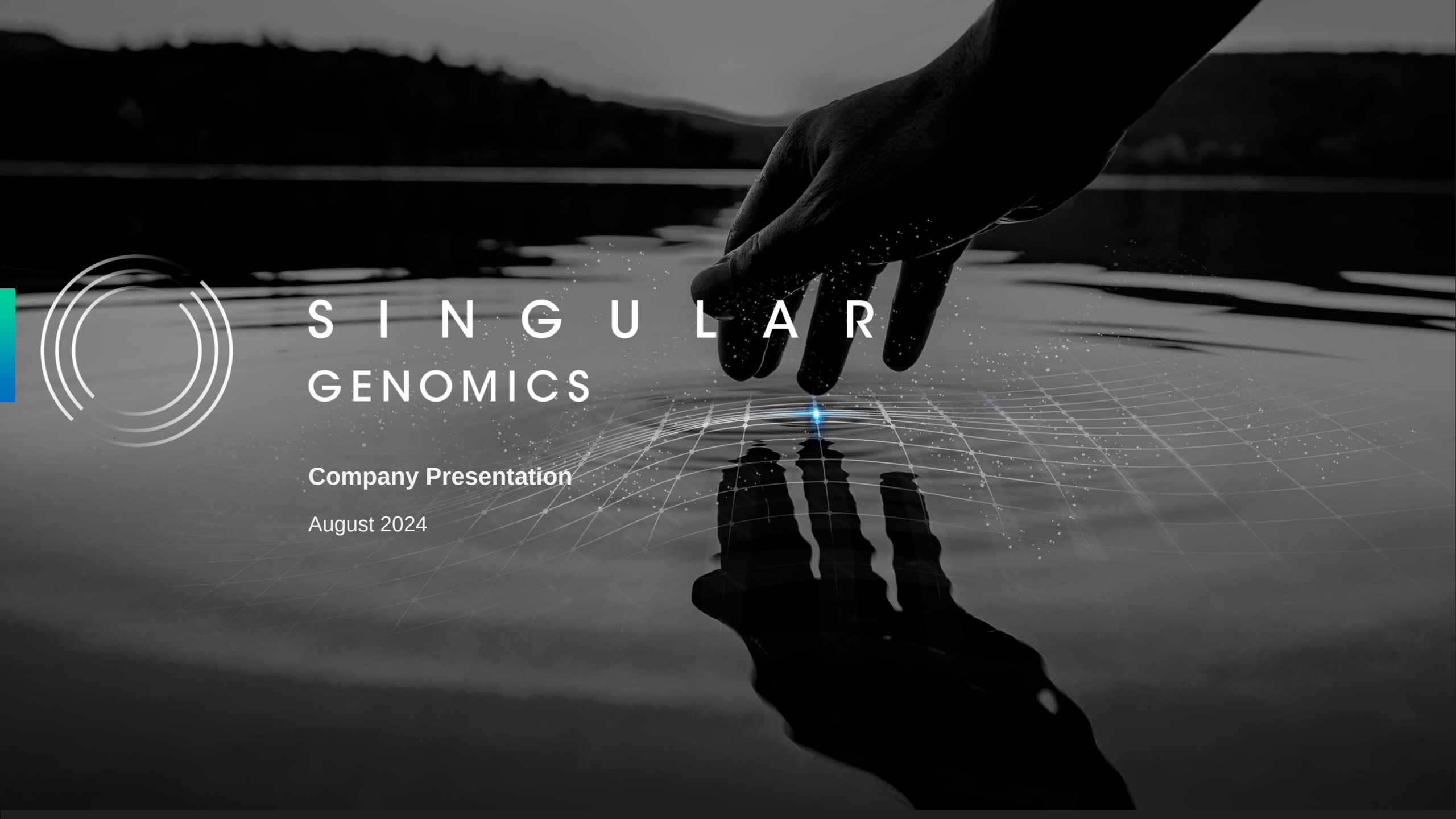


SINGULAR GENOMICS

Company Presentation

August 2024

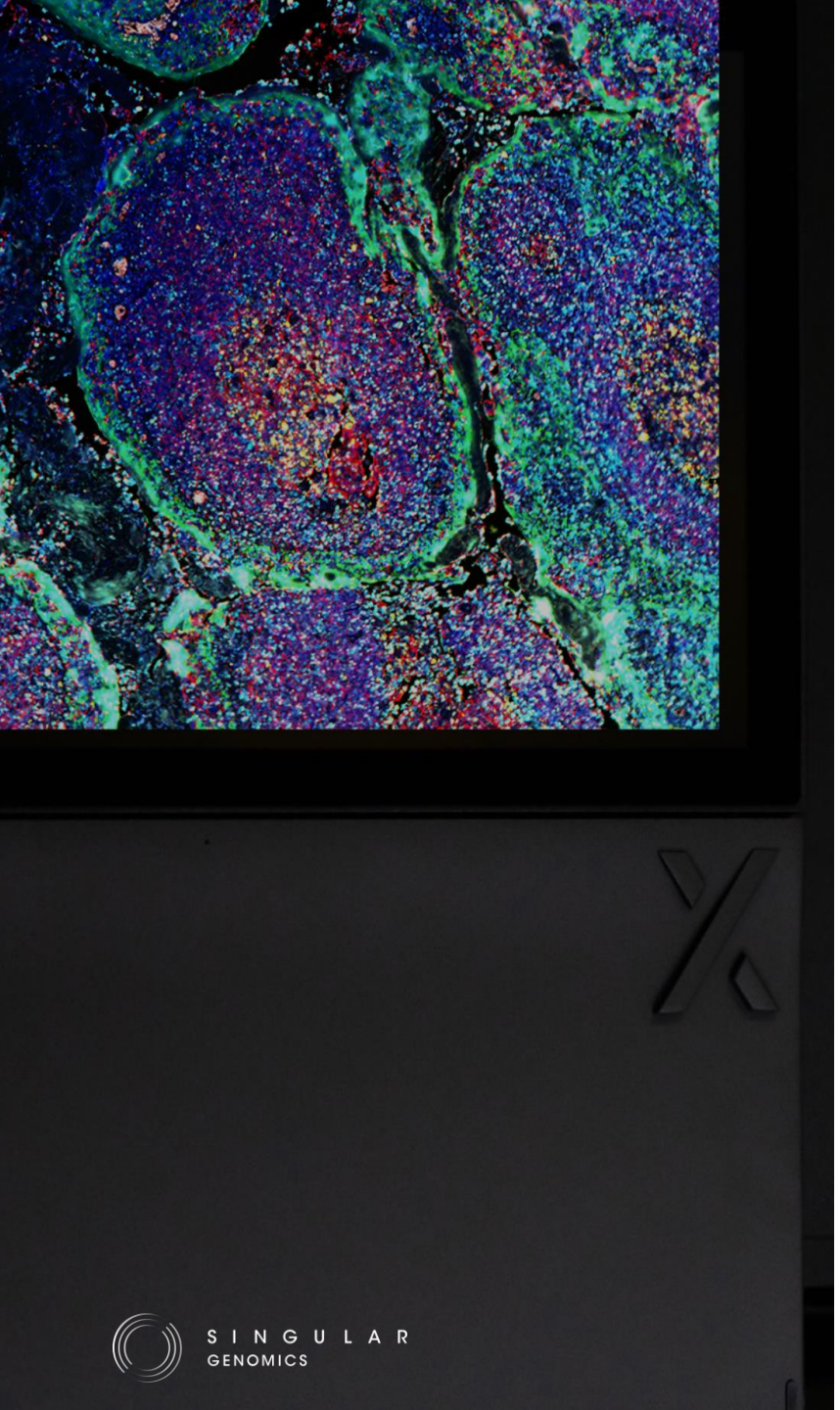
FORWARD-LOOKING STATEMENTS

Certain statements contained in this presentation, other than historical information, constitute forward-looking statements within the meaning of the federal securities laws. Forward-looking statements include, but are not limited to, statements regarding: (i) our timeline and planned development of the G4X and other future products; (ii) expected features, capabilities and specifications of the G4X and other future products and service offerings; (iii) our ability to successfully manufacture, commercialize and support the G4, G4X, our flow cell kits, and G4X-related service offerings in accordance with our timelines, objectives and specifications; (iv) future addressable markets for our products and services; and (v) quotes of management. Any such forward-looking statements are based on our management's current expectations and are subject to risks and uncertainties that could cause our actual future results to differ materially from our management's current expectations or those implied by our forward-looking statements. These risks and uncertainties include, but are not limited to, the following: (i) we are currently developing the G4X Spatial Sequencer and may not be successful in completing its development on our projected timeline, with the features and capabilities we expect, or at the cost we anticipate; (ii) we have very little history manufacturing and commercializing our products or technology; (iii) the life sciences technology market is highly competitive, and if we fail to compete effectively, our business and operating results will suffer; (iv) if we are sued for infringing, misappropriating or otherwise violating intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our products and/or services; (v) if our products or service offerings fail to achieve early customer and scientific acceptance, we may not be able to achieve broader market acceptance for our products, and our revenues and prospects may be harmed; (vi) we expect to be highly dependent upon revenue generated from the sale of the G4, G4X and future products and service offerings, and any delay or failure by us to successfully manufacture and commercialize the G4, G4X and future products and service offerings could have a substantial adverse effect on our business and results of operations; and (vii) recent macroeconomic challenges such as inflation and rising interest rates may materially and adversely impact our business, operations, product manufacturing and commercialization objectives. These and other risk factors