



Date: September 21, 2020
To: North Zone, Edmonton Zone, Central Zone and Cross Cancer Institute
Physicians, Nurses, Laboratory Directors & Managers, Oncologists and Pathologists
From: Molecular Pathology Provincial Program
Molecular Pathology Laboratory – University of Alberta Hospital
Re: Expanded Cancer Biomarker Testing Panel for Lung Cancer

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message:

- On Thursday September 17, 2020 the Molecular Pathology Laboratory at the University of Alberta Hospital will begin to offer an expanded cancer biomarker testing panel for lung cancer.

Why this is important:

- For our lung cancer requests, BRAF, ERBB2, KRAS and PIK3CA are now included in our expanded cancer biomarker testing panel.
- Analysis for BRAF, EGFR, ERBB2, KRAS and PIK3CA mutations is performed after PCR amplification using a single base extension technique (iPLEX Lung HS assay) and mass spectrometry on the MassArray instrument. This multiplex assay is capable of detecting BRAF mutations G469A, G459V, D594G and V600E; EGFR point mutations at codons 709, 719, 768, 790, 797, 858 and 861, deletions in exon 19 and insertions in exon 20; ERBB2 insertion mutations at codons 775-776; KRAS mutations at codons 12, 13 and 61; and PIK3CA mutations E542K, E545K, H1047R and H1047L. The estimated sensitivity of this assay is 3%.

Action Required:

- Please refer to the Alberta Precision Laboratories (APL) test directory for additional test information at <https://www.albertahealthservices.ca/lab/Page3217.aspx>
- The EGFR mutation analysis test orderable will be replaced with the Lung Carcinoma Mutation Analysis test orderable in Connect Care.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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