

## DETERMINING PD-L1 STATUS IN PATIENTS FOR SPECIFIC TUMOR TYPES.

## Programmed death-ligand 1 (PD-L1) expression

PD-L1 (Programmed Cell Death Ligand 1) modulates the activity of the immune system by exerting dual ligand blockade of the PD-1 pathway. It can also be found on tumor cells.<sup>1</sup>

PD-1 (Programmed Cell Death Protein 1) is an immune-checkpoint receptor that limits the activity of T lymphocytes in peripheral tissues by binding to PD-L1. There are cancer immunotherapies that target this pathway, but biomarker testing may be required to determine if a patient is eligible for those treatments.<sup>2</sup>

For specific indications, assessing PD-L1 expression at specific minimum thresholds are required to use KEYTRUDA®.3

## PD-L1 testing is required for the following indications:<sup>2</sup>



1st line treatment, as monotherapy, for of adults patients with metastatic non-small cell lung carcinoma (NSCLC) or stage III disease where patients are not candidates for surgical resection or definitive chemoradiation expressing PD-L1TPS≥ 1% as determined by a validated test, with no EGFR or ALK genomic tumor aberrations.

Cut-off Point TPS≥1%



Treatment of adult patients with metastatic NSCLC as monotherapy, whose tumors express PD-L1TPS≥ 1% as determined by a validated test, and who have disease progression on or after platinum-containing chemotherapy.

**Cut-off Point** 

TPS≥1%



Treatment of adults patients with persistent, recurrent, or metastatic cervical cancer, whose tumors express PD-L1 CPS≥ 1, as determined by a validated test, in combination with chemotherapy with or without bevacizumab.

**Cut-off Point** 

CPS≥1



1st line treatment of metastatic or unresectable recurrent head and neck squamous cell carcinoma (HNSCC) as monotherapy, in adult patients whose tumors have PD-L1 CPS≥ 1 as determined by a validated test.

**Cut-off Point** 

CPS≥1



Treatment in combination with chemotherapy for adult with locally recurrent unresectable or metastatic triple-negative breast cancer (TNBC), who have not received prior chemotherapy for metastatic disease and whose tumors express with PD-L1 CPS≥ 10, as determined by a validated test.

**Cut-off Point** 

CPS≥10

## CONSIDER BIOMARKERTESTING Visit biomarkertesting.ca for more information.

Please consult the Product Monograph for important information about:

- Contraindications in people who have experienced a severe hypersensitivity reactions to this drug or to any ingredient in the formulation or component to the
  container closure system:
- Relevant warnings and precautions regarding immune-mediated adverse reactions, solid organ transplant rejection, allogeneic stem cell transplant after and before
  treatment, severe infusion-related reactions, teratogenic risk, patients with hepatic or renal impairment, pregnant women and women breastfeeding during treatment
  and for at least 4 months after it, driving and operating machinery, monitoring requirements, pediatrics, and geriatrics;
- Conditions of clinical use, adverse reactions, drug interactions and dosing instructions.

The Product Monograph is also available by calling us at 1-800-567-2594 or by email at medinfocanada@merck.com

ALK=Anaplastic Lymphoma Kinase; CPS=combined positive score; EGFR=Epidermal growth factor receptor; HNSCC=head and neck squamous cell carcinoma; NSCLC=non-small cell lung carcinoma; PD-L1=programmed death ligand 1;TNBC=triple-negative breast cancer; TPS=tumor proportion score.

References: 1. Chen DS et al. Clin Cancer Res. 2012;18(24):6580–6587. 2. KEYTRUDA® Product Monograph. Merck Canada Inc., January 25, 2023. 3. Incorvaia L, Fanale D, Badalamenti G, et al. Programmed Death Ligand 1 (PD-L1) as a Predictive Biomarker for Pembrolizumab Therapy in Patients with Advanced Non-Small-Cell Lung Cancer (NSCLC). Adv Ther. 2019;2600-2617.

4. Herbst R, Garon E, et al. Five-Year Survival Update From KEYNOTE-010: Pembrolizumab Versus Docetaxel for Previously Treated, Programmed Death-Ligand 1–Positive Advanced NSCLC. J Thorac Oncol. 2021;P1718-1732.