that may affect our future results of operations are identified and described in more detail in our most recent filings on Forms 10-K and 10-Q and in other filings that we make with the SEC from time to time, including our Quarterly Report on Form 10-Q for the period ended June 30, 2024, filed with the SEC on August 13, 2024. Accordingly, you should not rely on forward-looking statements as predictions of future events or our future performance. Except as required by law, we undertake no obligation to update publicly or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size, growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates.

The performance information in this presentation and the associated discussion regarding our G4 and G4X instrument and consumable kits are reported at target specifications, and the performance of third-party instruments are reported based on specifications publicly available on such third party's website.

This presentation contains references to our trade names, trademarks and service marks and to those belonging to third parties. We do not intend our use or display of a third party's trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, such third party.



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PRESENTATION CONTENTS

COMPANY OVERVIEW

~195
Employees

~300
Issued and pending patents

$450M
Dollars raised

$133M
Cash as of 6.30.2024

OMIC
NASDAQ Ticker

THE NEXT ERA OF MOLECULAR ANALYSIS

On-Market

G4

Fast, Flexible and Scalable
Next Generation Sequencing

Early Access Expected 2024

G4X*

High-throughput *In Situ*
Spatial Sequencing

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** Product in development. Specifications subject to change.*
For research use only. Not for use in diagnostic procedures.

COMPANY STRATEGY

Novel Technology

Existing NGS instrument and chemistry, expansive IP portfolio

Differentiation

Spatial at scale; addresses an unmet need in higher throughput and lower cost per sample

Growth Markets

Address large and fast-growing market opportunities in spatial multiomics

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ADDRESSABLE MARKETS*

NEXT GENERATION AND SPATIAL SEQUENCING

Next Generation Sequencing

$7B ▸ $20B

2023 2030

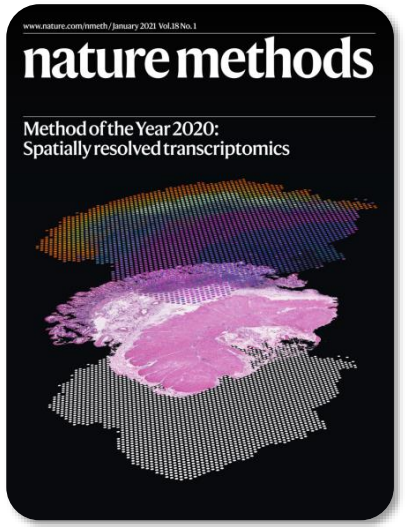
Growth Drivers

- Established markets and applications
- Clinical applications and reimbursement
- Oncology & immunology applications

Spatial Sequencing**

$2B ▸ $11B

2023 2030



Growth Drivers

- Next frontier of biological research
- Scale and cost
- Discovery to translational

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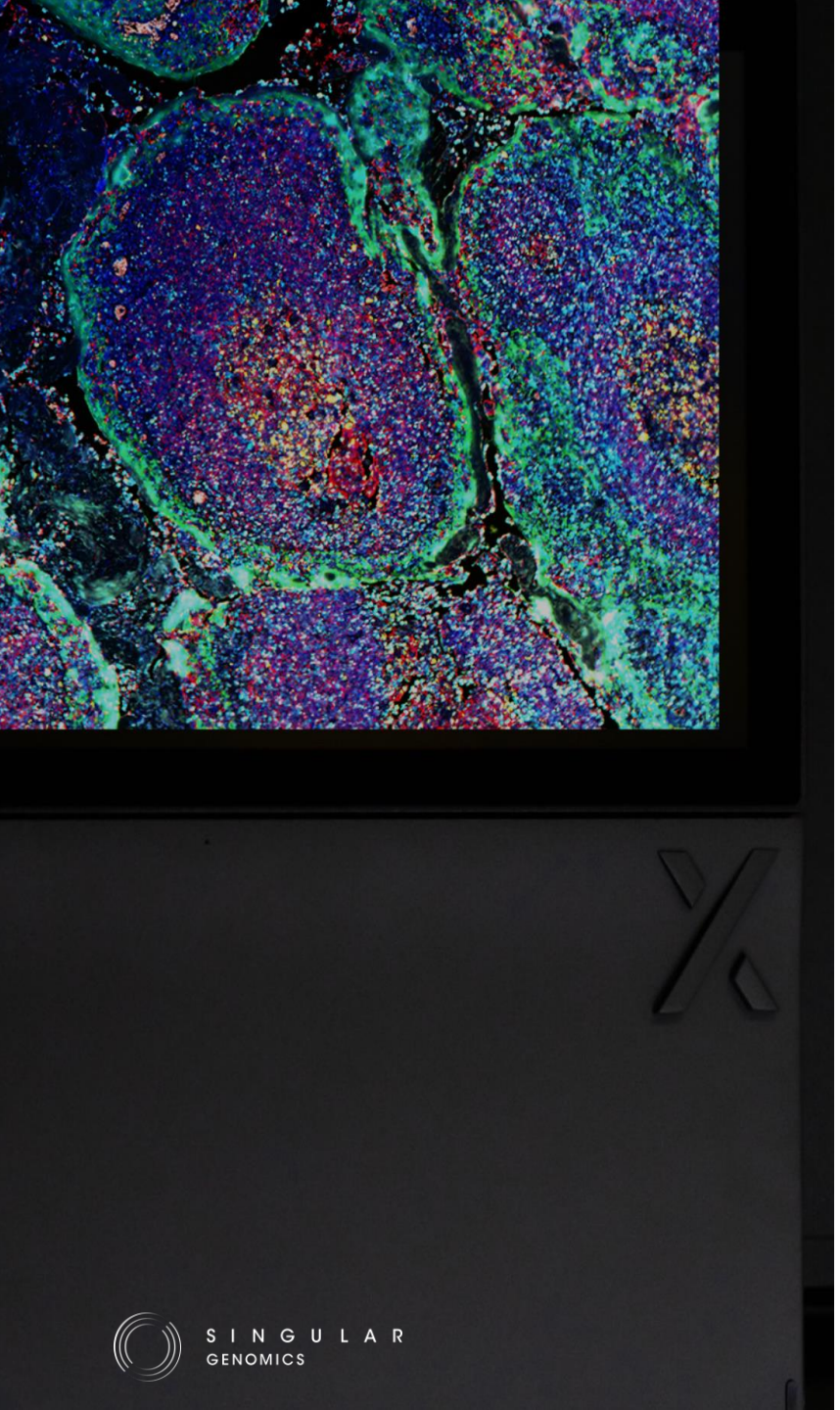
** Internal estimates.*

