10x GENOMICS

UNCOMPROMISED SPATIAL

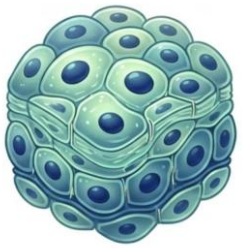
Only on Atera

April 2026

IMPOSSIBLE.

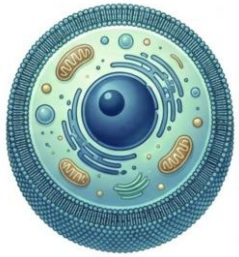
The future belongs to spatial biology

Biology functions through **specific cells,** expressing **specific molecules,** in **specific locations** within a tissue



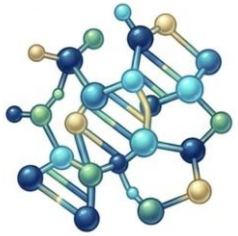
Tissue

Histology, H&E, IHC



Cells

Microscopy, Flow Cytometry



Molecules

Sanger, qPCR, NGS

SPATIAL BIOLOGY

SPATIAL BIOLOGY

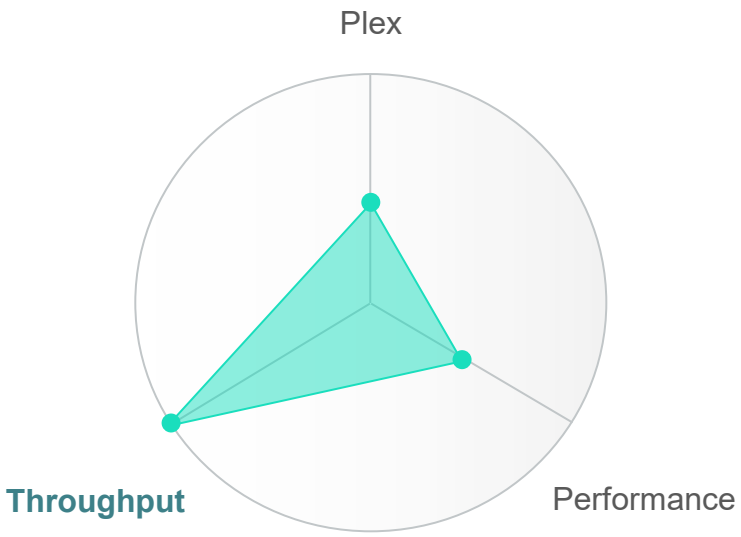
Preserving the full context



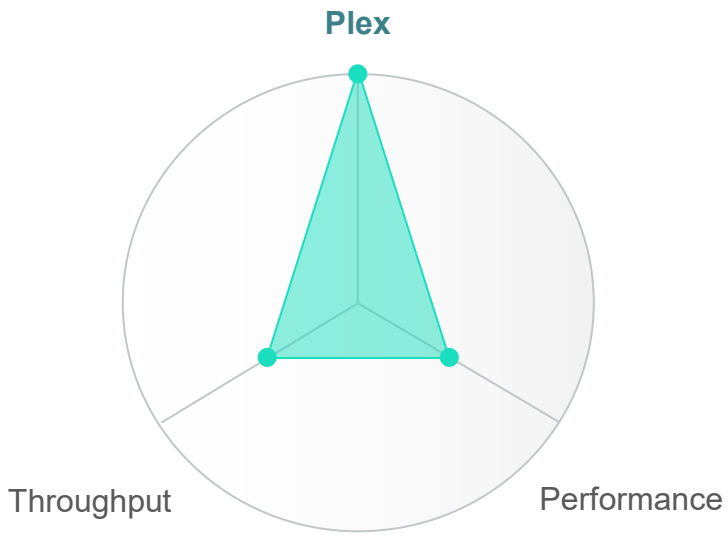
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Current spatial tools require compromises

