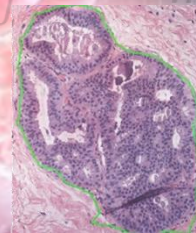
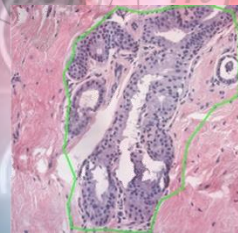
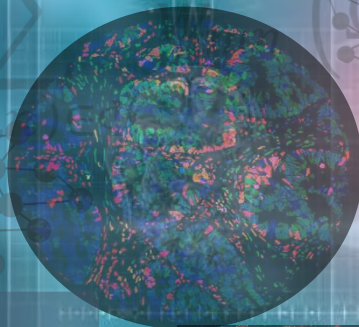




SpIntellx™

$$p(f_i^s, f_j^s) = \frac{1}{Z} \sum_{(m)} \dots$$

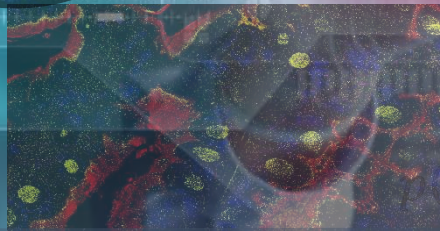


MEDICAL REPORT	
02:43:080	
586 89 403	
253 684 01	
99:RP_809	

SEE MORE

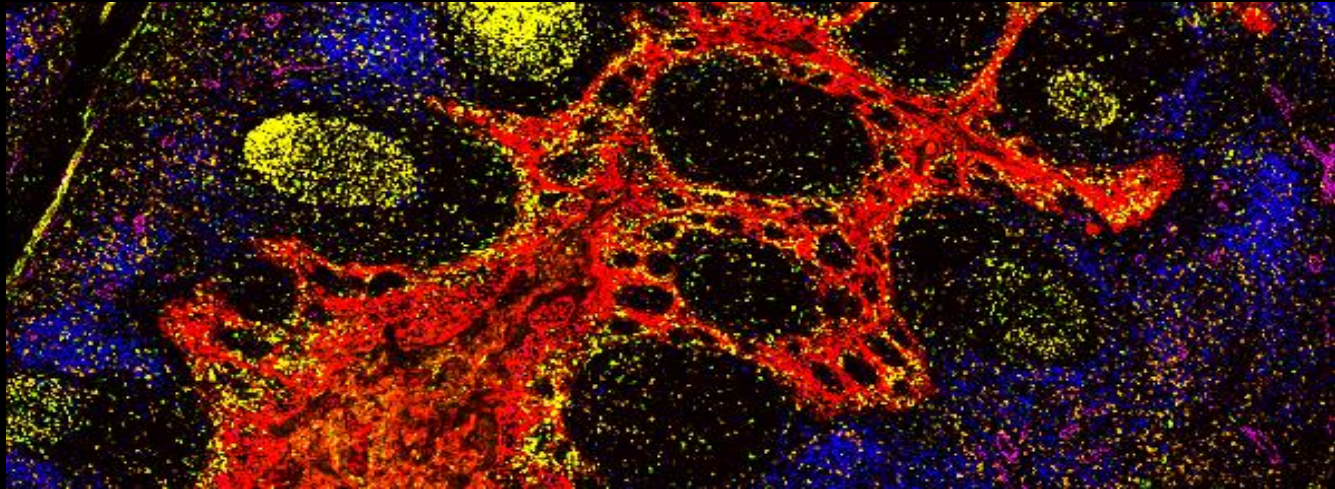
KNOW MORE


POWER PRECISION PATHOLOGY



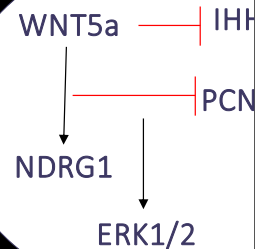
$$\vec{x}) = \sum_{j=1}^M N(\vec{x} | \mu_j, \Lambda_j \Lambda_j^T + \Psi)$$

**Are you leveraging the
power of Precision Pathology?**

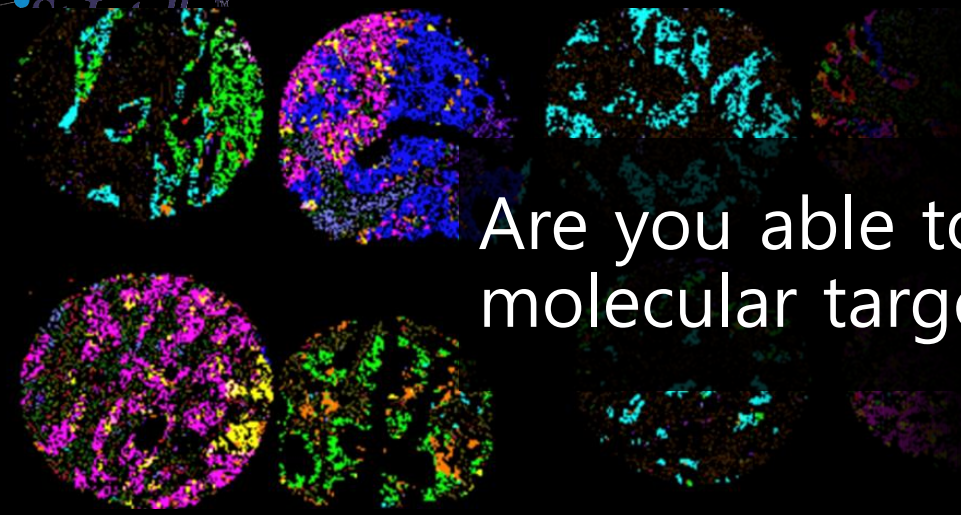




Are you obtaining optimal patient cohorts for your clinical trials?

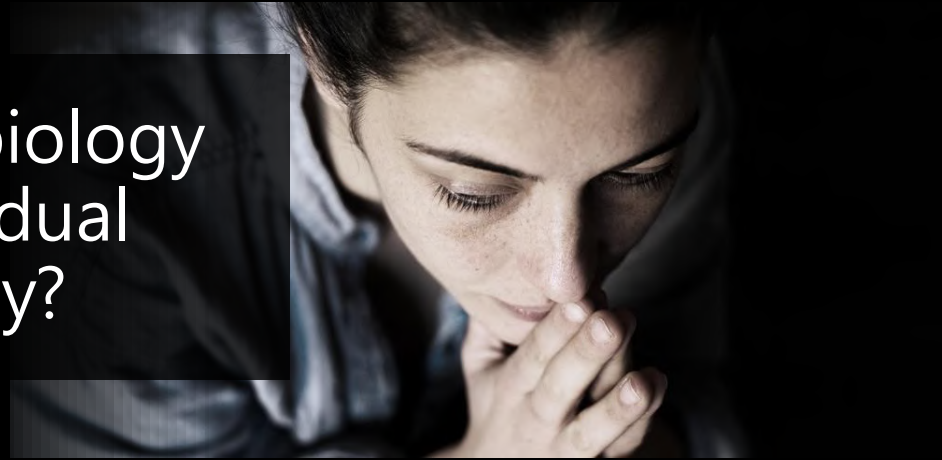


Are you harnessing Explainable AI to build the highest precision companion diagnostics?



Are you able to identify potential novel molecular targets for drug discovery?

Are you leveraging spatial biology insights to unravel an individual patient's response to therapy?





