



DIVISION OF  
CORPORATION FINANCE

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

June 3, 2015

Via E-mail

Stephen DiPalma  
Interim Chief Financial Officer  
Interleukin Genetics, Inc.  
135 Beaver Street  
Waltham, Massachusetts 02452

**Re: Interleukin Genetics, Inc.  
Preliminary Proxy Statement on Schedule 14A  
Filed May 26, 2015  
File No. 001-32715**

Dear Mr. DiPalma:

We have limited our review of your proxy statement to the issue we have addressed in our comment. Please respond to this letter by amending your proxy statement and providing the requested information. Where you do not believe our comment applies 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 proxy statement or your response to our comment, we may have additional comments.

Proposal 5, page 31

Proposal 6, page 32

1. We note that you have proposed amendments to your charter that would increase the number of authorized shares of your common stock and effect a reverse stock split of your common stock. For each of these proposals, please amend your disclosure to indicate whether you have any plans, arrangements or understandings to issue any of the shares that would be newly available for issuance following the increase to authorized shares and reverse stock split. If any such plans exist, please disclose all material information. If not, please revise your disclosure to indicate that you have no such plans.

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.

Stephen DiPalma  
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In responding to our comment, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in its filing;
- staff comments or changes to disclosures 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.

Please contact Alla Berenshteyn at (202) 551-4325 or me at (202) 551-3715 with any other questions.

Sincerely,

*/s/ Bryan J. Pitko* for

Jeffrey P. Riedler  
Assistant Director

cc: Via E-mail  
Brian Keane, Esq.  
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.