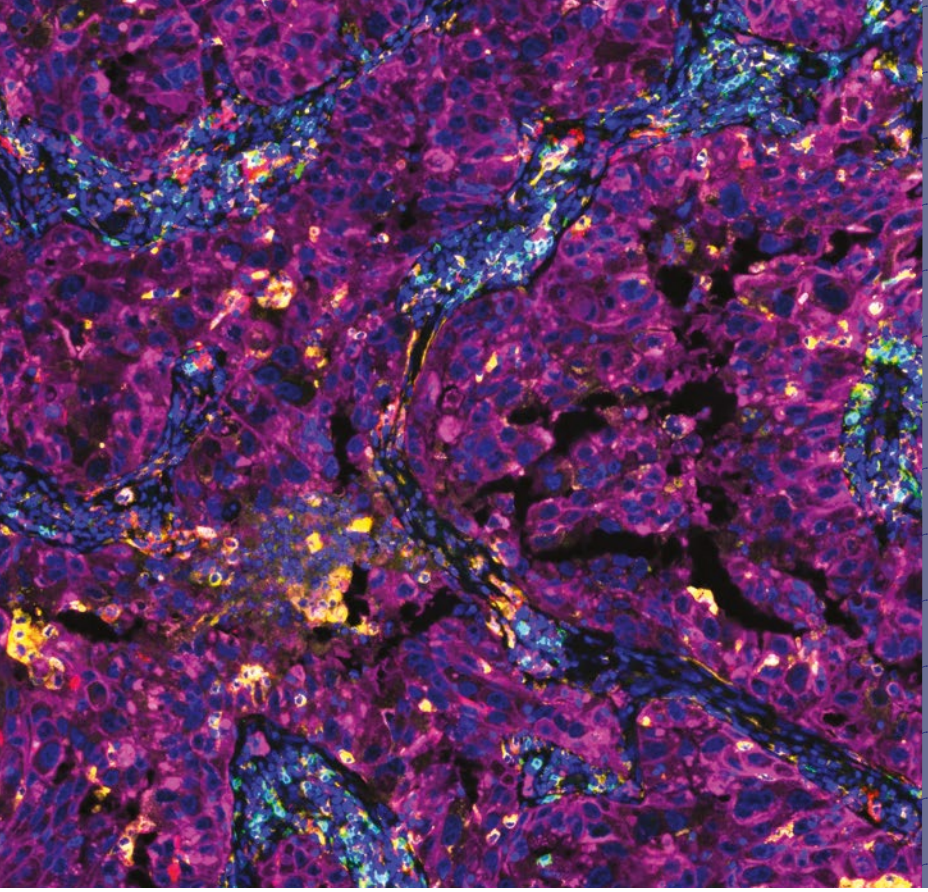


Profiling Cancer Biology with Spatial Proteomics Services

vizgen®

Our mission

Spatial Proteomics Services

Our mission is to develop products and services using spatial phenomics that utilize emerging knowledge of human biology and enable the data- driven development of personalized cancer therapies.

Wherever you are in your biomarker journey Vizgen can help

Design

Our experts guide you on the best assay for your biomarker strategy

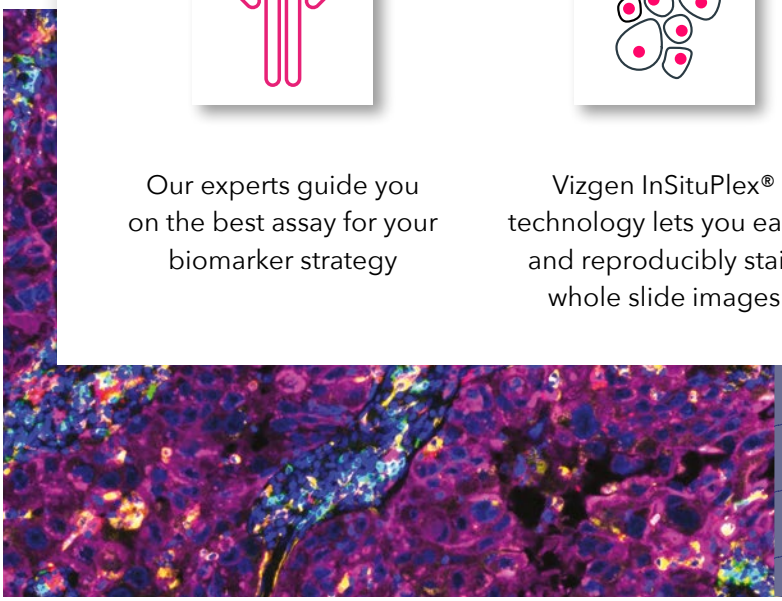
Image

Vizgen InSituPlex® technology lets you easily and reproducibly stain whole slide images

Analyze

AI

Image analysis and data mining lets you reveal the most important findings from your images



We seek to give every patient the best chance of a cure by revealing the true state of cancer using spatial phenomics.

