

# CENTER FOR DRUG EVALUATION AND RESEARCH

## Approval Package for:

### *APPLICATION NUMBER:*

**211150Orig1s000**

*Trade Name:* WAKIX  
*Generic or Proper Name:* Pitolisant

*Sponsor:* Bioprojet Pharma

*Approval Date:* August 14, 2019

*Indication:* Indicated for the treatment of excessive daytime sleepiness (EDS) in adult patients with narcolepsy.

# CENTER FOR DRUG EVALUATION AND RESEARCH

## 211150Orig1s000

### CONTENTS

#### Reviews / Information Included in this NDA Review.

|  |          |
|--|----------|
| <b>Approval Letter</b>                               | <b>X</b> |
| <b>Other Action Letters</b>                          |          |
| <b>Labeling</b>                                      | <b>X</b> |
| <b>REMS</b>  |          |
| <b>Summary Review</b>                                | <b>X</b> |
| <b>Officer/Employee List</b>                         | <b>X</b> |
| <b>Office Director Memo</b>                          |          |
| <b>Cross Discipline Team Leader Review</b>           |          |
| <b>Clinical Review(s)</b>                            | <b>X</b> |
| <b>Product Quality Review(s)</b>                     | <b>X</b> |
| <b>Non-Clinical Review(s)</b>                        | <b>X</b> |
| <b>Statistical Review(s)</b>                         | <b>X</b> |
| <b>Clinical Microbiology / Virology Review(s)</b>    |          |
| <b>Clinical Pharmacology Review(s)</b>               | <b>X</b> |
| <b>Other Reviews</b>                                 | <b>X</b> |
| <b>Risk Assessment and Risk Mitigation Review(s)</b> | <b>X</b> |
| <b>Proprietary Name Review(s)</b>                    | <b>X</b> |
| <b>Administrative/Correspondence Document(s)</b>     | <b>X</b> |

**CENTER FOR DRUG EVALUATION AND  
RESEARCH**

*APPLICATION NUMBER:*

**211150Orig1s000**

**APPROVAL LETTER**



NDA 211150/Original 1

**NDA APPROVAL**

Bioprojet Pharma  
c/o Harmony Biosciences, LLC  
Attention: Michele A. Roy, RN, MS  
VP, Regulatory Affairs  
630 W Germantown Pike, Suite 215  
Plymouth Meeting, PA 19462

Dear Ms. Roy:

Please refer to your new drug application (NDA) dated December 14, 2018, and your amendments, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA) for Wakix (pitolisant) 4.45 mg and 17.8 mg tablets.

NDA 211150 provides for the use of Wakix (pitolisant) tablets for the following indications which, for administrative purposes, we have designated as follows:

- NDA 211150/Original 1 – Treatment of excessive daytime sleepiness in adult patients with narcolepsy

(b) (4)

The subject of this action letter is NDA 211150/Original 1.

(b) (4)

### **APPROVAL & LABELING**

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.

### **CONTENT OF LABELING**

As soon as possible, but no later than 14 days from the date of this letter, submit the content of labeling [21 CFR 314.50(l)] in structured product labeling (SPL) format using the FDA automated drug registration and listing system (eLIST), as described at FDA.gov.<sup>1</sup> Content of labeling must be identical to the enclosed labeling (text for the Prescribing Information) as well as annual reportable changes not included in the

<sup>1</sup> <http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm>

enclosed labeling. Information on submitting SPL files using eLIST may be found in the guidance for industry *SPL Standard for Content of Labeling Technical Qs and As*.<sup>2</sup>

The SPL will be accessible via publicly available labeling repositories.

### **CARTON AND CONTAINER LABELING**

Submit final printed carton and container labeling that are identical to the enclosed carton and container labeling, as soon as they are available, but no more than 30 days after they are printed. Please submit these labeling electronically according to the guidance for industry *Providing Regulatory Submissions in Electronic Format — Certain Human Pharmaceutical Product Applications and Related Submissions Using the eCTD Specifications*. For administrative purposes, designate this submission “**Final Printed Carton and Container Labeling for approved NDA 211150.**” Approval of this submission by FDA is not required before the labeling is used.

