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

FORM 10-K/A no. 1

(Mark one)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2010

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from ____________________ to ____________________

Commission file number 0-5576

SPHERIX INCORPORATED

(Exact name of Registrant as specified in its Charter)

Delaware	52-0849320
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

6430 Rockledge Drive, Suite 503, Bethesda, Maryland 20817
(Address of principal executive offices)

Registrant's telephone number, including area code: 301-897-2540

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock ($.005 par value per share)	NASDAQ Capital Market

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes [ ] No [X]

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [ ] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company (as defined in Rule 12b-2 of the Exchange Act).
Large Accelerated Filer [ ] Accelerated Filer [ ] Non-accelerated Filer [ ] Smaller Reporting Company [X]

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes [ ] No [X]

State the aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter (for purposes of this determination, only our Directors and Executive Officers have been deemed affiliates): Common Stock (Par Value $.005) – $19,692,323

There were 25,624,872 shares of the Registrant's Common Stock outstanding as of March 16, 2011.

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EXPLANATORY NOTE

This Form 10-K/A is being filed to amend the annual report on Form 10-K filed by Spherix Incorporated (the "Company") for the period ended December 31, 2010. The initial filing omitted the electronic signature to the Report of Independent Registered Public Accounting Firm and the Consent of Independent Registered Public Accounting Firm. This filing corrects the omission.

This Amendment contains currently dated certifications of our Chief Executive Officer and Chief Financial Officer.

We have not modified or updated this filing for any other disclosures set forth in the original Form 10-K. Accordingly, this Form 10-K/A does not reflect events occurring after the filing of the initial Form 10-K or modify or update those disclosures.

PART II

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial statements and supplementary data required by this Item 8 follow.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Spherix Incorporated

We have audited the accompanying consolidated balance sheets of Spherix Incorporated (a Delaware corporation) and subsidiaries as of December 31, 2010 and 2009, and the related consolidated statements of operations, changes in stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2010. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Spherix Incorporated as of December 31, 2010 and 2009, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

/s/ Grant Thornton LLP

Baltimore, MD
March 30, 2011

Spherix Incorporated
Consolidated Statements of Operations
For the Years Ended December 31, 2010 and 2009

	2010	2009
Revenue	$ 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	(4,080,123)	(3,265,137)
Total operating expense	(9,443,911)	(10,545,387)
Loss from operations	(8,011,459)	(9,186,277)
Other income	135,914	-
Interest income	6,109	37,646
Loss from continuing operations before taxes	(7,869,436)	(9,148,631)
Income tax benefit	133,194	-
Net loss	(7,736,242)	(9,148,631)
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	18,061,322	14,713,473
Weighted average shares outstanding, diluted	18,061,322	14,713,473

The accompanying notes to financial statements are an integral part of these financial statements.

Spherix Incorporated
Consolidated Balance Sheets
As of December 31, 2010 and 2009

ASSETS	**2010**	**2009**
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	6,824,990	9,885,361
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	$ 7,017,072	$ 10,155,308
LIABILITIES AND STOCKHOLDERS' EQUITY		
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	1,945,908	2,193,720
Deferred compensation	550,000	580,000
Deferred rent	80,945	109,712
Total liabilities	2,576,853	2,883,432
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	4,440,219	7,271,876
Total liabilities and stockholders' equity	$ 7,017,072	$ 10,155,308

The accompanying notes to financial statements are an integral part of these financial statements.

Spherix Incorporated
Consolidated Statements of Changes in Stockholders' Equity
For the Years Ended December 2010 and 2009

	Preferred Stock		Common Stock		Paid-in Capital in Excess of Par	Treasury Stock		Retained Earnings (Accumulated Deficit)	Stockholders' Equity
	Shares	Amount	Shares	Amount		Shares	Amount		
Balance, January 1, 2009	-	$ -	14,437,600	$ 72,188	$ 27,602,486	80,438	$ (464,786)	$ (16,800,372)	$ 10,409,516
Sale of common stock, net of offering costs of $416,347	-	-	2,760,870	13,804	5,919,849	-	-	-	5,933,653
Stock-based compensation	-	-	32,616	163	77,175	-	-	-	77,338
Net loss	-	-	-	-	-	-	-	(9,148,631)	(9,148,631)
Balance, December 31, 2009	-	-	17,231,086	86,155	33,599,510	80,438	(464,786)	(25,949,003)	7,271,876
Sale of series B preferred stock, net of offering costs of $382,500	5,250	52	-	-	4,867,448	-	-	-	4,867,500
Conversion of series B preferred stock into common stock	(5,249)	(52)	4,199,200	20,996	(20,944)	-	-	-	-
Stock-based compensation	-	-	6,024	31	37,054	-	-	-	37,085
Net loss	-	-	-	-	-	-	-	(7,736,242)	(7,736,242)
Balance, December 31, 2010	1	$ -	21,436,310	$ 107,182	$ 38,483,068	80,438	$ (464,786)	$ (33,685,245)	$ 4,440,219

The accompanying notes to financial statements are an integral part of these financial statements.

