



DIVISION OF
CORPORATION FINANCE

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

June 6, 2014

Via E-mail

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

**Re: Roka Bioscience, Inc.
Registration Statement on Form S-1
Filed May 21, 2014
File No. 333-196135**

Dear Mr. Sobieski:

We have reviewed your 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Claims that our molecular assays, page 24

1. We note your revisions in response to prior comment 2. Please tell us why you believe there is doubt about whether the third-party claims are relevant to the technology you use, and provide us your analysis of whether your prospectus summary should identify this issue specifically rather than just the general reference to potential claims currently on page 7.

License Agreement, page 90

2. We note your revisions in response to prior comment 6.
 - Please clarify what you mean by CUDA patents in a manner that permits investors to understand the significance of the non-exclusivity.
 - Please provide sufficient information regarding the nature and extent of the rights Gen-Probe granted as of the effective date of the license so that investors can evaluate

the extent of the competitive risk. Likewise, please provide sufficient information regarding the assay products in existence as of the date the license was executed as mentioned in the first clause (ii) of the first full paragraph on page 90 so that investors can evaluate the extent of the competitive risk from Gen-Probe.

Certain Relationships and Related Party Transactions, page 117

3. Please ensure that your disclosure is current. For example, we note the disclosure of the payments mentioned on page 121 through December 31, 2013.

Exhibits

4. Please tell us the authority on which you rely to conclude that exhibits included with your draft registration statement have been “previously filed.”

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;
- 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.

Steven T. Sobieski
Roka Bioscience, Inc.
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You may contact Dennis Hult at (202) 551-3618 or Kevin Vaughn, Accounting Branch Chief, 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