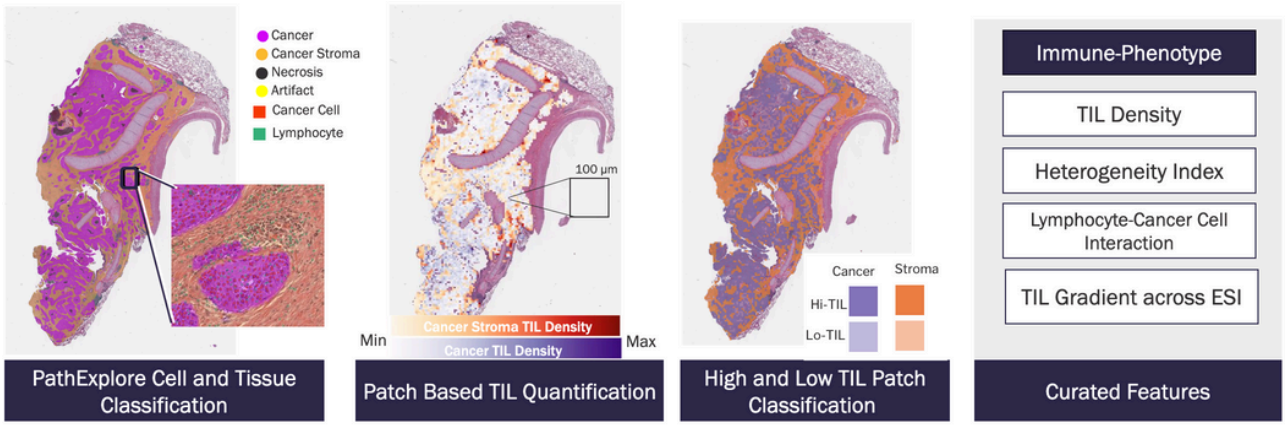
PathAI

ONCOLOGY

PathExplore™ IOP

Introducing PathExplore™ IOP

Spatial characterization of tumor-infiltrating lymphocytes (TILs) and Immune Phenotypes (IP) directly from H&E

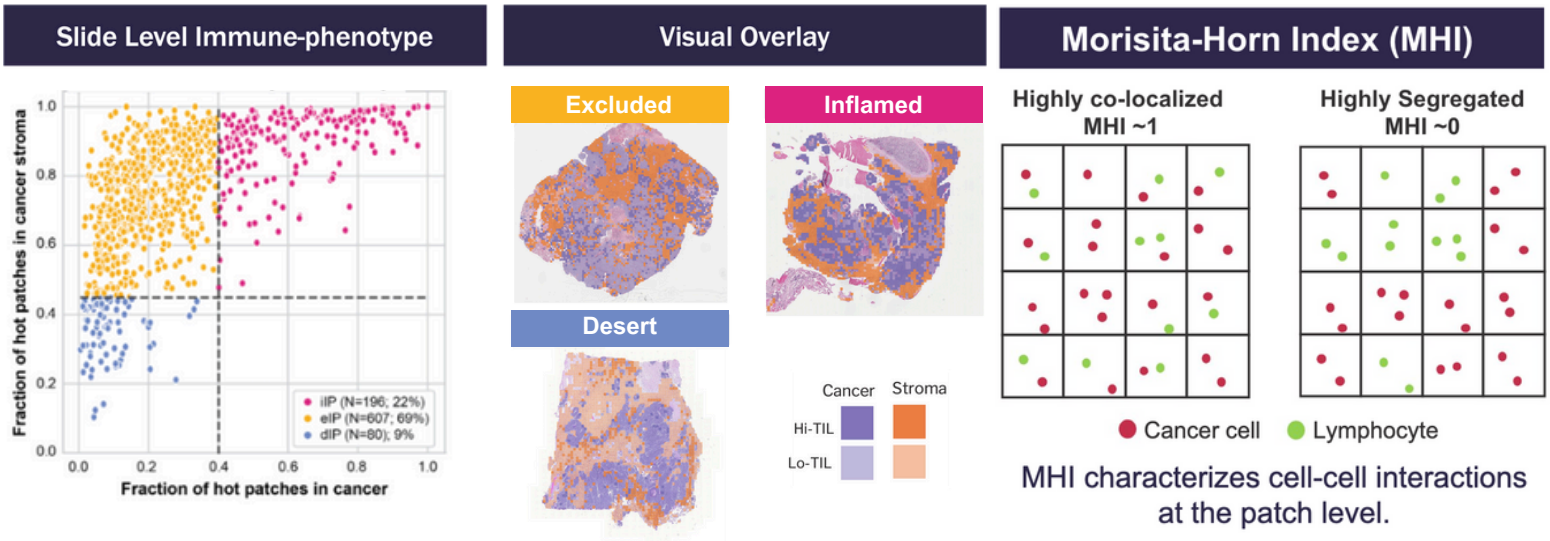


Identify, quantify, and classify TILs & immune phenotypes within the tumor microenvironment (TME) in single-cell, spatial resolution

