



December 1, 2009

Subject: Preparation and Administration of Thyrogen® (thyrotropin alfa for injection)

Dear Health Care Professional,

Foreign particles have been detected in a small number of vials during the course of routine quality control testing of some products, including Thyrogen, filled 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. Foreign particles identified by visual inspection prior to administration ranged in size from 140-295 microns (as a comparison, a human hair diameter ranges from 40 to 120 microns). Intramuscular injection of foreign particles of this size may cause local reactions at the site of injection. These include injection site reactions such as pain, local swelling and foreign body granuloma as well as local allergic reactions including rash and urticaria.

To better understand these potential risks to patients, Genzyme has reviewed the Thyrogen global safety database which contains all adverse events reported to Genzyme from January 2004 through 5 Nov 2009 and did not identify any safety concerns that could be potentially related to intramuscular injection of foreign particles.

We are providing the following recommendations for Thyrogen as stated in the Product Monograph:

1. Perform a visual examination of the lyophilized product prior to reconstitution. **Do not use if there are foreign particles.**
2. Follow the preparation instructions provided in the DOSAGE AND ADMINISTRATION, Reconstitution section of the Product Monograph.
3. As stated in the Product Monograph, visually inspect the reconstituted product for any foreign particles within each vial and when withdrawn into the syringe. **Do not use if there are any foreign particles.**
4. If foreign particles are observed, promptly contact Genzyme Medical Information at 800-745-4447 (option 2). Genzyme will provide replacement product and will work with you regarding options for re-scheduling or proceeding with the Thyrogen treatment/testing protocol.
5. Please return vials containing foreign particles per instructions to be provided by Genzyme Medical Information.

As stated in the approved product labeling, thyroid hormone withdrawal remains the standard diagnostic modality and therefore is an alternative to Thyrogen, should concern remain.

Please inform your thyroid cancer treatment team of this letter as appropriate. Should you require further information or have any questions, please do not hesitate to contact Genzyme Medical at 800-745-4447 (option 2) or by email at medinfo@genzyme.com.

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 Thyrogen[®] 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.

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

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/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
Tel: 613-954-6522
Fax: 613-952-7738

Sincerely,

original signed by

Brian Lewis
General Manager