Are you leveraging subspecialty expertise for intelligent caseload distribution in your practice?



Is your AI software just a black-box showing heatmap overlays with no explanations?

A close-up photograph of a hand holding a black chess piece (a pawn) over a chessboard. The hand is positioned in the upper left, with the thumb and index finger gripping the top of the piece. The chessboard is in the foreground, and other pieces are visible in the background, slightly out of focus. The lighting is soft, highlighting the texture of the hand and the smooth surface of the chess piece.

**Get Two Steps Ahead in
Precision Pathology with SpIntellx**



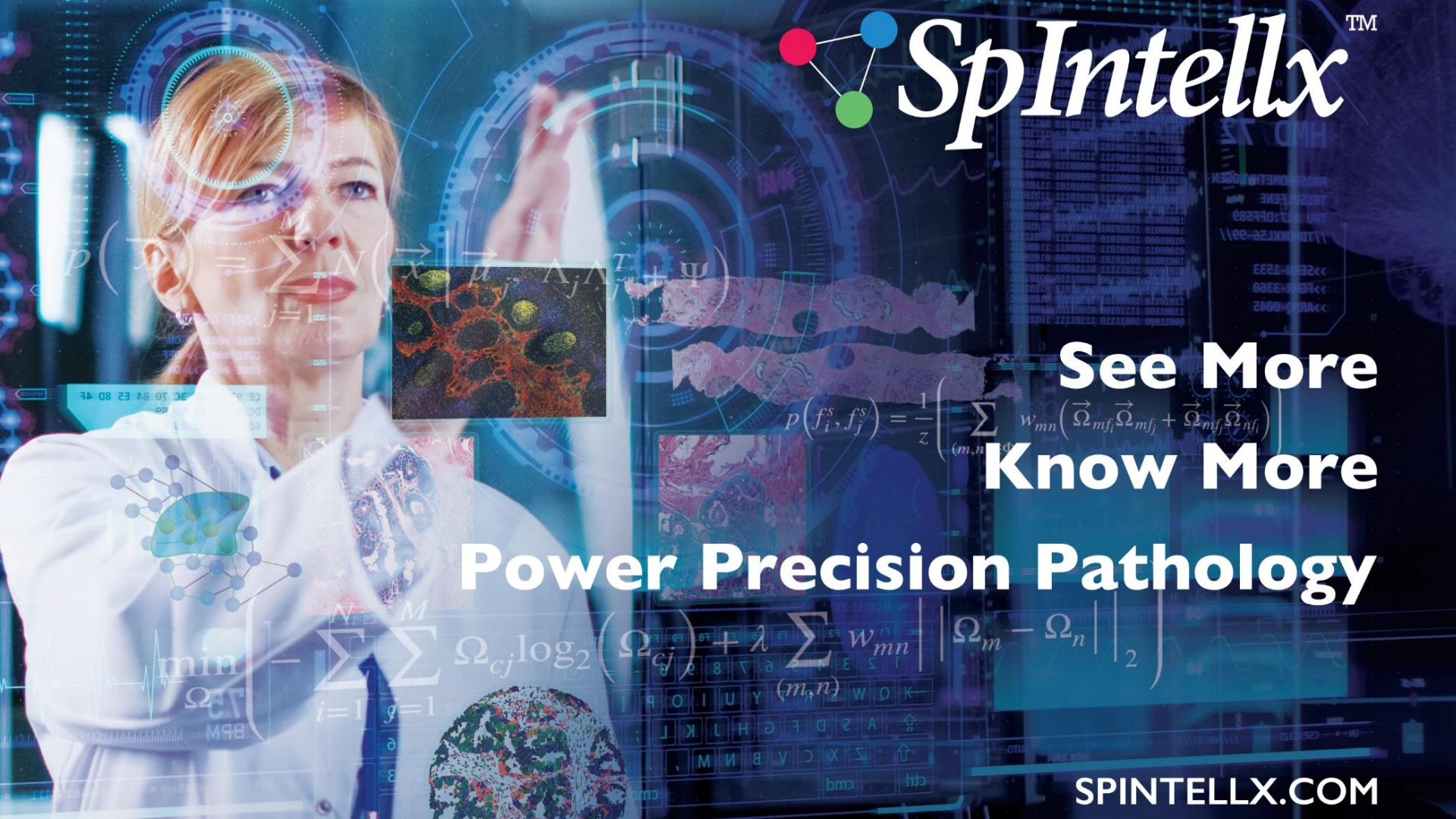
SpIntellx™

See More

Know More

Power Precision Pathology

SPINTELLX.COM



$$p(x) = \sum_{j=1}^N \left(\mu_j \Delta_j \Delta_j^T + \Psi \right)$$

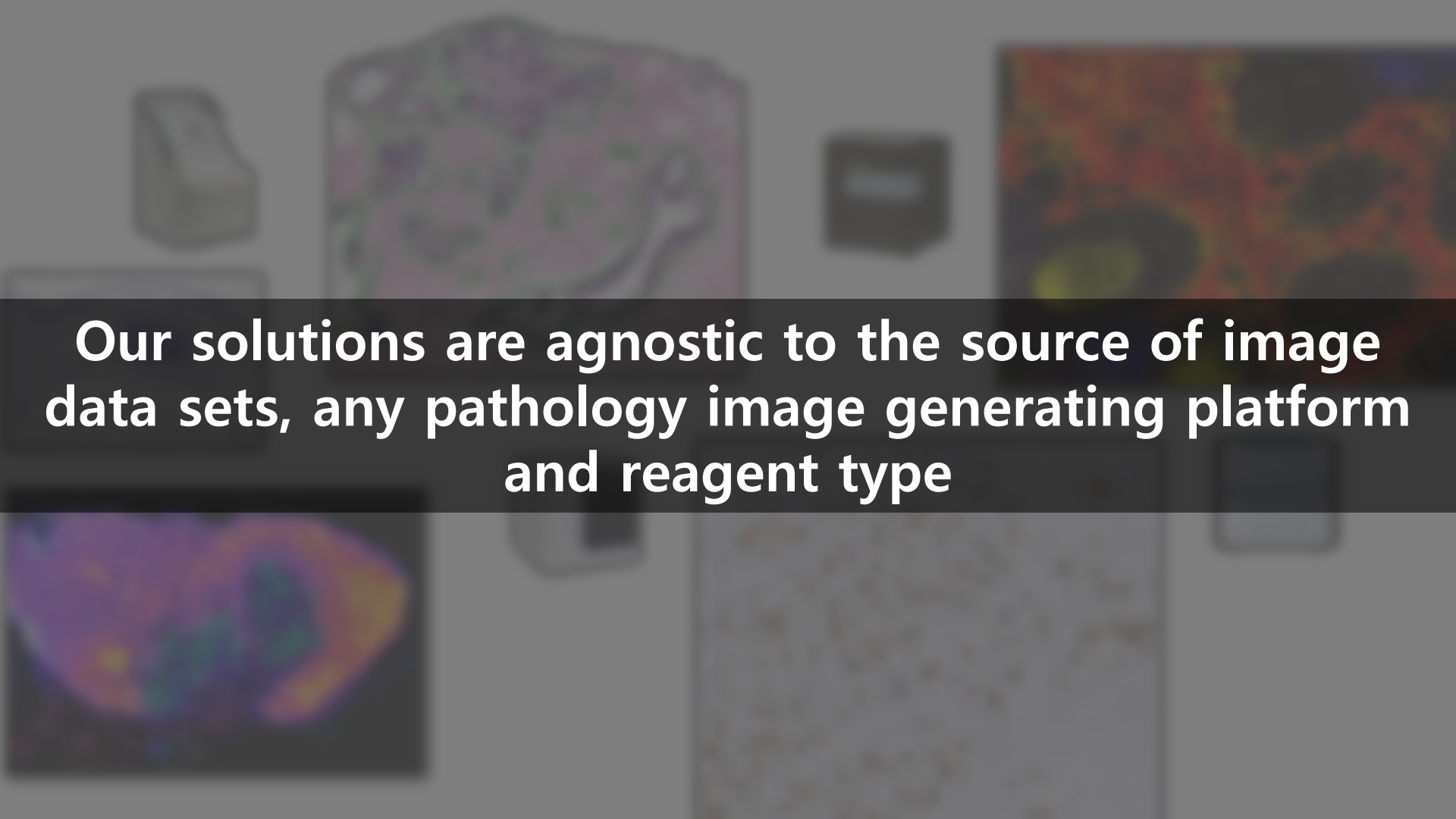
$$p(f_i^s, f_j^s) = \frac{1}{z} \sum_{(m,n)} w_{mn} \left(\vec{\Omega}_{mf_i} \vec{\Omega}_{mf_j} + \vec{\Omega}_{mf_j} \vec{\Omega}_{mf_i} \right)$$

