)	(2,147,876)
Income tax expense	(14,485)	-
<b>Net loss</b>	\$ (235,336)	\$ (2,147,876)
Net loss per share, basic	\$ (0.10)	\$ (1.25)
Net loss per share, diluted	\$ (0.10)	\$ (1.25)
Weighted average shares outstanding, basic	2,448,647	1,715,065
Weighted average shares outstanding, diluted	2,448,647	1,715,065

## Consolidated Balance Sheets

<b>ASSETS</b>	<b>March 31, 2011 (Unaudited)</b>	<b>December 31, 2010</b>
Current assets		
Cash and cash equivalents	\$ 6,544,793	\$ 5,575,310
Trade accounts receivable, net of allowance of \$0 and \$65,000	193,125	285,859
Grants receivable	-	270,128
Other receivables	105,685	74,110
Prepaid research expenses	404,032	464,322
Prepaid expenses and other assets	146,226	155,261
Total current assets	7,393,861	6,824,990
Property and equipment, net of of accumulated depreciation of \$215,008 and \$197,971	139,498	154,161
Patents, net of accumulated amortization of \$1,839 and \$50,725	307	2,296
Deposit	35,625	35,625
Total assets	\$ 7,569,291	\$ 7,017,072
 <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable and accrued expenses	\$ 395,111	\$ 1,211,561
Accrued salaries and benefits	253,712	563,706
Deferred revenue	96,515	170,641
Total current liabilities	745,338	1,945,908
Deferred compensation	-	550,000
Deferred rent	73,478	80,945
Total liabilities	818,816	2,576,853
Commitments and contingencies	-	-
Stockholders' equity		
Preferred stock, \$0.01 par value, 2,000,000 shares authorized; 5,250 series B issued and 1 outstanding at March 31, 2011 and December 31, 2010	-	-
Common stock, \$0.01 par value, 5,000,000 shares authorized; 2,570,531 and 2,143,631 issued, 2,562,487 and 2,135,587 outstanding at March 31, 2011 and December 31, 2010, respectively	25,705	21,436
Paid-in capital in excess of par value	41,110,137	38,568,814
Treasury stock, 8,043 shares, at cost at March 31, 2011 and December 31, 2010	(464,786)	(464,786)
Accumulated deficit	(33,920,581)	(33,685,245)
Total stockholders' equity	6,750,475	4,440,219
Total liabilities and stockholders' equity	\$ 7,569,291	\$ 7,017,072

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