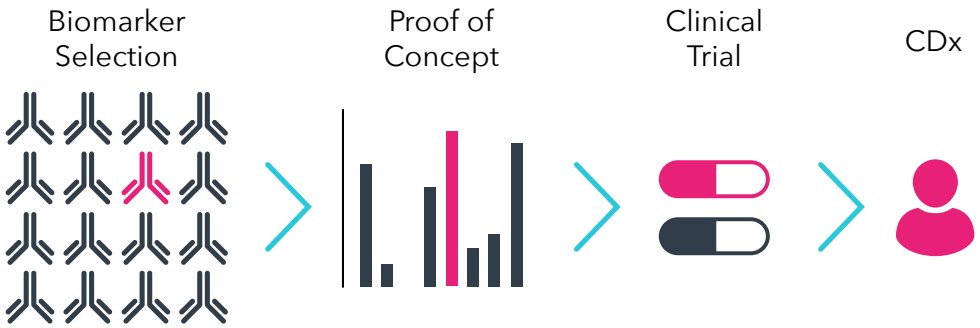
Imagine a partner that supports your biomarker journey through the entire development pipeline, from the beginning, with defining and framing your specific scientific question, developing your biomarker panel, all the way through to delivering answers that enable your project to move forward and make an impact in personalized medicine.

Journey with Vizgen

From Translational Research to Clinical Trials

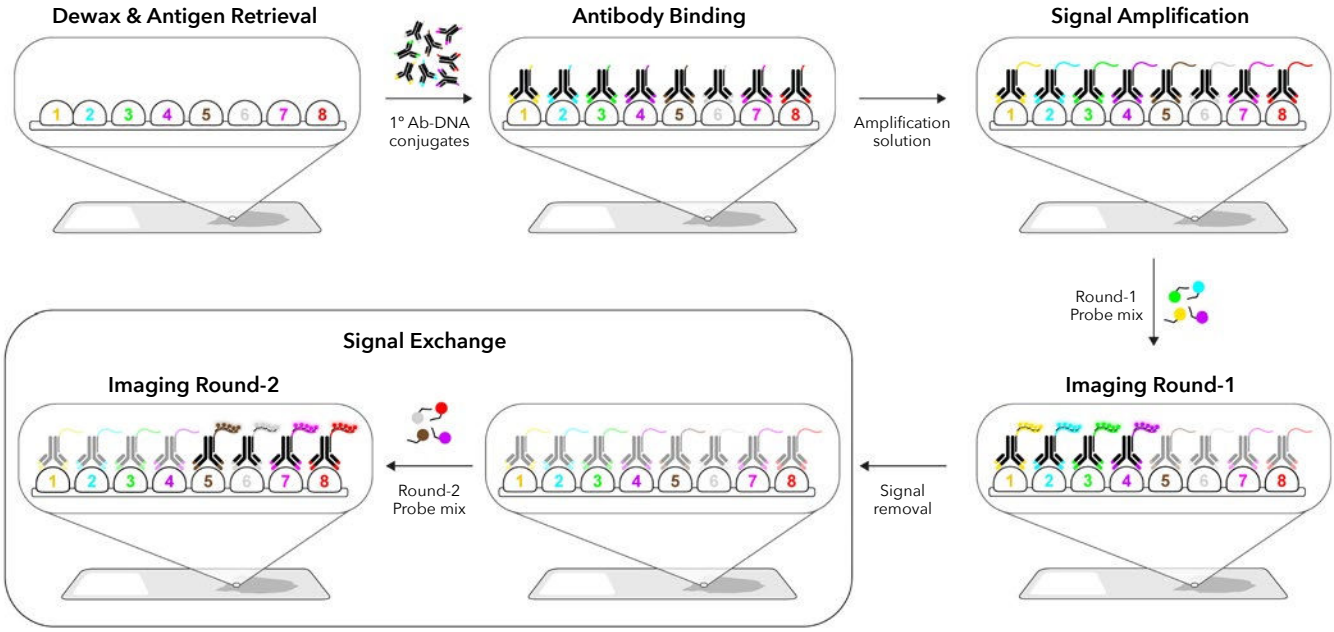
As your pipeline moves forward, your needs for high-plex assays will change. Vizgen understands that reducing assay complexity as study size increases is essential to progress towards potential clinical utility.
By combining superior assay and staining technology with expertise in data analysis, we are your ideal partner to help take your projects from discovery into the clinic.