*** Includes spatial and single cell applications.*



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G4: BENCHTOP PERFORMANCE REDEFINED

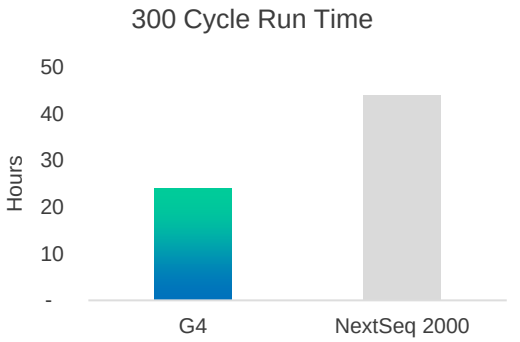
KEY ATTRIBUTES TO ADDRESS NGS MARKET

Quality: ≥99.9%, or Q30, for ≥85% of base reads

Speed

8–24 hours

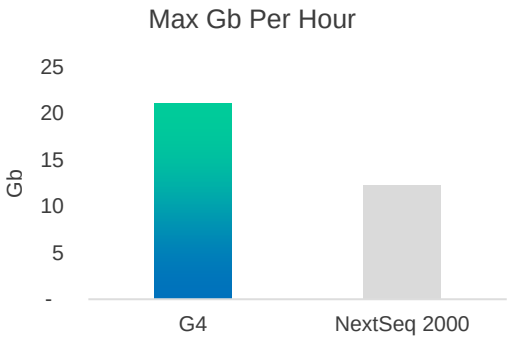
Industry leading run times



Power

Up to 480 Gb output

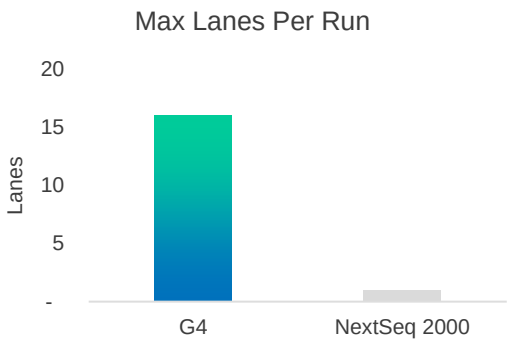
Unmatched data produced per day



Flexibility

1–4 flow cells, 16 lanes

Unparalleled operational efficiency



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ADDRESSING THE NGS OPPORTUNITY

G4 VALUE DRIVERS

G4: Addressing Market Growth

- ✓ **Flexibility, power, speed**
- ✓ **Application-based solutions**
- ✓ **Decentralized clinical fit**

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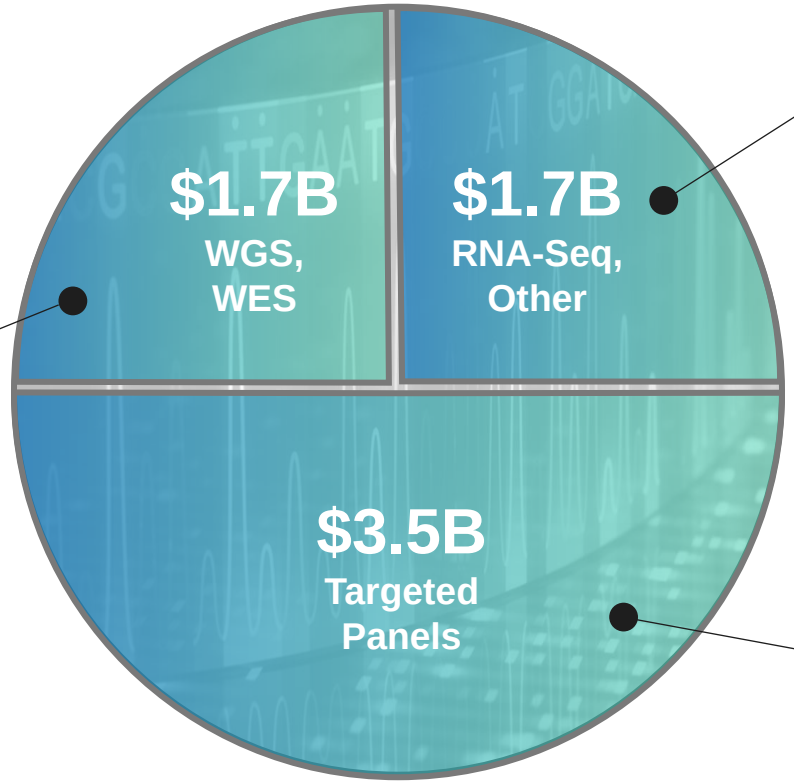
G4 ADDRESSES MAJORITY OF THE MARKET

