



DIVISION OF  
CORPORATION FINANCE

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

January 16, 2014

Via E-mail

Phillip Chan, MD, PhD  
Chief Executive Officer  
CytoSorbents Corporation  
7 Deer Park Drive, Suite K  
Monmouth Junction, New Jersey 08852

**Re: CytoSorbents Corporation  
Registration Statement on Form S-1  
Filed December 23, 2013  
File No. 333-193053**

Dear Dr. Chan:

We have limited our review of your registration statement to those issues we have addressed in our comments. In our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. Where you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to our comments, we may have additional comments.

Registration Statement Fee Table

1. Please revise your fee table to indicate the appropriate registration fee for each security that you are registering for sale. Refer to the Note to the Calculation of Registration Fee section on Form S-1. Ensure that your revised table also (1) reflects the offering of units, and (2) makes clear how it reflects the securities that can be sold through exercise of the over-allotment option.

Prospectus Cover Page

2. Please provide an indication of where you will disclose the fixed offering price, net proceeds and other information required by Regulation S-K Item 501(b)(3) on a per unit and total basis as required by that Item.

3. We see that your offering will be conducted on a best efforts, no minimum basis with no arrangements for funds to be placed in an escrow, trust or similar account. Please revise your prospectus cover page to describe the effect on investors given these arrangements. For example, please disclose that you may complete the offering even if only a small portion of the total offering is raised and that amount may be substantially less than the total maximum offering amount. Please also disclose what may happen to investor funds not placed in escrow pending closing with respect to that investor if you are voluntarily or involuntarily placed into bankruptcy or receivership prior to that closing. Also add risk factors as appropriate.
4. With a view toward clarified disclosure, please tell us how an over-allotment could be created in a best-efforts offering. Also tell us whether and how syndicate short positions would be created in this offering and how the short positions would be closed.
5. Please reconcile your prospectus cover disclosure regarding the composition of the Units with the disclosure at the bottom of page 68 that you might sell units that exclude warrants. In this regard, please ensure that your fee table registers the total amount of each type of unit that you are offering. Also, given that you appear to be ineligible to file a registration statement for an unallocated shelf offering, please clarify in an appropriate section of your document how you determined the number of each type of unit to offer.

#### Prospectus

6. Please revise your filing to include all information except that which can be excluded by Securities Act Rule 430A. We note for example that you have not included the total number of Units and common stock being offered, the specific discount to market at which the units will be offered, or the date on which you will use the market price to establish the fixed offering price. Also note that your disclosure throughout your preliminary prospectus, such as on page 68, must include information based on a *bona fide* estimate of the public offering price; see section II.A.7 of Release 33-6714 (May 27, 1987).
7. Please update the disclosure in your prospectus as appropriate to reflect the information in your filings and press releases after the date you filed this registration statement. Ensure that your disclosure in the prospectus regarding that information is balanced; for example, when disclosing study results, include any material limitations on the results, material negative results, and any required follow-up to the study.

#### Use of proceeds, pages 6 and 17

8. Please disclose the approximate amount of proceeds that you currently intend to use for each identified purpose. Show your intended use of proceeds over a reasonable range of potential amounts that you could receive from the best efforts offering. Disclose any

material impact on your liquidity and operations given a reasonable range of potential amounts of proceeds. See instructions 1 and 3 to Regulation S-K Item 504.

9. Please discuss separately in this section the amount and use of the proceeds from the exercise of the warrants that you are offering in this transaction. Include a reasonable range of potential amounts that you could receive from the exercise of the warrants.

Risk Factors, page 7

10. Please include appropriate risk factor disclosure regarding the ineffectiveness of your disclosure controls and procedures and your internal control over financial reporting disclosed in your most recent Form 10-K and other Exchange Act filings.

Executive Compensation, page 55

11. Please update your disclosure for your most recently completed fiscal year.

Undertakings, page 88

12. Please include all undertakings required by Regulation S-K Item 512(a) and (i).

Exhibits

13. Please file an opinion of counsel as to the legality of each security being offered.
14. Please file the purchase agreement, the warrants to be issued in connection with your offering, and the engagement letter agreement with Brean Capital.
15. Please file the document you identify as exhibit 3.1(b).

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 the information the Securities Act of 1933 and all applicable Securities Act rules require. 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 you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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;

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- 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 staff comments and 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3617 with any questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso  
Branch Chief

cc (via e-mail): Gregg Jaclin, Esq.  
Szaferman Lakind Blumstein & Blader, PC