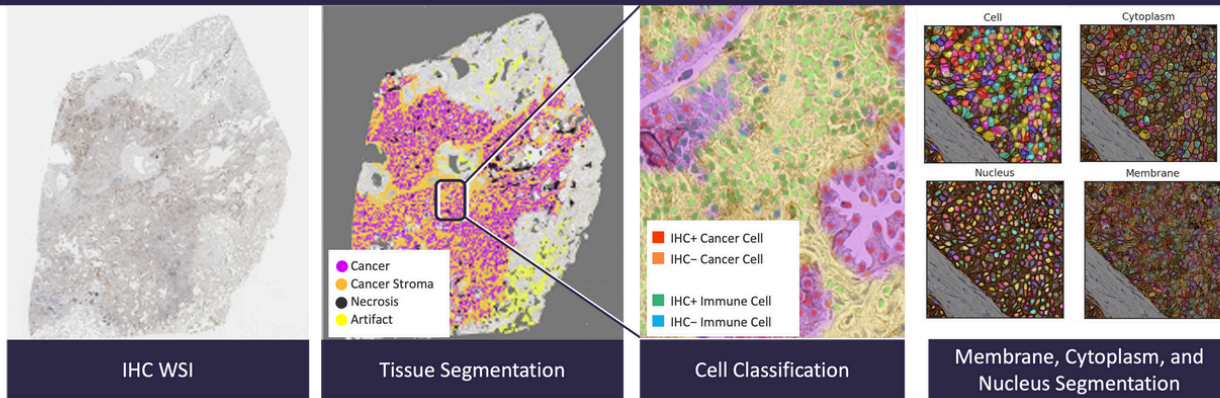# Introducing IHC Explore™

Enhanced biomarker quantification from immunohistochemistry (IHC) slides

AI-Powered characterization and quantification of tissue regions, cell populations, stain intensities, and scoring compartments

IHC **Explore** is an AI-powered panel that extracts **human interpretable features (HIFs)** from IHC WSI to characterize staining patterns with spatially-contextualized, single-cell resolution
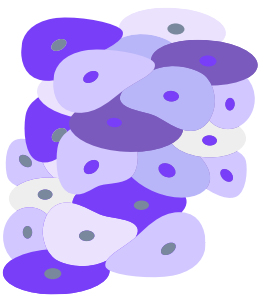
Cancer
Cancer Stroma
Necrosis
Artifact

IHC+ Cancer Cell
IHC− Cancer Cell
IHC+ Immune Cell
IHC− Immune Cell

Cell   Cytoplasm
Nucleus   Membrane

IHC WSI | Tissue Segmentation | Cell Classification | Membrane, Cytoplasm, and Nucleus Segmentation

Unlock next-generation IHC biomarkers and target insights

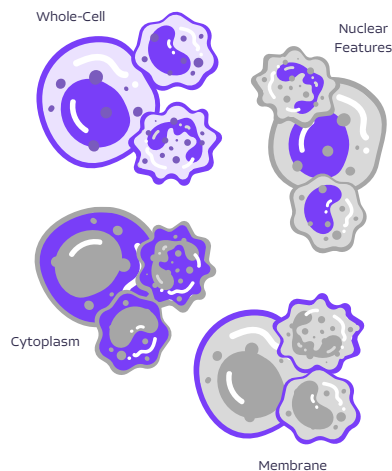**IHC Explore provides >300 standardized & structured features that allow you to:**

- **Segment and classify** tissue regions and cell types across the entire whole slide image
- **Analyze** densities, spatial patterns, and cell-cell interactions with single-cell resolution
- **Quantify** stain intensity by tissue region, cell type, and subcellular compartment
- **Characterize** expression heterogeneity, target localization, and stain distribution
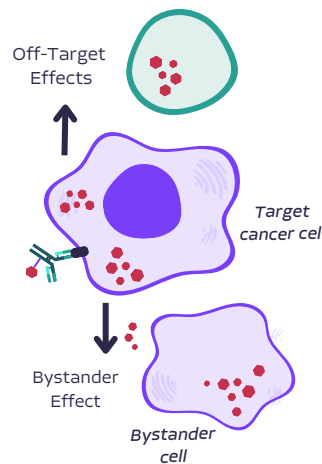
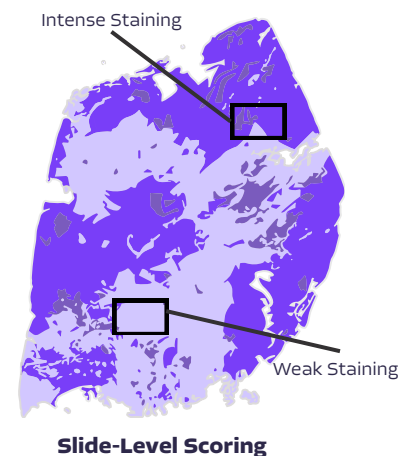### Continuous H-Score