$$\min_{\Omega} \left[- \sum_{i=1}^N \sum_{j=1}^M \Omega_{cj} \log_2 \left(\Omega_{cj} \right) + \lambda \sum_{(m,n)} w_{mn} \left| \Omega_m - \Omega_n \right|_2 \right]$$

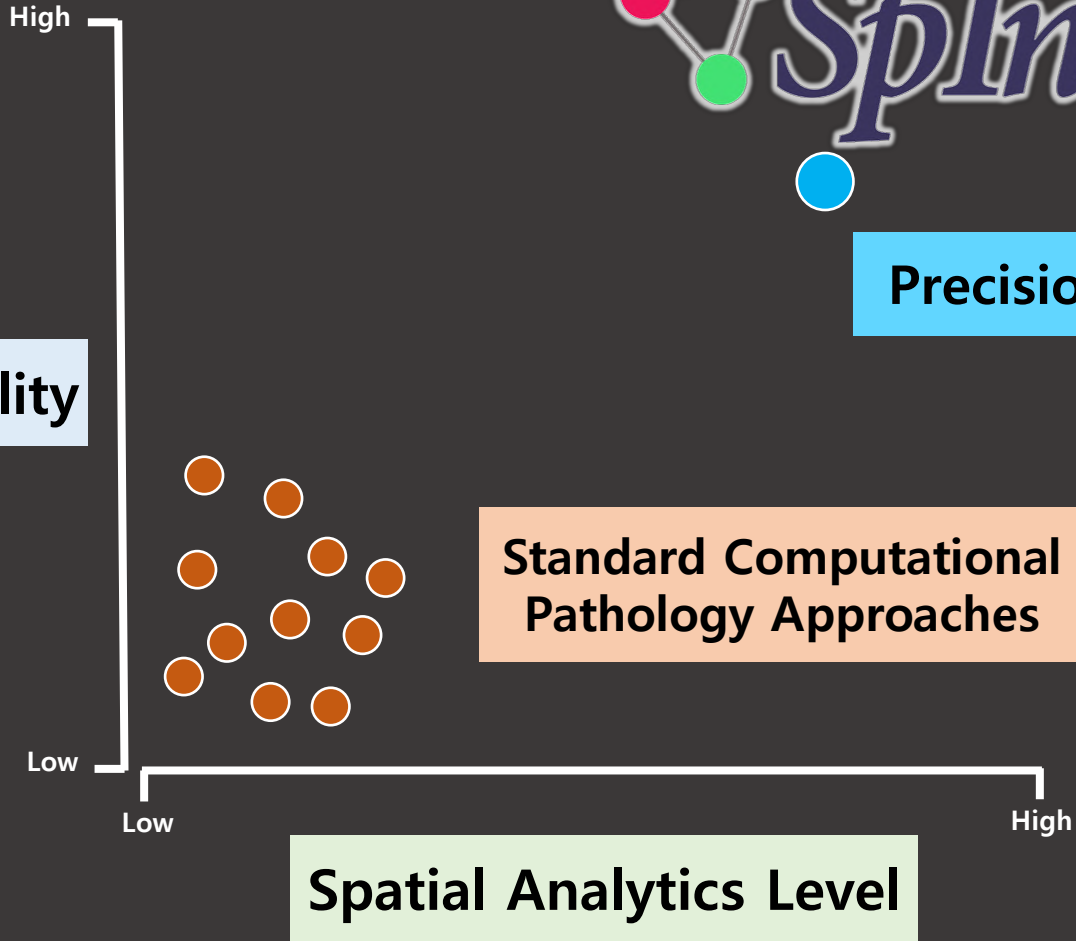


SpIntellx created the new era of precision pathology by transforming computational and systems pathology with **Unbiased Spatial Analytics** and **Explainable AI**.





Our solutions are agnostic to the source of image data sets, any pathology image generating platform and reagent type



See More. Know More. Power Precision Pathology.

