

**Health Canada Endorsed Important Safety Information on  
Cerezyme® (imiglucerase for injection), Fabrazyme® (agalsidase beta),  
Myozyme® (alglucosidase alfa) and Aldurazyme® (laronidase)**



December 1, 2009

Dear Health Care Professional:

**Subject: Preparation and Administration of Cerezyme® (imiglucerase for injection), Fabrazyme® (agalsidase beta), Myozyme® (alglucosidase alfa) and Aldurazyme® (laronidase)**

Foreign particles have been detected in a small number of vials during the course of routine quality control testing of Genzyme's above-mentioned products at the Genzyme Allston Landing Facility. Genzyme has also received customer reports of foreign particles in some vials of these products. To help ensure that patients are not exposed to foreign particles during product administration, we are writing to alert health care practitioners to the potential presence of such foreign particles and reinforce recommendations for product preparation and administration.

Foreign particles are a known issue in the manufacture of protein products. The particles observed include non-latex rubber originating from the stopper, or stainless steel particles or fiber-like material originating from the manufacturing process. These findings are unrelated to the decontamination of the Allston Landing Facility. Foreign particles identified by visual inspection prior to administration ranged in size from 120-500 microns (as a comparison, a human hair diameter ranges from 40 to 120 microns).

Genzyme recommends using a 0.2 or 0.22 micron in-line filter to prevent particulates from entering the bloodstream. Without prior filtration, intravenous injection of foreign particles of this size most likely would remain close to the injection site (Madsen R. et al). This could cause local venous damage or injection site reactions such as pain or local irritation. However, particles can theoretically migrate and cause embolic phenomena. Should this occur, the organ most likely affected would be the lung resulting in pulmonary emboli and/or foreign body granuloma and may manifest as symptoms ranging from mild respiratory discomfort to respiratory failure. In the presence of cardiac septal defects other organs could be affected.

To better understand these potential risks to patients, Genzyme has reviewed the global safety database which contains all adverse events reported to Genzyme for these products from January 2007 through November 05, 2009). The review has not revealed any safety concerns to suggest that patients treated with Genzyme products have reported any reactions related to exposure to foreign particles. The safety profile for these products remains unchanged.

We are providing the following recommendations for preparation and administration of Enzyme Replacement Therapies:

1. Perform a visual examination of the lyophilized product prior to reconstitution. For Aldurazyme, examine the liquid solution. **Do not use if there are foreign particles and use a new product vial.**
2. Follow the preparation instructions provided in the Dosage and Administration section of the approved product labeling.
3. As stated in the approved product labeling, visually inspect the reconstituted product within each vial and when withdrawn into the syringe, and during dilution into the infusion bag, for any particles. **Do not use if there are any particles and use a new product vial.**

4. If foreign particles are observed, report to Genzyme Medical Information at 800-745-4447 (option 2). Please return vials containing foreign particles per instruction to be provided by Genzyme Medical Information.
5. Aldurazyme, Cerezyme, Fabrazyme, and Myozyme should be filtered during administration of the infusion. Use an in-line, 0.2 or 0.22 micron, low protein binding filter. While it is assumed that visible particles (i.e. > 50 µm) will be retained by the recommended 0.2 or 0.22 micron filters, Genzyme has not yet performed studies to assure filter integrity is maintained on filtration of product that may contain such particles.
6. Unused vials or reconstituted product should be refrigerated within the conditions specified in the approved labeling.

Managing marketed health product-related adverse reactions depends on health care professionals and consumers reporting them. Reporting rates determined on the basis of spontaneously reported post-marketing adverse reactions are generally presumed to underestimate the risks associated with health product treatments. Any case of serious or unexpected adverse reactions in patients receiving Cerezyme®, Fabrazyme®, Myozyme® and Aldurazyme® should be reported to Genzyme or Health Canada at the following addresses:

Genzyme  
800-2700 Matheson Blvd East  
Mississauga Ontario L4W 4V9  
Tel: 1-800-745-4447  
email at [medinfo@genzyme.com](mailto:medinfo@genzyme.com).

**Any suspected adverse reaction can also be reported to:**

Canada Vigilance Program  
Marketed Health Products Directorate  
HEALTH CANADA  
Address Locator: 0701C  
Ottawa, Ontario, K1A 0K9  
Tel: 613-957-0337 or Fax: 613-957-0335

To report an Adverse Reaction, consumers and health professionals may call toll free:

Tel: 866-234-2345

Fax: 866-678-6789

[CanadaVigilance@hc-sc.gc.ca](mailto:CanadaVigilance@hc-sc.gc.ca)

The [AR Reporting Form](#) and the [AR Guidelines](#) can be found on the Health Canada web site or in *The Canadian Compendium of Pharmaceuticals and Specialties*.

[http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/form/ar-ei\\_form\\_e.html](http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/form/ar-ei_form_e.html)

[http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/guide/ar-ei\\_guide-ldir\\_e.html](http://www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/guide/ar-ei_guide-ldir_e.html)

**For other inquiries related to this communication, please contact Health Canada at:**

Marketed Health Products Directorate (MHPD)

E-mail: [MHPD\\_DPSC@hc-sc.gc.ca](mailto:MHPD_DPSC@hc-sc.gc.ca)

Tel: 613-954-6522

Fax: 613-952-7738

Sincerely,

*original signed by*

Brian Lewis  
General Manager