 Approval Package for:

APPLICATION NUMBER:

208169Orig1s000

Trade Name: Xuriden oral granules

Generic Name: Uridine triacetate

Sponsor: Wellstat Therapeutics Corporation

Approval Date: September 4, 2015

Indication: For the treatment of hereditary orotic aciduria.
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APPLICATION NUMBER:

208169Orig1s000

APPROVAL LETTER
Dear Dr. Bamat:

Please refer to your New Drug Application (NDA) dated and received January 8, 2015, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act (FDCA), for Xuriden (uridine triacetate) oral granules.

We also refer to our approval letter dated September 4, 2015, which contained the following error: the Post-Marketing Commitment (PMC) numbers are incorrect.

This replacement approval letter incorporates the correction of the error. The effective approval date will remain September 4, 2015, the date of the original approval letter.

We acknowledge receipt of your amendments dated January 21 and 23; February 12; April 3, 10, 22, 28; May 4, 11(2), 22, 29; June 1, 15, 25; and July 10, 14, 28; August 10; and September 1, 2015.

This new drug application provides for the use of Xuriden (uridine triacetate) oral granules for the treatment of hereditary orotic aciduria.

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.

We note that your August 10, 2015, submission includes final printed labeling (FPL) for your package insert and instructions for use. We have not reviewed this FPL. You are responsible for assuring that the wording in this printed labeling is identical to that of the approved content of labeling in the structured product labeling (SPL) format.
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 http://www.fda.gov/ForIndustry/DataStandards/StructuredProductLabeling/default.htm. 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/UCM072392.pdf.

The SPL will be accessible via publicly available labeling repositories.

CARTON AND IMMEDIATE CONTAINER LABELS

We acknowledge your June 25, 2015, submission containing final printed carton and container labels.

RARE PEDIATRIC DISEASE PRIORITY REVIEW VOUCHER

We also inform you that you have been granted a rare pediatric disease priority review voucher, as provided under section 529 of the FDCA. This priority review voucher (PRV) has been assigned a tracking number, PRV NDA 208169. All correspondences related to this voucher should refer to this tracking number.

This voucher entitles you to designate a single human drug application submitted under section 505(b)(1) of the FDCA or a single biologic application submitted under section 351 of the Public Health Service Act as qualifying for a priority review. Such an application would not have to meet any other requirements for a priority review. The list below describes the sponsor responsibilities and the parameters for using and transferring a rare pediatric disease priority review voucher.

- The sponsor who redeems the priority review voucher must notify FDA of its intent to submit an application with a priority review voucher at least 90 days before submission of the application, and must include the date the sponsor intends to submit the application. This notification should be prominently marked, “Notification of Intent to Submit an Application with a Rare Pediatric Disease Priority Review Voucher.”

- This priority review voucher may be transferred, including by sale, by you to another sponsor of a human drug or biologic application. There is no limit on the number of times that the priority review voucher may be transferred, but each person to whom the priority review voucher is transferred must notify FDA of the change in ownership of the voucher not later than 30 days after the transfer. If you retain and redeem this priority review voucher, you should refer to this letter as an official record of the voucher. If the priority review voucher is transferred, the sponsor to whom the priority review voucher has been transferred should include a copy of this letter (which will be posted on our Web
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site as are all approval letters) and proof that the priority review voucher was transferred.

- FDA may revoke the priority review voucher if the rare pediatric disease product for
which the priority review voucher was awarded is not marketed in the U.S. within 1 year
following the date of approval.

- The sponsor of an approved rare pediatric disease product application who is awarded a
priority review voucher must submit a report to FDA no later than 5 years after approval
that addresses, for each of the first 4 post-approval years:
  - the estimated population in the U.S. suffering from the rare pediatric disease for
    which the product was approved (both the entire population and the population
    aged 0 through 18 years),
  - the estimated demand in the U.S. for the product, and
  - the actual amount of product distributed in the U.S.

