Leveraging Real-World Data for Real-World Impact

Integrate quantitative & structured pathology data with clinico-genomic real-world data (RWD) to:

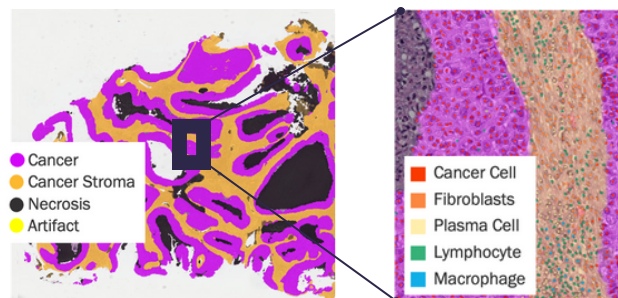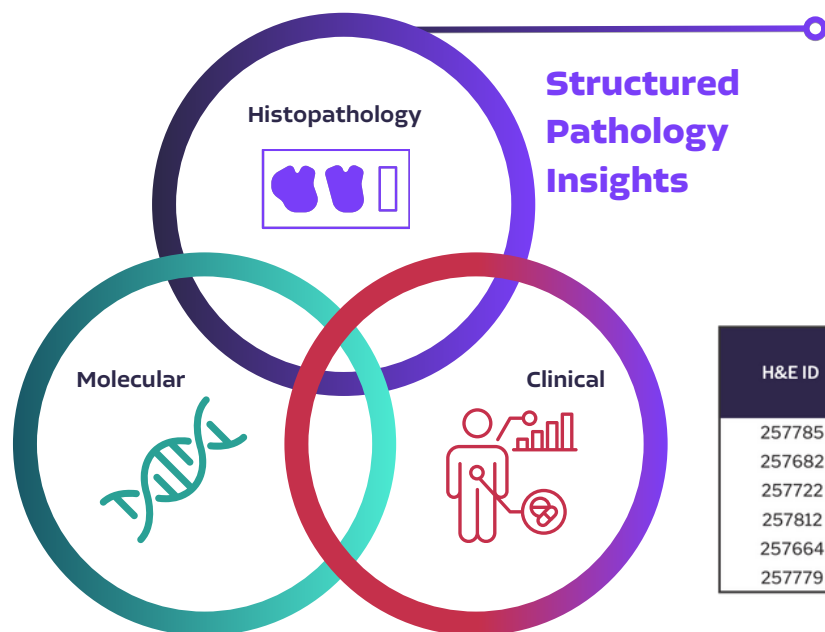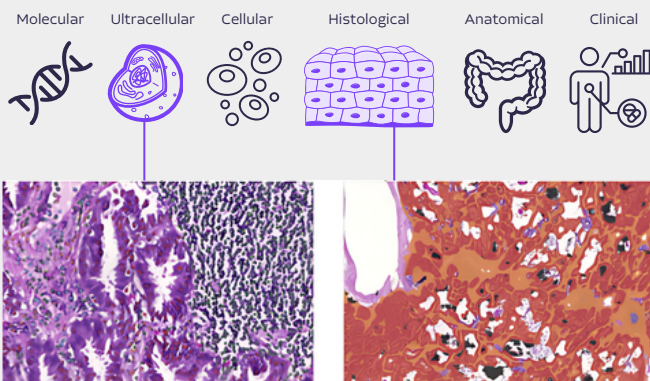- Discover novel histopathology biomarkers
- Enhance clinical development & trial design
- Assess real-world prevalence and treatment effectiveness

Pathology data remains underutilized in drug development due to a lack of *standardization, structure, and scale*

Advances in digital pathology and AI are enabling researchers to obtain spatially-resolved single-cell insights directly from routine histopathology samples such H&E-stained tissue samples

Molecular | Ultracellular | Cellular | Histological | Anatomical | Clinical

Structured Pathology Insights

Histopathology

Molecular

Clinical

- Cancer
- Cancer Stroma
- Necrosis
- Artifact

- Cancer Cell
- Fibroblasts
- Plasma Cell
- Lymphocyte
- Macrophage

H&E ID	AREA of CANCER	TOTAL LYMPHOCYTES in CANCER STROMA	RATIO of LYMPHOCYTES to FIBROBLASTS in TUMOR
257785	27.355	3611	12.503
257682	32.699	18822	7.405
257722	17.855	2974	5.396
257812	24.049	3426	8.131
257664	37.703	2281	2.764
257779	86.544	13325	9.771

Transform unstructured pathology images into structured feature tables that unlock more detailed and actionable biological insights
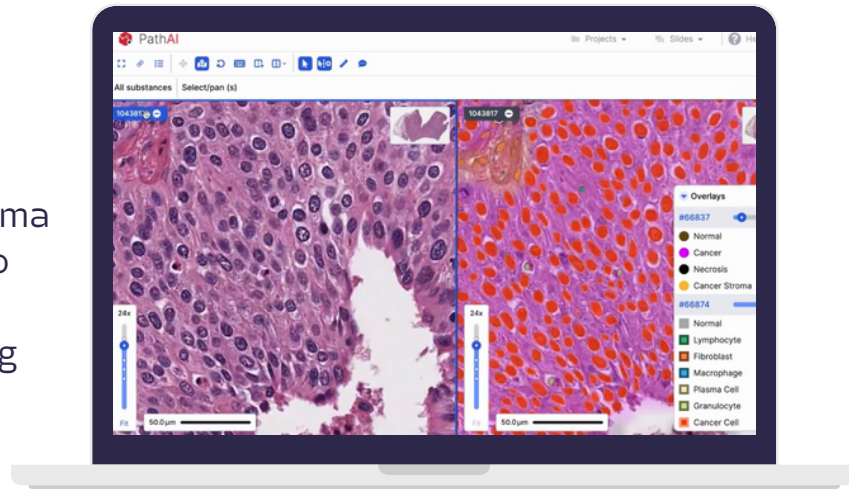
Integrate pathology data with clinico-genomic RWD to bridge the molecular drivers of disease to their clinical manifestations

Enhancing Real-World Data with AI-Powered Pathology

See what you can extract with PathExplore™ for quantitative histopathology

PathExplore delivers >300 standardized histopathology features including:

- Total Area of Tumor Tissue
- Total Number of Lymphocytes
- Density of Lymphocytes in Cancer Stroma
- Number of Lymphocytes in Proximity to Cancer Cells
- Spatial Distribution of Tumor Infiltrating Lymphocytes and *more*

How we can help

Looking for a real-world dataset?

PathAI has built a network of industry-leading RWD partners allowing you to access a comprehensive range of curated real-world datasets. These datasets include clinical, molecular, and AI-derived quantitative pathology data, enabling multi-modal analyses across the drug development lifecycle.

Looking to enrich an existing RWD cohort?

Our solutions transform raw whole slide images (WSIs) into standardized and structured tissue and cell features, enhancing your ability to derive meaningful insights and accelerate discoveries in translational research and clinical development.

License Available Datasets

Fuel your research with PathExplore™ data generated from H&E WSI from The Cancer Genome Atlas (TCGA)

Learn more at **www.pathai.com**

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

www.pathai.com
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