

Date: May 19, 2016

To: All Zones
Physicians, Nurses, Laboratory Directors & Managers, Oncologists and Pathologists

From: Genetic Laboratory Services (GLS)

Re: *JAK2* exon 12 mutation assay

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Messages:

As of Monday April 4, 2016 the GLS Molecular Pathology Laboratory located at the University of Alberta Hospital has begun to offer a *JAK2* exon 12 mutation assay.

Why this is important:

DNA sequence mutations in the Janus kinase 2 gene (*JAK2*) are found in the hematopoietic cells of several myeloproliferative neoplasms (MPNs), most frequently polycythemia vera (~95%), essential thrombocythemia (~50%), and primary myelofibrosis (~50%). Mutations in *JAK2* have been reported at much lower frequency in other MPNs, chronic myelomonocytic leukemia and mixed MPN/myelodysplastic syndromes, but essentially never in chronic myelogenous leukemia (CML), reactive cytoses, or normal patients.

Typically, *JAK2* exon 12 mutation for polycythemia vera is indicated when the V617F mutation has been ruled out.

Action Required:

Please refer to the AHS Central and Edmonton Zone Test Directory for additional test information at: <http://www.albertahealthservices.ca/3217.asp>

Inquiries and feedback may be directed to:

Dr. Iyare Izevbaye, Lab Head, Molecular Pathology Laboratory, Genetic Laboratory Services, (780) 407-8025

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, Laboratory Services