

**Date:** August 2, 2016  
**To:** Edmonton Zone, North Zone and Central Zone  
 Physicians, Nurse Managers/Educators, Metabolic Clinic & Laboratories  
**From:** Genetic Laboratory Services (GLS)  
**Re:** Lysosomal Enzyme Testing (Leukocytes)

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### Key Messages

- Effective immediately, the GLS Newborn Metabolic Screening/Biochemical Genetics (NMS/BG) Lab in Edmonton will again offer lysosomal enzyme activity testing on leukocytes for Fabry, Gaucher, GM1 Gangliosidosis, and Pompe disease.
- Interpretive reports with new reference intervals can be viewed in Netcare. Abnormal results will be called out to the metabolic physician on-call. The expected turnaround time is 10 days.
- Serum hexosaminidase testing for Tay-Sachs and Sandhoff disease will continue to be referred out to GLS Biochemical Genetics South Laboratory in Calgary.

### Action Required

- Provide detailed patient history and indicate enzyme test request on the requisition.
- Advise the patient to arrive at the Edmonton Clinic prior to 10am for blood draw Monday through Thursday.
- North and Central Zone require a special arrangement including collection of a control sample. The NMS/BG Lab must be notified in advance at 780-407-8820 to discuss.

### Specimen Requirements

Clinical Indication	Test Name	Collection/Handling/Transport
Fabry	$\alpha$ -galactosidase	Li or Na heparin whole blood light or dark green top tube(no gel) Adult: 6mL and Pediatric: 3mL <u>Edmonton Zone:</u> Send immediately at room temperature to UAH specimen receiving. Must receive samples <u>before noon</u> the same day.
Pompe	$\alpha$ -glucosidase	
GM1 Gangliosidosis	$\beta$ -galactosidase	
Gaucher	$\beta$ -glucosidase	

### Additional information:

- Alberta Health Services Edmonton Zone and DynaLIFEDx Laboratory Test Directories
- Edmonton Client Response Centre at :780-407-7484

### Inquiries and feedback may be directed to:

- UAH Biochemical Genetics Laboratory, Edmonton, Genetic Counselor at 780-407-7907
- UAH Biochemical Genetics Laboratory, Biochemical Geneticist at 780-407-7379

### This bulletin has been reviewed and approved by:

Dr Martin Somerville, Medical/Scientific Director, Genetic Laboratory Services  
 Dr Carolyn O'Hara, Interim Provincial Medical Director, AHS Laboratory Services