Spherix Incorporated
Consolidated Statements of Cash Flows
For the Years Ended December 31, 2010 and 2009

	2010	2009
Cash flows from operating activities		
Net loss	$ (7,736,242)	$ (9,148,631)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	77,865	84,377
Loss on sale of fixed assets	-	5,399
Bad debt expense	65,000	-
Stock-based compensation	37,085	77,338
Changes in assets and liabilities:		
Receivables	(419,996)	43,464
Prepaid expenses and other assets	(410,328)	73,716
Accounts payable and accrued expenses	(327,538)	1,087,168
Deferred rent	(28,767)	(27,024)
Deferred compensation	(30,000)	(80,000)
Deferred revenue	79,726	51,568
Net cash used in operating activities	(8,693,195)	(7,832,625)
Cash flows from investing activities		
Proceeds from the maturity of short-term investments	375,003	1,519,431
Proceeds from the sales of fixed assets	-	700
Net cash provided by investing activities	375,003	1,520,131
Cash flows from financing activities		
Proceeds from issuance of Series B Preferred stock, net	4,867,500	-
Proceeds from issuance of common stock, net	-	5,933,653
Net cash provided by financing activities	4,867,500	5,933,653
Net decrease in cash and cash equivalents	(3,450,692)	(378,841)
Cash and cash equivalents, beginning of year	9,026,002	9,404,843
Cash and cash equivalents, end of year	$ 5,575,310	$ 9,026,002

The accompanying notes to financial statements are an integral part of these financial statements.

Spherix Incorporated
Notes to Consolidated Financial Statements

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1. Summary of Significant Accounting Policies

Nature of Business and Basis of Presentation

The Company's principal segments are Biospherics, our biotechnology research and development business, and Health Sciences, a technical and regulatory consulting business. The Health Sciences business provides technical and regulatory consulting services to biotechnology and pharmaceutical companies, as well as providing technical support for the Company's own R&D activities. The Company generally provides its services on either a fixed price basis or on a "time and expenses" basis, charging hourly rates for each staff member involved in a project, based on his or her skills and experience.

The Company has two wholly-owned subsidiaries, Biospherics Incorporated and Spherix Consulting, Inc., for its two operating segments. The Company's Health Sciences contracts are in the name of Spherix Consulting, Inc. and the Company's patents and other assets and operations are in the name of Biospherics Incorporated. Spherix Incorporated provides management, strategic guidance, business development, marketing and other services to its subsidiaries.

The consolidated financial statements include the accounts of Spherix Incorporated, Biospherics Incorporated and Spherix Consulting, Inc. (collectively, the "Company"). All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates and Assumptions

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America. This requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. Significant estimates include allowance for doubtful accounts, stock compensation expense, amortization and depreciation. Accordingly, actual results could differ from those estimates and assumptions.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less when purchased to be cash and cash equivalents. At December 31, 2010 and 2009, the Company had approximately $5.3 and $8.9 million invested in funds with a maturity of three months or less, which are considered cash and cash equivalents. The Company maintains cash balances at several banks. Interest bearing accounts at each institution are insured by the Federal Deposit Insurance Corporation up to $250,000. At December 31, 2010, the Company's interest bearing deposits in excess of the FDIC limits was $5.3 million. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash.

Short-term Investments

The Company's short-term investments consisted of investments in debt securities, which matured in one year or less, and were valued at amortized cost, which approximated fair value.

Concentrations

During each of 2010 and 2009, 99% of our revenue was generated from the Health Sciences business. In 2010, revenue from one customer accounted for 10% of revenues. In 2009, five customers accounted for 19%, 16%, 14%, 12% and 11% of revenues, respectively.

Property and Equipment and Depreciation

Property and equipment are stated at cost and consist of office furniture and equipment, computer hardware and software, and leasehold improvements. The Company computes depreciation and amortization under the straight-line method and typically over the following estimated useful lives of the related assets:

Office furniture and equipment	3 to 10 years
Computer hardware and software	3 to 5 years

Leasehold improvements are depreciated or amortized over the shorter of the term of the related lease or the estimated useful lives of the assets (generally 5 to 10 years). Major additions, improvements and renewals are capitalized at cost and ordinary repairs, maintenance, and renewals are expensed in the year incurred. Gains or losses from the sale or retirement of property and equipment result from the difference between sales proceeds (if any) and the assets' net book value, and are recorded in the consolidated Statement of Operations.

Patent Costs

Legal costs incurred in connection with patent applications and costs of acquiring patents are capitalized when incurred. When patents are granted, costs are amortized over a term representing the shorter of the life of the patent or the projected sales period of the product or process.

Impairment of Long-Lived Assets

Whenever events or changes in circumstances indicate that the carrying amount of long-lived assets, including patents and property and equipment, may not be fully recoverable, the Company evaluates the probability that the future undiscounted net cash flows, without interest charges, will be less than the carrying amount of the assets. If any impairment is indicated as a result of this review, the Company would recognize a loss based on the amount by which the carrying amount exceeds the estimated fair value, determined based on the discounted future cash flows. No such impairment was noted.

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, services have been rendered, the contract price is fixed or determinable and collectability is reasonably assured. On time and expense contracts revenue is recognized at contractually agreed-upon rates based upon direct labor hours expended and other direct costs incurred. Revenue for fixed-price contracts is recognized as deliverables or milestones are completed. Losses, if any, on contracts are recorded during the period when first determined.

Direct Costs

The Company's direct costs consist primarily of labor costs.

Research and Development Costs

Research and development costs are charged to operations as incurred. Included in the 2009 research and development costs is $1.4 million in losses related to purchases of D-tagatose used for trial purposes.

