



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

September 27, 2016

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

Re: GenVec, Inc.
Form 10-K
Filed March 9, 2016
File No. 000-24469

Dear Mr. Swirsky:

We have reviewed your filing and have the following comment.

Please respond to this comment within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing your response to this comment, we may have additional comments.

Item 1. Business
Hearing and Balance Program
Collaboration with Novartis, page 6

1. In future filings, please revise the description of your research collaboration and license agreement with Novartis to describe the material provisions of the agreement. Your disclosure should include the duration of the agreement, termination provisions, royalty terms and a range of the royalty rates. Please ensure that your disclosed range of royalty rates is within a ten-percent range (e.g., "10-20%," "single digits," "teens," "twenties," as applicable).

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 Exchange 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.

Douglas J. Swirsky
GenVec, Inc.
September 27, 2016
Page 2

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

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure 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 Dorrie Yale at 202-551-8776 or Christina Thomas at 202-551-3577 with any questions.

Sincerely,

/s/ Christina M. Thomas for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance