



DIVISION OF  
CORPORATION FINANCE

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

May 7, 2015

Via E-mail

Mr. Panna L. Sharma  
Chief Executive Officer  
Cancer Genetics, Inc.  
201 Route 17 North  
2<sup>nd</sup> Floor  
Rutherford, NJ 07070

**Re: Cancer Genetics, Inc.  
Form 10-K for the Year Ended December 31, 2014  
Filed March 16, 2015  
File No. 001-35817**

Dear Mr. Sharma:

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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2014  
Management's Discussion and Analysis of Financial Condition and Results of Operations, page 62

1. We note that in your earnings call on March 12, 2015 you quantified your backlog at the closing of 2014 (about \$25 million) and discussed the trend in backlog as well as the timeframe when you believe you will recognize revenue. We are unable to locate disclosure regarding backlog in your Form 10-K. Please revise future filings to address your backlog pursuant to Item 101(c)(2)(viii) of Regulation S-K. Provide us with draft disclosure.

Financial Statements and Supplementary Data, page 75

Notes to Consolidated Financial Statements, page 82

Note 2. Significant Accounting Policies, page 86

Principles of Consolidation, page 86

2. We note here you disclose consolidating three subsidiaries: Cancer Genetics Italia, S.r.l., Gentriss, LLC and CGI India (BioServe). In exhibit 21 to your Form 10-K you list four subsidiaries. Please confirm to us that all four of these entities are consolidated in your financial statements or tell us why they are not consolidated and your basis under GAAP.

Revenue Recognition, page 86

3. We note the summary of your 19 active collaborations on page 20 and your disclosure on page 8 that you will continue to develop and expand your collaborations with leading universities and research centers to facilitate the development of additional tests and further demonstrate the clinical value of your existing tests. Please tell us how you account for revenue from your collaboration agreements, including any upfront or milestone payments received, and cite the accounting guidance that you apply. Also confirm that will expand your revenue recognition disclosure in future filings to clearly describe how you account for the collaboration agreements or tell us why you believe such disclosure is not required.

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.

Panna L. Sharma  
Cancer Genetics, Inc.  
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In responding to our comments, please provide a written statement from the company acknowledging that:

- 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 Brian McAllister, Staff Accountant, at (202) 551-3341 or John Archfield, Staff Accountant, at (202) 551-3315 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan, Staff Attorney, at (202) 551-3269 or James Lopez, Legal Branch Chief, at (202) 551-3536 on legal or related matters. Please contact me at (202) 551-3871 with any other questions.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins  
Senior Assistant Chief Accountant  
Office of Beverages, Apparel, and  
Mining