

# Visium Spatial Profiling

*Empower clinical research by mapping complete transcriptomes with morphological context from FFPE tissues*

## Uncovering cellular diversity to advance clinical and translational research

Visium spatial profiling is a next-generation sequencing method that enables the analysis of cellular relationships by combining transcriptomics with histological techniques. It has advantages over traditional bulk RNA sequencing by providing high-resolution gene profiling across whole tissue sections, resolving tissue heterogeneity, and revealing the spatial organization of cell types and cell states within a morphological context. IQVIA Laboratories utilizes leading technologies such as the 10x Genomics® CytAssist and the Illumina® NovaSeq™ platforms to facilitate spatial profiling insights from ubiquitous FFPE samples. We can meet your sequencing needs with our extensive services that span the clinical research continuum, combined with our global laboratory network and expert support team.

Figure 1

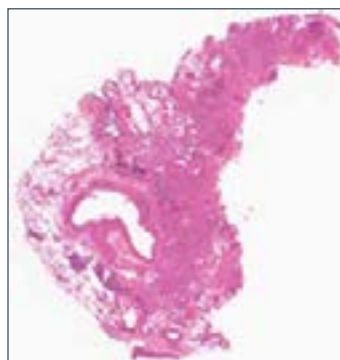
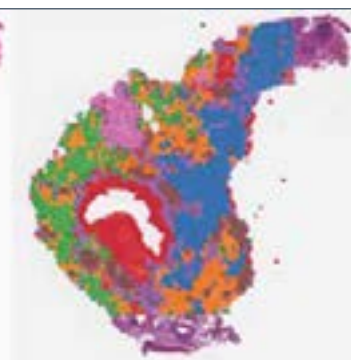


Figure 2



- Cluster 1
- Cluster 2
- Cluster 3
- Cluster 4
- Cluster 5
- Cluster 6
- Cluster 7

## High quality, high throughput, high satisfaction



Comprehensive suite of genomic services for smarter trials and simpler contracting



Enhanced high-throughput workflow to advance large-scale projects



Comprehensive trial support enabled by our global network



Simultaneous analysis of the transcriptomics and morphological insights with spatial technology



**Spatial profiling**



Flexible customization to satisfy specific research needs

# Customizable spatial profiling solutions to meet your research needs

PATHOLOGIST GUIDED ANALYSIS	SPATIAL MULTIOMICS – RNA AND HISTOLOGY PROFILING	PROFILE CLINICALLY RELEVANT TISSUES
Profile up to 11x11 mm of whole tissue sections per sample with our Visium spatial profiling assay. Our board-certified pathologist selects regions of interest to guide meaningful gene expression and morphological insights. FFPE samples undergo precise transcript localization enabled by the Visium CytAssist platform.	Expand on the information gathered from spatial processing with the multiomic assay. Supplement gene expression data by analyzing cellular relationships by combining transcriptomics with histology to profile samples at enhanced resolution.	Examine archived or biobanked samples, such as FFPE, to identify biomarkers, or conduct retrospective and longitudinal studies to monitor biological changes over time. With our advanced workflow tailored for FFPE tissue profiling, tissue heterogeneity can be discerned, and the spatial arrangement of various cell types and states can be uncovered within a morphological framework.

## Supporting studies around the world

Our centralized scientific and operational oversight combined with our global laboratory footprint enables comprehensive, large-scale trial support. Expeditious delivery from your clinical site to one of our central labs is essential for maintaining the integrity of your samples. We can transport samples from almost anywhere in the world within a 24-48 hour timeframe.



## Simplify your work

- 1. Request a quote**

[Request a quote](#) today to discovery how spatial profiling with IQVIA Laboratories can advance your research.
- 2. Ship your samples**

Our global central laboratory network enables testing at a single site.
- 3. Get your results**

Obtain in-depth data to understand gene expression, spatial organization, morphological context, and much more.

# Technology you can trust

Our assay acquires high-resolution tissue insights by pairing histological staining with probe-hybridized RNA and spatial barcoding, followed by library preparation and sequencing. Our validated sample handling procedures ensure reliable chain of custody.

## Sample preparation:

Our team of board-certified pathologists evaluate your sample and select the capture area of interest. We then carefully prepare your samples using the automated CytAssist instrument for RNA probe capture. Our standardized workflow ensures meaningful data acquisition while reducing the risk of operator variability.



## Library construction:

The RNA probes within the capture area of interest from each FFPE slide are targeted and uniquely barcoded, allowing for the labeling and profiling of RNA while maintaining the spatial context. Gene expression libraries are constructed alongside H&E imaging, generating multiple readouts that can be linked back to the same tissue sample.



## Sequencing:

Prepared libraries are sequenced on Illumina® NovaSeq™ to enable high-throughput, rapid, and deep sequencing.



## Bioinformatics analysis and delivery:

Rapid analysis of samples is enabled by robust computational architecture, a standardized analysis pipeline, and a dedicated team of bioinformaticists. Upon request, an experienced data analytics team is available to consult on your research objectives and enable deep exploration of project data.



### Global consistency

Harmonized assay testing on **3 continents** for consistent results.



### Personalized service

Custom turnaround times for **delivery and analysis**.



### Massive data delivery

**1.2+ petabytes** of genomic data globally in 2024.



### Decades of Expertise

**Over 20 years** in genomics testing.



### Industry leader

Leading in genomic testing **since 2001**.



Extensive experience working with the **top 10 pharmaceutical companies**.



IQVIA Genomics has partnered with **> 125 leading/top biotech companies**.

## CONTACT US

Toll free: +1 855.277.9929

Direct: +1 919.998.7000

International: +44 (0) 1506 814000

IQVIA Laboratories: +1 919.405.2248

[labs.iqvia.com](https://labs.iqvia.com)