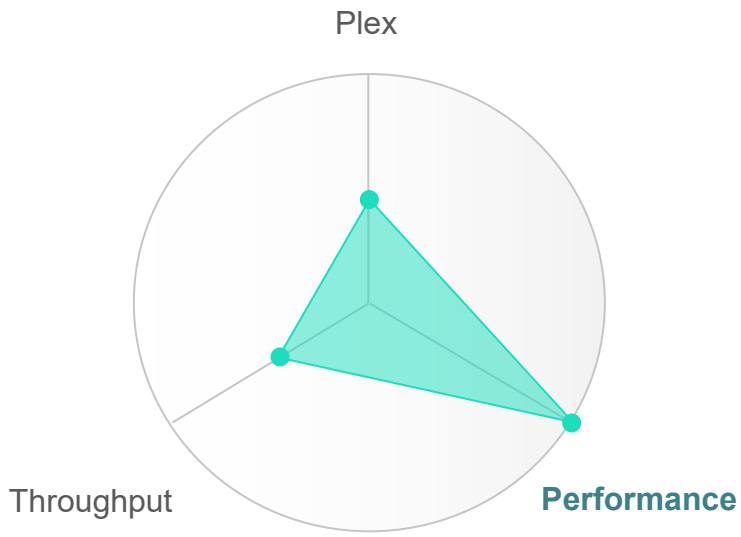
Throughput at Low Resolution



Plex at Low Performance



Performance at Low Plex and Low Throughput



Until now...

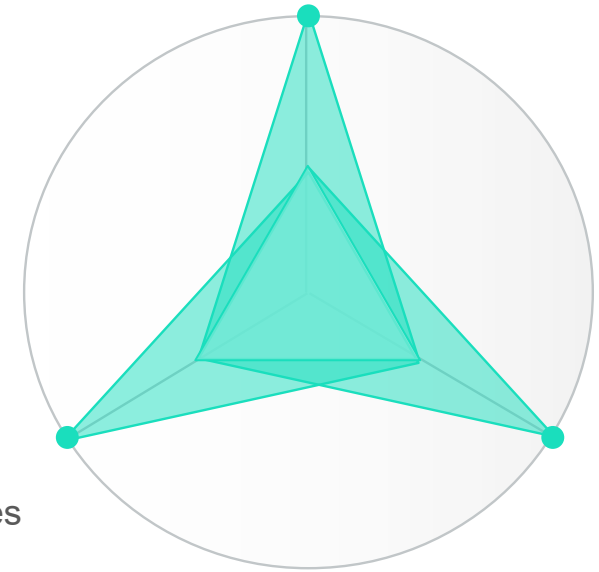
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Uncompromised spatial

Introducing Atera

Plex

Whole transcriptome profiling



Throughput

Up to 800 whole transcriptome samples of 1 cm^2 per year

Performance

Single cell level sensitivity and specificity at subcellular resolution



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WHAT IS ATERA

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REDEFINING HOW BIOLOGY IS MEASURED AND UNDERSTOOD



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ATERA

Spatial without compromise

Xenium paved the way – Atera redefines spatial biology from a specialized tool into a primary, standalone discovery engine



Discovery Power

Whole transcriptome coverage with sensitivity fine-tuned for each target

Output

Engineering advancements to enable large-scale, routine projects

Confidence

Data quality comparative to Chromium single cell

Accessibility

Standard slide compatibility and reduced cost-per-sample

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The Atera Whole Transcriptome Assay (WTA)

Built on our Chromium and Visium expertise, this highly sensitive **probe-based assay bypasses poly-A limitations** to deliver superior whole transcriptome discovery



Unlock FFPE

Probes deliver whole transcriptome coverage even for fragmented transcripts and degraded samples



Single-cell quality

Delivers gold-standard sensitivity comparable to Chromium single-cell, with subcellular spatial resolution



Tunable sensitivity

Poly-A capture often misses lowly expressed genes



Pinpoint specificity

Refined padlock probe chemistry ensures high on-target calls and low false discovery rates compared to other ISH methods

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Assays to fit every use case

Start broad → Zoom In → Customize

1

Atera WTA

Ultimate spatial discovery

- → 18,000+ gene panels with stackable customization of up to 1,000 genes
- → Human WTA at launch
- → Mouse WTA coming soon

2

Atera Select

Targeted expression validation

- → Stackable 1,000-gene panels (combine up to 3 panels to 3,000 targets)
- → Human multi-tissue at launch
- → Additional tissue and application panels coming soon

3

Custom

Unlimited exploration

- → Build bespoke modular assay with up to 3,000 gene targets
- → Target any sequence in any species
- → Stack up to three 1,000-gene Custom or Atera Select panels for modular flexibility

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Atera brings new scale to spatial biology along multiple dimensions



