

Food and Drug Administration Silver Spring MD 20993

NDA 208716

## NDA APPROVAL

Eli Lilly and Company Attention: Guy Ruble, PharmD Director, Global Regulatory Affairs – Oncology, North America Lilly Research Laboratories Lilly Corporate Center Indianapolis, IN 46285

Dear Dr. Ruble:

Please refer to your New Drug Application (NDA) dated May 5, 2017, received May 5, 2017, and your amendments, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA) for Verzenio<sup>TM</sup> (abemaciclib) tablets, 50 mg, 100 mg, 150 mg, and 200 mg.

This new drug application provides for the use of Verzenio<sup>TM</sup> (abemaciclib) tablets:

- in combination with fulvestrant for the treatment of women with hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer with disease progression following endocrine therapy; and
- as monotherapy for the treatment of adult patients with HR-positive, HER2-negative advanced or metastatic breast cancer with disease progression following endocrine therapy and prior chemotherapy in the metastatic setting.

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. Based on the available primary and supportive stability data a 24-month expiry dating is granted for Verzenio<sup>TM</sup> (abemaciclib) tablets stored at 20°C to 25°C (68°F to 77°F) with excursions permitted between 15°C to 30°C (59°F to 86°F) [See USP Controlled Room Temperature].

## **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 <a href="http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm">http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm</a>. Content of labeling must be identical to the enclosed labeling (text for the package insert, text for the patient package insert). 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, available at

#### http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/U CM072392.pdf

The SPL will be accessible via publicly available labeling repositories.

# CARTON AND IMMEDIATE CONTAINER LABELS

Submit final printed carton and immediate container labels that are identical to the enclosed carton and immediate container labels 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* — *Certain Human Pharmaceutical Product Applications and Related Submissions Using the eCTD Specifications* (*May 2015, Revision 3*). For administrative purposes, designate this submission "**Final Printed Carton and Container Labels for approved NDA 208716**." Approval of this submission by FDA is not required before the labeling is used.

## **ADVISORY COMMITTEE**

Your application for abemaciclib 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 of this class.

#### **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 studies requirement for this application because necessary studies are impossible or highly impracticable.

#### **POSTMARKETING REQUIREMENTS UNDER 505(0)**

Section 505(0)(3) of the Federal Food, Drug, and Cosmetic Act (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 assess a known serious risk of diarrhea.

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 this serious risk.

Finally, we have determined that only a clinical trial (rather than a nonclinical or observational study) will be sufficient to assess a known serious risk of severe diarrhea. Therefore, based on appropriate scientific data, FDA has determined that you are required to

conduct the following trials:

3254-1 Submit a final report and datasets from a new clinical trial to evaluate the incidence of dose reductions and dose interruptions due to severe diarrhea when abemaciclib is administered with a meal, compared to abemaciclib taken in the modified fasted condition, and when it is administered without regard to food in patients.

The timetable you submitted on August 16, 2017 states that you will conduct this trial according to the following schedule:

Final Protocol Submission:	06/2018
Trial Completion:	06/2021
Final Report Submission:	12/2021

Submit clinical protocol(s) to your IND 106100 with a cross-reference letter to this NDA. Submit nonclinical and chemistry, manufacturing, and controls protocols and all final report(s) 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).** 

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.

## POSTMARKETING COMMITMENTS SUBJECT TO REPORTING REQUIREMENTS UNDER SECTION 506B

We remind you of your postmarketing commitments:

3254-2 Submit the overall survival (OS) data and final report from clinical trial MONARCH 2: Entitled "A Randomized, Double-Blind, Placebo-Controlled, Phase 3 Study of Fulvestrant with or without Abemaciclib, a CDK4/6 Inhibitor, for Women with Hormone Receptor Positive, HER2 Negative Locally Advanced or Metastatic Breast Cancer."

The timetable you submitted on August 16, 2017, states that you will conduct this study according to the following schedule:

Final Protocol Submission	04/2014
Trial Completion:	12/2021
Final Report Submission:	06/2022

3254-3 Conduct Physiologically based Pharmacokinetic modeling (PBPK) analysis to evaluate the effect of repeat doses of a moderate CYP3A4 inducer on the single dose pharmacokinetics of abemaciclib and its active metabolites to assess the magnitude of decreased drug exposure and to determine appropriate dosing recommendations. If the results from the PBPK analysis are inconclusive, conduct a pharmacokinetic trial to evaluate the effect of repeat doses of a moderate CYP3A4 inducer on the single dose pharmacokinetics of abemaciclib and its active metabolites to assess the magnitude of decreased drug exposure and to determine appropriate dosing recommendations. Design and conduct the trial in accordance with the FDA Guidance for Industry entitled "Drug Interaction Studies – Study Design, Data Analysis, Implications for Dosing, and Labeling Recommendations." Submit final report and data sets.

The timetable you submitted on August 16, 2017, states that you will conduct this study according to the following schedule:

Final Report Submission: 02/2018

Submit clinical protocols to your IND 106100 for this product. Submit nonclinical and chemistry, manufacturing, and controls protocols and all postmarketing 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/trials, number of patients entered into each study/trial. All submissions, including supplements, relating to these postmarketing commitments should be prominently labeled "Postmarketing Commitment Protocol," "Postmarketing Commitment Final Report," or "Postmarketing Commitment Correspondence."

# 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, Medication Guide, and patient PI (as applicable) to:

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 (available at:

<u>http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/U</u> <u>CM443702.pdf</u> ).

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. Form FDA 2253 is available at

http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM083570.pdf. Information and Instructions for completing the form can be found at http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Forms/UCM375154.pdf. For more information about submission of promotional materials to the Office of Prescription Drug Promotion (OPDP), see http://www.fda.gov/AboutFDA/CentersOffices/CDER/ucm090142.htm.

# **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

http://www.fda.gov/Safety/MedWatch/HowToReport/ucm166910.htm.

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# 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, call Janice Kim, Regulatory Project Manager, at (301) 796-9628.

Sincerely,

{See appended electronic signature page}

Richard Pazdur, MD Director (Acting) Office of Hematology and Oncology Products Center for Drug Evaluation and Research

Enclosure(s): Content of Labeling Carton and Container Labeling

# 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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RICHARD PAZDUR 09/28/2017