DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
Silver Spring MD 20993

BLA 125291/136

SUPPLEMENT APPROVAL
RELEASE REMS REQUIREMENT

Genzyme Corporation
Attention: Jennifer Eaddy
Associate Director, Regulatory Affairs
500 Kendall Street
Cambridge, MA 02142

Dear Ms. Eaddy:

Please refer to your Supplemental Biologics License Application (sBLA), dated and received January 30, 2014, submitted under section 351(a) of the Public Health Service Act for Lumizyme (aglucosidase alfa).

We acknowledge receipt of your amendments dated April 02, 2014, April 04, 2014, April 14, 2014, May 19, 2014, May 23, 2014, May 30, 2014, June 20, 2014, June 23, 2014, June 25, 2014, July 17, 2014, July 21, 2014, July 30, 2014, July 31, 2014, August 01, 2014, and your risk evaluation and mitigation strategy (REMS) assessments dated May 23, 2014 and June 13, 2014.

This Prior Approval supplemental biologics application proposes to revise the indication for Lumizyme to extend the population to all patients with Pompe disease (acid α-glucosidase (GAA) deficiency), including infantile-onset and late-onset patients less than 8 years of age.

The revised indication will be Lumizyme (alglucosidase alfa) is a hydrolytic lysosomal glycogen-specific enzyme indicated for patients with Pompe disease (acid α-glucosidase (GAA) deficiency).

Additionally, this application proposes to eliminate the requirement for the approved Lumizyme REMS.

APPROVAL & LABELING

We have completed our review of this supplemental 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, submit, via the FDA automated drug registration and listing system (eLIST), the content of labeling [21 CFR 601.14(b)] 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) and include the labeling changes proposed in any pending "Changes Being Effected" (CBE) supplements. Information on submitting SPL files using eLIST may be found in the guidance for industry titled "SPL Standard for Content of Labeling Technical Qs and As" at http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM072392.pdf.

The SPL will be accessible via publicly available labeling repositories.

Also within 14 days, amend all pending supplemental applications that includes labeling changes for this BLA, including pending "Changes Being Effected" (CBE) supplements, for which FDA has not yet issued an action letter, with the content of labeling [21 CFR 601.12(f)] in MS Word format that includes the changes approved in this supplemental application.

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 your application has orphan designation, you are exempt from this requirement.

RISK EVALUATION AND MITIGATION STRATEGY REQUIREMENTS

The REMS for Lumizyme (alglucosidase alfa) was originally approved on May 24, 2010, and the most recent REMS modification was approved on July 16, 2012. The REMS consists of a communication plan, elements to assure safe use (ETASU), an implementation system, and a timetable for submission of assessments of the REMS.

You propose that FDA no longer require a REMS for Lumizyme (alglucosidase alfa).

Because the May 23, 2014, assessment demonstrates that the communication plan has been completed and has met its goals, we have determined that it is no longer necessary to include it as an element of the approved REMS to ensure that the benefits of the drug outweigh the risks.

Additionally, the approval of the expanded indication to include patients of any age eliminates the need for restricted distribution under the ETASU because it is no longer necessary to limit

the treatment with Lumizyme to use in patients with non-infantile onset Pompe disease who are greater than or equal to 8 years of age.

Therefore, we agree with your proposal, and a REMS for Lumizyme (alglucosidase alfa) is no longer required.

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(s) to:

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

As required under 21 CFR 601.12(f)(4), you must submit final promotional materials, and the package insert(s), 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 BLA (in 21 CFR 600.80 and in 21 CFR 600.81).

If you have any questions, call Kevin Bugin, Regulatory Project Manager, at (301) 796-2302.

Sincerely,

{See appended electronic signature page}

Donna Griebel, M.D.
Director
Division of Gastroenterology and Inborn Errors Products
Office of Drug Evaluation III
Center for Drug Evaluation and Research

ENCLOSURE(S):

Content of Labeling

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

/s/

DONNA J GRIEBEL
08/01/2014