### **ADVISORY COMMITTEE**

Your application for Wakix was not referred to an FDA advisory committee because the application did not raise significant safety or efficacy issues that were unexpected for a drug in the intended population.

### **REQUIRED PEDIATRIC ASSESSMENTS**

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients (which includes new salts and new fixed combinations), 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 in pediatric patients unless this requirement is waived, deferred, or inapplicable.

Because this drug product for this indication has an orphan drug designation, you are exempt from this requirement.

### **POSTMARKETING REQUIREMENTS UNDER 505(o)**

Section 505(o)(3) of the FDCA authorizes FDA to require holders of approved drug and biological product applications to conduct postmarketing studies and clinical trials for certain purposes, if FDA makes certain findings required by the statute.

We have determined that an analysis of spontaneous postmarketing adverse events reported under subsection 505(k)(1) of the FDCA will not be sufficient to identify an

---

<sup>2</sup> We update guidances periodically. For the most recent version of a guidance, check the FDA Guidance Documents Database <https://www.fda.gov/RegulatoryInformation/Guidances/default.htm>.

unexpected serious risk of pregnancy complications, effects on the developing fetus and neonate, and effects on the breastfed infant during lactation.

Furthermore, the new pharmacovigilance system that FDA is required to establish under section 505(k)(3) of the FDCA will not be sufficient to assess these serious risks.

Therefore, based on appropriate scientific data, FDA has determined that you are required to conduct the following studies:

3675-1 Conduct a prospective, registry-based, observational exposure cohort study that compares the maternal, fetal, and infant outcomes of women exposed to pitolisant during pregnancy to an unexposed control population. The registry will detect and record major and minor congenital malformations, spontaneous abortions, stillbirths, elective terminations, small for gestational age, preterm birth, and any other adverse pregnancy outcomes. These outcomes will be assessed throughout pregnancy. Infant outcomes, including effects on postnatal growth and development, will be assessed through at least the first year of life.

The timetable you agreed to on August 12, 2019, states that you will conduct this study according to the following schedule:

Final Protocol Submission: 06/2020  
Study Completion: 06/2030  
Final Report Submission: 06/2030

3675-2 Conduct a pregnancy study that uses a different design from the Pregnancy Registry (e.g., a case control study or a retrospective cohort study using claims or electronic medical record data with outcome validation) to assess major congenital malformations, spontaneous abortions, stillbirths, and small for gestational age and preterm birth in women exposed to pitolisant during pregnancy compared to an unexposed control population.

The timetable you agreed to on August 12, 2019, states that you will conduct this study according to the following schedule:

Final Protocol Submission: 06/2020  
Study Completion: 06/2030  
Final Report Submission: 06/2030

3675-3 Conduct a lactation study in lactating women who have received therapeutic doses of pitolisant using a validated assay to assess concentrations of pitolisant in breast milk.

The timetable you agreed to on August 12, 2019, states that you will conduct this study according to the following schedule:

Final Protocol Submission: 06/2020

Study Completion: 06/2021

Final Report Submission: 06/2022

Submit clinical protocols to your IND 111842 with a cross-reference letter to this NDA. Submit nonclinical and chemistry, manufacturing, and controls protocols and all final reports to your NDA. Prominently identify the submission with the following wording in bold capital letters at the top of the first page of the submission, as appropriate:

**Required Postmarketing Protocol Under 505(o), Required Postmarketing Final Report Under 505(o), Required Postmarketing Correspondence Under 505(o).**

Submission of the protocols for required postmarketing observational studies to your IND is for purposes of administrative tracking only. These studies do not constitute clinical investigations pursuant to 21 CFR 312.3(b) and therefore are not subject to the IND requirements under 21 CFR part 312 or FDA's regulations under 21 CFR parts 50 (Protection of Human Subjects) and 56 (Institutional Review Boards).