Selling, General and Administrative Expense

The Company's selling, general and administrative expenses consist primarily of executive management salaries and fringe benefits, sales and marketing costs, finance and accounting, human resources, as well as general corporate costs and costs related to being a public company.

Other Income

Other income consists of two grants from the U.S. Government awarded in October 2010 in support of the Company's 2009 and 2010 diabetes and triglyceride research. As a result, in 2010 the Company recognized $136,000 in other income, net of a related tax benefit of $133,000.

Income Taxes

Deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year end, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. A valuation allowance is established based upon periodic assessments made by management to reduce deferred tax assets to the amount expected to be realized. Income tax expense is the current tax provision for the period and the change during the period in deferred tax assets and liabilities.

During 2010, the Company's subsidiary, Biospherics Incorporated, received notice from the IRS that it had been awarded two grants under IRC Section 48D of the Internal Revenue Code's "Qualifying Therapeutic Discovery Project." The amount received pursuant to the QTDP Grant was $270,000 of which $133,000 related to the income tax benefit associated with the realization or "monetization" of prior-period tax attributes for which the Company had previously established a valuation allowance.

The Company's policy is to recognize interest and penalties on tax liabilities as interest expense. At December 31, 2010 and 2009, the Company had no unrecognized income tax benefits and recognized no interest or penalties on income tax liabilities.

Fair Value Information

The estimated fair value of the Company's financial instruments, which include cash, receivables, and accounts payable reported in the Consolidated Balance Sheets, approximate their carrying value given their short maturities.

Accounting for Stock-Based Compensation

The Company applies the fair value method, which requires that the measurement of all employee share-based payments to employees, including grants of employee stock options, be expensed over their requisite service period based on their value at the grant date using their fair value, determined using a prescribed option-pricing model. The Company uses a Black-Scholes option pricing model to value stock options. For the years ended December 31, 2010 and 2009, the Company recognized $30,417 and $13,160 in stock based compensation expense relating to 26,664 stock options awarded in April 2010 and 59,000 stock options awarded in February 2006, and also recognized $6,668 and $64,178, respectively, related to the issuance of restricted stock (see Note 8, "Stockholders' Equity").

Net Loss Per Share

Basic net loss per common share has been computed by dividing net loss by the weighted-average number of common shares outstanding during the year. Diluted net loss per common share has been computed by dividing net loss by the weighted-average number of common shares outstanding without an assumed increase in common shares outstanding for common stock equivalents, as common stock equivalents are antidilutive. At December 31, 2010, 1,381 of the Company's 63,088 outstanding options were considered common stock equivalents as the exercise prices of those 1,381 options were below the average market price of the Company's common stock for the period. None of the 3,413,174 warrants were considered common stock equivalents at December 31, 2010 as the exercise prices of the warrants were above the average market price of the Company's common stock for the period.

New Accounting Pronouncements

In January 2010, new disclosures became effective relating to fair value measurements. The adoption of these disclosure rules had no effect on the Company's financial position, results of operations or cash flows.

In October 2009, the Financial Accounting Standards Board (FASB) issued ASC Update No. 2009-13, which amends the Revenue Recognition topic of the Codification. This update provides amendments to the criteria in Subtopic 605-25 of the Codification for separating consideration in multiple-deliverable arrangements. As a result of those amendments, multiple-deliverable arrangements will be separated in more circumstances than under existing U.S. GAAP. The amendments establish a selling price hierarchy for determining the selling price of a deliverable and will replace the term fair value in the revenue allocation guidance with selling price to clarify that the allocation of revenue is based on entity-specific assumptions rather than assumptions of a marketplace participant. The amendments will also eliminate the residual method of allocation and require that arrangement consideration be allocated at the inception of the arrangement to all deliverables using the relative selling price method and will require that a vendor determine its best estimate of selling price in a manner that is consistent with that used to determine the price to sell the deliverable on a stand-alone basis. These amendments will be effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, with early adoption permitted. The adoption of these disclosure rules had no effect on the Company's financial position, results of operations or cash flows.

In July 2010, the FASB issued an accounting update to provide guidance to enhance disclosures related to the credit quality of a company's financing receivables portfolio and the associated allowance for credit losses. Pursuant to this accounting update, a company is required to provide a greater level of disaggregated information about its allowance for credit loss with the objective of facilitating users' evaluation of the nature of credit risk inherent in the company's portfolio of financing receivables, how that risk is analyzed and assessed in arriving at the allowance for credit losses, and the changes and reasons for those changes in the allowance for credit losses. The revised disclosures as of the end of the reporting period are effective for the Company beginning in 2011. The Company is currently evaluating the impact of this accounting update on its financial disclosures.

In December 2010, the FASB issued ASU No. 2010-29, "Business combinations – disclosure of supplementary pro forma information," ("ASU 2010-29") to amend topic ASC 805 "Business Combinations," by improving disclosure requirements related to the business combinations performed during the year being reported on. Under the amended guidance, a public entity that presents comparative financial statements must disclose the pro forma revenue and earnings of the combined entity as though the business combination had occurred as of the beginning of the prior annual reporting period. The Company is currently evaluating the impact the adoption of this update might have on its financial disclosures.