From high-plex to low-plex: Optimize your biomarker panel as your study moves towards potential clinical use.

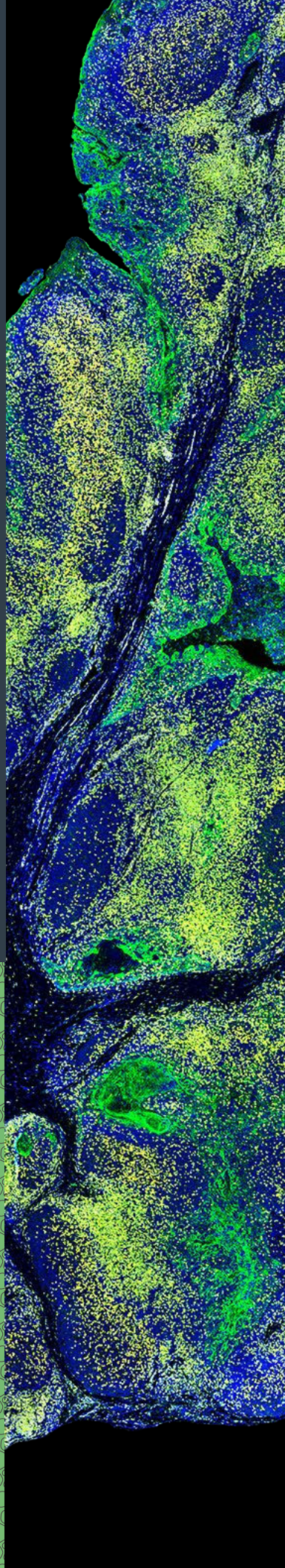


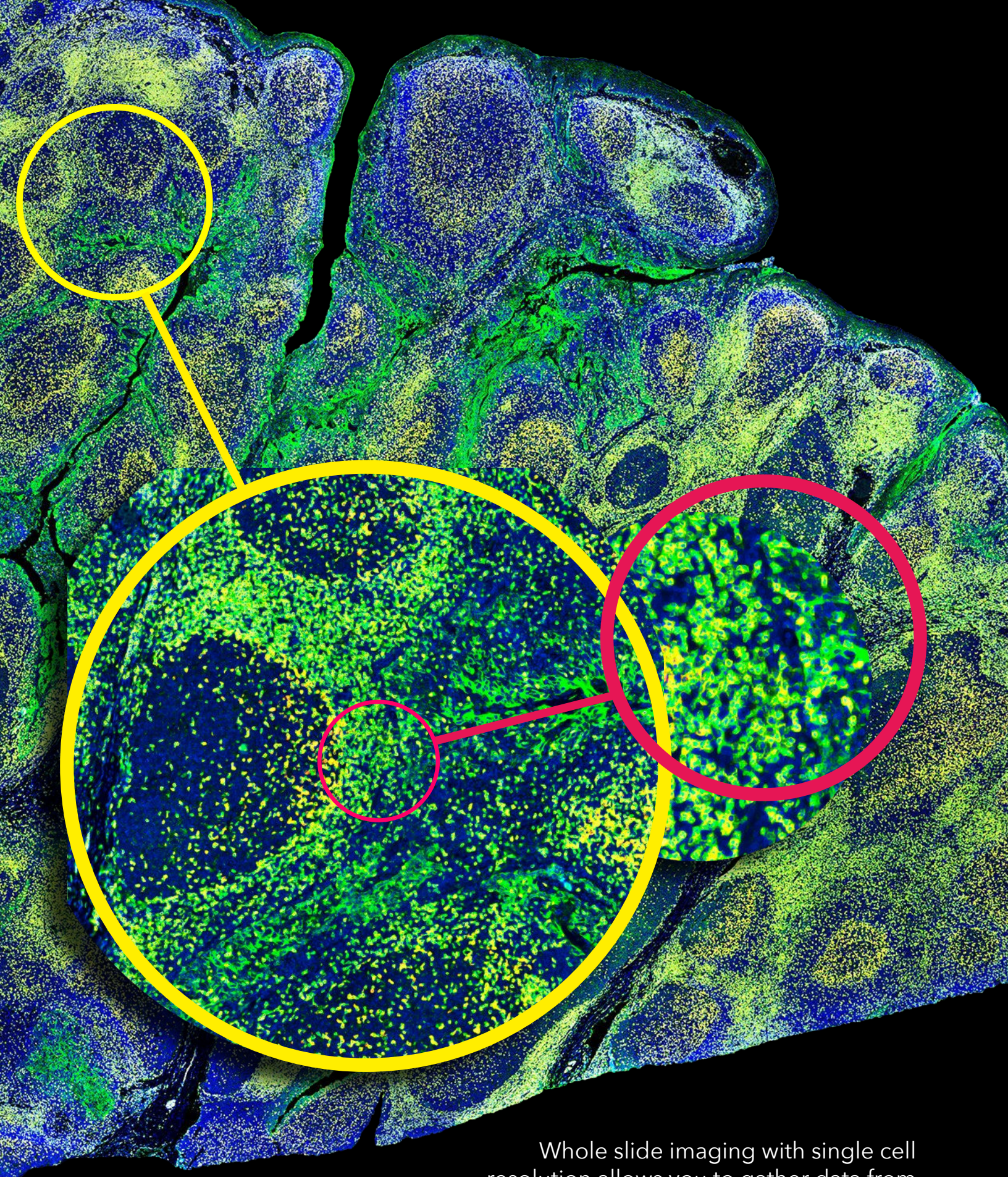
Spatial Proteomics with Pathology-Grade Precision

