

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) March 28, 2012

**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 March 28, 2012, the Registrant issued a press release regarding its financial results for the year ended December 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 March 28, 2012.

**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:** March 28, 2012

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

**SPHERIX ANNOUNCES 2011 FINANCIAL RESULTS**  
***Business Update Call to be Held April 11 at 1:00 p.m. Eastern Time***

**BETHESDA, MD (March 28, 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 reported financial results for the year ended December 31, 2011, and recent and upcoming business highlights.

**Recent and Upcoming Highlights**

• **Pharmaceutical Development**

- The Company has just requested a Type B meeting to discuss its preclinical development of SPX-106T, a new drug-drug combination product, and finalize its IND application for submission to the FDA
- Announced results showing that SPX-106T arrested development and reduced atherosclerotic plaque in the aortic arch, thoracic aorta and sinus of Valsalva in mice genetically predisposed to cardiovascular disease
- Raised \$1.15 million in a registered direct offering and \$1.25 million through a private placement transaction
- Announced the successful completion of a 28-day rat toxicology study of SPX-106, a component of SPX-106T, showing an ample margin of safety with the dosing planned for the first-in-human study later this year
- Announced that SPX-106T was effective at reducing hyperlipidemia in three animal models
- Recent and upcoming trade and professional shows:
  - September 30-October 5, 2012: Spherix's President, Dr. Robert Lodder will present two papers, "Nonparametric Feature Detection for Multifactorial Diseases with Ultrahigh Dimensional Data Spaces" and "Experimental Mechanisms for Suppression of Atherogenesis and Plaque Development" (title tentative), co-authored with Dr. Claire Kruger, Chief Executive Officer, Dr. A. Wallace Hayes, Spherix's Principal Advisor, and Dr. Dietrich Conze, Spherix's Science Consultant, at the SciX meeting in Kansas City, MO
  - March 29, 2012: Dr. Lodder will present a poster, co-authored with Brittney Metts, Sean Thatcher, and Dr. Lisa Cassis, on combination therapies for cardiovascular diseases and the metabolic syndrome at the CCTS Spring Conference in Lexington, KY
  - March 15, 2012: Dr. Lodder presented "Measurement of Lipoproteins in Treatment with SPX-106," co-authored with Drs. Kruger and Conze and Brittney Metts, at the Pittcon Conference in Orlando
  - March 12, 2012: Dr. Lodder, presented "Molecular Factor Computing (MFC) of the Extent of Atherosclerosis in D Tagatose Treatment," co-authored with Drs. Kruger and Conze, and Molly Binkley, at the Pittcon Conference
  - February 16, 2012: Dr. Kruger presented to investors as part of the LHA Life Sciences & Medical Technologies Virtual Conference
  - October 26, 2011: Dr. Lodder presented a poster co-authored with Drs. Kruger, Hayes and Conze, at the AAPS National Meeting in Washington, DC
  - September 12, 2011: Drs. Kruger and Lodder presented a corporate overview at the Rodman & Renshaw 13<sup>th</sup> Annual Healthcare Conference in New York

• **Health Sciences Consulting**

- Recent publications:
  - Dr. Nancy Booth, Spherix's Science Consultant, Drs. Kruger and Hayes, and Dr. Roger Clemens, Spherix's Senior Consultant, authored "An innovative approach to the safety evaluation of natural products: Cranberry (*Vaccinium macrocarpon* Aiton) leaf

- aqueous extract as a case study," accepted for publication by Food and Chemical Toxicology
- Drs. Kruger and Booth were quoted by NutraIngredients regarding the American Heart Association's recent claims regarding the GRAS (Generally Recognized As Safe) process: <http://www.nutraingredients-usa.com/Regulation/AHA-GRAS-attack-reaction-Why-self-affirmed-GRAS-is-not-GRAS-lite>
  - Dr. Kruger was quoted by NutraIngredients recently regarding the FDA's draft New Dietary Ingredient guidance: <http://www.nutraingredients-usa.com/Regulation/Harvard-professor-NDI-draft-guidance-doesn-t-go-far-enough>
  - Drs. Kruger, Booth, and Hayes authored "Exceptions to the New Dietary Ingredient Notification Requirement: Utilizing GRAS as a Path Forward," in Food Technology, pages 16-18, January 2012
- Recent and upcoming trade and professional shows:
    - January 23-May 7, 2012: Drs. Kruger and Hayes taught "ENVR E-159 Environmental Toxicology and Risk Management," during the Spring Term at Harvard University's Extension School
    - December 12, 2011: Dr. Kruger presented at the Food and Drug Law Institute's one-day workshop on New Dietary Ingredient Regulation and Compliance held in Washington, D.C.
    - November 18, 2011: Drs. Kruger and Booth both presented at the American College of Nutrition Conference held at the Malcolm Forbes Conference Center of Morristown Memorial Hospital, New Jersey
    - October 6, 2011: Dr. Kruger presented at Health Ingredients Japan in Tokyo
    - September 8, 2011: Drs. Kruger, Booth and Hayes presented at the American Herbal Product Association's Congress on New Dietary Ingredients held in Chicago

### **Financial Results for the Year Ended December 31, 2011**

The net loss for 2011 was \$3.5 million, or \$1.32 per share, compared with a net loss of \$7.7 million, or \$4.28 per share, for 2010. Working capital was \$4.6 million as of December 31, 2011, compared with \$4.9 million as of December 31, 2010. The Company's cash and cash equivalents as of December 31, 2011 were \$4.9 million, and in February 2012 the Company raised an additional \$1.15 million in a registered direct offering.

