

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 30, 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 March 30, 2011, the Registrant issued a press release regarding its financial results for the year ended December 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 March 30, 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:** March 30, 2011

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

**SPHERIX ANNOUNCES 2010 FINANCIAL RESULTS**  
**Business Update Call to be Held April 7 at 11:00 a.m. Eastern Time**

**BETHESDA, MD (March 30, 2011) – 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, 2010.

**Recent and Upcoming Highlights**

- **Pharmaceutical Development**
  - Announced the signing of a multi-unit research contract to investigate the role of D-tagatose in lowering triglycerides
  - Announced results from its first Phase 3 trial post hoc analysis for D-tagatose in the treatment of Type 2 diabetes
  - Seeking a strategic relationship with a pharmaceutical company for the continued clinical development of D-tagatose as a treatment for Type 2 diabetes and triglycerides
  - Raised \$5.25 million in a registered direct offering of preferred stock and warrants
  - Raised \$2.77 million in a registered direct offering of common stock and warrants
  - Recent and upcoming trade and professional shows:
    - Spherix's President, Dr. Robert Lodder, presented and participated at the Windhover Therapy Area Conference held November 3-4, 2010 in Boston
    - January 11, 2011: Dr. Lodder presented at OneMedForum SF 2011 and at Biotech Showcase 2011, both in San Francisco
    - February 15, 2011: Dr. Lodder presented at the 13th Annual BIO CEO & Investor Conference in New York; with Spherix's CEO, Dr. Claire Kruger, in attendance
    - March 31, 2011: Dr. Lodder will be presenting at the BIO-Windhover/Pharmaceutical Strategic Outlook 2011 Conference to be held in New York
  
- **Health Sciences Consulting**
  - Recent and upcoming trade and professional shows:
    - October 23, 2010: Dr. Kruger presented "Stevia...The Science Behind the Sweetness" at the Supply Side West post-conference Stevia: Trends, Product Development and Regulatory Update Workshop in Las Vegas
    - December 8, 2010: Dr. Kruger presented "Probiotics: Advances in the Assessment of Safe Use," during Virgo Publishing's Probiotics Webinar
    - January 14, 2011: Dr. Kruger presented "Contaminants in Fish Oils" at GOED Exchange 2011 in Salt Lake City
    - March 21, 2011: Spherix Consulting's Principal Advisor, Dr. A. Wallace Hayes, presented at the Analyzing Risk: Science, Assessment and Management Program, held at the Harvard School of Public Health in Boston; his presentation, "Toxicology for Risk Analysis," was co-authored by Dr. Kruger
    - April 9, 2011: Dr. Kruger will be speaking at the American Dietetic Association's Nutrition News Forecast 2011 in Chicago
    - May 16, 2011: Dr. 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

## Financial Results for the Year Ended December 31, 2010

The net loss for 2010 was \$7.7 million, or \$0.43 per share, compared with a net loss of \$9.1 million, or \$0.62 per share, for 2009. Cash used to fund operations in 2010 was \$8.7 million, compared with \$7.8 million in 2009.

The Company's research and development (R&D) efforts are focused on the development of pharmaceuticals, particularly D-tagatose, a naturally occurring sugar and a low-calorie, full-bulk sweetener previously approved by the U.S. Food and Drug Administration (FDA) as a GRAS (Generally Recognized As Safe) food ingredient. 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 pharmaceutical 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, with R&D expenditures for 2010 and 2009 consisting of both a Phase 3 clinical trial and a related Phase 2 dose-range study. Included in 2009 R&D costs was an expense of \$1.4 million for the purchase of D-tagatose. The Company's 2010 R&D expenses decreased by \$1.98 million compared with 2009.

The Phase 3 trial to determine efficacy of D-tagatose as a treatment for Type 2 diabetes and the Phase 2 dose-range trial to evaluate the effectiveness of lower doses of D-tagatose in treating Type 2 diabetes were completed in late 2010. As Spherix has determined that it will take several additional years of clinical trials and could cost as much as several hundred million dollars to seek and obtain FDA approval for D-tagatose as a diabetes drug, the safety portion of the Phase 3 trial has been terminated.

In the fourth quarter of 2010, the Company began shifting the focus of its R&D efforts to the use of D-tagatose in lowering triglyceride levels, and anticipates a decrease in R&D costs in the initial years of the triglyceride studies compared with 2010 costs. Preclinical trials for the use of D-tagatose in lowering triglyceride levels will be conducted in 2011 and a human proof-of-concept trial may begin later in the year. The Company estimates that it will likely take three or more years to undertake the studies and clinical trials necessary to attract a pharmaceutical partner to complete development, and an additional 2-4 years to complete all necessary studies for an NDA filing.

Working capital was \$4.9 million as of December 31, 2010, including \$5.6 million in cash and cash equivalents.

"We believe this cash on hand, combined with the \$2.6 million of net proceeds of the January 2011 offering, provide us with sufficient capital to fund operations for 2011 and into the following year as we work to complete a number of critical milestones," said Dr. Claire L. Kruger, CEO of Spherix. "Among these milestones are the results of several preclinical studies of the effects of D-tagatose in dyslipidemia and high triglycerides in high fat and high carbohydrate diets. In addition, we have begun a human clinical postprandial trial with D-tagatose in the treatment of high triglycerides. Data from this human trial are expected to be announced in the fall of 2011."

### Business Update Conference Call and Webcast

Spherix management will host a conference call to provide a business update and answer questions on Thursday, April 7, 2011, beginning at 11:00 a.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: 56320911. 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 14, 2011, and can be accessed by dialing (800) 642-1687 from the U.S. or (706) 645-9291 from outside of the U.S. All listeners should provide the following passcode: 56320911. The webcast will be available for 30 days.

Separately, Spherix announces that its Annual Shareholders Meeting, previously scheduled for May 17, 2011, will take place later this year and is tentatively scheduled for August 16, 2011.

**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. 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>2010</u>	<u>2009</u>
<b>Revenue</b>	\$ 1,432,452	\$ 1,359,110
Operating expense		
Direct costs	(517,677)	(449,293)
Research and development expense	(4,846,111)	(6,830,957)
Selling, general and administrative expense	<u>(4,080,123)</u>	<u>(3,265,137)</u>
Total operating expense	<u>(9,443,911)</u>	<u>(10,545,387)</u>
Loss from operations	(8,011,459)	(9,186,277)
Other income	135,914	-
Interest income	<u>6,109</u>	<u>37,646</u>
Loss from continuing operations before taxes	(7,869,436)	(9,148,631)
Income tax benefit	<u>133,194</u>	<u>-</u>
<b>Net loss</b>	<u>(7,736,242)</u>	<u>(9,148,631)</u>
Net (loss) income per share, basic	\$ (0.43)	\$ (0.62)
Net (loss) income per share, diluted	\$ (0.43)	\$ (0.62)
Weighted average shares outstanding, basic	<u>18,061,322</u>	<u>14,713,473</u>
Weighted average shares outstanding, diluted	<u>18,061,322</u>	<u>14,713,473</u>

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

<b>ASSETS</b>	<b>2010</b>	<b>2009</b>
Current assets		
Cash and cash equivalents	\$ 5,575,310	\$ 9,026,002
Short-term investments, held to maturity	-	375,003
Trade accounts receivable, net	285,859	274,153
Grants receivable	270,128	-
Other receivables	74,110	948
Prepaid research expenses	464,322	-
Prepaid expenses and other assets	155,261	209,255
Total current assets	<u>6,824,990</u>	<u>9,885,361</u>
Property and equipment, net	154,161	225,958
Patents, net of accumulated amortization of \$50,725 and \$44,657	2,296	8,364
Deposit	35,625	35,625
Total assets	<u>\$ 7,017,072</u>	<u>\$ 10,155,308</u>
 <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable and accrued expenses	\$ 1,211,561	\$ 1,714,140
Accrued salaries and benefits	563,706	388,665
Deferred revenue	170,641	90,915
Total current liabilities	<u>1,945,908</u>	<u>2,193,720</u>
Deferred compensation	550,000	580,000
Deferred rent	80,945	109,712
Total liabilities	<u>2,576,853</u>	<u>2,883,432</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, 2010, none issued and outstanding at December 31, 2009	-	-
Common stock, \$0.005 par value, 50,000,000 shares authorized; 21,436,310 and 17,231,086 issued, 21,355,872 and 17,150,648 outstanding at December 31, 2010 and 2009, respectively	107,182	86,155
Paid-in capital in excess of par value	38,483,068	33,599,510
Treasury stock, 80,438 shares, at cost at December 31, 2010 and 2009, respectively	(464,786)	(464,786)
Accumulated deficit	(33,685,245)	(25,949,003)
Total stockholders' equity	<u>4,440,219</u>	<u>7,271,876</u>
Total liabilities and stockholders' equity	<u>\$ 7,017,072</u>	<u>\$ 10,155,308</u>