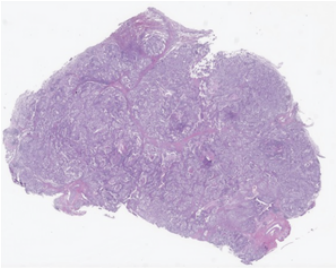
- **Visualize** the density & spatial distribution of TILs with single-cell resolution
- **Identify** High and Low TIL density regions within tissue regions
- **Analyze** TIL populations and distributions by tissue compartments
- **Quantify** cell-cell interactions between tumor and immune cells
- **Curated features** designed to characterize the tumor-immune microenvironment

Immune phenotypes are assigned using patch-based cell & tissue features alongside disease indication-specific thresholds

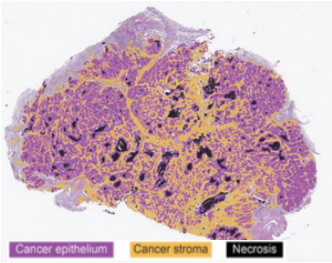
- **Characterize** the spatial arrangement of TILs within the tumor core and periphery
- **Gain** quantitative insight into immune-inflamed, desert, or excluded phenotypes
- **Evaluate** the cell-to-cell interactions at high resolution



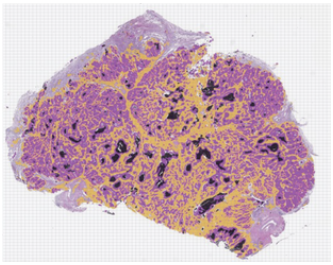
PathExplore™ IOP captures the complex heterogeneity of the TME to provide unprecedented insight into mechanisms shaping the tumor-immune landscape



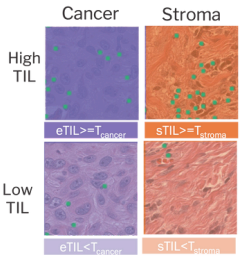
1. H&E-stained WSI is selected for analysis



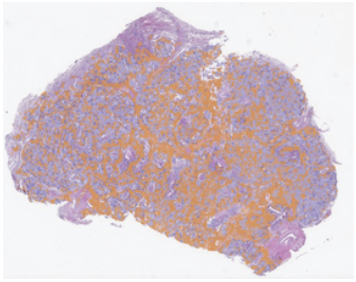
2. Tissue regions and cell types are identified by PathExplore™



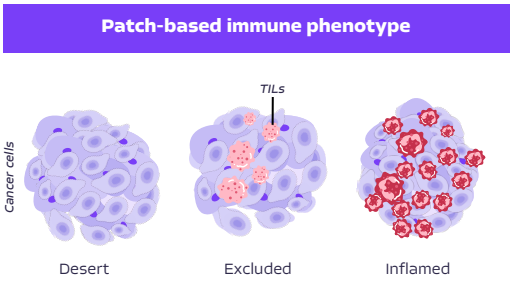
3. WSI divided into 0.01mm² patches for **ultra-high resolution analysis**



4. TIL density is calculated in each patch designated as cancer or cancer stroma



5. Patches are designated “High-TIL” or “Low-TIL” based on defined thresholds for cancer & stroma



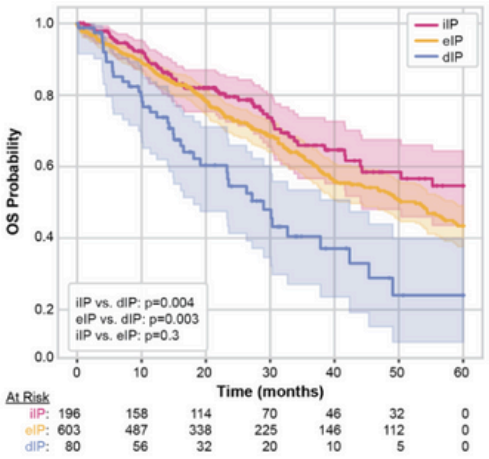
6. Each slide is assigned an Immune phenotype classification based on the % of High-TIL patches in cancer & cancer stroma

Application

Novel biomarkers for patient stratification

PathExplore™ IOP distinct immune profiles stratifies patient prognosis and treatment response

PD-L1 is suboptimal for predicting immune checkpoint inhibitor efficacy due to its variable tumor expression and inducibility by inflammation, causing inconsistent therapy response predictions. Quantifying TILs and characterizing the immune phenotype offer a more reliable alternative, providing a comprehensive view of the TME.



Learn more at **www.pathexplore.com**

Contact us at **bd@pathai.com**

PathExplore™ IOP is for research use only. Not for use in diagnostic procedures.

www.pathai.com
1325 Boylston Street Suite 10000 Boston, MA 02215