Revolutionizing Your Pre-Clinical and Clinical Workflows



Accelerated
Drug Discovery



Optimized
Clinical Trials



Advanced
Companion Diagnostics



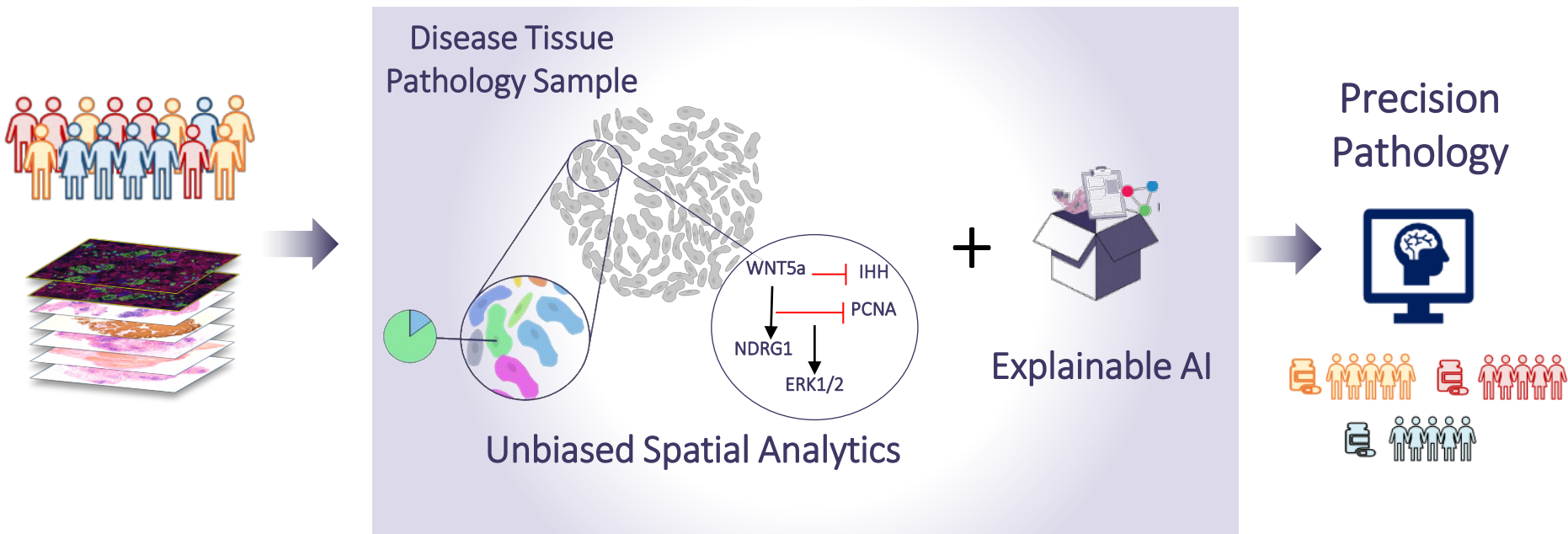
Personalized
Therapeutic Options



Efficient and Accurate
Clinical Workflows

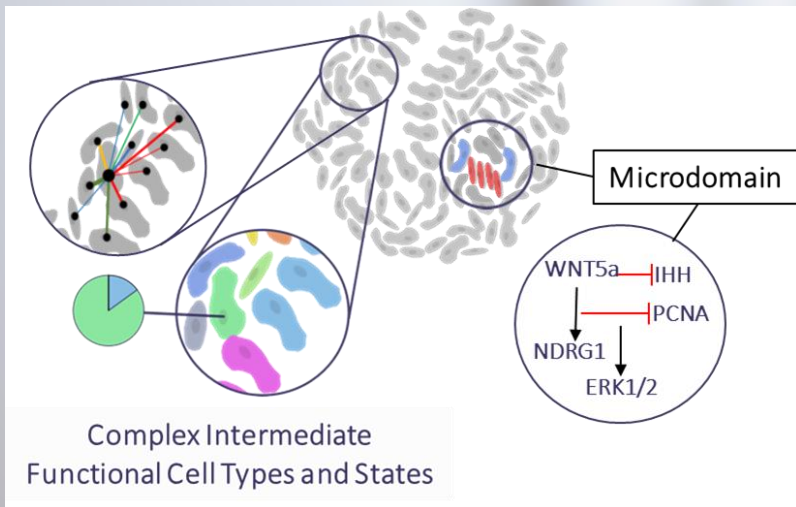
Leveraging Explainable AI (xAI) to Get to the “Why?”

Harnessing Unbiased Spatial Analytics and Explainable AI to Power Precision Pathology



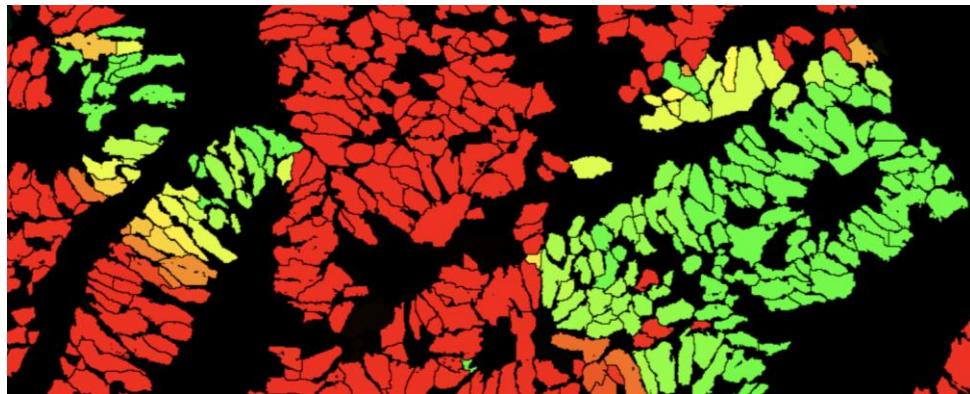


The Only Company Leveraging Unbiased Spatial Analytics



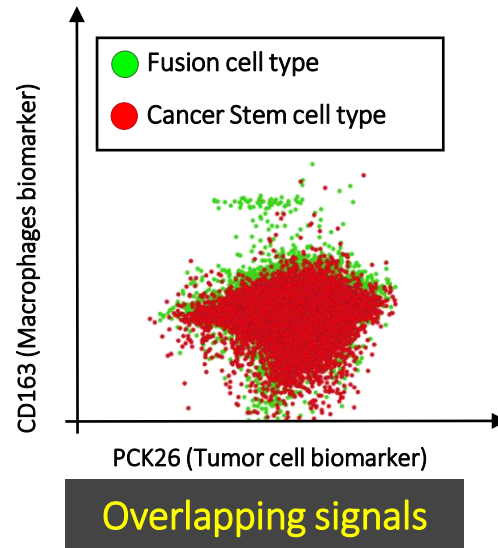
The Only Company That Can Identify Functionally Relevant Transition Cell States and Fusion Cell Types

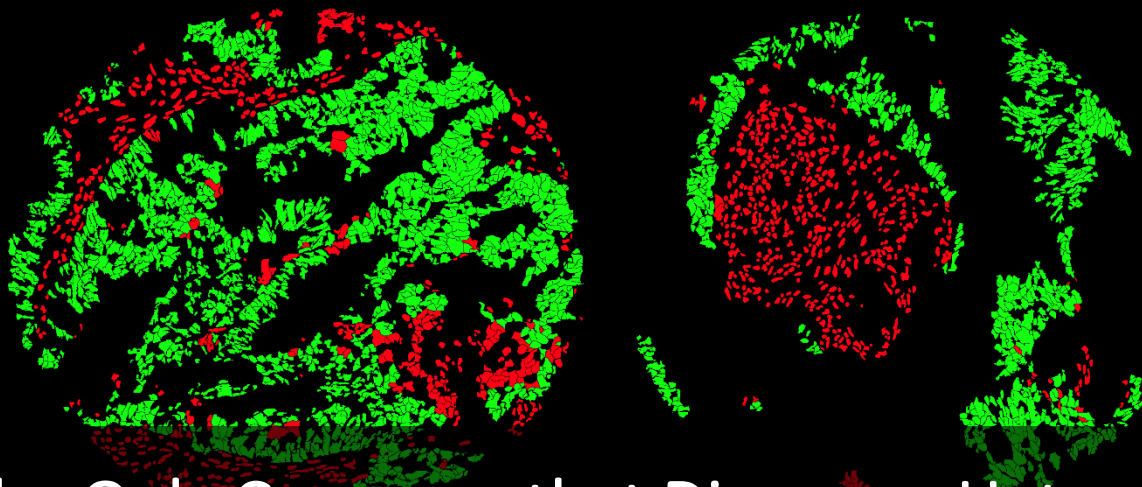
Unbiased and automated functional cell phenotyping