InSituPlex® Assay: An Overview



Analysis from Whole Slide to Single Cell



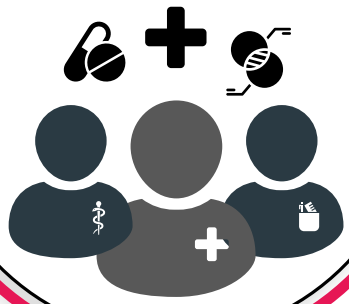


Whole slide imaging with single cell resolution allows you to gather data from the entire slide but also investigate different regions and cell-cell interactions.

Start Your Biomarker Journey with Vizgen

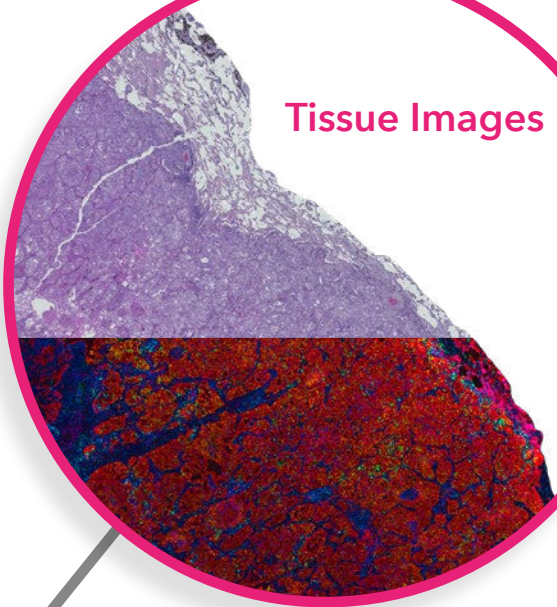
A full team of experts in bioassays, imaging and analysis is available to help you define your project

