

October 7, 2013

Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-2001

Attention: John Reynolds
Assistant Director

RE: Veracyte, Inc.
Registration Statement on Form S-1
Filed September 20, 2013
File No. 333-191282

Dear Mr. Reynolds:

Veracyte, Inc. (the "Registrant") hereby provides the following information in response to the comments received from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") in its letter to the Registrant dated September 30, 2013. The number of the responses and the headings set forth below correspond to the numbered comments and headings in the letter from the Staff.

On behalf of the Registrant, we are concurrently filing via EDGAR Amendment No. 1 to the Registration Statement on Form S-1 ("Amendment No. 1"), and for the convenience of the Staff, we are providing to the Staff by courier delivery, a copy of this letter, a copy of Amendment No. 1, and a marked copy of Amendment No.1 (against the Registration Statement on Form S-1 filed on September 20, 2013).

Additionally, under separate cover, we are supplementally providing the Staff with materials that the Registrant orally presented to potential investors in reliance on Section 5(d) of the Securities Act of 1933.

October 7, 2013
Page 2

Prospectus Summary, page 1

1. *Please expand your disclosure to address the following:*

- *It is unclear how you determined that molecular diagnostic solutions represent a \$4.0 billion opportunity. Please provide further clarification of your statements that your conclusions were based on primary research with participants in the industry.*
- *Address how you concluded that Afirma GEC is sufficiently robust to reduce diagnostic surgery on patients with cytology indeterminate results by 90% given the report cited by you appears to make this claim only where the result has been reclassified as benign, rather than for all cases of cytology indeterminate results. We note that only 93 of 180 nonmalignant samples were correctly identified as benign by the gene-expression classifier, yielding a specificity of 52%.*

In addition, please provide clear disclosure in the prospectus of the basis for these and other statements, citing the source(s) of the information, where available.

Response: In response to the Staff's comment, the Registrant has revised the above-referenced statements in Amendment No. 1 to provide additional detail regarding the basis for these statements. The Registrant supplementally advises the Staff that the potential market opportunity is based on the Registrant's ongoing market research. The reference to primary research with participants in the industry was intended to connote that publicly available information and discussions with industry experts and the like are some of the factors the Registrant considers in its analysis.

Additionally, in response to the Staff's comment, the Registrant has provided additional disclosure in Amendment No. 1 which provides the basis and sources of various statements in the prospectus, and has added a section entitled "References" that includes detailed citations to the source data.

2. *We reissue comment seven from our letter dated September 9, 2013. Please update the disclosure throughout the prospectus as of the most recent practicable date. For instance, we note the amount of common stock outstanding is as of June 30, 2013.*

Response: In response to the Staff's comment, the Registrant has updated disclosure throughout the prospectus through October 1, 2013.

Information Regarding Forward-Looking Statements, page 32

3. *We note that you state that you "have not independently verified the third party data ... and believe it to be reasonable." Please remove that statement. In addition, as previously requested, please add clear disclosure that the company is responsible for all of the disclosure included in the prospectus.*

Response: In response to the Staff's comment, the Registrant has revised page 33 of Amendment No. 1 to remove the referenced statement and add the additional disclosure requested by the Staff.

October 7, 2013
Page 3

Use of Proceeds, page 33

4. *We note the allocation to working capital and general corporate purposes. Please clarify whether any of these proceeds may be used to pay compensation to officers and/or directors. If so, add a separate line to the table to reflect such compensation.*

Response: In response to the Staff's comment, the Registrant has revised "Use of Proceeds" to clarify that it intends to use a portion of the proceeds for working capital and other general corporate purposes, including the costs of operating as a public company. The Registrant has revised Amendment No. 1 to describe its post-IPO compensation for non-employee directors, as approved by the Board of Directors last week, under the heading "Director Compensation" on page 99, and 2013 compensation for executive officers is provided in "Executive Compensation". While the Registrant is not aware of specific plans for future compensation other than as disclosed in the Registration Statement, the Registrant respectfully submits that decisions with respect to future compensation of directors and executive officers falls within the authority reserved for the Board of Directors in their discretion. Additionally, the Registrant respectfully submits that it does not believe specifically identifying director and officer compensation as a specific use of proceeds is appropriate because such compensation is a normal general and administrative expense associated with running a business and not a material use of proceeds from the proposed offering.

