



DIVISION OF
CORPORATION FINANCE

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

May 14, 2014

Via E-mail

Steven T. Sobieski
Chief Financial Officer
Roka Bioscience, Inc.
20 Independence Boulevard
Warren, NJ 07059

**Re: Roka Bioscience, Inc.
Amendment No. 3 to Draft Registration Statement on Form S-1
Submitted April 30, 2014
CIK No. 0001472343**

Dear Mr. Sobieski:

We have reviewed your amended 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.

Company Overview, page 1

1. Please address that part of prior comment 2 that sought disclosure in your summary regarding the extent of your reliance on major customers to balance your current summary disclosure referring to multiple customers.

Claims that our molecular assays and instruments . . . , page 23

2. Please expand your response to prior comment 6 to tell us what contract allows you to acquire rights to the technology. Also tell us whether that contract eliminates any liability you might have for your use of the technology before you acquire the rights; if it does not eliminate that liability, please provide us your analysis of the materiality of any such liability.

Results of Operations, page 51

3. Please expand your response to prior comment 7 to tell us when you introduced each of the assays that you currently sell and the extent of the effect of those newly introduced assays on your sales in each of the periods presented. It remains unclear to what extent the currently disclosed increase in consumables sales resulted from the introduction of new assays.

Our Atlas Detection Assay Performance, page 77

4. We note your response to prior comment 9; however, your references to the AOAC in this section appear to indicate that the data presented in this section has been certified by the AOAC. Please file the consent of the AOAC.

Collaborate with food safety . . . , page 81

5. We note your response to prior comment 11. Please clarify what you mean by a “non-commercial” arrangement. In this regard, if the USDA has no financial obligations to you, please say so clearly.

License Agreement from Gen-Probe, page 84

6. We note that your disclosure in clause (i) in your response to prior comment 14 addresses your ability to manufacture and commercialize your product rather than the extent that parties can compete with you. Please address the extent that parties can compete with you. Also tell us (1) why Gen-Probe’s right to commercialize the assay products that you license does not present a competitive threat, and (2) where you explain in your prospectus disclosure the issue mentioned in clause (iii) of your response.
7. Please expand your response to prior comment 15 to clarify whether you have analyzed the Gen-Probe patents that do relate to your business. Also, please disclose the content of the last sentence of your response to that comment.

General

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>.

Steven T. Sobieski
Roka Bioscience, Inc.
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You may contact Dennis Hult at (202) 551-3618 or Kevin Vaughn at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Brian Soares at (202) 551-3580 or me at (202) 551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief

cc (via e-mail): Steven M. Skolnick
Lowenstein Sandler LLP