Section 505(o)(3)(E)(ii) of the FDCA requires you to report periodically on the status of any study or clinical trial required under this section. This section also requires you to periodically report to FDA on the status of any study or clinical trial otherwise undertaken to investigate a safety issue. Section 506B of the FDCA, as well as 21 CFR 314.81(b)(2)(vii) requires you to report annually on the status of any postmarketing commitments or required studies or clinical trials.

FDA will consider the submission of your annual report under section 506B and 21 CFR 314.81(b)(2)(vii) to satisfy the periodic reporting requirement under section 505(o)(3)(E)(ii) provided that you include the elements listed in 505(o) and 21 CFR 314.81(b)(2)(vii). We remind you that to comply with 505(o), your annual report must also include a report on the status of any study or clinical trial otherwise undertaken to investigate a safety issue. Failure to submit an annual report for studies or clinical trials required under 505(o) on the date required will be considered a violation of FDCA section 505(o)(3)(E)(ii) and could result in enforcement action.

### **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 Prescribing Information, Medication Guide, and Patient Package Insert (as applicable) to:

**U.S. Food and Drug Administration**  
Silver Spring, MD 20993  
[www.fda.gov](http://www.fda.gov)

OPDP Regulatory Project Manager  
Food and Drug Administration  
Center for Drug Evaluation and Research  
Office of Prescription Drug Promotion  
5901-B Ammendale Road  
Beltsville, MD 20705-1266

Alternatively, you may submit a request for advisory comments electronically in eCTD format. For more information about submitting promotional materials in eCTD format, see the draft guidance for industry *Providing Regulatory Submissions in Electronic and Non-Electronic Format – Promotional Labeling and Advertising Materials for Human Prescription Drugs*.<sup>3</sup>

As required under 21 CFR 314.81(b)(3)(i), you must submit final promotional materials, and the Prescribing Information, at the time of initial dissemination or publication, accompanied by a Form FDA 2253. Form FDA 2253 is available at FDA.gov.<sup>4</sup> Information and Instructions for completing the form can be found at FDA.gov.<sup>5</sup> For more information about submission of promotional materials to the Office of Prescription Drug Promotion (OPDP), see FDA.gov.<sup>6</sup>

## **REPORTING REQUIREMENTS**

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

## **MEDWATCH-TO-MANUFACTURER PROGRAM**

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 FDA.gov.<sup>7</sup>

---

<sup>3</sup> When final, this guidance will represent the FDA's current thinking on this topic. For the most recent version of a guidance, check the FDA guidance web page at <https://www.fda.gov/RegulatoryInformation/Guidances/default.htm>.

<sup>4</sup> <http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM083570.pdf>

<sup>5</sup> <http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM375154.pdf>

<sup>6</sup> <http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm>

<sup>7</sup> <http://www.fda.gov/Safety/MedWatch/HowToReport/ucm166910.htm>



## **POST APPROVAL FEEDBACK MEETING**

New molecular entities and new biologics qualify for a post approval feedback meeting. Such meetings are used to discuss the quality of the application and to evaluate the communication process during drug development and marketing application review. The purpose is to learn from successful aspects of the review process and to identify areas that could benefit from improvement. If you would like to have such a meeting with us, call the Regulatory Project Manager for this application.

If you have any questions, contact LT Brendan Muoio, Senior Regulatory Project Manager, at (240) 402-4518 or [brendan.muio@fda.hhs.gov](mailto:brendan.muio@fda.hhs.gov).

Sincerely,

*{See appended electronic signature page}*

Ellis Unger, MD  
Director  
Office of Drug Evaluation I  
Office of New Drugs  
Center for Drug Evaluation and Research

### ENCLOSURES:

- Content of Labeling
  - Prescribing Information
- Carton and Container Labeling

-----  
**This is a representation of an electronic record that was signed electronically. Following this are manifestations of any and all electronic signatures for this electronic record.**  
-----

/s/  
-----

ELLIS F UNGER  
08/14/2019 04:58:42 PM