Tumor Cell Cancer Stem Cell
Cells in transition – shades of yellow


Current biased biomarker intensity thresholding approaches fail

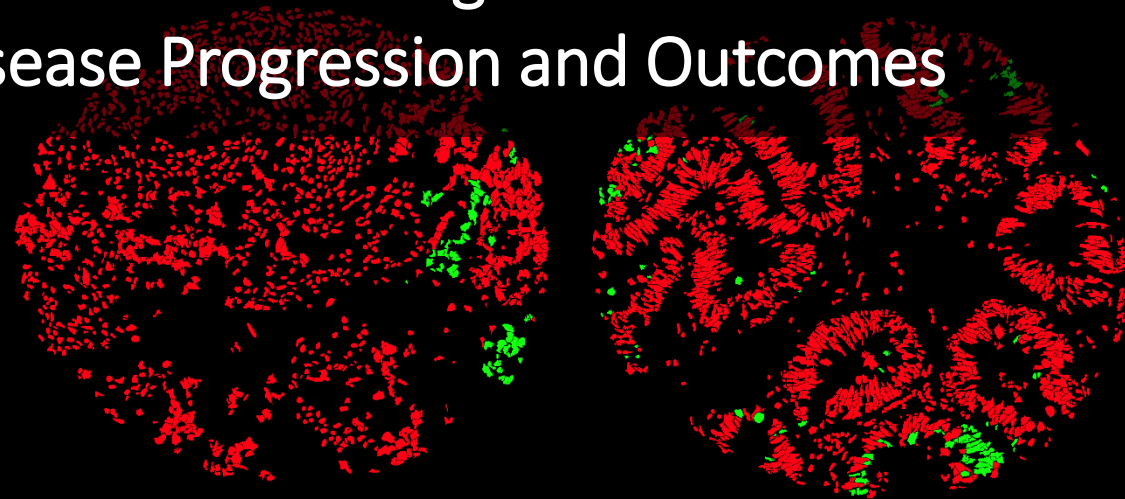


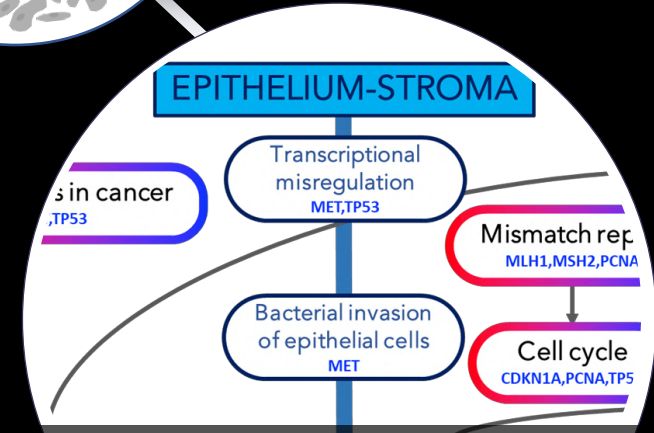
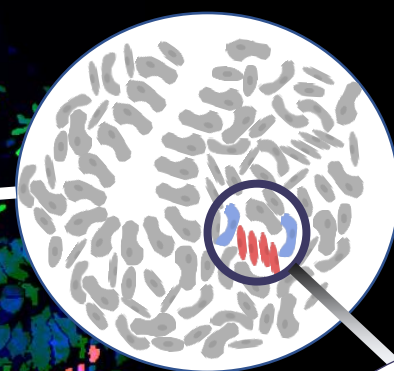
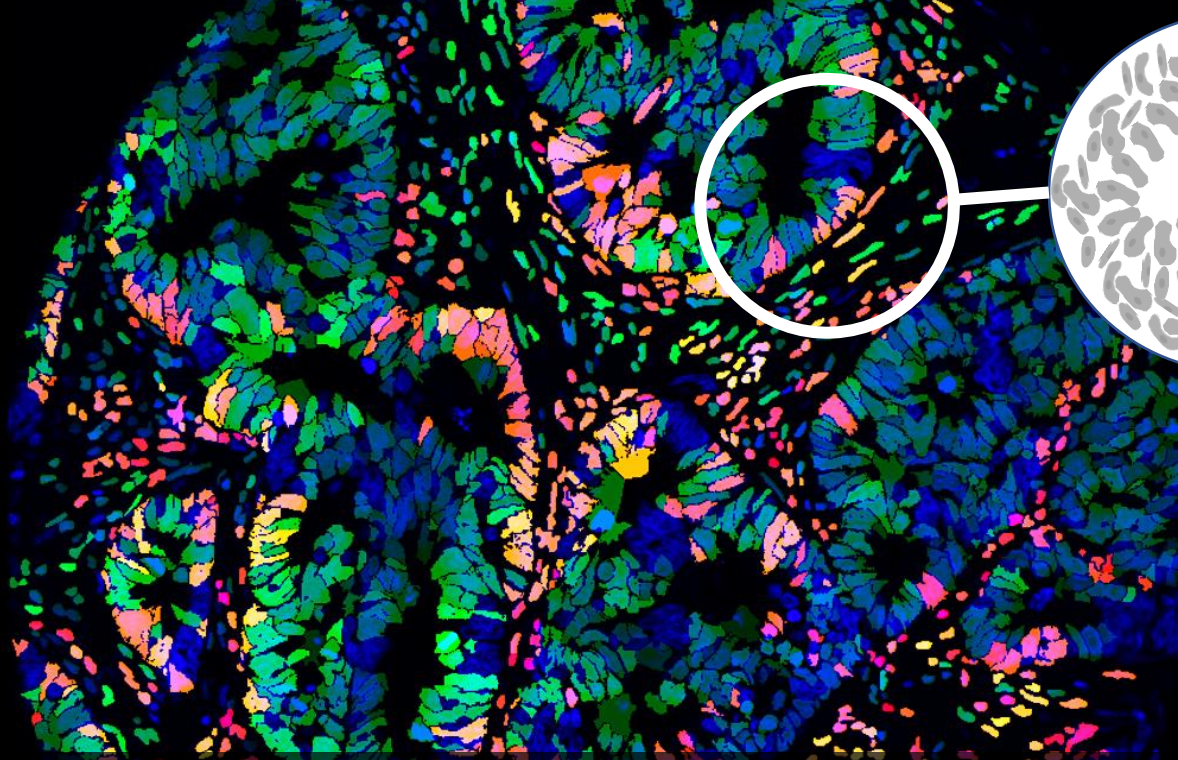


The Only Company that Discovers Heterogeneous Microdomains
Associated with Disease Progression and Outcomes

 Microdomain 1: Tumor promoting

 Microdomain 2: Tumor restraining





The Only Company with Microdomain-Specific Spatial Systems Pathology to Identify Pathway Interactions, Signaling Networks, Potential Molecular Targets and Drugs



Explainable and
Trustworthy AI

“Why?”

Recommendations
with explanations



The Only Company That “Gets to the Why”
through Explainable AI

Google Chrome Apr 12, 13:29

TumorMapr localhost:8487

TumorMapr™

Channels Explore Recommendation

Therapy Recommendations:

Oxaliplatin with 5-fluorouracil

Therapy Duration: 6 Months

3 year DFS Projection confidence: 94%

Why?

Patient ID43123

Recommendation

Therapeutic Recommendation:
5-fluorouracil for 3 months (Confidence = 92%)

<p><input checked="" type="checkbox"/> <u>Treatment Projections (Confidence = 93%) No Evidence of Disease (3 years)</u></p>	<p><input type="checkbox"/> <u>No Treatment Projections: (Confidence = 89%) Recurrence in 9 months</u></p>
---------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------

Key xAI Findings

- [Predominance of "Stem-tumor" phenotype and "CAFs"](#)
- [Transitional cell count is disproportional](#)
- [Spatial interaction hierarchy between "T-Cells", "B-Cells", and "STEM Cells"](#)
- [PI3K spatially co-activated with mTOR](#)
- [TGF-b signaling to CAFs is spatially modulated](#)

Why?

