

Via Facsimile and U.S. Mail  
Mail Stop 4720

February 23, 2010

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

**Re: GenVec, Inc.  
Form 10-K for the Fiscal Year Ended December 31, 2008  
Filed March 16, 2009  
File Number 000-24469**

**Definitive Proxy Statement  
Filed April 30, 2009**

Dear Dr. Fischer:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

Sincerely,

Jeffrey Riedler  
Assistant Director