2. Liquidity

We expect to continue to incur substantial development costs in our Biospherics segment in the next several years, without substantial corresponding revenue, and we will continue to incur ongoing administrative and other expenses, including public company expenses. We intend to finance our activities through:

- the remaining proceeds of the November 2009, October 2010 and January 2011 registered direct equity offerings, which resulted in net proceeds of $6 million, $4.9 million and $2.6 million, respectively;
- two one-time grants totaling approximately $270,000 from the U.S. Government in support of the Company's diabetes and triglyceride research received in the first quarter of 2011; and
- additional funds we will seek to raise through the sale of additional stock in the future.

Working capital was $4.9 million at December 31, 2010, including $5.5 million on hand. Management believes that this cash on hand, combined with the $2.6 million of net proceeds of the January 2011 offering, provide us with sufficient cash to sustain operations for 2011. We expect that we will need to expend approximately $3 million to $5 million over the next twelve (12) months to support our currently planned operations. This estimate assumes (i) continuing efforts to sell, license, or obtain a partner for the diabetes drug application, (ii) no further significant expenditures for developing D-tagatose as a drug for diabetes, (iii) continuing development of D-tagatose as a treatment for high triglycerides, (iv) ongoing operation of the Health Sciences segment at the current level of activity and (v) that we raise additional funds to continue our development efforts beyond this 12 month period.

Due to the nature of our business, we will need to raise additional funds on a consistent basis to continue operations and to fully pursue the triglycerides opportunity. Fundraising will likely require the issuance of additional equity securities and a purchaser of such securities will likely insist that such securities be registered securities.

NASDAQ rules require stockholder approval for certain stock issuances constituting twenty percent (20%) or more of a company's issued and outstanding stock.

The Company cannot be assured that it will be able to attract a purchaser of securities to raise the additional funds it will likely require; that the Company will be able to obtain any required stockholder approval; or that the Company will be able to have additional registered direct primary offerings. If we reach a point where we are unable to raise needed additional funds to continue our business activities, we will be forced to cease our development activities and dissolve the Company. In such an event, we will need to satisfy various severance, lease termination and other dissolution-related obligations.

3. Fair Value Measurements

The Company has elected not to apply the fair value option to measure any of the financial assets and liabilities on its balance sheet not already valued at fair value under other accounting pronouncements. These other financial assets and liabilities are primarily short-term investments, accounts receivable, accounts payable and debt, which are reported at historical value. The fair value of these financial assets and liabilities approximate their fair value because of their short duration.

4. Allowance for Doubtful Accounts

Management regularly reviews accounts receivable for uncollectible and potentially uncollectible accounts, and when necessary establishes an allowance for doubtful accounts. Balances that are outstanding after management has used reasonable collection efforts are written-off through a charge to the valuation allowance and a credit to accounts receivable. At December 31, 2010, the allowance for doubtful accounts was $65,000. An allowance for doubtful accounts was not deemed necessary at December 31, 2009.

Balance, January 1, 2009	$ 0
Provision for doubtful accounts	0
Balance December 31, 2009	0
Provision for doubtful accounts	65,000
Balance December 31, 2010	$65,000

5. Property and Equipment

The components of property and equipment as of December 31, at cost are:

	2010	2009
Computers	$ 14,000	$ 14,000
Office furniture and equipment	109,000	109,000
Leasehold improvements	229,000	229,000
Total cost	352,000	352,000
Accumulated depreciation and amortization	(198,000)	(126,000)
Property and equipment, net	$ 154,000	$ 226,000

The Company's depreciation expense for the years ended December 31, 2010 and 2009 was $72,000 and $78,000, respectively.

6. Patents and Intangible Assets

The Company's amortization expense for each of the years ended December 31, 2010 and 2009 was $6,000 on patents with an original value of $53,000. The Company's future amortization based on its patents and intangible assets at December 31, 2010 is as follows:

Year	Amortization Expense
2011	$ 2,000

7. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following at December 31:

	2010	2009
Accounts payable	$ 312,000	$ 961,000
Purchase commitment	600,000	600,000
Deferred Compensation	145,000	140,000
Accrued expenses	154,000	13,000
	$1,211,000	$1,714,000

8. Stockholders' Equity

Registered Direct Offerings

On October 7, 2010, the Company and certain investors entered into a securities purchase agreement, pursuant to which the Company agreed to sell an aggregate of 5,250 shares of its Series B Convertible Preferred Stock and warrants to purchase up to an additional 2,100,000 shares of its common stock to such investors for gross proceeds of approximately $5.25 million. Each share of Series B Convertible Preferred Stock was convertible at the option of the holder, at any time, into 800 shares of common stock based on a conversion price of $1.25 per share of Series B Convertible Preferred Stock. The preferred stock and warrants were sold in units, with each unit consisting of one share of preferred stock and a warrant to purchase 0.5 of a share of common stock. The purchase price per unit was $1,000.00. Subject to certain ownership limitations, the warrants are exercisable at any time on or after the initial date and on or prior to October 6, 2015, but not thereafter, at an exercise price of $1.50 per share. The exercise price of the warrants is subject to adjustment in the case of stock splits, stock dividends, combinations of share and similar recapitalization transactions. The net proceeds to the Company from the October 2010 offering, after deducting placement agent fees and the Company's offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in the offering, were approximately $4.9 million. The preferred stock, warrants to purchase common stock (including the placement agent warrants) and shares of common stock issuable upon conversion of the preferred stock and exercise of the warrants were issued pursuant to a prospectus filed with the Securities and Exchange Commission pursuant to a registration statement on Form S-1 (File No. 333-167963), which became effective on October 6, 2010.

In connection with the closing of the October 2010 offering, the Company issued to Rodman & Renshaw, LLC warrants to purchase 126,000 shares of our common stock (at an exercise price of $1.5625 per share). The warrants are exercisable at the option of the holder at any time beginning October 13, 2010 through and including October 13, 2015. These warrants were offered and sold by us in reliance upon exemptions from the registration statement requirements by Section 4(2) of the Securities Act of 1933, as amended, as transactions by an issuer not involving a public offering.

On November 16, 2009, the Company entered into a securities purchase agreement with certain investors to sell an aggregate of 2,760,870 shares of its common stock and warrants to purchase up to an additional 1,104,348 shares of its common stock to such investors for gross proceeds of approximately $6.3 million. The common stock and warrants were sold in units, with each unit consisting of one share of common stock and a warrant to purchase 0.40 of a share of common stock. The purchase price per unit was $ 2.30. Subject to certain ownership limitations, the warrants are exercisable at any time on or after the initial issue date and on or prior to November 16, 2014, but not thereafter, at an exercise price of $ 3.25. The exercise price of the warrants is subject to adjustment in the case of stock splits, stock dividends, combinations of shares and similar recapitalization transactions. The warrants are classified as equity instruments and are accounted for in additional-paid-in capital.

On November 6, 2009, in connection with the closing of our registered direct offering of convertible preferred stock and warrants to purchase common stock, the Company issued to Rodman & Renshaw, LLC, as partial consideration for its services as placement agent, warrants to purchase up to 82,826 shares of our common stock at an exercise price of $2.875 per share. The warrants are exercisable at the option of the holder at any time beginning on November 16, 2009 through and including November 16, 2011. These warrants were offered and sold by us in reliance upon exemptions from the registration statement requirements by Section 4(2) of the Securities Act of 1933, as amended, as transactions by an issuer not involving a public offering.

The net proceeds to the Company from the registered direct offering, after deducting placement agent fees and the Company's offering expenses, and excluding the proceeds, if any, from the exercise of the warrants issued in the offering, were approximately $6 million.

Restricted Stock

In August 2010 and 2009, the Company issued 6,024 and 5,952 shares of restricted stock as part of an employment agreement. The total fair value of the issuances of the stock was $20,000, which was recognized as compensation expense over a two-year vesting period. The fair value of the stock awards was based on the closing market price on the date of the grant.

In August 2009, the Company issued 26,664 shares of restricted stock with a fair value of $40,000 to its independent Board Members, which was recognized as compensation expense at the time of issue. The fair value of the stock awards was based on the closing market price on the date of grant.

In August 2007, the Company granted 30,000 and 15,000 shares in restricted stock as part of the employment agreements for the Company's Chief Executive Officer and President. The fair value of the stock was $55,800 and $30,000, which was recognized as compensation expense over the respective vesting periods of two and one years.

Stock Option Plan

The Company has an Employees' Stock Option Plan (the "Plan") which permits issuance of both Incentive Stock Options (ISO) and Non-Qualified Stock Options, whereby options may be granted to officers, Directors and other key employees to purchase up to 1,000,000 shares of common stock in amounts determined by the Compensation Committee of the Board of Directors through December 31, 2010. During 2010, the Company granted 35,088 stock options to the Company's Board of Directors under the Plan. In 2009, no stock options were granted under the Plan. Options issued to employees typically vest over a four-year period and options issued to non-employee directors vested immediately upon being granted. At December 31, 2010, all of the outstanding options under the plan were fully vested.

Activity for the two years ended December 31, 2010, for all option grants is shown below:

	2010 Shares	2010 Weighted Average Exercise Price	2009 Shares	2009 Weighted Average Exercise Price
Outstanding at beginning of year	40,500	$ 2.57	40,500	$ 2.57
Granted	35,088	$ 1.14	-	$ -
Exercised	-	$ -	-	$ -
Expired or forfeited	(12,500)	$ 3.41	-	$ -
Outstanding at end of year	63,088	$ -	40,500	$ 2.57
Options exercisable at end of year	63,088		39,750	
Weighted-average fair value of options granted during the year	$ -		$ -	
Price range of options				
Outstanding	$1.14-$2.20		$2.20-$3.41	
Exercised	$ -		$ -	
Expired or forfeited	$ 3.41		$ -	

The following table summarizes information with respect to stock options outstanding at December 31, 2010:

Range of Exercise Price	Number of Options Outstanding at 12/31/10	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life
$1.14	35,088	$1.14	4.4
$2.20	28,000	$2.20	0.1
	63,088		

The following table summarizes information with respect to stock options exercisable at December 31, 2010:

Year of Option Expiration	Number of Options	Weighted Average Exercise Price	Price Range
2011	28,000	$2.20	$2.20
2015	35,088	$1.14	$1.14
All Years	63,088		

The Company used the following assumptions in the Black-Scholes calculation used to measure the fair value of stock-based compensation in accordance with ASC 718 for stock options granted in 2010. No stock options were granted in 2009.