Select a channel:

Choose a selection:

Histogram:

Density plot:

Case: T20-002001

Patient Name: Patient-002001
Age: 72
Sex: F
Original diagnostic label:
Original primary diagnosis:
HistoMapr™ Recommendation:

Toggles

- Draw ROI Boundary:
- Draw Sample ROIs:
- Hide ROI Panel:

Key Findings

- [Elliptical nuclei pattern](#)
- [Spaced-out round nuclei pattern](#)
- [Spaced-out small nuclei pattern](#)

Click a finding to visualize

Example Ducts Guiding DCIS Diagnosis

DCIS

DCIS

[Histological Patterns](#)

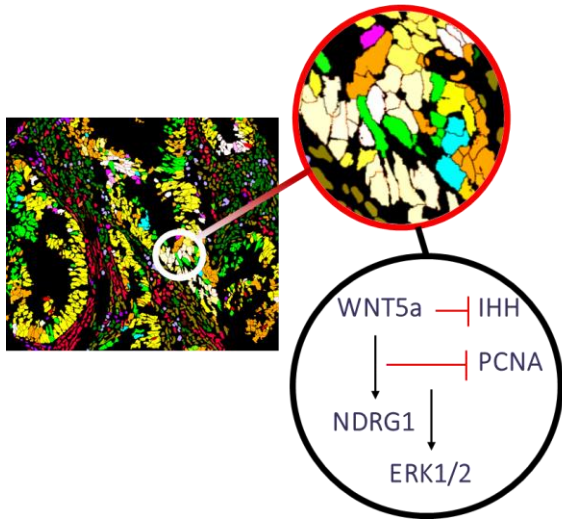
250 μm

Why? **DCIS** Agree Disagree Not Sure

« Back to Cases

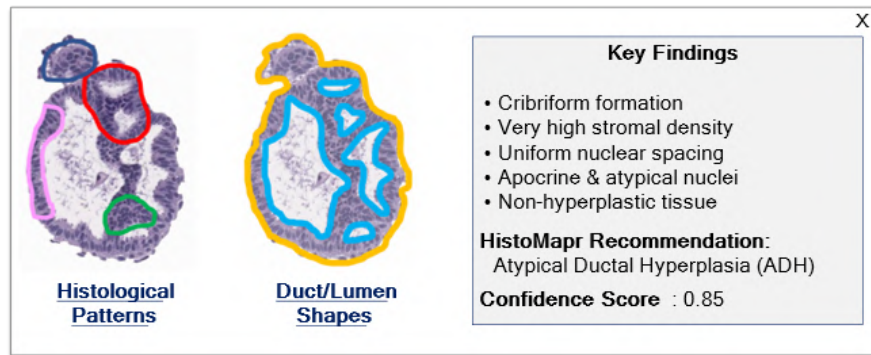
SpIntellx Solutions are Agnostic to Imaging Platforms and Disease Types

TumorMapr™



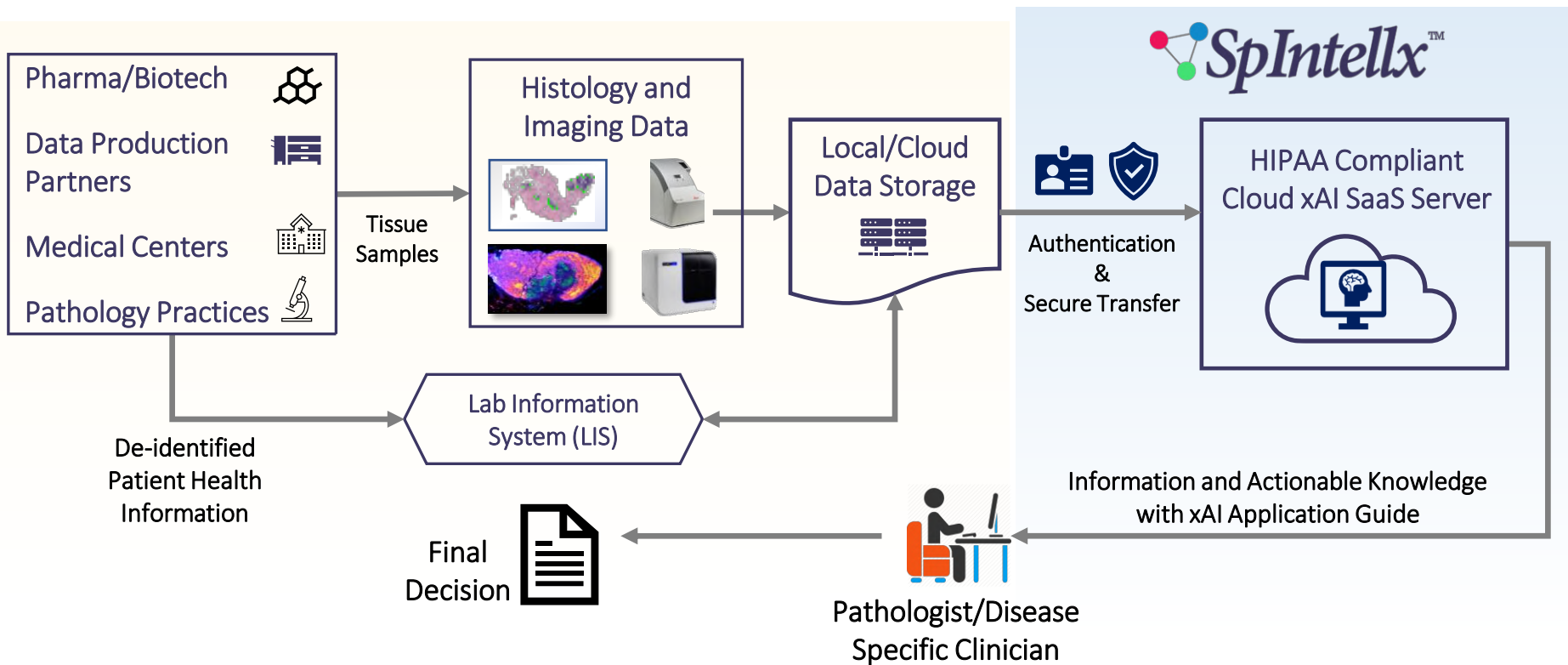
Applied to multi-hyperplexed fluorescence or mass spectrometry biomarker labeled image datasets

HistoMapr™



Applied to traditional transmitted light pathology images (H&E, IHC and chromogenic multiplexed IHC)

SpIntellx has Created a Scalable and Modular Software Solution

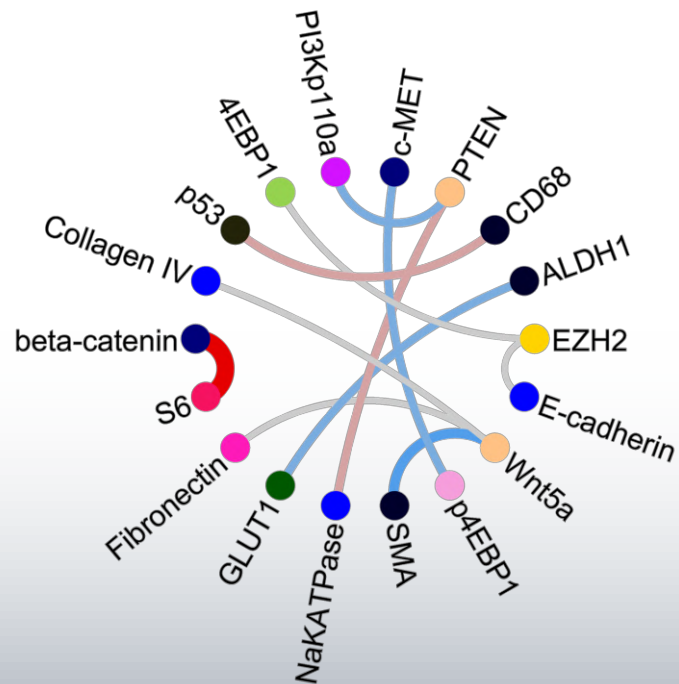


Accelerated Drug Discovery

Our solutions are the only ones in the market that identify novel cell types, biomarkers & targets leveraging unbiased spatial analytics and explainable AI to reveal underlying disease mechanisms and advance discovery and research.

