

What Is the Sensitivity and Specificity of PD-L1 Testing in Cytologic vs Paired Histologic Specimens in Non-Small Cell Lung Cancer?

STUDY DESIGN

Meta-analyses of studies reporting the **pooled sensitivity and specificity** of programmed death ligand 1 (**PD-L1**) testing on:

Cytology Cell Block vs **Histology Specimen**

1,618 articles identified



23 articles included

RESULTS

PD-L1 sample and cutoff		Sensitivity	Specificity
Histology specimens and cytology cell blocks (n=1,064)	≥1%	0.84 (95% CI, 0.77 to 0.89)	0.88 (95% CI, 0.82 to 0.93)
	≥50%	0.78 (95% CI, 0.69 to 0.86)	0.94 (95% CI, 0.91 to 0.96)
Paired specimens without interval treatment between histology and cytology (n=946)	≥1%	0.84 (95% CI, 0.76 to 0.90)	0.89 (95% CI, 0.82 to 0.94)
	≥50%	0.80 (95% CI, 0.71 to 0.89)	0.94 (95% CI, 0.91 to 0.96)

Cytologic specimens provide an accurate assessment of PD-L1 expression in most patients with non-small cell lung cancer, at both >1% and >50% cutoffs, when compared with histologic specimens.