



DIVISION OF
CORPORATION FINANCE

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

October 3, 2014

Via E-mail

Ilan Reich
Chief Executive Officer
Viatar CTC Solutions Inc.
116 John Street, Suite 10
Lowell, Massachusetts 01582

**Re: Viatar CTC Solutions Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted September 8, 2014
CIK No. 0001616495**

Dear Mr. Reich:

We have reviewed your draft registration statement 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 by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If 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 the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Calculation of Registration Fee

1. Because you are not registering the exercise of the warrants, your reliance on Rule 457(g) to calculate the fee, as you indicate in footnote 3, is not appropriate for this registration statement. Please revise to refer to an applicable section of Rule 457.

Prospectus Cover Page

2. Given the requirements in paragraph 16 of Securities Act Schedule A and Item 501(b)(3) of Regulation S-K, you must disclose the offering price at which the selling stockholders will offer and sell the securities registered for resale. We will not object if you disclose a fixed price at which the selling stockholders will sell, and disclose that the selling stockholders will sell at that price until the price of your shares is quoted on one of the

marketplaces that you cite in the third-to-last paragraph on your prospectus cover and thereafter at prevailing market prices or privately negotiated prices.

Prospectus Summary, page 1

3. The introductory paragraph to your summary states that the summary is not complete. A summary, by its very nature, does not and is not required to contain all of the detailed information that is in the prospectus. However, if you have elected to include a summary in your prospectus, it must be complete. Do you mean to say that, because this is a summary, it may not contain all of the information that is important to your investors? Delete the reference to an incomplete summary from your prospectus.

Overview, page 1

4. Refer to the first bullet point in the second list of bullet points on page 1. Briefly highlight why you changed your business plans. Also, in an appropriate section of your prospectus, disclose how you disposed of the assets and liabilities of the prior business.
5. Please disclose prominently in your prospectus summary the substantial doubt about your ability to continue as a going concern as mentioned in your auditor's report.
6. Please revise the forepart of your document to replace technical terms with concrete, everyday language that is understandable to investors who may not be experts in your industry. For example, your disclosure refers to "front end" for DNA sequencing, 510K, Premarket Approval, and leukapheresis as if investors are already familiar with those concepts and their significance. See Rule 421(d). In sections other than the forepart of your document, if you must use technical terms, please ensure that they are clear in context. For example, on page 31 you refer to an investigational device exemption as if investors would already be aware of the significance of that term.
7. Please highlight the material hurdles that remain before your technology is ready for submission for FDA marketing clearance.
8. Please highlight in your prospectus summary the control by your CEO as described in the first risk factor on page 18.
9. If your proposed "Molecular Diagnostics System" does not diagnose a disease or injury, please say so clearly and directly to balance the name that you have given the system.

Implications of Being an Emerging Growth Company, page 2

10. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act,

whether or not they retain copies of the communications. Similarly, please supplementally provide us with any research reports about you that are published or distributed in reliance upon Section 2(a)(3) of the Securities Act of 1933 added by Section 105(a) of the Jumpstart Our Business Startups Act by any broker or dealer that is participating or will participate in your offering.

Our commercial success, page 12

11. Refer the last sentence of this risk factor. Please clarify why users of your potential products “will likely” have “missing documentation and/or other issues.”

If we do not receive regulatory approvals, page 14

12. Please clarify the reason for the uncertainty expressed in the first sentence of this risk factor. Also tell us why you believe you need FDA clearance only for “diagnostic” uses.

If we are unable to maintain, page 16

13. Please separate your discussion of granted patents and patent applications so that it is clear from your risk factor the number of patents that you have been granted. Likewise, please separately quantify your owned versus licensed patents.

Special Note, page 20

14. You may not disclaim responsibility for your disclosure. Please revise the penultimate sentence of the penultimate paragraph of this section accordingly.

Market and Industry Data, page 21

15. Please tell us whether you commissioned any of the data used in your prospectus.

Warrant liability, page 24

16. Please clarify whether this transaction qualifies as an initial public offering for purposes of fixing the warrant exercise price. Also tell us whether this transaction qualifies as an initial public offering for purposes of the trigger mentioned on page 76.

Capital Resources and Expenditure Requirements, page 29

17. Please quantify and discuss your known obligations, including the minimum payments under your licenses mentioned on page 44.

