

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

Mail Stop 4645

September 7, 2016

Mark B. Carbeau Chief Executive Officer Interleukin Genetics, Inc. 135 Beaver Street Waltham, MA 02452

Re: Interleukin Genetics, Inc.

Preliminary Proxy Statement on Schedule 14A

Filed August 30, 2016 File No. 001-32715

Dear Mr. Carbeau:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or 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. 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 rules require.

Sincerely,

/s/ Erin K. Jaskot, for

Suzanne Hayes Assistant Director Office of Healthcare and Insurance

cc: Brian Keane

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.