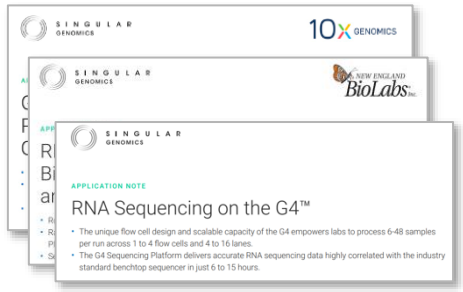
PUBLICATIONS ACROSS APPLICATIONS

Lane Independence
16 individual lanes

Speed
Quick turnaround times

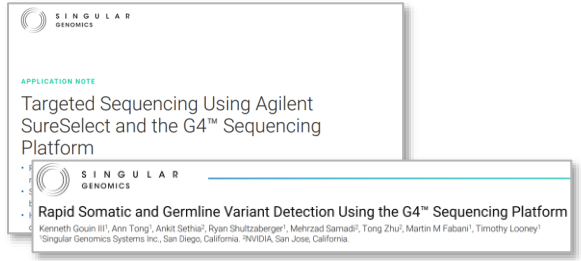
Accuracy
Industry gold standard





Flexibility
Optimize run sizes

Max Read Kits
Single cell and spatial solutions



Flexibility
Optimize run sizes

Lane Independence
16 individual lanes

Cost
Low cost per Gb or M reads

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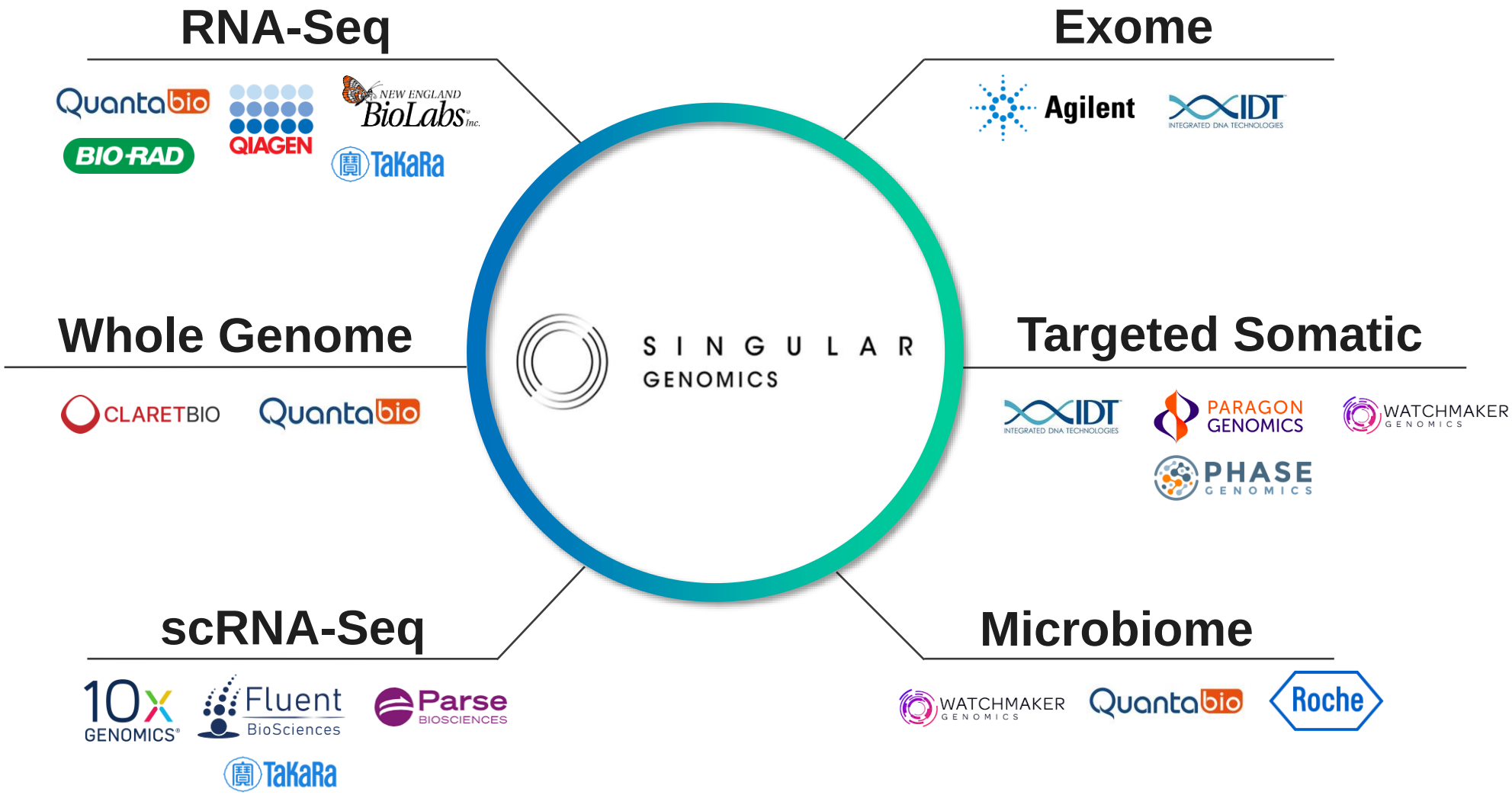
Internal estimates.

LEADING LIBRARY PREP COMPATIBILITY

VALIDATED PROTOCOLS FOR EASE OF ADOPTION



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G4 ON-MARKET FEEDBACK

CUSTOMER QUOTES

HARVARD UNIVERSITY

"The flexibility and speed of the G4 *has enabled our Spatial Technologies Unit to use a single instrument for new single cell and spatial transcriptomic assay pilots as well as production, decrease turnaround times, and meet demanding deadlines for our clients."*

BROAD INSTITUTE

"The instrument was purchased to replace old equipment, augment our sequencing capacity, and **lower our sequencing cost while addressing new needs** *from our users… Its 4 flow cells and 16-lane design gave us the ability to streamline our single cell sequencing operation. The four-color chemistry* **allows us to successfully and consistently sequence extremely difficult libraries that were a challenge for a very long time** *while generating superb reproducible data…"*

MIT

"We have been very excited by the enthusiasm of the researchers we support for the G4 with **many labs already submitting projects** *to be run on the sequencer. These include samples for RNA-Seq (both standard and high-throughput), CUT&RUN, as well as custom protocols where the laboratories are preparing their own libraries."*