5. *We note the disclosure in this section, the summary, and risk factors section regarding the broad discretion of management in using the net proceeds from the offering and the disclosure regarding the potential allocation of proceeds to acquisitions. The company may reserve the right to change the use of proceeds, provided that such reservation is due to certain contingencies that are discussed specifically and the alternatives to such use are indicated. See Instruction 7 to item 504 of Regulation S-K. Please revise the disclosure in this section accordingly.*

Response: In response to the Staff's comment, the Registrant has added the requested disclosure to "Use of Proceeds" in Amendment No. 1 on page 34.

October 7, 2013
Page 4

Management's Discussion and Analysis of Financial Condition and Results of Operations

Factors Affecting Our Performance

How we recognize revenue, page 50

6. *We note your response to prior comment 13. However, considering the significant percentage of revenues you recognize upon cash collection, it appears to us disclosures of amounts billed for tests where services have been performed and results have been delivered is an important element that would enhance investors' understanding of your business, performance and potential future revenues. Accordingly, revise your filing to disclose (i) the estimated future revenue not yet recognized for tests where results have been delivered, but no revenues have been recognized because collection was not reasonably assured at each of the balance sheet dates (ii) the period and the amount such estimated revenue was subsequently recognized and (iii) that some of these amounts may never be collected.*

Response: In response to the Staff's comment, the Registrant has added the requested disclosure to Amendment No. 1 on page 53.

Liquidity and Capital Resources, page 56

7. *It is not sufficient to indicate merely the length of time that your resources will be adequate to meet your cash requirements. Refer to Securities Act Release No. 33-8350, Section IV. Your disclosure should provide a clear picture of your ability to generate cash and to meet existing and known or reasonably likely future cash requirements. Please expand your discussion accordingly. In addition, discuss in greater detail the circumstances that may result in a change in the length of time the company has sufficient resources to meet its cash requirements.*

Response: In response to the Staff's comment, the Registrant has added the requested disclosure to Amendment No. 1 beginning on page 59.

October 7, 2013
Page 5

Description of Business, page 60

8. *We reissue comment 17 from our letter dated September 9, 2013. Please provide a description of your plan of operations for the remainder of the fiscal year and the first six months of the next fiscal year, including the anticipated research and development to be performed during this time period. Provide clear disclosure in the business section as to the time period for each specific element of the plan of operations and discuss the costs associated with the various plans. Provide a more detailed discussion of the use of proceeds and how such funds will satisfy your cash operations for the period disclosed. In addition, discuss any anticipated material changes in the number of employees. The disclosure you reference in your response focuses on the adequacy of the office space, not the number of employees.*

Response: In response to the Staff's comment, the Registrant has added the requested disclosure to "Business" under the caption "Near-term Plan of Operations" on page 85 of Amendment No. 1.

Physicians, page 66

9. We note the reference to the third party who prepared the market research study. Please identify the third party and file their consent as an exhibit.

Response: In response to the Staff's comment, the Registrant has identified such third party on Page 69. The Registrant has filed the consent as Exhibit 23.3 to Amendment No. 1. The Registrant supplementally advises the Staff that it has been informed by WorldOne Interactive that WorldOne Interactive has acquired Sermo. WorldOne Interactive is the Global Engagement Group of WorldOne, Inc.

Preferred Stock, page 110

10. Please clarify when the conversion of the preferred stock will occur. The current disclosure says as of August 30, 2013 but then goes on to state this is upon the closing of the offering. To the extent this has not already occurred, revise to provide clear disclosure throughout the prospectus of the concurrent conversion transaction.

Response: In response to the Staff's comment, the Registrant has revised the disclosure on page 117 of Amendment No. 1 to clarify that the conversion of the preferred stock will occur upon the closing of the offering.

* * *

October 7, 2013

Page 6

The Registrant acknowledges the following:

- the Registrant 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 Registrant 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.

We trust the forgoing to be responsive to the Staff's comments. Should you have questions or if we can provide you with any additional information, please call me at (650) 233-4670. You may also direct any further comments to me via facsimile at (650) 233-4545 or via email.

Very truly yours,

/s/ Gabriella A. Lombardi

Gabriella A. Lombardi

cc: Veracyte, Inc.:
Bonnie H. Anderson, President and Chief Executive Officer
Shelly D. Guyer, Chief Financial Officer

Simpson Thacher & Bartlett LLP:
William H. Hinman, Esq.

Pillsbury Winthrop Shaw Pittman LLP:
Stanton D. Wong
Christina F. Pearson