Business, page 30

18. Please tell us why you do not describe in this section the “application delivery and server load balancing solutions” mentioned on page 20.
19. In an appropriate section of your document, please provide the disclosure required by Regulation S-K Item 506, including (1) a comparison of the fixed offering price of this offering to the cash contribution of those people mentioned in the first sentence of that Item, and (2) the net tangible book value per share, and the amount of immediate dilution from the fixed offering price in this offering.

Industry Overview, page 31

20. Please see footnote 41 and the related text of Release 33-7856 (April 28, 2000) regarding your obligations when including internet web site addresses, including your obligation to file the linked information.

Our Technology, page 37

21. From your disclosure in the first paragraph of this section, it appears that you are indicating that competitors’ circulating tumor cell technology, like those you describe on page 33, are ineffective. If so, please provide us support for this claim; otherwise, please clarify your disclosure.
22. When you make comparative statements, like “far greater” on page 37, please clarify against what you are comparing yourself.
23. Please clarify how your proposed “Molecular Diagnostics System” operates. Does your system require a health care provider to draw a 50mL sample from the patient while competing systems require only 10mL?
24. Please state clearly the status of your proposed products. For example, what hurdles must be overcome before you have a product that can be used for clinical trials? Which of the disclosed capabilities of your product have been demonstrated in statistically significant clinical trials? If the effectiveness of your products has been demonstrated as you indicate in the last paragraph on page 38, why must it be validated before you begin the process of seeking regulatory authority to market the proposed products?
25. If you did not conduct the studies mentioned in the last paragraph of this subsection, please revise to remove any implication to the contrary.

Commercialization Strategy, page 39

26. Please disclose the material terms of your collaboration arrangements. Include the duration of each material arrangement and the material obligations of the parties. Clarify who owns the related intellectual property. For example, we note the Vivonics arrangement mentioned on page 95. File the agreements governing the material arrangements as exhibits to this registration statement.

Intellectual property, page 42

27. Please clarify which of the disclosed patent applications and licensed patents relate to your prior business and which relate to your current business. Clarify which features of the products that you describe are protected by the relevant patents; for example, it is unclear whether all of the features mentioned in the last two bullet points on page 38 are protected by your owned patents. Are they protected by licenses? Please file the material licenses as exhibits to your registration statement.
28. Please provide us your analysis of why you believe you need not disclose with greater specificity your obligations under your licenses, including the milestone payments and royalties and any obligation to issue securities.

Government Regulation, page 44

29. Please describe potential penalties for non-compliance with such federal regulatory requirements.

Marketing Authorization, page 44

30. Your disclosure here appears to indicate that you would be authorized to market the product as soon as you submit the 510(k) application. Please more fully describe the regulatory process.

Legal Proceedings, page 46

31. Please tell us why this section does not disclose the proceedings mentioned in the third bullet point on page 20.

Executive Officers and Directors, page 46

32. Please tell us how you reconcile your disclosure regarding the positions that your CEO held from 1998-2001 at Inamed with Inamed's disclosure with the Commission during that time.

33. If you elect to highlight positive results of a company that previously employed your CEO, please ensure that you balance your disclosure with relevant negative trends. For example, what were the income trends during the relevant periods?
34. Please provide us support for the penultimate sentence of the last paragraph on page 46.
35. Refer to your disclosure of “Executive Officers” as separate from “Key Employees.” Please note that Rule 405 defines “executive officer” to include your vice president in charge of a business unit, division or function. Please ensure that your prospectus includes all required disclosure about all individuals who are within this definition of executive officer.

Employment Agreement, page 49

36. Please tell us which members of your management team are parties to the employment agreements mentioned on page 7.

Director Compensation, page 50

37. Please disclose with this table the information required by the Instructions to Regulation S-K Item 402(n)(2)(v) and (vi). See the instruction to Item 402(r).

Selling Stockholders, page 50

38. Please disclose the material terms of the warrants related to shares being offered. Include the exercise price, redemption terms, expiration date, and any material terms relating to adjustment of the exercise price. Also, please provide us your analysis of whether the warrants should be filed as exhibits to this registration statement.
39. We note that the selling stockholders will own no securities after the offering. If a selling stockholder acquired securities from you or any predecessor or affiliate in the past three years, please disclose the material terms of that transaction, including the date of the transaction, the nature and amount of consideration, and when that consideration was paid. For selling stockholders who acquired securities from you or any predecessor or affiliate more than three years ago, please include in your letter to us that you provide in response to these comments the material terms of those transactions, including the date of the transactions, the nature and amount of consideration, and when that consideration was paid. Address in your response the terms of the escrow mentioned on page 94 and whether any selling stockholders are offering the shares held in escrow.
40. Please disclose the natural person or persons who exercise the sole or shared voting and/or dispositive powers with respect to the shares to be offered by AFILP.