Scope Project

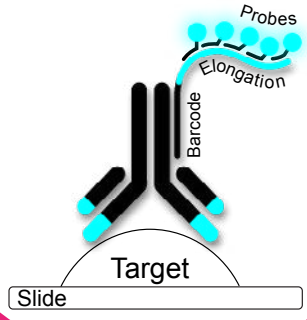


Whole slide imaging with H&E co-registration on a single slide

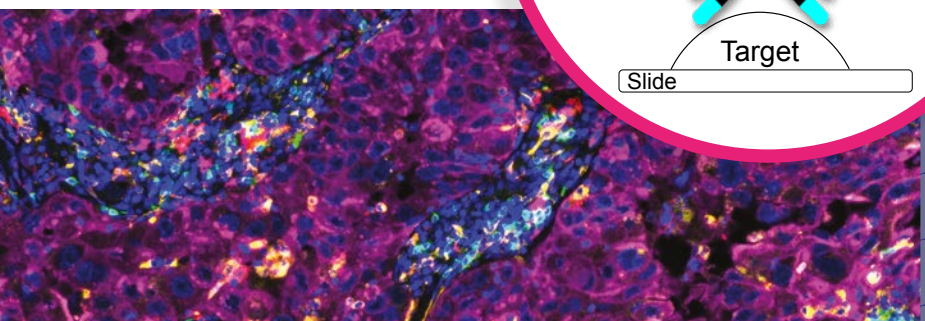
Tissue Images



InSituPlex Technology



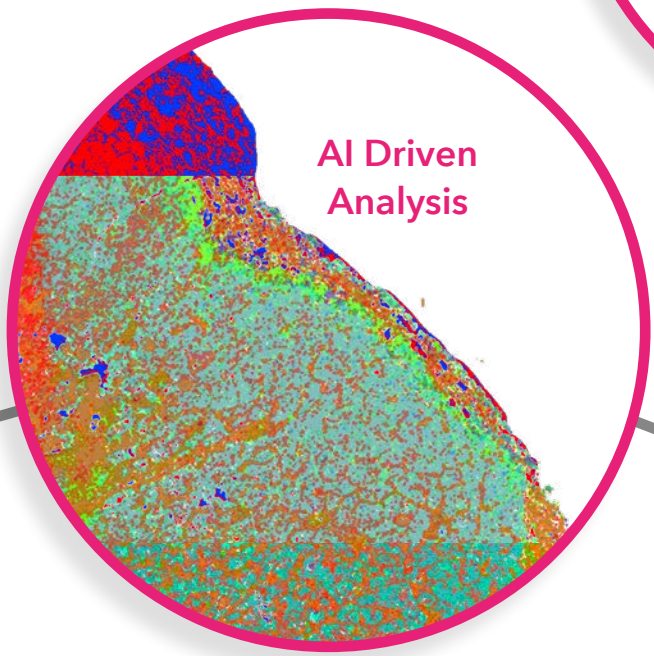
Images with superior signal to noise, available in 4, 8, 12-plex options



Data Reports

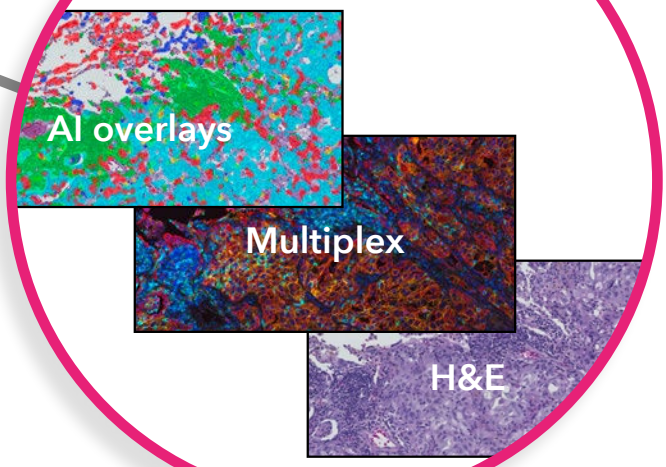
Comprehensive summary of project with insightful analysis data

AI Driven Analysis



Dig into the data with analysis tools plus experts in the field of spatial biology

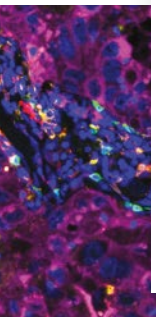
Visualization Tools



Web-based image viewing capabilities facilitate tissue exploration

Pathology-grade precision

Our proprietary InSituPlex® technology enables advanced exploration and interrogation of tissue samples for precision medicine research. With gentle staining methods that allow H&E staining post ISP, same-slide image co-registration of whole tissue sections enables a comprehensive view into the tissue microenvironment. Visualization tools and advanced image analysis services allow you to find the biologically relevant data within your samples.

