

## KCMS Quick Guide #1

# PD-L1 CPS CALCULATION & DOCUMENTATION STANDARDS

### Understanding PD-L1 CPS

- CPS (Combined Positive Score) quantifies PD-L1 expression on both tumor cells and immune cells (lymphocytes + macrophages).
- Formula:  $CPS = (\text{Number of PD-L1-staining tumor cells} + \text{lymphocytes} + \text{macrophages}) \times 100 \div \text{Total viable tumor cells}$
- Range: 0–100
- Clinical Cutoff:  $CPS \geq 1 = \text{PD-L1 positive}$

**Implication:**  $CPS \geq 1$  identifies patients eligible for pembrolizumab per KEYNOTE-826 and NCCN v.2025.

### Testing and Reporting Requirements

COMPONENT	BEST PRACTICE	NOTES
Assay Type	Use FDA-approved PD-L1 IHC assay (e.g., Dako 22C3 pharmDx).	Avoid cross platform variation.
Specimen Source	FFPE tissue (biopsy or resection)	Cytology acceptable if validated.
Scoring & Reporting	Report exact CPS (e.g., $CPS = 5$ ) with test method and antibody clone	Do not round values.
Turnaround Time	5-10 business days	Expedite for patients pending systemic therapy

### Documentation Standards

- ✓ Record CPS result in the pathology summary and EHR “Biomarker Results” section.
- ✓ Link PD-L1 status to treatment plan (e.g., “Eligible for pembrolizumab based on  $CPS \geq 1$ ”).
- ✓ Include lab name, date, and assay type for audit consistency.
- ✓ Retain PD-L1 report for tumor board review.

### Interpretation Summary

CPS RESULT	PD-L1 STATUS	RECOMMENDED ACTION
$CPS < 1$	Negative	Proceed with platinum-based chemotherapy ± bevacizumab; assess for biomarker-driven options
$CPS \geq 1$	Positive	Eligible for pembrolizumab + chemo ± bevacizumab or pembrolizumab maintenance

### Quality & Audit Tips

- Confirm inter-pathologist concordance for CPS scoring in complex cases.
- Include CPS in tumor board templates and treatment summaries.
- Re-test at recurrence if initial CPS testing predates systemic progression.

#### ✓ Fast Action

Use this Quick Guide to standardize PD-L1 testing, ensure accurate CPS documentation, and support timely initiation of immunotherapy for eligible cervical cancer patients.

Source: NCCN Guidelines, Cervical Cancer, 2025