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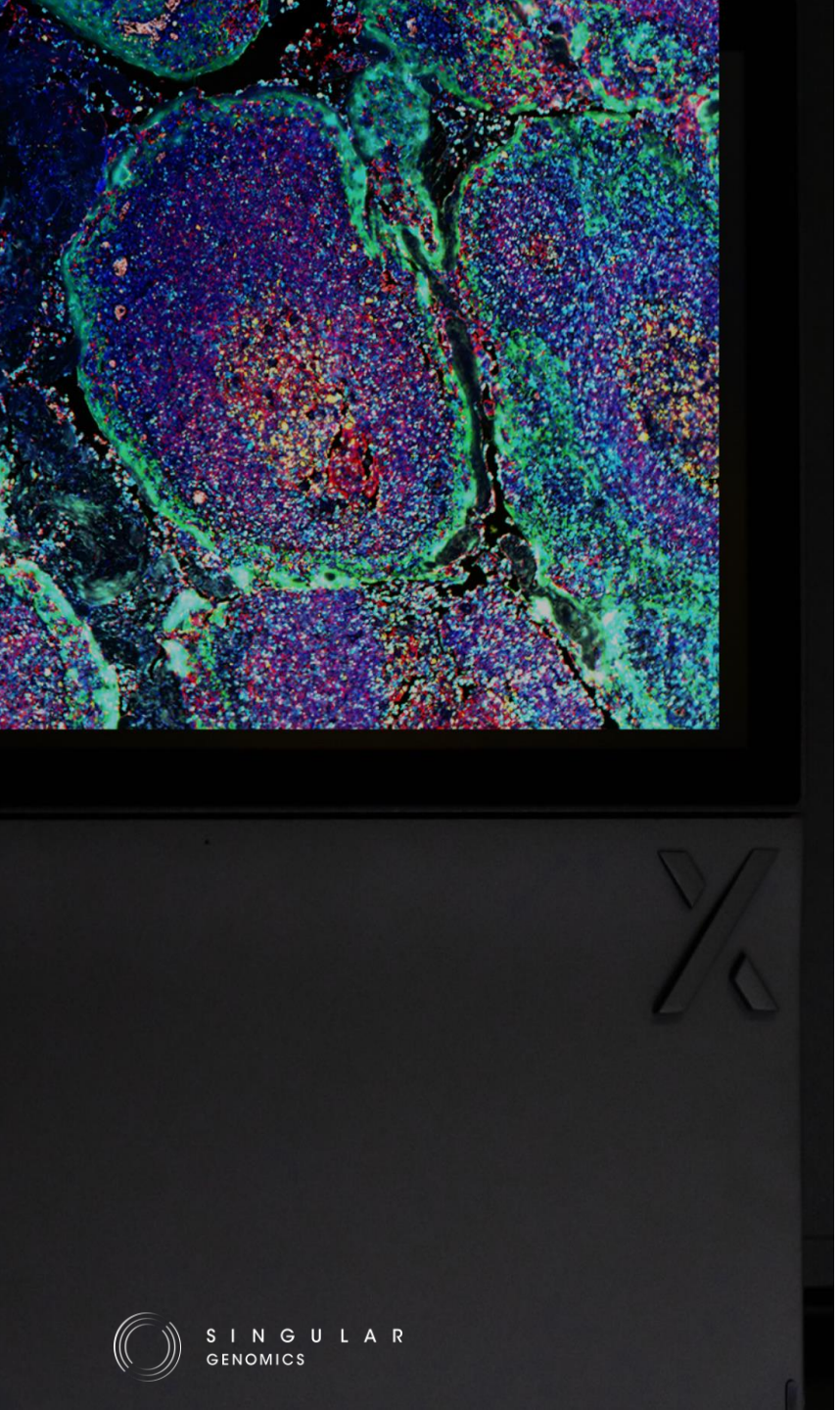


PRESENTATION CONTENTS

SPATIAL MARKET TODAY

"Spatialomics technologies should see significant growth ahead..."

"The G4X high throughput profile is differentiated and we expect healthy demand…"

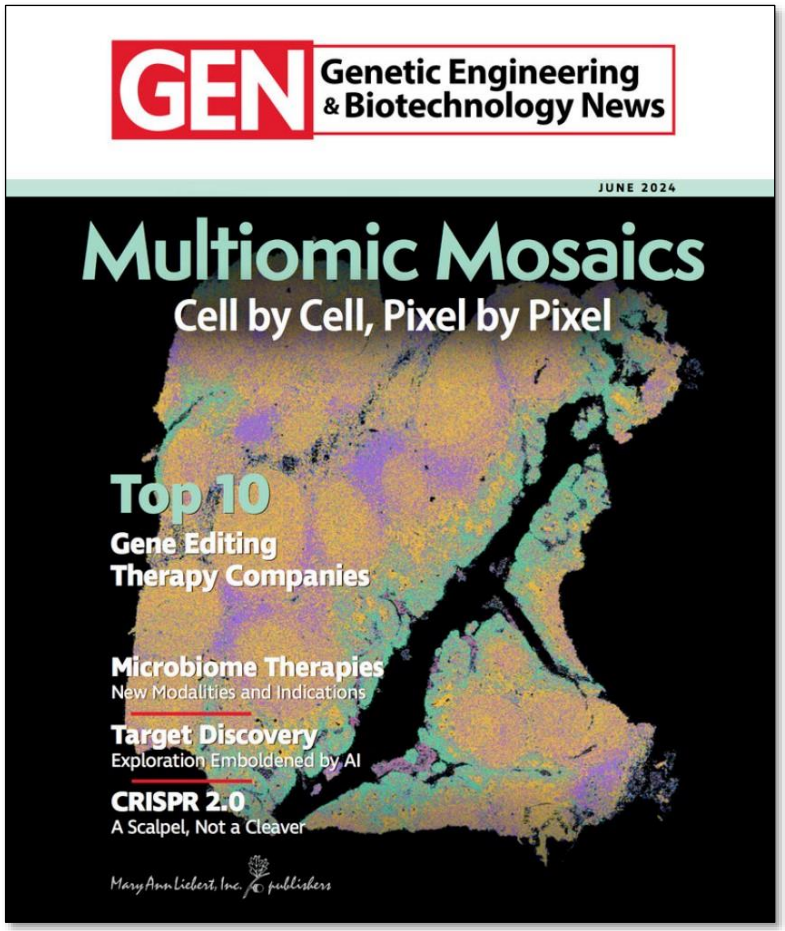
TD Cowen
a division of TD Securities

"Spatial biology enables access to data and context that traditional methods do not provide."

Canaccord Genuity

"Though users are increasingly familiar with the spatial workflow, challenges remain that limit overall data quality, throughput, and analysis capabilities."

