



DIVISION OF
CORPORATION FINANCE

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

February 22, 2011

Paul H. Fischer, Ph.D.
President and Chief Executive Officer
GenVec, Inc.
65 West Watkins Mill Road
Gaithersburg, MD 20878

Re: GenVec, Inc.
Preliminary Proxy Statement
Filed February 11, 2011
File No. 000-24469

Dear Dr. Fischer:

We have completed our review of your filing and do not have any further comments at this time.

Sincerely,

Jeffrey P. Riedler
Assistant Director

cc: William Intner (Hogan Lovells US LLP)