	2010
Risk-free interest rate	2.01%
Expected life (years)	4
Volatility	106.1%
Dividend yield	0%

9. Income Taxes

Income tax from continuing operations for 2010 and 2009 was as follows:

	2010	2009
U.S. Federal income tax benefit	$ 118,000	$ -
State and local income tax benefit	$ 15,000	$ -
Total income tax benefit	$ 133,000	$ -

	2010	2009
Current income tax benefit	$ 38,000	$ -
Deferred income tax benefit	$ 95,000	$ -
Total income tax benefit	$ 133,000	$ -

The tax effects of significant temporary differences representing deferred tax assets as of December 31, 2010 and 2009 are as follows:

	2010	2009
Deferred tax assets		
Deferred rent	$ 32,000	$ 43,000
Accrued vacation	33,000	28,000
Tax credit	23,000	82,000
Deferred compensation	274,000	282,000
Net operating loss carryforward	13,912,000	10,941,000
Accrued bonus	165,000	103,000
Stock based compensation	41,000	31,000
Inventory adjustments	426,000	434,000
Accrued expenses	38,000	-
Other	27,000	1,000
Total deferred tax asset	14,971,000	11,945,000
Deferred tax liabilities		
Property and equipment	(23,000)	(48,000)
Change in accounting method - accrued bonus	(41,000)	-
	(64,000)	(48,000)
Valuation allowance	(14,907,000)	(11,897,000)
Deferred tax asset	$ -	$ -

At December 31, 2010 and 2009, the Company had net operating loss carryforwards for U.S. federal income tax purposes of approximately $33.9 million and $26.4 million, respectively, which will begin to expire in 2019. At December 31, 2010 and 2009, the Company had net operating loss carryforwards for state income tax purposes of approximately $44.6 million and $36.3 million, respectively, which will begin to expire in 2018. Based on the Company's historical losses and its accumulated deficit, the Company has provided a full valuation allowance against the net deferred tax asset.

Utilization of the net operating loss carryforwards and credit may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The Company has not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of net operating loss carryforwards attributable to periods before the change and could result in a reduction in the total net operating losses and research credits available.

Reconciliation between actual tax benefits and taxes computed at the statutory Federal rate of 34 percent for 2010 and 2009 are as follows:

	2010	2009
U.S. Federal income tax benefit at the statutory rate of 34%	$ 2,675,000	$ 3,110,000
Effect of permanent differences	(7,000)	(7,000)
Effect of permanent differences - Government Grant	51,000	-
State income taxes benefit, net of federal tax benefit	424,000	494,000
Other	-	(119,000)
Change in valuation allowance	(3,010,000)	(3,478,000)
Income tax benefit	$ 133,000	$ -

During 2010, the Company's subsidiary, Biospherics Incorporated, received notice from the IRS that it had been awarded two grants under IRC Section 48D of the Internal Revenue Code's "Qualifying Therapeutic Discovery Project." The amount received pursuant to the QTDP Grant was $0.3 million of which $0.1 million related to the income tax benefit associated with the realization or "monetization" of prior-period tax attributes for which the Company had previously established a valuation allowance.

Tax Uncertainties

The Company recognizes a tax expense associated with an uncertain tax position when, in management's judgment, it is more likely than not that the position will be sustained upon examination by a taxing authority. For a tax position that meets the more-likely-than-not recognition threshold, the Company initially and subsequently measures the tax expense as the largest amount that it judges to have a greater than 50% likelihood of being realized upon ultimate settlement with a taxing authority. The liability associated with unrecognized tax expense is adjusted periodically due to changing circumstances, such as the progress of tax audits, case law developments and new or emerging legislation. The effective tax rate includes the net impact of changes in the liability for unrecognized tax benefits and subsequent adjustments as considered appropriate by management. The Company has not recognized any such adjustments. At December 31, 2010 and 2009, the Company had no material unrecognized income tax expense and recognized no interest or penalties on income tax liabilities.

The Company is subject to U.S. federal income tax and state and local income tax in multiple jurisdictions. The statute of limitations for the consolidated U.S. federal income tax return is closed for all tax years up to and including 2006, except for pre-2006 tax returns that generated net operating loss carry forwards that could be adjusted on audit. During 2009, an IRS audit of tax year 2006 was completed and no adjustments were proposed. Currently, no federal or state and local income tax returns are under examination by the respective taxing authorities.

10. Commitments and Contingencies

Purchase Commitments

During 2009, the Company entered into a purchase commitment with a supplier of the Company's D-Tagatose product. The agreement committed the Company to purchase 25 metric tons of D-Tagatose. The Company utilized the D-Tagatose as a part of the Phase 2 and Phase 3 trials. This phase was necessary for the Company to be able to commercialize the product and as the products were not going to be available for sale, the Company wrote off the entire product value into Research and Development Costs. The amounts written off in 2009 from the agreement were $1.1 million. Of this amount $500,000 was paid in 2009 and the remaining balance of $600,000 is included in the Company's accounts payable and accrued expenses at December 31, 2010 and 2009. On March 16, 2011, both parties signed an agreement whereby Inalco will supply Spherix with 8.5 metric tons of D-tagatose for amounts previously paid for and both parties have agreed to release each other from any other obligations under the previous agreement (See Note 13 – Subsequent Events).

Leases

The Company has commitments under an operating lease through 2013 relating to its administrative office in Bethesda, Maryland.

