

February 12, 2013

**VIA FEDEX**

Securities and Exchange Commission  
Division of Corporation Finance  
Washington, DC 20549-7010  
Attention: Erin Wilson, Esq.

**Re: Cancer Genetics, Inc.  
Amendment No. 14 to Registration Statement on Form S-1  
Filed February 12, 2013  
File No. 333-178836**

Dear Ms. Wilson:

On behalf of Cancer Genetics, Inc. (the "Company"), to expedite your review of the Company's Amendment No. 14 to the Registration Statement filed by the Company earlier today, we are providing you, on a supplemental basis, with our response to two questions you have raised.

First, you have noted that Aegis Capital Corp, in its acceleration request letter dated February 8, 2013, represents that it will distribute preliminary prospectuses in accordance with Rule 460 so as to secure adequate distribution of the preliminary prospectus. You have asked whether such distribution has in fact been made. I have spoken with counsel for Aegis who assures me, and has authorized me to assure the staff, that in fact distribution of the preliminary prospectus has been made in accordance with Rule 460.

You also asked about our reverse stock split, noting that the charter amendment filed with our Amendment No. 13 refers to a reverse split in the range of 1 for 1 to 1 for 2. Under Sections 102(d) and 242 of the General Corporation Law of the State of Delaware, the terms of a reverse stock split can be made dependent on a determination of the board directors of the corporation as to the exact split ratio within a specified range, which was the case for the CGI charter amendment. The split then becomes effective when the board determines the precise split ratio, publicly announces the exact ratio (which was done in our filings included in Amendment No. 13) and files the charter amendment in the form approved by stockholders with the Secretary of State of the State of Delaware (which CGI filed on February 8 at 5:00 p.m.). Accordingly, this will confirm that the reverse split described in the Cancer Genetics prospectus was effective as of 5:00 p.m. on February 8.

If you have any questions or comments with respect to the foregoing, or with respect to the Registration Statement in general, please feel free to call me at 973-597-2564.

Very truly yours,