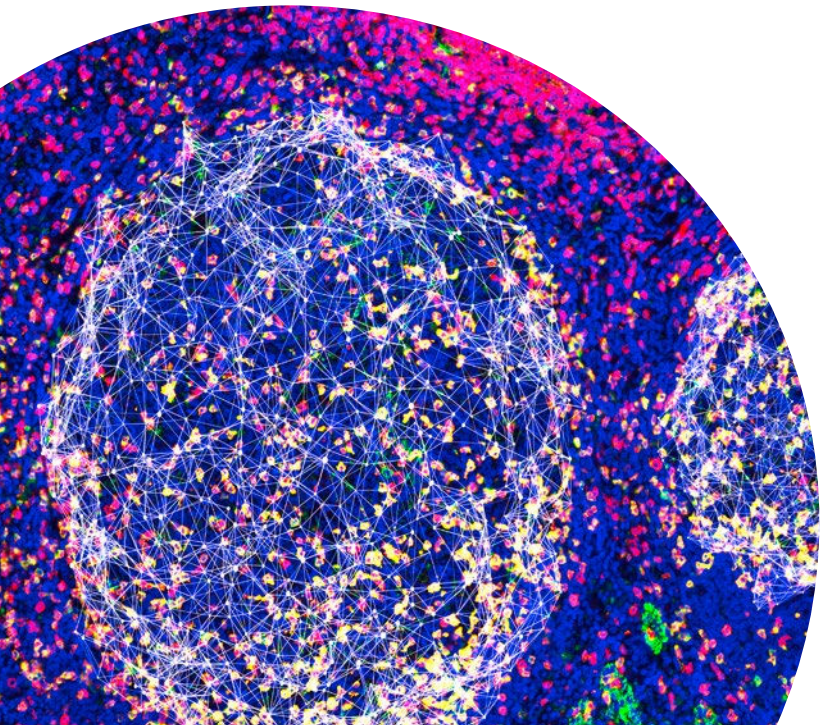


STARVUE™
Image Data Science

Find the meaningful data in your image

Spatial phenomics is the discipline of mining tissue images in their own context to identify spatial patterns that are related to clinical outcomes. It involves every step from assay development and application, scanning, image analysis and data mining.

We are a curious, precise, rigorous, and a helpful partner in spatial phenomics across the entire workflow from assay to data.

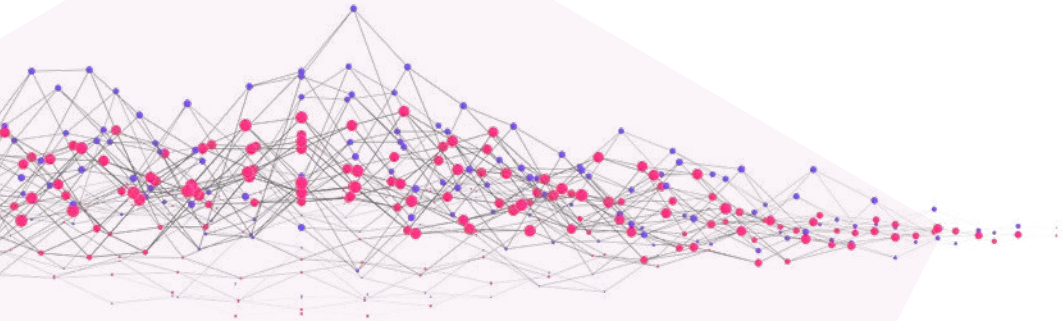


Whole slide imaging

InSituPlex® (ISP) technology comprises multiple benefits to the spatial biology workflow. Thanks to our labeling strategy, all signals are true signals: no tedious calibration and ambiguous spectral unmixing is required.

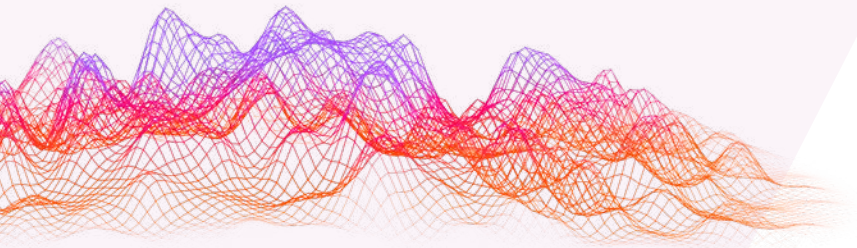
Cohort comparison

With quantitative analysis you can compare with other similar cases across study groups and treatment options.