41. Please reconcile the number of shares underlying warrants mentioned in the footnotes to this table with the number of shares underlying warrants mentioned in the fee table to this registration statement.

Plan of Distribution, page 53

42. Please provide us your analysis supporting your conclusion that the information in the last list of bullet points in this section may be provided by a prospectus supplement filed per Rule 424 rather than an amendment to this registration statement. See Regulation S-K Item 512(a)(1)(iii).

Securities Ownership of Certain Beneficial Owners and Management, page 55

43. Please include disclosure substantially in the tabular form required by Regulation S-K Item 403 for each class of securities addressed by that Item.

Description of Securities, page 56

44. Please disclose the number of shares underlying the convertible note mentioned on page 85.
45. Please quantify the amount of common equity that could be sold pursuant to Rule 144 or that the registrant has agreed to register under the Securities Act for sale by securities holders. See Item 201(a)(2)(ii) of Regulation S-K.

Additional Information, page 61

46. We note your reference to proxy statements in the second paragraph. Please tell us when you plan to register a class of your securities per Section 12 of the Exchange Act.

Condensed Consolidated Balance Sheets, page 85

47. We see you have recorded interest receivable of \$60,622 and \$44,782 at June 30, 2014 and December 31, 2013, respectively. Based on disclosures at pages 72 and 93, it appears the interest receivable is from promissory notes received for the issuance of common stock. Please tell us how you considered the guidance at FASB ASC 505-10-45 or other authoritative U.S. GAAP when determining how to present the referenced interest receivable in your balance sheets.
48. In a related matter, based on disclosures at page 27 it appears the line item "interest and dividends" presented in your statement of operations for fiscal 2013 and 2012 as well as the 2014 interim period includes accrued interest income on promissory notes received for the issuance of member units. Please tell us the authoritative U.S. GAAP you

considered when determining how to account for and present interest due on promissory notes received in exchange for the issuance of member units.

Note 3 Stockholders' Equity (Deficit), page 92

49. Given you converted to a C corporation on February 25, 2014, please tell us why the disclosures in the last paragraph in this footnote related to your authorization to issue 1,000,000 member units are meaningful. Please revise this footnote, as necessary, based on our comment.

Recent Sales of Unregistered Securities, page 100

50. Please provide the disclosure required by Regulation S-K Item 701 for the past three years, not just since February 25, 2014.
51. Please clarify which sales you believe were exempt from registration per Regulation D, and tell us when you filed a Form D related to those sales.
52. Please disclose the number of investors involved in each transaction, and clarify the facts relied upon to make the issuance of securities in your conversion to a corporation exempt from registration.

Undertakings, page 100

53. Please provide the undertakings required by Regulation S-K Item 512(a)(6).

Signatures, page 102

54. When you file your registration statement, please ensure that you indicate clearly below the second paragraph of text required on the Signatures page who signed the registration statement in the capacity of principal financial officer, controller or principal accounting officer, and director so that it is clear that the document has been signed all persons required per Instruction 1 to the Signatures page of Form S-1.

Exhibits

55. We note your reference on page 46 to directors you plan to appoint. Please file the consents required by Rule 438.

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

Ilan Reich
Viatar CTC Solutions Inc.
October 3, 2014
Page 9

Please keep in mind that we may publicly post filing review correspondence in accordance with our December 1, 2011 policy (<http://www.sec.gov/divisions/corpfin/cfannouncements/edgarcorrespondence.htm>). If you intend to use Rule 83 (17 CFR 200.83) to request confidential treatment of information in the correspondence you submit on EDGAR, please properly mark that information in each of your confidential submissions to us so we do not repeat or refer to that information in our comment letters to you.

You may contact Dennis Hult at 202-551-3618 or Jay Webb at 202-551-3603 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at 202-551-3637 or me at 202-551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief

cc: (via e-mail): Gregory Sichenzia, Esq.