

**CENTER FOR DRUG EVALUATION AND RESEARCH**

**APPROVAL PACKAGE FOR:**

**APPLICATION NUMBER**

**21-487**

**Approval Letter(s)**



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
Rockville, MD 20857

NDA 21-487

Forest Laboratories, Inc.  
Attention: Doreen V. Morgan, Pharm. D.  
Harborside Financial Center  
Plaza 3, Suite 602  
Jersey City, NJ 07311

Dear Dr. Morgan:

Please refer to your new drug application (NDA) dated December 19, 2002, received December 19, 2002, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Namenda™ (memantine hydrochloride) 5 mg, 10 mg, 15 mg and 20 mg Tablets.

We acknowledge receipt of your submissions dated:

January 10, 2003	April 11, 2003	July 18, 2003	September 18, 2003
January 14, 2003	April 17, 2003	August 6, 2003	September 19, 2003
January 24, 2003	May 15, 2003	August 7, 2003	September 24, 2003
February 14, 2003	June 3, 2003	August 8, 2003	September 26, 2003
March 5, 2003	June 25, 2003	August 13, 2003	October 3, 2003
March 6, 2003	June 27, 2003	August 14, 2003	October 14, 2003
March 12, 2003	July 1, 2003	August 26, 2003	
March 13, 2003	July 3, 2003	August 29, 2003	
March 19, 2003	July 9, 2003	September 11, 2003	
March 24, 2003	July 11, 2003	September 12, 2003	

This new drug application provides for the use of Namenda™ (memantine hydrochloride) 5 mg, 10 mg, 15 mg and 20 mg Tablets for the treatment of moderate to severe dementia of the Alzheimer's type.

We have completed our review of this application, as amended. It is approved, effective on the date of this letter, for use as recommended in the agreed-upon labeling text.

The final printed labeling (FPL) must be identical to the enclosed labeling text and submitted labeling (immediate container and carton labels dated October 3, 2003, as amended dated October 14, 2003). Marketing the product with FPL that is not identical to the approved labeling text may render the product misbranded and an unapproved new drug.

Please submit an electronic version of the FPL according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format - NDA*. 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. Individually mount 15 of the copies on heavy-weight paper or similar material. For administrative purposes, designate this

submission "FPL for approved NDA 21-487." Approval of this submission by FDA is not required before the labeling is used.

The approved expiration dating for Namenda™ tablets is 18 months at 25° C (77° F) and is based on the stability data provided in your December 19, 2002 submission. The expiration dating can be extended based on additional stability data generated and reported in the annual report.

Validation of the regulatory methods has not been completed. At the present time, it is the policy of the Center not to withhold approval because the methods are being validated. Nevertheless, we expect your continued cooperation to resolve any problems that may be identified.

We remind you of your postmarketing study commitments in your submission dated October 14, 2003. These commitments are listed below.

1. The final study report for the ongoing renal impairment study (MEM-PK-02) should be submitted as a labeling supplement within 1 year of the date of approval.
2. A protocol for a study in subjects with moderate hepatic impairment compared to normal subjects should be submitted within 1 year from the date of approval and the final study report as a labeling supplement should be submitted within 18 months of FDA's acceptance of the protocol. This could be addressed by a post hoc analysis, if there are adequate number of hepatically impaired subjects in the clinical trials.
3. A protocol to evaluate the induction potential of memantine should be submitted within 6 months from the date of approval and the final study report should be submitted within 1 year from the date of approval.
4. Reanalyze the available ECG interval data (including data from study MEM-MD-06A) after all ECGs have been read by a central laboratory using standardized measuring methodology and submit the data within 6 months from the date of approval.
5. Submit additional eye examination results from the ongoing — studies 192944-004-02 and 192944-005-02 and any other memantine studies where eye examination data are systematically collected by October 1, 2007.

Submit clinical protocols for the studies 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 Protocol", "Postmarketing Study Final Report", or "Postmarketing Study Correspondence."

We remind you that you must submit patent information on form FDA 3542, *Patent Information Submitted Upon and After Approval of an NDA or Supplement*, within 30 days of the date of this letter as required by 21 CFR 314.53(c)(2)(ii) and 314.53(d)(2) at the address provided by 21 CFR 314.53(d)(4). The form may be obtained at

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<http://www.fda.gov/opacom/morechoices/fdaforms/cder.html>. To expedite review of this patent declaration form, we request you submit an additional copy of the form to this application and to the Center for Drug Evaluation and Research "Orange Book" staff at

Food and Drug Administration  
Office of Generic Drugs, HFD-610  
Orange Book Staff  
7500 Standish Place  
Metro Park North II  
Rockville, MD 20855-2773

In addition, submit three copies of the introductory promotional materials that you propose to use for this product. Submit all proposed materials in draft or mock-up form, not final print. Send one copy to this division and two copies of both the promotional materials and the package insert directly to:

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

We remind you that you must comply with reporting requirements for an approved NDA (21 CFR 314.80 and 314.81).

The MedWatch-to-Manufacturer Program provides manufacturers with copies of serious adverse event reports that are received directly by the FDA. New molecular entities and important new biologics qualify for inclusion for three years after approval. Your firm is eligible to receive copies of reports for this product. To participate in the program, please see the enrollment instructions and program description details at [www.fda.gov/medwatch/report/mmp.htm](http://www.fda.gov/medwatch/report/mmp.htm).

If you have any questions, call Melina Griffis, R.Ph., Senior Regulatory Project Manager at (301) 594-5526.

Sincerely,

*{See appended electronic signature page}*

Robert Temple, M.D.  
Director  
Office of Drug Evaluation I  
Center for Drug Evaluation and Research

Enclosure

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**This is a representation of an electronic record that was signed electronically and  
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/s/

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Robert Temple  
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