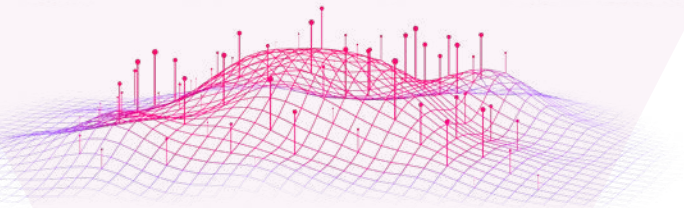
Data analytics

We provide you with a complete representation of the tumor landscape including tissue compartments, cell phenotypes and interactions, so you are ready for scientific exploration.



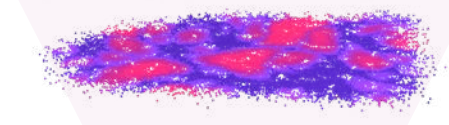
Cell quantification

Identify cell populations in the tissue and classify them into meaningful phenotypes based on the selected biomarkers.



Cell interactions

Go beyond counting cells and look at cellular interactions which define the key points of immune biological processes.

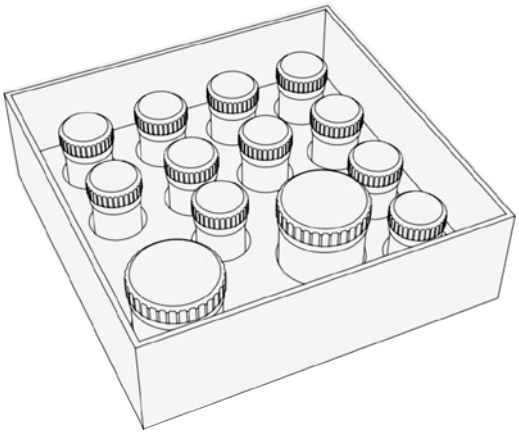


Tissue compartmentalization

One of the most basic, yet powerful, approaches in spatial phenomics is the analysis of cell populations in different tissue compartments.

Panels

Complete Flexibility in Panel Design



Characterize immune biology using pre-optimized panels and markers for whole slide analysis.

Get pathology-grade assay precision and accuracy, unprecedented signal to noise, same slide H&E staining, fast turnaround time, and collaboration with our team of spatial biology experts and assay development specialists.

With an extensive menu of markers and panels you can select between up to 12 markers to efficiently test and iterate on several hypotheses quickly and robustly.

OmniVUE™

Completely configurable panels with validated biomarkers

- Pre-optimized, Ready-to-use reagents
- Validated biomarkers (30+)
- Agile panel design without additional redevelopment
- Delivery in <4 weeks
- Pre-optimized deep learning based image analysis models

Vizgen.com/products/omnivue

U-VUE® Experienced

Configurable panels with biomarkers developed via in-house experience

- Rapid and modular panel design with developed targets (60+)
- No additional marker development
- Delivery in <8 weeks
- Same-slide H&E staining and co-registration

Vizgen.com/products/u-vue

U-VUE® Custom

Completely custom panels with any novel biomarker(s) of interest

- Development of assay parameters and custom AI algorithms any novel biomarker of choice
- Create panels for human, mouse, cynomolgus monkey or any species of your choice

