



DIVISION OF
CORPORATION FINANCE

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

February 4, 2014

Via E-mail

Douglas J. Swirsky
President and Chief Executive Officer
GenVec, Inc.,
910 Clopper Road, Suite 220N
Gaithersburg, Maryland 20878

**Re: GenVec, Inc.
Registration Statement on Form S-3
Filed January 23, 2014
File No. 333-193511**

Dear Mr. Swirsky:

We have limited our review of your registration statement to the issue addressed in our comment. If you do not believe our comment applies to your facts and circumstances, please tell us why in a response.

After reviewing any information you provide in response to this comment, we may have additional comments.

General

1. You have submitted an application for confidential treatment that is currently pending. Once this application has been processed and any outstanding issues with your request have been resolved, you will then be eligible to submit a request for acceleration of your registration statement.

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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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 staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as 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. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Please contact Scot Foley at (202) 551-3383 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler
Assistant Director

cc: Asher M. Rubin
William I. Intner
Hogan Lovells US LLP
100 International Drive, Suite 2000
Baltimore, MD 21202