- You may also review the requirements related to this program at
  http://www.gpo.gov/fdsys/pkg/PLAW-112publ144/pdf/PLAW-112publ144.pdf1
  (see Section 908 of FDASIA on pages 1094-1098 which amends the FD&C Act by adding
  Section 529). Formal guidance about this program will be published in the future.

ADVISORY COMMITTEE

Your application for uridine triacetate was not referred to an FDA advisory committee because
the application did not raise significant public health questions on the role of uridine triacetate in
the diagnosis, cure, mitigation, treatment, or prevention of a disease; outside expertise was not
necessary; and there were no controversial issues that would benefit from advisory committee
discussion.

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.

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

POSTMARKETING COMMITMENTS SUBJECT TO REPORTING REQUIREMENTS
UNDER SECTION 506B

We remind you of your postmarketing commitment:

2932-1  Continue to evaluate the long-term efficacy and safety of XURIDEN (uridine
triacetate) in patients currently enrolled in Protocol 401-13-001 every 6 months
for a total duration of 2 years in an extension trial. The extension trial should
collect data on growth, hematologic indices, and urine biomarkers (orotic acid and
orotidine). Growth data should include height, weight, height velocity and weight
velocity. Ensure that the growth data are submitted also as z-scores. Provide information on any dose adjustments made during the extension trial, including the dose amount, the reason(s) for the adjustment, and the results of any additional clinical or laboratory assessments performed following dose adjustments.

The timetable you submitted on July 14, 2015, states that you will conduct this trial according to the following schedule:

- **Trial Completion:** 06/16
- **Final Report Submission:** 11/16

**POSTMARKETING COMMITMENTS NOT SUBJECT TO THE REPORTING REQUIREMENTS UNDER SECTION 506B**

We remind you of your postmarketing commitment:

2932-2 Develop a discriminating dissolution method appropriate for the proposed product and set dissolution method acceptance criteria based on data from at least 5 commercial batches. Determine the particle size distribution of the final drug product and, using the updated dissolution method, evaluate the impact of the particle size distribution on dissolution. The studies should also include an evaluation of batches submitted in the application (e.g., W017891, W017893, W017895, W012785, and W021129). Based on findings from these studies, update the final drug product particle size specification and the in-process controls.

The timetable you submitted on September 1, 2015, states that you will conduct this study according to the following schedule:

- **Final Protocol Submission:** 09/15
- **Study Completion:** 02/16
- **Final Report Submission:** 03/16

Submit clinical protocols to your IND 118931 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 to:

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: [http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM443702.pdf](http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM443702.pdf)).

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](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](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](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](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.

**PDUFA V APPLICANT INTERVIEW**

FDA has contracted with Eastern Research Group, Inc. (ERG) to conduct an independent interim and final assessment of the Program for Enhanced Review Transparency and Communication for NME NDAs and Original BLAs under PDUFA V (‘the Program’). The PDUFA V Commitment Letter states that these assessments will include interviews with applicants following FDA action on applications reviewed in the Program. For this purpose, first-cycle actions include approvals, complete responses, and withdrawals after filing. The purpose of the interview is to better understand applicant experiences with the Program and its ability to improve transparency and communication during FDA review.

ERG will contact you to schedule a PDUFA V applicant interview and provide specifics about the interview process. Your responses during the interview will be confidential with respect to the FDA review team. ERG has signed a non-disclosure agreement and will not disclose any identifying information to anyone outside their project team. They will report only anonymized results and findings in the interim and final assessments. Members of the FDA review team will be interviewed by ERG separately. While your participation in the interview is voluntary, your feedback will be helpful to these assessments.

If you have any questions, call Jessica Benjamin, Regulatory Project Manager, at (301) 796-3924.

Sincerely,

{See appended electronic signature page}

Amy G. Egan, M.D., M.P.H.
Deputy Director
Office of Drug Evaluation III
Center for Drug Evaluation and Research

Enclosure(s):

- Content of Labeling
- Carton and Container Labeling

Reference ID: 3821044
This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

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AMY G EGAN
09/04/2015