Vizgen.com/products/u-vue

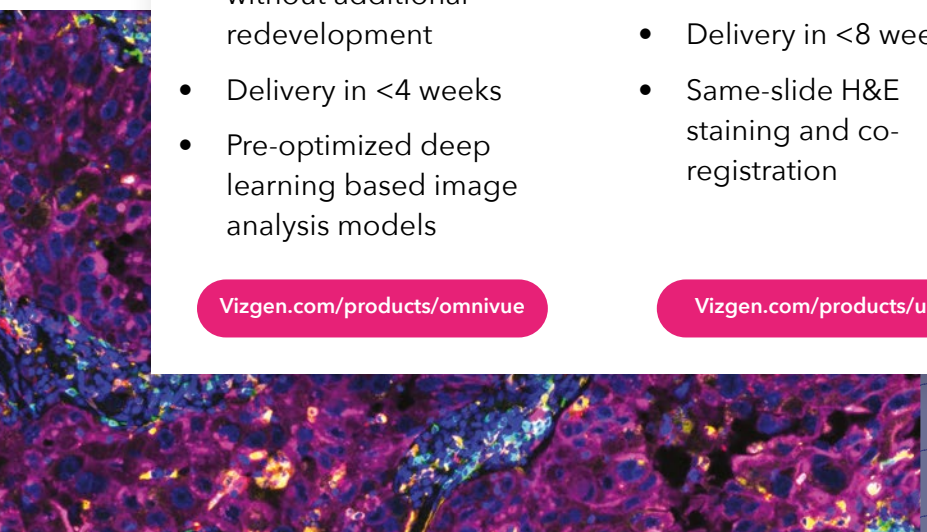
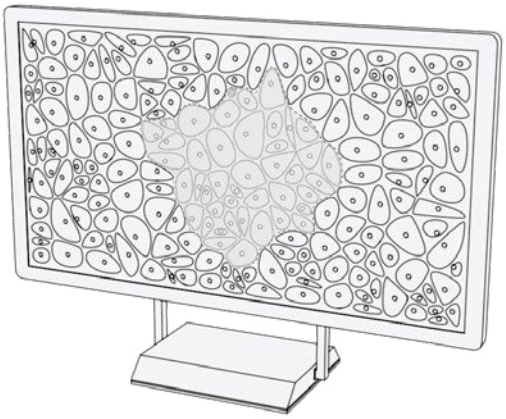


Image Analysis & Data Analytics

A complete spatial analysis of tumor biology requires comprehensive image analysis. Using the latest innovations in the field of computational pathology, our expert team of image and data analysis specialists can help you tease out the most important findings from your images.



The Vizgen Advantage

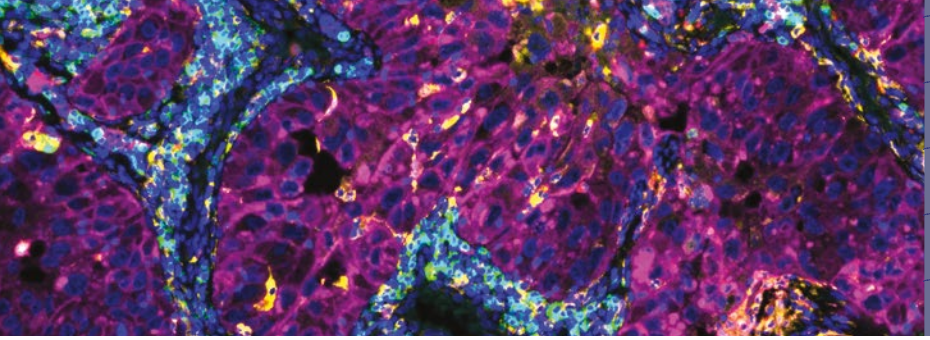
- End-to-end consultative approach to assay development and image analysis tailored to your needs.
- Standardized analysis yield consistent results that are comparable across time or similar studies

Standard Image Analysis

- Identify cell populations in the tissue
- Classify meaningful phenotypes based on the biomarkers
- Define specific tumor and non-tumor regions
- Look at the specific phenotypes within those compartments

Custom Image Analysis

- Evaluate spatial relationships
- Look at cell clustering, dispersion and co-localization
- Find immune excluded regions and much more
- Compare biomarker profiles
- Confirm differences between groups within the data set
- Look at the effects of different treatment plans over time

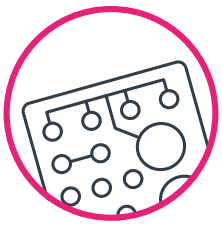


Vizgen Can Help

Custom assay development services

Whether human, mouse, NHP, or any other species, our services can help you propel your research forward with comprehensive data solutions for your spatial research needs. Do you want assistance in designing the optimal panel of antibodies? Are you interested in performing the work yourself or are you looking to outsource?

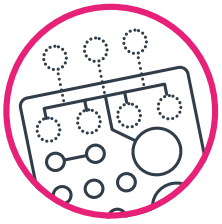
Explore our flexible options:



Ready-to-use kits

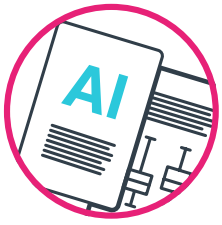
Assay guidance

Standard image analysis



Custom kits

Staining and imaging service



Custom image analysis

Reach out to us.

We can help you scope your project and discuss timelines and deliverables.

Learn more and explore: vizgen.com

Drop us a line: contact@vizgen.com