

Date: December 9, 2016
To: Thoracic Surgeons, Oncologists, and Radiologists
From: AHS Laboratory Services
Re: PD-L1 Lung Biomarker Testing Available in Alberta

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Key Messages:

- PD-L1 biomarker immunohistochemistry (IHC) testing for advanced non-small cell lung carcinoma (NSCLC) will be available for ordering on December 12, 2016.
- Testing will be performed at the EZ IHC lab for all of Alberta.
- PD-L1 will now be incorporated into the biomarker testing on advanced NSCLC in addition to EGFR and ALK.
- PD-L1 testing is to be done on both squamous and non-squamous (adenocarcinoma) advanced NSCLC.
- PD-L1 **cannot** be tested on cytological material at this time.
- Pathologists have been informed of the testing and will be responsible for reflex ordering on all advanced NSCLC patients whose samples fit the testing criteria.
- Labelling the sample requisition with "Biomarkers for advanced NSCLC" would help the process.
- The pharmaceutical company Merck has provided compassionate funding to Alberta Health Services through the Alberta Cancer Foundation for this testing. The funding for PD-L1 testing is available until September 30, 2017.

Why is this important:

Martin Reck et al (2016) provided evidence based recommendations for PD-L1 testing and treatment of patients with advanced NSCLC. PD-L1 IHC testing should be used to select patients for PD-1- targeted Pembrolizumab therapy in:

- Advanced non-small cell lung cancer (NSCLC) patients with no sensitizing EGFR mutations or ALK translocations
- Specimens can be squamous or non squamous (adenocarcinoma)

Action Required:

Clinicians should be aware that PD-L1 testing will be available in Alberta effective **December 12, 2016**.

Advanced NSCLC- Squamous	PD-L1 biomarker testing performed (except on cytological material at this time)	
Advanced NSCLC- Non-squamous (Adenocarcinoma)	EGFR/ALK/PD-L1 biomarker testing algorithm is performed	
	If sample is cytological material	PD-L1 cannot be performed (EGFR and ALK can be performed)

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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