Future minimum rental payments required as of December 31, 2010, under the non-cancelable lease are as follows:

Year Ending December 31,	Operating Lease
2011	155,000
2012	159,000
2013	40,000
	$ 354,000

The Company's building lease contains step rent provisions, capital improvement funding, or other tenant allowances. Minimum rental payments including allowances on this lease are recognized on a straight-line basis over the term of the lease. In 2008, lease incentives under the Bethesda facility lease provided for $150,000 of leasehold improvements. The Company incurred net operating lease rental expenses of approximately $140,000 and $165,000 for the years 2010 and 2009, respectively. The operating lease rental expenses for 2009 included office space in Annapolis, Maryland under a lease that ended in June 2009.

Related Party Transactions

Employment, Deferred Compensation, and Consulting Agreements for Principal Stockholders

Under employment agreements with Dr. Gilbert V. Levin and Mrs. M. Karen Levin, the Company's founders, the Company has agreed to provide Dr. and Mrs. Levin each with lifetime payments of $12,500 each quarter and to fund long-term lifetime healthcare and health insurance policies following their retirements from the Company on August 14, 2008 and January 4, 2006, respectively. At December 31, 2010, the Company's liability for both Dr. and Mrs. Levin was estimated to be $450,000 for the lifetime payments and $245,000 for funding the long-term lifetime healthcare and health insurance policies based on actuarially determined amounts. The non-current portion of these amounts is reported on the accompanying balance sheet as deferred compensation. During 2010 and 2009, the Company paid Dr. and Mrs. Levin a combined total of $141,000 and $135,000 in post-retirement benefits (see Note 13, "Subsequent Events").

Dr. and Mrs. Levin have agreed to serve as consultants to the Company on an as-needed basis, at a specified daily rate. No consulting payments were made to the Levins during 2010 or 2009.

11. Employee Benefit Plans

The Spherix Incorporated 401(k) Retirement Plan (the "Plan") is a discretionary defined contribution plan and covers substantially all employees who have attained the age of 21, have completed one year of service, and have worked a minimum of 1,000 hours in the past Plan or anniversary year.

Under provisions of the Plan, the Company, for any plan year, has contributed an amount equal to 50% of the participant's contribution or 2½% of the participant's eligible compensation, whichever is less. The Company may, at its own discretion, make additional matching contributions to participants. Company contributions, net of forfeitures, amounted to $18,000 and $15,000 in 2010 and 2009, respectively.

12. Information by Business Segment

Operating segments are components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company's principal segments are Biospherics, our biotechnology research and development business, and Health Sciences, a technical and regulatory consulting business.

Financial information by business segment for the years ended December 31, 2010 and 2009 is summarized below:

		Year Ended December 31,	
		2010	**2009**
Revenues	Health Sciences	$ 1,417,000	$ 1,350,000
	Biospherics	15,000	9,000
	Total revenues	$ 1,432,000	$ 1,359,000
Operating Income (Loss) and Loss Before Income Taxes	Health Sciences	$ 464,000	$ 691,000
	Biospherics	(5,659,000)	(7,523,000)
	General and administration	(2,816,000)	(2,354,000)
	Total operating loss	(8,011,000)	(9,186,000)
	Other income	136,000	-
	Interest income	6,000	37,000
	Loss from continuing operations before income taxes	$ (7,869,000)	$ (9,149,000)
Income Tax Benefit	Health Sciences	$ -	$ -
	Biospherics	133,000	-
	Total income tax benefit	$ 133,000	$ -
Identifiable Assets	Health Sciences	$ 359,000	$ 274,000
	Biospherics	739,000	8,000
	General corporate assets	5,919,000	9,873,000
	Total assets	$ 7,017,000	$ 10,155,000
Capital Expenditures	Health Sciences	$ -	$ -
	Biospherics	-	-
	General corporate assets	-	-
	Total capital expenditures	$ -	$ -
Depreciation and Amortization	Health Sciences	$ -	$ -
	Biospherics	6,000	6,000
	General corporate assets	72,000	78,000
	Total depreciation and amortization	$ 78,000	$ 84,000

Operating income (loss) from continuing operations consists of revenue less operating expenses. In computing operating loss, interest expense and income taxes were not considered. The operating income for the Health Sciences segment was 33% and 51% of that segment's revenue for 2010 and 2009.

Biospherics is dedicated to development of pharmaceuticals. Until June 2010, this development was 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.

Identifiable assets by business segment are those assets used in the Company's operations in each segment, such as accounts receivable, inventories, fixed assets, and patent costs. Corporate assets are principally cash and certain other assets not related to a particular segment's operations.

13. Subsequent Events

The Company evaluated all events or transactions after December 31, 2010 through the date the financial statements were issued.

In January 2011, the Company entered into a Letter Agreement with Gilbert V. Levin and M. Karen Levin pursuant to which the Company agreed to make a one time lump sum payment of $450,000 to the Levins in full satisfaction of the Company's obligation to make a series of continuing payments to the Levins relating to their prior employment by the Company. The Company's estimated liability to the Levins at December 31, 2010, and prior to the above agreement, was approximately $695,000. The $450,000 lump sum payment was made on January 31, 2011, and the Company will recognize a gain of $245,000 in January 2011. Per the terms of the agreement, Gilbert V. Levin resigned as a member of the Board of Directors of the Company on January 13, 2011.