DeciBio

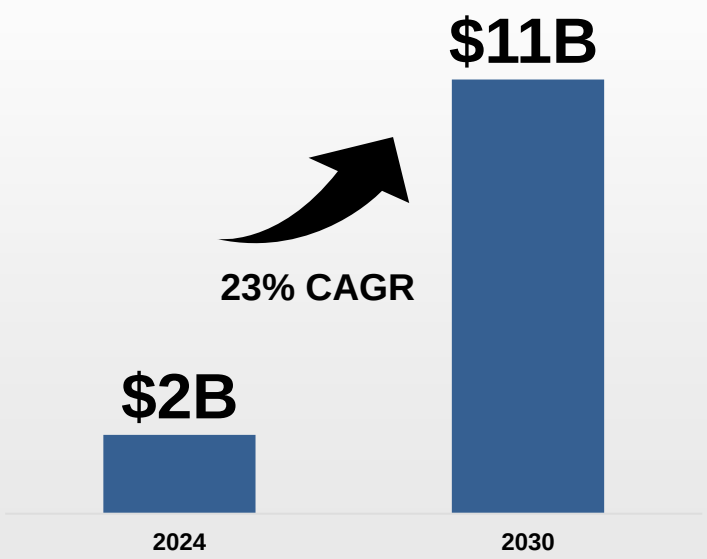


GEN magazine cover, June 2024; G4X image presented at AGBT February 2024

SPATIAL SEQUENCING MARKET TODAY*

GROWING MARKETS, LIMITED BY CURRENT PRODUCT OPTIONS

Fast Growing TAM**



Key Applications

Immunology and oncology research

Cell and gene therapies

Drug discovery and development

Current Limitations

Throughput

Cost $$

Speed

Multiple Data Types

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** Internal estimates.*

*** Includes spatial and single cell applications.*

INTRODUCING G4X

HIGH-THROUGHPUT SPATIAL SEQUENCING

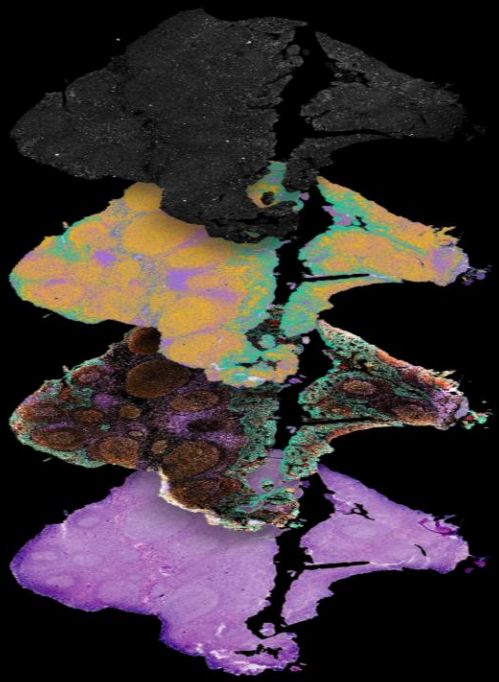
A New Era, With Data Fueled By High Throughput Spatial Sequencing

Direct sequencing of RNA

RNA gene transcripts

Image dozens of proteins

Visualize tissue morphology



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What is spatial sequencing?

Sequencing inside cells, in tissue
Three *in situ* readout modalities: direct sequencing of RNA (Direct-Seq ™), transcripts, proteins

What is high throughput?

More imaging space per run, more samples per week
Orders of magnitude more samples per run

Why spatial biology?

Novel scientific insights of underlying tissue within a spatial context
Sequencing accelerates spatial profiling; speed, throughput, more novel data

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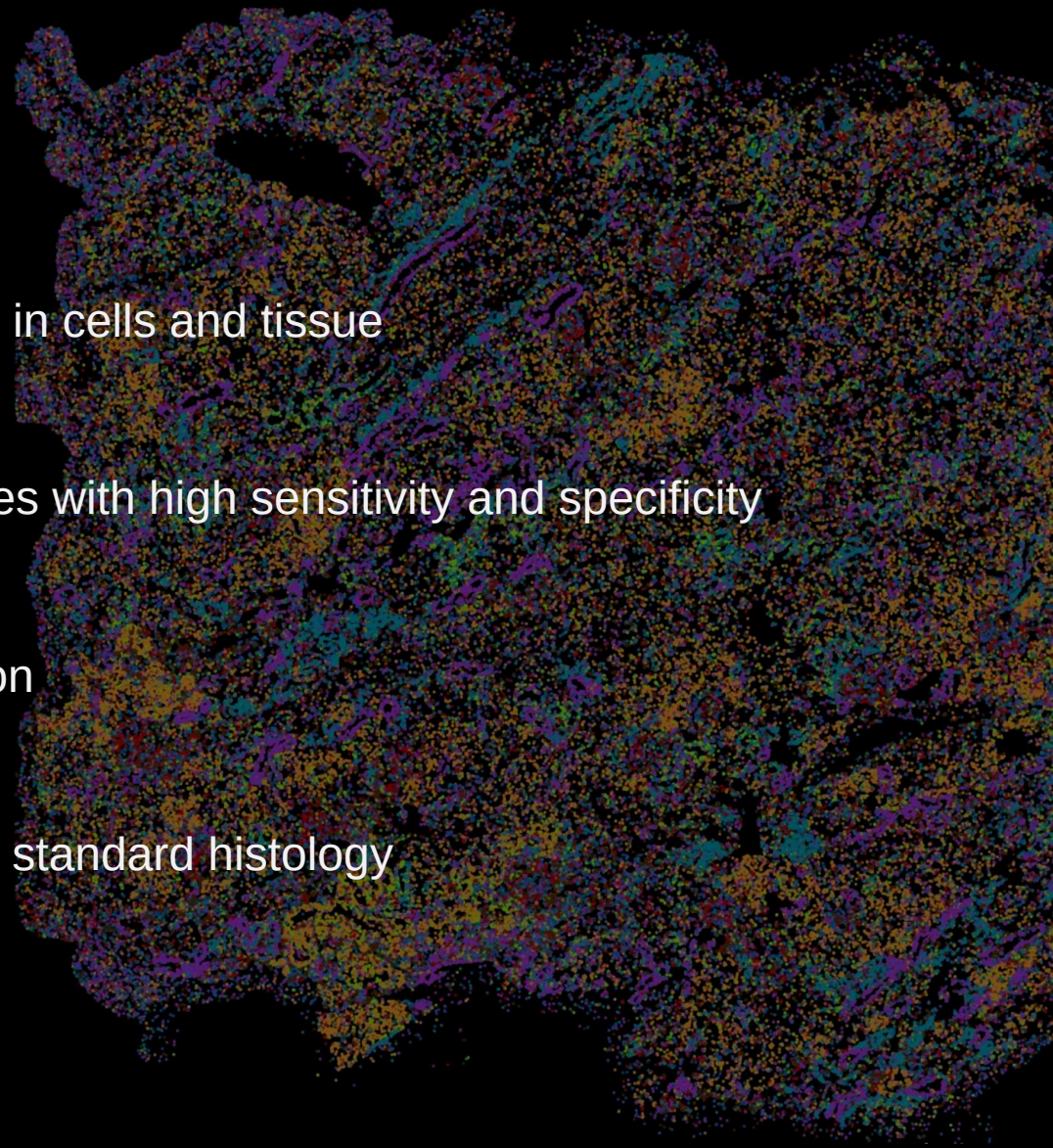
STACKABLE LAYERS OF DATA

Simultaneous multiomic readout,
from a single FFPE section…

- **Direct-Seq** — Sequencing RNA at subcellular resolution in cells and tissue
- **Transcriptomics** — Barcode-free profiling of hundreds of genes with high sensitivity and specificity
- **Proteomics** — Image dozens of proteins at high resolution
- **Fluorescent H&E** — Visualize tissue morphology to connect to standard histology



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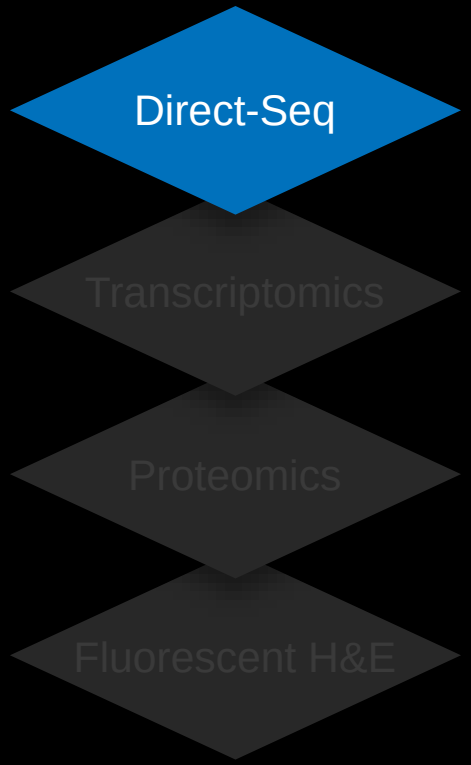
UNPACKING SPATIAL SEQUENCING



