

Mail Stop 6010

November 28, 2006

Timothy J. Richerson
Chief Executive Officer
Interleukin Genetics, Inc.
135 Beaver Street
Waltham, Massachusetts 02452

**Re: Interleukin Genetics, Inc.
Registration Statement on Form S-3
File Number 333-138862**

Dear Mr. Richerson:

This is to advise you that we have limited our review of the above referenced registration statement to only the issues identified below.

Form S-3

Confidential Treatment Application

1. We will be monitoring your registration statement for resolution of your pending confidential treatment requests. All comments will need to be fully resolved before we take final action on the registration statement.

Form S-3 Eligibility

2. It is unclear whether you are eligible to use the Form S-3 as it is uncertain if you meet the \$75 million public float requirement set forth in Instruction I.(B)(1) of Form S-3, which provides that the Form S-3 is only available if the aggregate market value of the voting and non-voting common equity held by your non-affiliates is \$75 million or more. Please explain to us why you are eligible to use the Form S-3 or amend your registration statement on an appropriate form.

Signature Page

3. Your principal financial officer and either a controller or chief accounting officer must sign the registration statement. Your next amendment and all subsequent amendments must contain this signature. If a person acts in more than one of these capacities, the

signature page must indicate all of the capacities in which they are signing. Please revise your signature page accordingly.

Exhibit 5.1: Legal Counsel Opinion

4. We note that your registration statement is registering subscription rights to purchase the company's common stock as well as registering the underlying common stock. Please note that Item 601(b)(5) of Regulation S-K requires a legality opinion for the registration of rights as well as the underlying common stock. Please have your counsel revise their legal opinion accordingly.

* * *

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed decision. 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert this action as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

Please contact Song P. Brandon at (202) 551-3621 or me at (202) 551-3710 with any questions.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: Daniel H. Follansbee, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, MA 02111