



DIVISION OF
CORPORATION FINANCE

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

June 19, 2013

Via E-mail

Mr. John H. Karnes
Chief Financial Officer
KiOR, Inc.
13001 Bay Park Road
Pasadena, TX 77507

Re: KiOR, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2012
Filed March 18, 2013
File No. 1-35213

Dear Mr. Karnes:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2012

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 34

Critical Accounting Policies and Estimates, page 34

1. Please revise future filings to identify common stock warrant accounting as a critical accounting policy and provide a comprehensive discussion of management's judgments as to the assumptions used to determine the fair value of your warrants. Alternatively, please explain to us why you do not believe common stock warrant accounting is a critical accounting policy.

Liquidity and Capital Resources, page 39

Alberta Lenders / Khosla Term Loan, page 40

2. We note your disclosure of certain financial covenants related to the Alberta Lenders / Khosla Term Loan. To the extent that it is reasonably likely that you will not meet any significant financial covenant, please revise your future filings to also present, for the most significant and restrictive covenants, the actual ratios and/or other actual amounts versus the minimum/maximum ratios/amounts permitted at the reporting date, as applicable. Such a presentation will allow investors to better understand your current status and ability to meet financial covenants. Refer to Section 501.13.c of the SEC Codification of Financial Reporting Policies.

Item 8. Financial Statements and Supplemental Data, page 46

Note 11. Stockholders' Equity, page 65

Warrants Issued in Connection with Alberta Lenders/Khosla Term Loan, page 65

3. Please tell us and revise future filings to describe the material provisions of the warrants issued in connection with the Alberta Lenders/Khosla Term Loan, as well as tell us and disclose how you determined that such warrants should be accounted for as equity.
4. In future filings, please revise your disclosure to also include a table showing a rollforward of the warrants issued/exercised during the periods presented and total warrants outstanding as of the balance sheet date that have been issued in connection with the Alberta Lenders/Khosla Term Loan. In your year-end disclosures, please specifically identify in your rollforward, which tranche of warrants issued represent the Subsequent Drawdown, ATM and PIK Warrants.

Supplementary Financial Data, page 70

5. In future filings, please disclose net sales and gross profit (net sales less costs and expenses associated directly with or allocated to products sold or services rendered) for each full quarter, as provided in Item 302(A)(1) of Regulation S-K.

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 Exchange Act of 1934 and all applicable Exchange 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.

In responding to our comments, please provide a written statement from the company acknowledging that:

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- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Dale Welcome at (202) 551-3865 or me at (202) 551-3768 if you have questions regarding this comment.

Sincerely,

/s/ John Cash

John Cash
Accounting Branch Chief