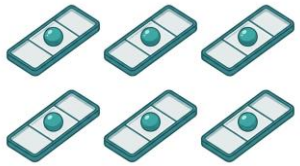
Larger sample area

>5 cm^2 per slide – Fit more samples or map large continuous sections



Slide compatibility

Off-the-shelf, standard microscopy slides for sample preservation



Discovery at scale

~800 Whole Transcriptome samples of 1 cm^2 per year

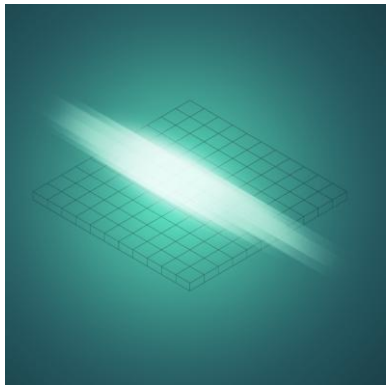


Large cohort profiling

>3,000 mid-plex samples of 1 cm^2 with a 1,000-gene panel per year

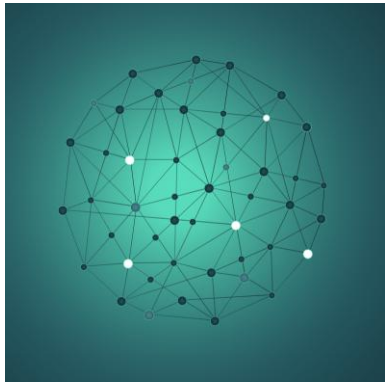
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Achieving the Impossible: Innovations Behind Atera



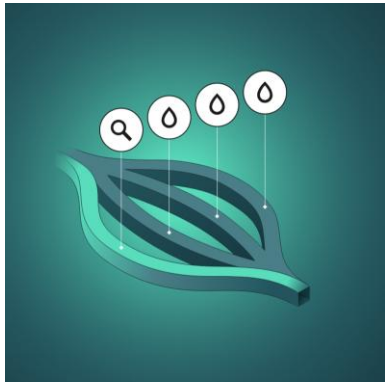
Imaging Power: Maximum Throughput

Built-for-purpose, ultra-fast high-res optical system



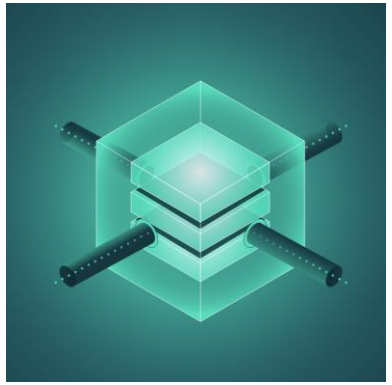
Chemistry: Optimized Assays

Redesigned for high sensitivity and maximum insight at whole transcriptome scale



Fluidics: Best of Both Worlds

Speed, efficiency, and standard microscopy slides



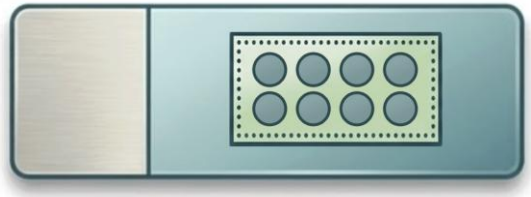
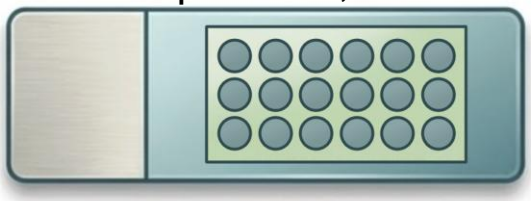
Compute: Petabytes to Insights

Onboard GPUs and advanced algorithms translate raw sensor data in real time

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Throughput for the future of spatial transcriptomics

Unlocking Clinical Trial Operational Efficiency:
3,000 core biopsies in a single year (4 mm diameter FFPE)

Xenium Prime 5K	8 cores per slide, 376 slides 	188 runs 	4 instruments 	2-4 FTEs 
Whole transcriptome	18 cores per slide, 176 slides 	42 runs 	1 instrument 	1 FTE 

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Redefining Spatial Biology with Atera



Plex

Whole transcriptome profiling

Throughput

Up to 800 whole transcriptome samples of 1 cm^2 per year

Sensitivity & Specificity

All at subcellular resolution

10X GENOMICS

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