Quantitative, single-cell intensity

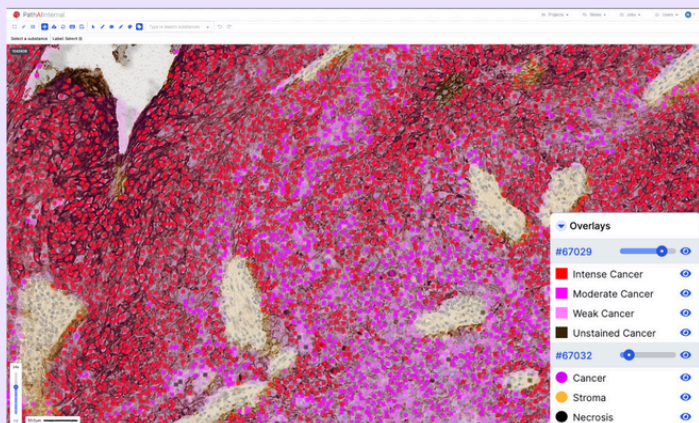### Sub-Cellular Stain Quantification

Whole-Cell
Nuclear Features
Cytoplasm
Membrane

Immunogenicity Assessment

Off-Target Effects

Target cancer cell

Bystander Effect

Bystander cell

Expression Heterogeneity

Intense Staining

Weak Staining

Slide-Level Scoring

Manage, visualize and interact with whole slide images, AI-powered overlays, and quantitative feature tables
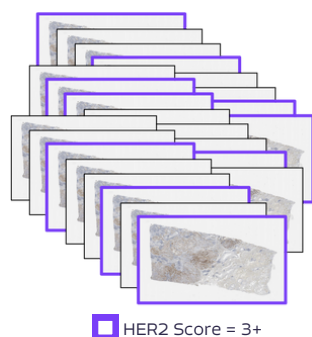

Visualization on AISight®

CASE ID	AREA of CANCER TISSUE	NUMBER OF INTENSELY STAINED CANCER CELLS -	DENSITY OF CANCER CELLS 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
257842	74.902	5367	6.268
257710	36.668	22139	8.405
257772	23.048	15403	7.670
257661	40.650	232	1.819
257675	38.911	31577	3.195
257768	55.950	46167	3.642
257655	33.196	1910	5.435
257715	41.967	5108	3.573
2578.47	27.514	5828	2.817
257787	50.229	3137	4.632
257717	56.574	16558	5.702
257810	45.417	52186	6.137
257831	80.421	8834	1.372
257777	98.076	78762	4.212
257728	12.002	82914	2.063

Downloadable Feature Tables

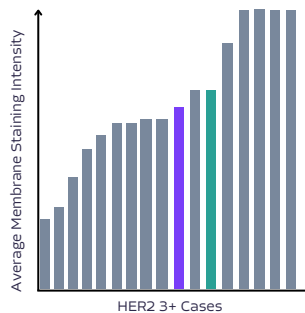## In Focus - Quantifying HER2 Expression Heterogeneity

IHC Explore's spatial, single-cell insights capture target expression distribution & stain heterogeneity to unlock novel biomarker strategies
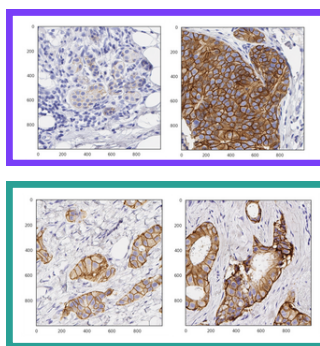
Slide-Level Scores

HER2 Score = 3+

HER2 IHC is classically scored categorically based on cancer cell stain completeness & intensity

AI-Enabled Scores
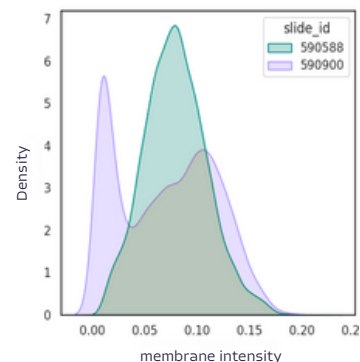

Average Membrane Staining Intensity

HER2 3+ Cases

IHC Explore provides quantitative, continuous measures of cell populations and staining intensity

Spatial Insights

IHC Explore quantifies expression heterogeneity not captured by categorical scores

Single-Cell Insights

IHC Explore per-cell features unveil distinct sub-populations that drive novel biomarker insights

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

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

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