



NDA 22-421

**NDA APPROVAL**

Boehringer Ingelheim Pharmaceuticals, Inc.  
Attention: Daniel T. Coleman, Ph.D.  
Associate Director, Drug Regulatory Affairs  
900 Ridgebury Road, P.O. Box 368  
Ridgefield, CT 06877-0368

Dear Dr. Coleman:

Please refer to your new drug application (NDA) dated October 23, 2008, received October 24, 2008, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Mirapex® ER (pramipexole dihydrochloride) Extended-release Tablets, 0.375 mg, 0.75 mg, 1.5mg, 3 mg, and 4.5 mg.

We acknowledge receipt of your submissions dated December 14, 2009, January 4, 2010 and January 6, 2010. The December 14, 2009, submission constituted a complete response to our August 24, 2009, action letter.

This new drug application provides for a new extended-release dosage of pramipexole (Mirapex® ER) for the treatment of the signs and symptoms of early idiopathic Parkinson's disease.

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 enclosed agreed-upon labeling text.

### **CONTENT OF LABELING**

As soon as possible, but no later than 14 days from the date of this letter, please submit the content of labeling [21 CFR 314.50(l)] in structured product labeling (SPL) format, as described at <http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm>, that is identical to the enclosed labeling (text for the package insert, text for the patient package insert) For administrative purposes, please designate this submission, "**SPL for approved NDA 022421.**"

## **CARTON AND IMMEDIATE CONTAINER LABELS**

Submit final printed carton and container labels that are identical to the carton and immediate container labels, submitted on December 12, 2009, as soon as they are available, but no more than 30 days after they are printed. Please submit these labels electronically according to the guidance for industry titled *Providing Regulatory Submissions in Electronic Format – Human Pharmaceutical Product Applications and Related Submissions Using the eCTD Specifications (October 2005)*. Alternatively, you may submit 12 paper copies, with 6 of the copies individually mounted on heavy-weight paper or similar material. For administrative purposes, designate this submission “**Final Printed Carton and Container Labels for approved NDA 022421.**”

Approval of this submission by FDA is not required before the labeling is used.

We note your agreement on February 2, 2010 to add the following statement, “Tablets must be swallowed whole and must not be chewed, crushed, or divided.” to all carton and immediate container labels in order to maintain consistency with the Dosage and Administration recommendations stated in the product package insert. As we have agreed, the use of carton and container labels already printed without this phrase may be used; we expect that new carton and container labels including the above statement will be available and in use in approximately one month. You must notify the Agency when you start distribution of the product with the new carton and immediate container labels that includes the above statement. Please include, with this notification, final copies of the revised carton and immediate container labels in the same format as described above.

Marketing the product with FPL that is not identical to the approved labeling text may render the product misbranded and an unapproved new drug.

## **CHEMISTRY, MANUFACTURING AND CONTROLS**

1. Based on our review of the stability data and in accordance with ICH Q1E, we grant a 24 month drug product expiry for all tablet strengths packaged in either 30-count or 7-count presentations in (b) (4) bottles with plastic screw caps containing desiccant and stored at USP controlled room temperature, protected from moisture.
2. We also grant a (b) (4) retest period for (b) (4) pramipexole dihydrochloride monohydrate drug substance and a (b) (4) holding period for bulk drug product tablets prior to final packaging.
3. We would like to remind you of our agreement during the previous review cycle to add a (b) (4) time point to the dissolution acceptance criteria within 12 months after the approval of this NDA.

### **REQUIRED PEDIATRIC ASSESSMENTS**

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients, new indications, new dosage forms, new dosing regimens, or new routes of administration are required to contain an assessment of the safety and effectiveness of the product for the claimed indication(s) in pediatric patients unless this requirement is waived, deferred, or inapplicable.

We are waiving the pediatric study requirement for this application because necessary studies are impossible or highly impracticable. Studies are impossible or highly impractical because Parkinson's disease typically occurs in adults over the age of 40 and it does not occur in the pediatric population.

### **PROMOTIONAL MATERIALS**

You may request advisory comments on proposed introductory advertising and promotional labeling. To do so, submit, in triplicate, a cover letter requesting advisory comments, the proposed materials in draft or mock-up form with annotated references, and the package insert to:

Food and Drug Administration  
Center for Drug Evaluation and Research  
Division of Drug Marketing, Advertising, and Communications  
5901-B Ammendale Road  
Beltsville, MD 20705-1266

As required under 21 CFR 314.81(b)(3)(i), you must submit final promotional materials, and the package insert, at the time of initial dissemination or publication, accompanied by a Form FDA 2253. For instruction on completing the Form FDA 2253, see page 2 of the Form. For more information about submission of promotional materials to the Division of Drug Marketing, Advertising, and Communications (DDMAC), see <http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm>.

### **LETTERS TO HEALTH CARE PROFESSIONALS**

If you issue a letter communicating important safety-related information about this drug product (i.e., a "Dear Health Care Professional" letter), we request that you submit an electronic copy of the letter to both this NDA and to the following address:

MedWatch  
Food and Drug Administration  
Suite 12B-05  
5600 Fishers Lane  
Rockville, MD 20857

**REPORTING REQUIREMENTS**

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

If you have any questions, call Stacy Metz, PharmD, Regulatory Project Manager, at (301) 796-2139.

Sincerely,

*{See appended electronic signature page}*

Russell Katz, M.D.  
Director  
Division of Neurology Products  
Center of Drug Evaluation I  
Center of Drug Evaluation and Research

Enclosure - Content of Labeling

Application  
Type/Number

Submission  
Type/Number

Submitter Name

Product Name

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NDA-22421

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ORIG-1

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BOEHRINGER  
INGELHEIM  
PHARMACEUTICA  
LS INC

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PRAMIPEXOLE  
DIHYDROCHLORIDE

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**This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.**  
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/s/  
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RUSSELL G KATZ  
02/19/2010