On January 14, 2011, Biospherics Incorporated, a wholly-owned subsidiary of the Company, filed a Complaint For Injunction Relief And Damages in The United States District Court For The District Of Maryland against Inalco S.p.A. (the "Complaint"). The Complaint alleged that Inalco had breached the 2009 Manufacturing Support and Supply Agreement as Inalco (i) refused to supply D-tagatose previously paid for by Biospherics, (ii) refused to provide a promised bank guarantee, and (iii) shut-down its D-tagatose production facilities. On March 16, 2011, both parties signed a settlement agreement whereby Inalco agreed to supply Spherix with 8.5 metric tons of D-tagatose and both parties have agreed to release each other from any other obligations under the previous agreement. As a result, Spherix will recognize a gain of $600,000 in 2011 on the release from its purchase obligation.

In January 2011, the Company obtained net proceeds of approximately $2.6 million in a registered offering. The common stock and common stock which may be issued upon the exercise of warrants issued in the offering have been registered under a Form S-3 registration statement declared effective by the Securities and Exchange Commission ("SEC") in October 2009.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Inherent Limitations on the Effectiveness of Controls

Management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our disclosure controls and procedures will prevent all errors and fraud. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable, not absolute, assurance of achieving the desired control objectives. Further, the design of a control system must reflect the fact that there are resource constraints, and management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management's override of the control. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our Exchange Act reports, such as this report on Form 10-Q, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. These controls and procedures are based closely on the definition of "disclosure controls and procedures" in Rule 13a-15(e) promulgated under the Exchange Act. Rules adopted by the SEC require that we present the conclusions of the Chief Executive Officer and Chief Financial Officer about the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report.

The Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures to provide reasonable assurance of achieving their objective pursuant to Exchange Act Rule 13a-14. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective at a reasonable assurance level, as of December 31, 2010. This report does not include an attestation of our independent registered public accounting firm regarding internal control over financial reporting. Management's report is not subject to attestation by our independent registered public accounting firm pursuant to the rules of the SEC for smaller reporting companies.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation, management has concluded that its internal control over financial reporting was effective as of December 31, 2010.

This Annual Report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENTS, SCHEDULES

(a) Exhibits

23	Consent of Grant Thornton LLP, Independent Auditors
31.1	Certification of Chief Executive Officer of Spherix Incorporated pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer of Spherix Incorporated pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer of Spherix Incorporated pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer of Spherix Incorporated pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Spherix Incorporated
(Registrant)

Date: September 16, 2011

By: /s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer and Chief Operating Officer

Date: September 16, 2011

By: /s/ Robert L. Clayton
Robert L. Clayton
Chief Financial Officer and Treasurer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

/s/ Douglas T. Brown Douglas T. Brown	Director	September 16, 2011
/s/ Robert L. Clayton Robert L. Clayton	CFO and Treasurer	September 16, 2011
/s/ Claire L. Kruger Claire L. Kruger	Chief Executive Officer and Chief Operating Officer	September 16, 2011
/s/ Robert A. Lodder, Jr. Robert A. Lodder, Jr.	Director and President	September 16, 2011
/s/ Thomas B. Peter Thomas B. Peter	Director	September 16, 2011
/s/ Aris Melissaratos Aris Melissaratos	Director	September 16, 2011
/s/ Robert J. Vander Zanden Robert J. Vander Zanden	Chairman of the Board	September 16, 2011

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 30, 2010, with respect to the consolidated financial statements in the Annual Report of Spherix Incorporated on Form 10-K for the year ended December 31, 2010. We hereby consent to the incorporation by reference of said reports in the Registration Statements of Spherix Incorporated on Form S-8 (File No. 333-66053 effective October 23, 1998), on Forms S-3 (File No. 333-44973 effective March 23, 1998, 333-79593 effective May 28, 1999, 333-32504 effective April 19, 2000, 333-116422 effective June 14, 2004 and 333-126930 effective August 25, 2009), on Form S-2 (File No. 333-126930 effective October 4, 2005) and on Form S-1 (File No. 333-167963 effective on October 6, 2010).

/s/ Grant Thornton LLP

Baltimore, Maryland
March 30, 2011

Exhibit 31.1

Certification of
Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Claire L. Kruger, certify that:

1. I have reviewed this report on Form 10-K of Spherix Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a–15(f) and 15d–15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer and Chief
Operating Officer
September 16, 2011

Exhibit 31.2

Certification of
Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Robert L. Clayton, certify that:

1. I have reviewed this report on Form 10-K of Spherix Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a–15(f) and 15d–15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Robert L. Clayton
Robert L. Clayton
Chief Financial Officer and Treasurer
September 16, 2011

Exhibit 32.1

Certification of
Chief Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Claire L. Kruger, Chief Executive Officer and Chief Operating Officer of Spherix Incorporated (the "Company"), in compliance with Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, to the best of my knowledge, the Company's Annual Report on Form 10-K for the period ended December 31, 2010 (the "Report") filed with the Securities and Exchange Commission:

- Fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Claire L. Kruger
Claire L. Kruger
Chief Executive Officer and Chief Operating Officer
September 16, 2011

A signed copy of this written statement required by Section 906 has been provided to Spherix Incorporated and will be retained by Spherix Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

Certification of
Chief Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Robert L. Clayton, Chief Financial Officer and Treasurer of Spherix Incorporated (the "Company"), in compliance with Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, to the best of my knowledge, the Company's Annual Report on Form 10-K for the period ended December 31, 2010 (the "Report") filed with the Securities and Exchange Commission:

- Fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Robert L. Clayton
Robert L. Clayton
Chief Financial Officer and Treasurer
September 16, 2011

A signed copy of this written statement required by Section 906 has been provided to Spherix Incorporated and will be retained by Spherix Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.