



NDA 22-068/S-002

**APPROVAL LETTER**

Novartis Pharmaceuticals Corporation  
One Health Plaza  
East Hanover, NJ 07936-1080

Attention: Jay Kraker, M.S.  
Senior Regulatory Manager

Dear Mr. Kraker:

Please refer to your supplemental new drug application dated September 16, 2008, received September 16, 2008, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Tasigna® (nilotinib) 200 mg Capsules.

We acknowledge receipt of your submissions dated September 25, 2008, January 14, 15, February 9, 10, 19, June 29, and August 10, 2009.

This supplemental new drug application provides for revisions to the package insert based on new clinical data from a completed hepatic impairment study [Study 2116], clinical data from a Phase 1 trial in combination with imatinib [Study 2103], clinical data from a drug-drug interaction study with warfarin [Study 2123], non-clinical data from a pre- and post-natal study of AMN107 in rat [Study 901168], as well as editorial revisions.

We completed our review of this supplemental new drug application, as amended. It is approved, effective on the date of this letter, for use as recommended in the final printed labeling (FPL) submitted on August 10, 2009.

We remind you of your postmarketing study commitments in your submission dated October 25, 2007. These commitments are listed below.

1. To submit the complete study report (with at least 24 months follow-up of all patients) and data from study 2101, a phase 2 multicenter study of nilotinib in patients with imatinib resistant or intolerant chronic myeloid leukemia in chronic and accelerated phases respectively (arms 4 & 3, respectively).

Protocol Submission:	Study 2101 filed to IND 69,764 in April 2004 (SN 000)
Study Start:	May 2004
Final Report Submission:	by August 2010

3. Conduct a relative bioavailability study (using a liquid formulation as the reference).

Protocol Submission: by August 2009  
Study Start: by November 2009  
Final Report Submission: by July 2010

4. Conduct a clinical study or studies to evaluate whether multiple doses of nilotinib alter the metabolism of a sensitive CYP2C9 substrate (for example, S-warfarin). If a significant interaction is demonstrated, additional clinical studies may be needed to evaluate whether multiple doses of nilotinib alter the metabolism of a sensitive CYP2C8 substrate (for example, repaglinide) and/or a sensitive CYP3A4 substrate (for example, midazolam).

Protocol Submission: by July 2008  
Study Start: by September 2008  
Final Report Submission: by June 2009

5. Conduct a clinical study to evaluate if H2 blockers/proton pump inhibitors alter the pharmacokinetics of nilotinib.

Protocol Submission: by July 2008  
Study Start: by September 2008  
Final Report Submission: by June 2009

6. Submit a supplement containing a revised version of the complete RiskMAP (goals and objectives, tools, implementation plan, evaluation plan and reports to the agency) including all supporting materials. This should incorporate the amendments agreed to in correspondence of October 22 and October 26, 2007.

Submission: by November 30, 2007

Submit clinical protocols to your IND for this product. Submit nonclinical and chemistry, manufacturing, and controls protocols and all study final reports to this NDA. In addition, under 21 CFR 314.81(b)(2)(vii) and 314.81(b)(2)(viii), you should include a status summary of each commitment in your annual report to this NDA. The status summary should include expected summary completion and final report submission dates, any changes in plans since the last annual report, and, for clinical studies, number of patients entered into each study. All submissions, including supplements, relating to these postmarketing study commitments must be prominently labeled “**Postmarketing Study Commitment Protocol**”, “**Postmarketing Study Commitment Final Report**”, or “**Postmarketing Study Commitment Correspondence.**”

If you issue a letter communicating important information about this drug product (i.e., a “Dear Health Care Professional” letter), we request that you submit a copy of the letter to this NDA and a copy to the following address:

MedWatch  
Food and Drug Administration  
Suite 12B05  
5600 Fishers Lane  
Rockville, MD 20857

We remind you that you must comply with the requirements for an approved NDA set forth under 21 CFR 314.80 and 314.81.

If you have any questions, call Christy Cottrell, Regulatory Project Manager, at (301) 796-4256.

Sincerely,

*{See appended electronic signature page}*

Robert L. Justice, M.D., M.S.  
Director  
Division of Drug Oncology Products  
Office of Oncology Drug Products  
Center for Drug Evaluation and Research

-----  
**This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.**  
-----

/s/  
-----

ROBERT L JUSTICE

08/21/2009