Direct-Seq

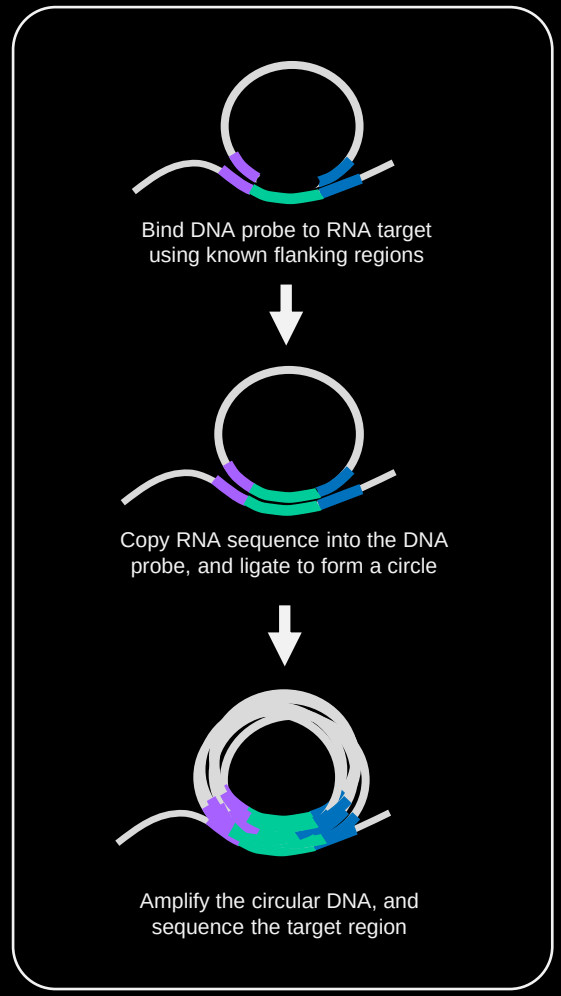
Sequencing RNA at subcellular resolution

Features:

- Sequencing of 1–100 bases of RNA *in situ*
- Detects broad class of mutations like SNVs, indels and fusions
- Rapid sequencing with 4-color SBS chemistry

Applications:

- B- and T-cell, sequencing of variable regions
- Cancer hotspot mutation analysis
- Gene editing



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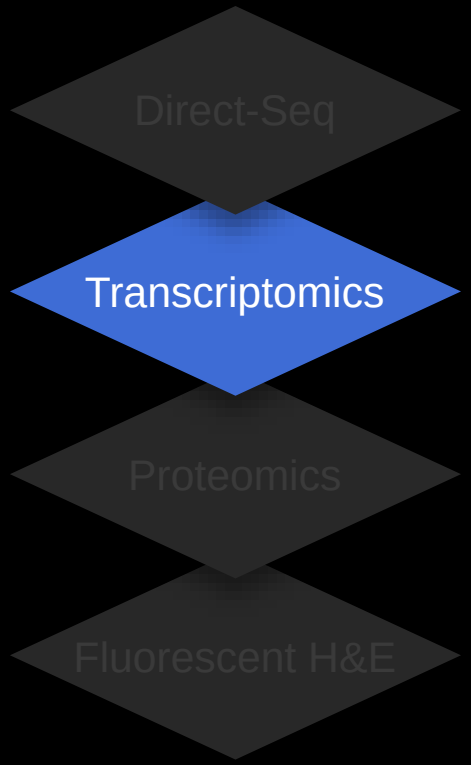
UNPACKING SPATIAL SEQUENCING



Transcriptomics

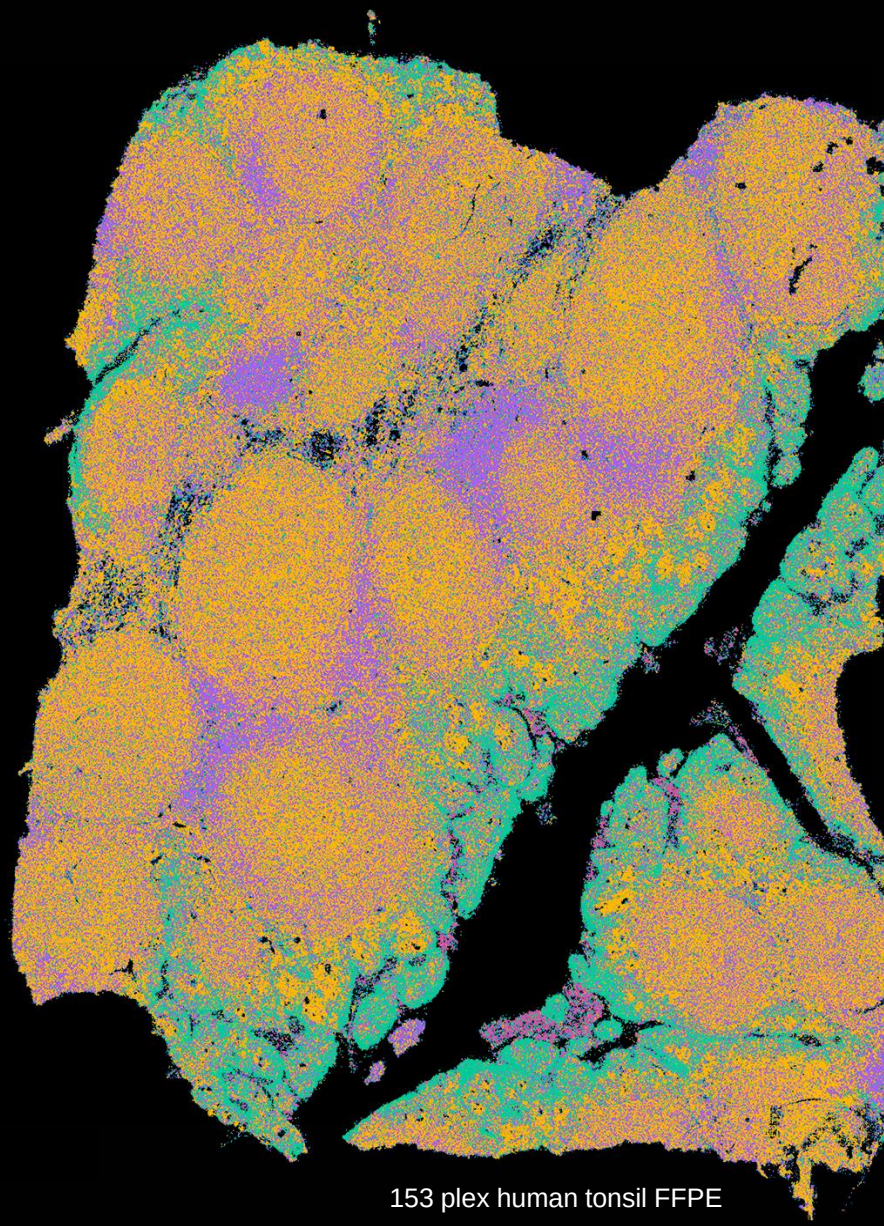
Barcode-free profiling of hundreds of genes

