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CENTER FOR DRUG EVALUATION AND RESEARCH

Approval Package

APPLICATION NUMBER:

20-636 /S-017 20-933 /S-007

Trade Name: Viramune

Generic Name: Nevirapine

Sponsor: Boehringer Ingelheim Pharmaceuticals, Inc.

Approval Date: March 27, 2002

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APPLICATION NUMBER:

20-636/S-017 20-933/S-007

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APPLICATION NUMBER:

20-636 /S-017 20-933 /S-007

APPROVAL LETTER



Food and Drug Administration Rockville MD 20857

Boehringer Ingelheim Pharmaceuticals, Inc. Attention: Kevin Dransfield Associate Director, Drug Regulatory Affairs 900 Ridgebury Road P.O. Box 368 Ridgefield, CT 06877-0368

Dear Mr. Dransfield:

Please refer to your supplemental new drug applications dated May 31, 2001, received May 31, 2001, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for VIRAMUNE ® (nevirapine) tablets and oral solution.

We acknowledge receipt of your submissions dated:

May 31, 2001	September 6, 2001	January 4, 2002	March 18, 2002
July 31, 2001	September 18, 2001	March 8, 2002	March 27, 2002
August 13,2001	September 24, 2001	March 15, 2002	, , , , , , , , , , , , , , , , , , , ,

These supplemental applications provide information to fulfill the accelerated approval commitments as required under 21 CFR 314.510. Specifically, these new drug applications provide for the use of VIRAMUNE ® (nevirapine) tablets and oral solution in combination with other antiretroviral agents for the treatment of HIV-1 infection.

We have completed the review of these supplemental applications, as amended, and have concluded that adequate information has been presented to demonstrate that the drug products are safe and effective for use as recommended in the agreed upon labeling text. Accordingly, these supplemental applications are approved effective on the date of this letter.

The final printed labeling (FPL) must be identical to the submitted draft package insert and patient package insert dated March 27, 2002.

Please submit the copies of final printed labeling (FPL) electronically to each application according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDA* (January 1999). Alternatively, you may submit 20 paper copies of the FPL as soon as it is available but no more than 30 days after it is printed. Please individually mount ten of the copies on heavyweight paper or similar material. For administrative purposes, these submissions should be designated "FPL for approved supplement NDA 20-636/S-017, 20-933/S-007." In addition, please provide a clean text Microsoft Word version of the label as a desk copy. Approval of these submissions by FDA is not required before the labeling is used. This NDA was approved under the regulations for accelerated approval of new drugs for serious or life-threatening illnesses, specifically, 21 CFR 314.510. Approval of this supplement fulfills your commitments made under 21 CFR 314.510.

We remind you of your postmarketing study commitments in your submission dated March 27, 2002. These commitments are listed below.

- 1. BIPI will work closely with IATEC, the IND holder for the 2NN study, to provide the results of the study to FDA in the fourth quarter of 2003.
- 2. BIPI will perform analyses to evaluate and attempt to determine appropriate dosing recommendations in patients with hepatic impairment by the second quarter of 2004.
- 3. BIPI commits to examine the genotypes and phenotypes of multiple nevirapine resistant HIV-1 isolates from patients receiving nevirapine in combination with other antiretroviral agents, and to provide data on the correlation of nevirapine plasma concentrations and plasma viral load response with the emergence of nevirapine resistance mutations in the 2NN study, in the fourth quarter of 2003.
- 4. BIPI commits to provide analyses of additional clinical trial data and evaluate the association between potential risk factors, including immunologic parameters (i.e. CD₄ counts), race, gender, and development of hepatic adverse eyents, in the third quarter of 2002.

Submit clinical protocols to your IND for this product. Submit nonclinical and chemistry, manufacturing, and controls protocols and all study final reports to these NDAs. 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 these NDAs. 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 Protocol", "Postmarketing Study Final Report", or "Postmarketing Study Correspondence."

Be advised that, as of April 1, 1999, all applications for new active ingredients, new dosage forms, new indications, new routes of administration, and new dosing regimens are required to contain an assessment of the safety and effectiveness of the product in pediatric patients unless this requirement is waived or deferred (63 FR 66632). The label currently includes information for pediatric use in ages greater than 2 months. However, additional information to determine the appropriate dosage of VIRAMUNE for chronic treatment of neonates and infants younger than two months of age is needed. We will defer any requirements for submission of this information until December 31, 2005.

In addition, please submit three copies of the introductory promotional materials that you propose to use for these products. All proposed materials should be submitted in draft or mock-up form, not final print. Please submit one copy to this Division and two copies of both the promotional materials and the package inserts directly to:

Division of Drug Marketing, Advertising, and Communications, HFD-42 Food and Drug Administration 5600 Fishers Lane Rockville, Maryland 20857

If a letter communicating important information about this drug product (i.e., a "Dear Health Care Professional" letter) is issued to physicians and others responsible for patient care, we request that you submit a copy of the letter to this NDA and a copy to the following address:

MEDWATCH, HF-2 FDA 5600 Fishers Lane Rockville, MD 20857

Please submit one market package of the drug product when it is available.

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, please call Ms. Christine Lincoln, RN, MS, MBA, Regulatory Project Manager, at (301) 827-2335.

Sincerely,

{See appended electronic signature page}

Debra Birnkrant, M.D.
Director
Division of Antiviral Drug Products
Office of Drug Evaluation IV
Center for Drug Evaluation and Research

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/s/

Jeffrey Murray 3/27/02 05:17:26 PM

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