Since the fourth quarter of 2010, the Company's R&D segment has focused on the development of a new drug-drug combination of D-tagatose and SPX-106 referred to as SPX-106T (a licensed compound) to treat dyslipidemias. Prior to that, the primary focus of the Company's R&D activities was on clinical trials investigating the use of D-tagatose for the treatment of Type 2 diabetes. The shift from late-stage trials to a preclinical trial resulted in a decrease in R&D costs between years; the Company anticipates that R&D costs will begin to increase with the progression of its dyslipidemia studies.

The Company has just requested a Type B meeting to discuss its preclinical development of SPX-106T and finalize its IND application for submission to the FDA. A human proof-of-concept trial of SPX-106T is expected to begin in mid-2012. In general, combination therapies have proven to be very effective in treating complex diseases such as cancer, infectious diseases, cardiovascular disease, diabetes and metabolic syndrome because they improve treatment responses and/or minimize development of drug resistance.

We estimate that it will likely take three or more years to complete the studies and clinical trials necessary to attract a pharma partner to complete the development and an additional two to four years to complete all necessary studies for a New Drug Application filing for D-tagatose or SPX-106T.

"Spherix has made excellent progress with SPX-106T as a potential treatment for dyslipidemias, including high triglycerides; however, this is still an early stage compound. In order to strengthen and diversify our pipeline, and provide for a series of drugs in various stages of development, we are actively seeking to acquire or in-license additional drugs," said Dr. Kruger. "Clinical-stage compounds in Phase 1 or Phase 2 are of particular interest to us, as are orphan drugs, which can be eligible for accelerated approval processes and a longer time for market exclusivity. The Spherix team of managers and scientists has already shown the ability to move a drug successfully through Phase 3 with D-tagatose for the treatment of mild diabetes, and we are confident we have the expertise to choose compounds with good opportunities for success," Dr. Kruger added.

## **Business Update Conference Call and Webcast**

Spherix management will host a conference call to provide a business update and answer questions on Wednesday, April 11, 2012, beginning at 1:00 p.m. Eastern time. To access the conference call, from the U.S. please dial (866) 322-1352 and from outside the U.S. please dial (706) 643-6246. All listeners should provide the following passcode: 62805777. Individuals interested in listening to the live conference call via the Internet may do so by logging on to the Company's website, [www.spherix.com](http://www.spherix.com).

Following the end of the conference call, a telephone replay will be available through April 17, 2012, and can be accessed by dialing (855) 859-2056 from the U.S. or (404) 537-3406 from outside of the U.S. All listeners should provide the following passcode: 62805777. The webcast will be available for 30 days.

## **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](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 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.

*- Tables Follow -*

**Spherix Incorporated**  
**Consolidated Statements of Operations**

	<u>2011</u>	<u>2010</u>
<b>Revenue</b>	\$ 820,925	\$ 1,432,452
Operating expense		
Direct costs	(388,065)	(517,677)
Research and development expense	(1,645,939)	(4,846,111)
Selling, general and administrative expense	<u>(3,133,792)</u>	<u>(4,080,123)</u>
Total operating expense	<u>(5,167,796)</u>	<u>(9,443,911)</u>
Loss from operations	(4,346,871)	(8,011,459)
Interest income	3,455	6,109
Other income	51,261	135,914
Gain on settlement of obligations	<u>845,000</u>	<u>-</u>
Loss from continuing operations before taxes	(3,447,155)	(7,869,436)
Income tax (expense) benefit	<u>(14,485)</u>	<u>133,194</u>
<b>Net loss</b>	<u>(3,461,640)</u>	<u>(7,736,242)</u>
Net loss per share, basic	\$ (1.32)	\$ (4.28)
Net loss per share, diluted	\$ (1.32)	\$ (4.28)
Weighted average shares outstanding, basic	<u>2,625,691</u>	<u>1,806,132</u>
Weighted average shares outstanding, diluted	<u>2,625,691</u>	<u>1,806,132</u>

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

<b>ASSETS</b>	<b>2011</b>	<b>2010</b>
Current assets		
Cash and cash equivalents	\$ 4,911,350	\$ 5,575,310
Trade accounts receivable, net of allowance of \$8,174 and \$65,000	232,507	285,859
Grants receivable	-	270,128
Other receivables	53,851	74,110
Prepaid research expenses	209,780	464,322
Prepaid expenses and other assets	120,427	155,261
Total current assets	<u>5,527,915</u>	<u>6,824,990</u>
Property and equipment, net of accumulated depreciation of \$265,502 and \$197,971	91,482	154,161
Patents, net of accumulated amortization of \$2,146 and \$50,725	-	2,296
Deposit	35,625	35,625
Total assets	<u>\$ 5,655,022</u>	<u>\$ 7,017,072</u>
 <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable and accrued expenses	\$ 269,996	\$ 1,211,561
Accrued salaries and benefits	549,815	563,706
Deferred revenue	72,871	170,641
Total current liabilities	<u>892,682</u>	<u>1,945,908</u>
Deferred compensation	-	550,000
Deferred rent	47,675	80,945
Total liabilities	<u>940,357</u>	<u>2,576,853</u>
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 December 31, 2011, and December 31, 2010	-	-
Common stock, \$0.01 par value, 50,000,000 shares authorized; 3,103,004 and 2,143,631 issued, 3,094,961 and 2,135,588 outstanding at December 31, 2011 and 2010, respectively	31,030	21,436
Paid-in capital in excess of par value	42,295,306	38,568,814
Treasury stock, 8,043 shares	(464,786)	(464,786)
Accumulated deficit	(37,146,885)	(33,685,245)
Total stockholders' equity	<u>4,714,665</u>	<u>4,440,219</u>
Total liabilities and stockholders' equity	<u>\$ 5,655,022</u>	<u>\$ 7,017,072</u>