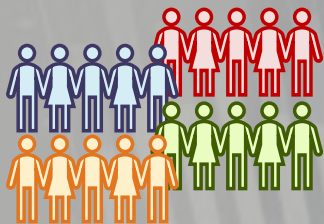
Accelerated Drug Discovery

Microdomain-specific spatial systems pathology yields pathway interactions and signaling networks driving disease progression, and identifying potential molecular targets and drugs



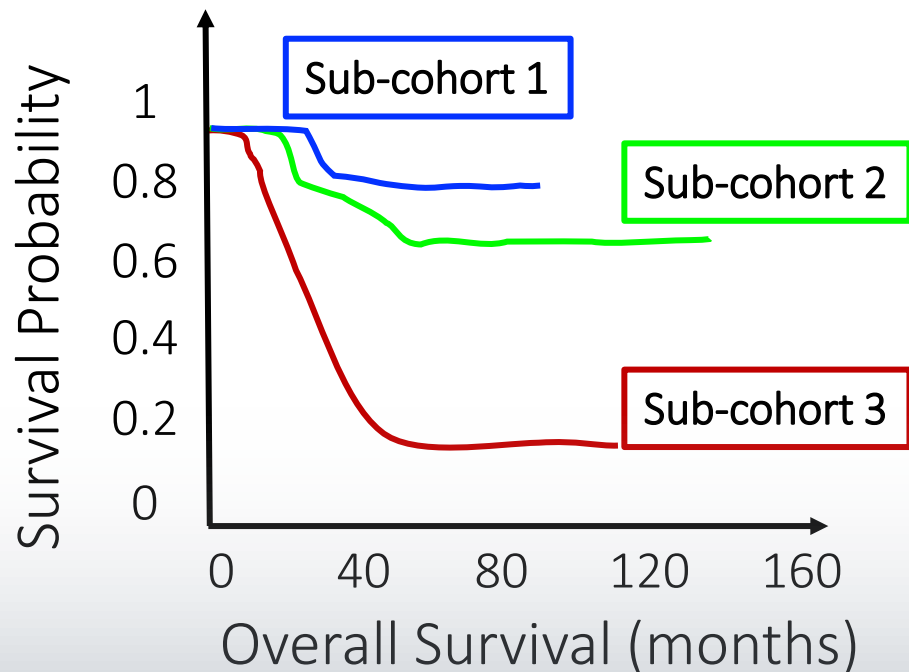
Optimized Clinical Trials

Clinical Trial
Stratification



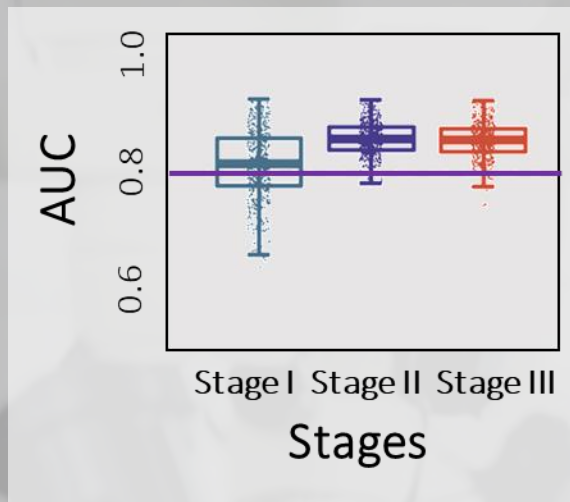
Our solutions achieve previously unattainable level of precision
in patient stratification for clinical trials

Optimized Clinical Trials



TumorMapr subtyping of triple-negative breast cancer cohort provides vast improvement over conventional methods

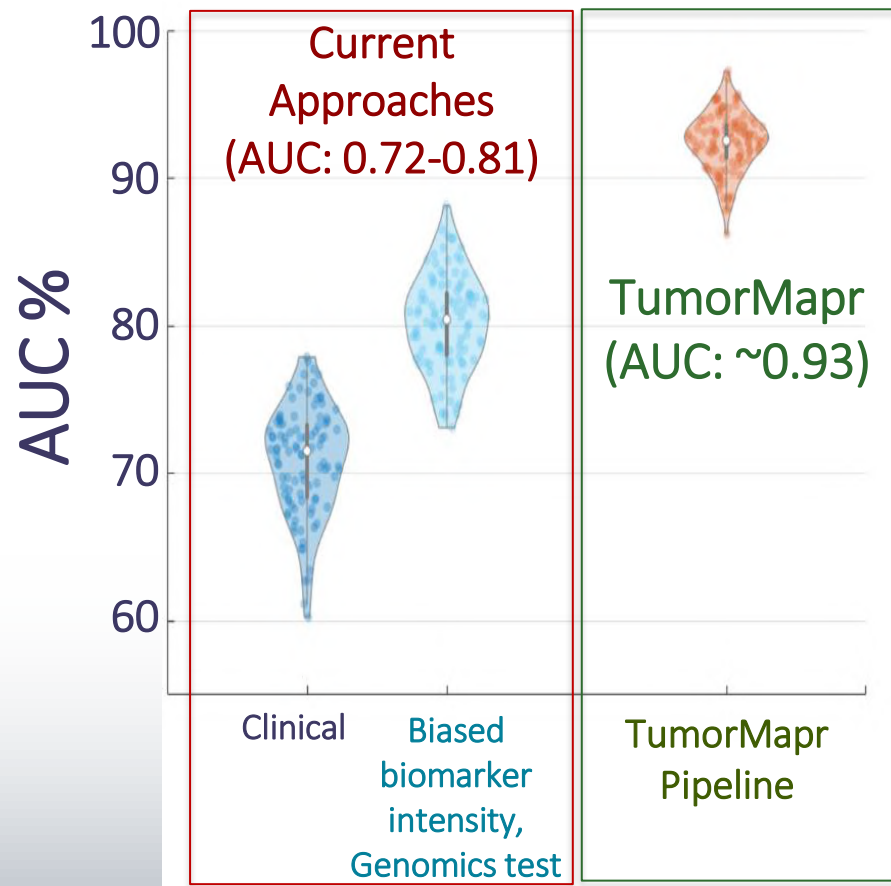
Advanced Companion Diagnostics



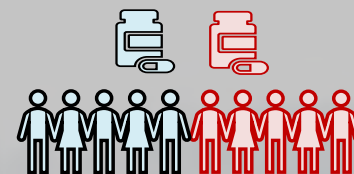
Precision pathology creates more predictive companion diagnostics and prognostics.

