



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

September 18, 2009

Via U.S. Mail and Facsimile

Claire L. Kruger
Chief Executive Officer and Chief Operating Officer
Spherix Incorporated
6430 Rockledge Drive #503
Bethesda, Maryland 20817

**Re: Spherix Incorporated
Registration Statement on Form S-3
Filed August 25, 2009
File No. 333-161531**

Dear Ms. Kruger:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Calculation of Registration Fee

1. We note your reference to debt securities in footnotes (4) and (6) and on page 17. Please tell us why you have not included such debt securities in the table, or alternatively, revise to omit these references.

Outside Cover of Prospectus

2. Please revise to set forth the calculation of the aggregate market value of your outstanding voting and nonvoting common equity, as required pursuant to Instruction 7 to General Instruction I.B.6. of Form S-3.

Exhibit 5.1

3. Please confirm your understanding that an updated unqualified opinion of counsel should be filed with respect to the legality of the securities being offered for each sale of the securities registered in this filing. See Compliance and Disclosure Interpretations – Securities Act Rules (Question 212.05), available in the Corporation Finance section of our website.
4. Please clarify in the first paragraph that Baxter, Baker, Sidle, Conn & Jones, P.A. has acted as counsel to the company.
5. Please revise paragraph 1 on page 2 to include the rights associated with the common stock.
6. Please revise to also opine on the legal, binding obligations of the company with respect to the Units.
7. Please revise to make clear that the opinion covers the Delaware General Corporation Law as well as all Delaware statutory provisions of law and any reported judicial decisions interpreting these laws.
8. Please revise the last sentence of the opinion to clarify that counsel does not admit that it is an expert within the meaning of Section 7 of the Securities Act.
9. The opinion does not contain a signature. Please have counsel revise its opinion accordingly.

Exhibit 23.2

10. Please file a revised consent that includes both the name and signature of the independent registered public accounting firm. See Item 601(b)(23) of Regulation S-K.

* * * *

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

Ms. Claire L. Kruger
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We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Chambre Malone, Staff Attorney at (202) 551-3262 or Brigitte Lippmann, Senior Staff Attorney at (202) 551-3713, or in their absence, myself at (202) 551-3760 with any other questions or disclosure issues.

Sincerely,

Pamela A. Long
Assistant Director

cc: James E. Baker, Jr. (*via facsimile at* (410) 230-3801)
Baxter, Baker, Sidle, Conn & Jones, P.A.
120 E. Baltimore Street, Suite 2100
Baltimore, Maryland 21202