Advanced Companion Diagnostics

TumorMapr-Colon™: Prognostic test vastly superior to existing genomic and computational pathology approaches in predicting the 5-year risk of recurrence in colorectal cancer patients



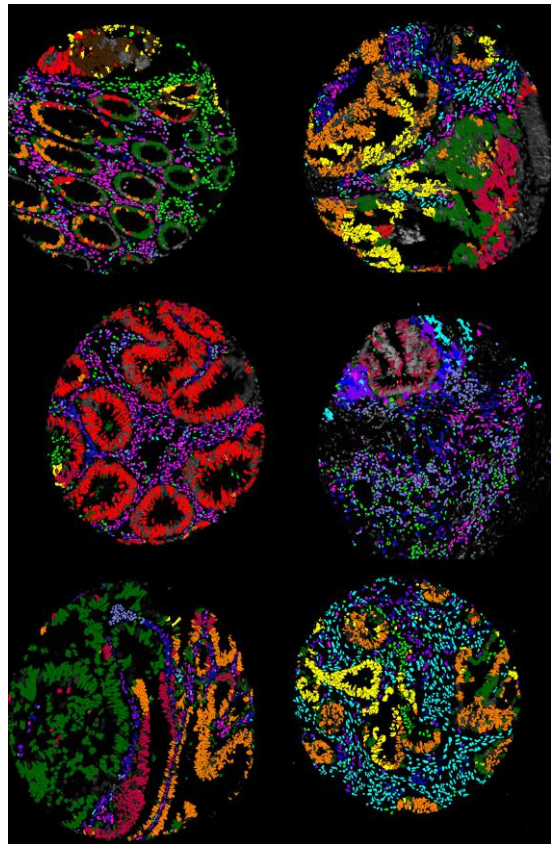
Personalized Therapeutic Options



Personalized
Therapeutic Strategies

Our solutions attain highly personalized adjuvant therapy options for individual patients and provide actionable insights to patient outcomes

Personalized Therapeutic Options



T1 (3 mo):
Capecitabine or 5-Fluorouracil



T2 (6 mo):
Oxaliplatin + 5-Fluorouracil or Capecitabine

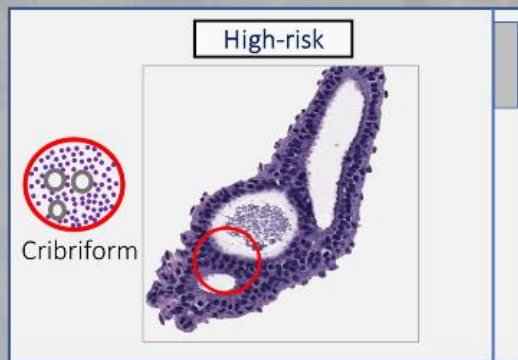


T3:
No treatment, observation



TumorMapr-Colon™ – xAI Guide Identifies Patients that
Should Receive a Particular Treatment

Efficient and Accurate Clinical Workflows

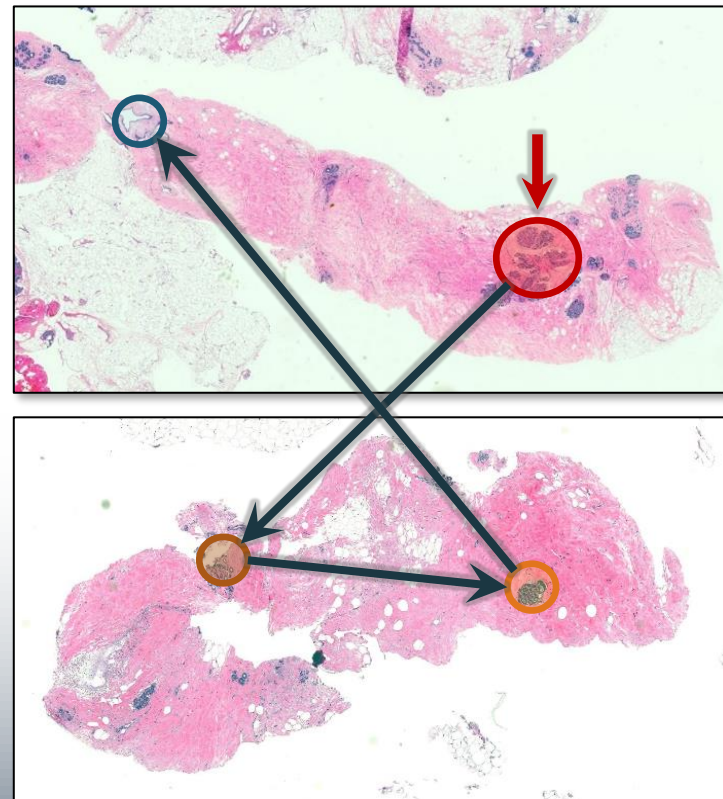


Our solutions address the unmet pathology needs by bringing innovations and delivering unparalleled flexibility and ease

HistoMapr-Breast: The First Truly Explainable Precision Pathology Platform

Unparalleled xAI-guided Non-linear Case Reading

- Instant On-Demand Explanations
- No Delay in Discovery
- Decisions Based on Best Regions
- No Driving Errors



HistoMapr-Breast: Quality Assurance Based on Explainable AI

- Perform on-the-go quality assurance
- Improve pathologists' accuracy and efficiency and reduce intra- and inter-pathologist discordance



Pathology Cases



HistoMapr-Breast



Real-time and Rapid
Diagnostic Assistance



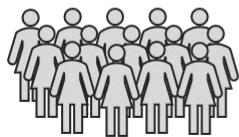
Improve Patient Safety and
Clinician Confidence

HistoMapr-Breast: The First Unbiased Spatial Analytics and xAI Precision Pathology Platform for Differential Diagnoses of Breast Biopsies

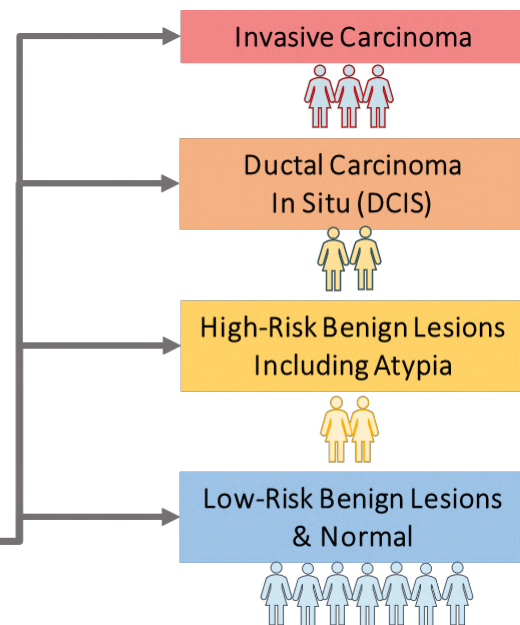
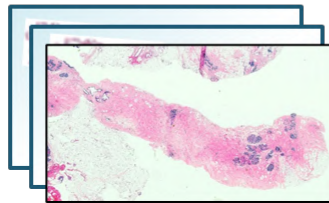
- Differentiate and rank a broad spectrum of breast pathologies, not only cancer vs. not-cancer.
- Triage case workload intelligently to forward the borderline cases to subspecialists



Validation Study Partner



Breast core biopsies



HistoMapr-Breast Involves Revolutionized Clinical Workflows

- Transparent and pathologist friendly explainable AI guidance
- Pathologist remains in control of the entire process and makes the final decision





The New Era of Precision Pathology

SpIntellx created the new era of precision pathology by transforming computational and systems pathology with unbiased spatial analytics and explainable AI.