Features:

- Small probe binding regions for degraded FFPE material
- Sub-micron level resolution for single-cell analysis
- On-board protocols to minimize optical crowding
- Nuclear and membrane-based cell segmentation

Applications:

- Immuno-oncology
- Cell mapping and differentiation
- Drug discovery



153 plex human tonsil FFPE

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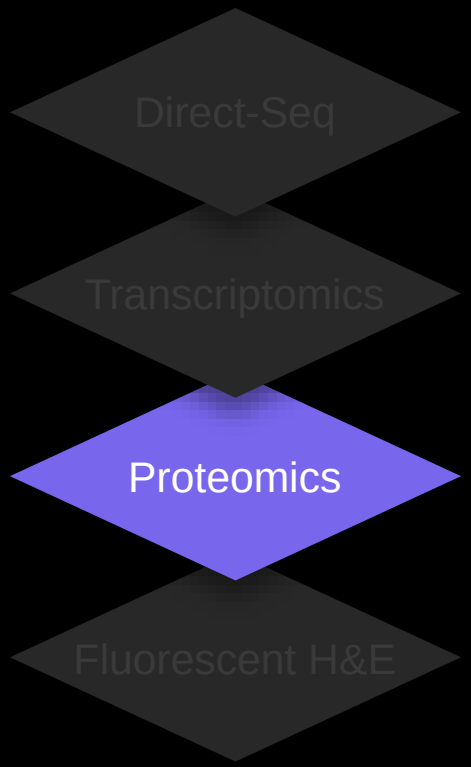
UNPACKING SPATIAL SEQUENCING



Proteomics

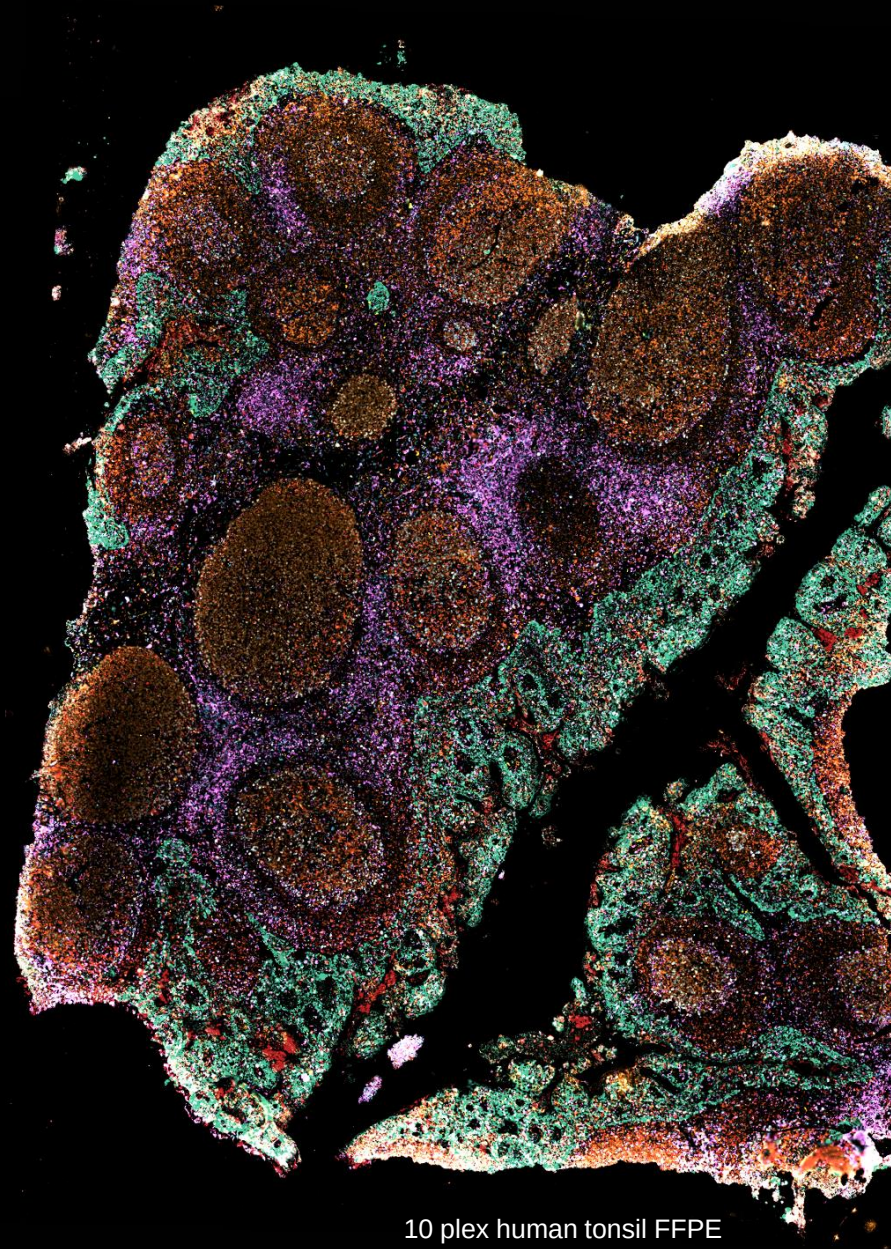
Image dozens of proteins at high resolution

Features:

- DNA-Oligo conjugated antibodies are amplified and detected
- High sensitivity and wide dynamic range
- Accurate cell boundary labeling enables cell segmentation

Applications:

- Immuno-oncology
- Drug and biomarker discovery



10 plex human tonsil FFPE

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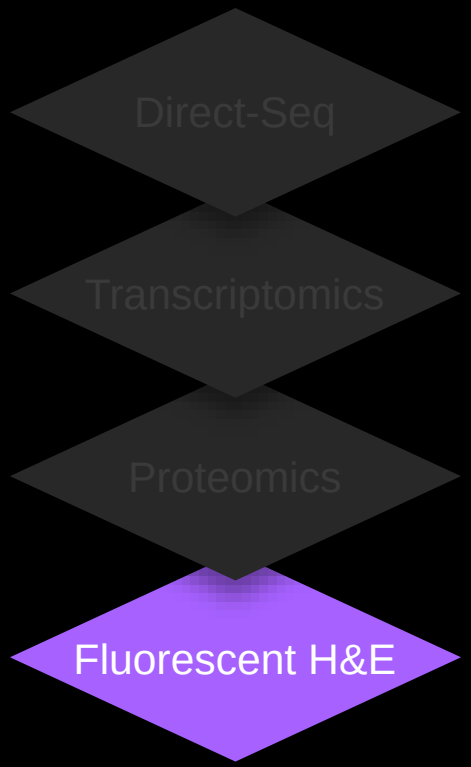
UNPACKING SPATIAL SEQUENCING



Fluorescent H&E

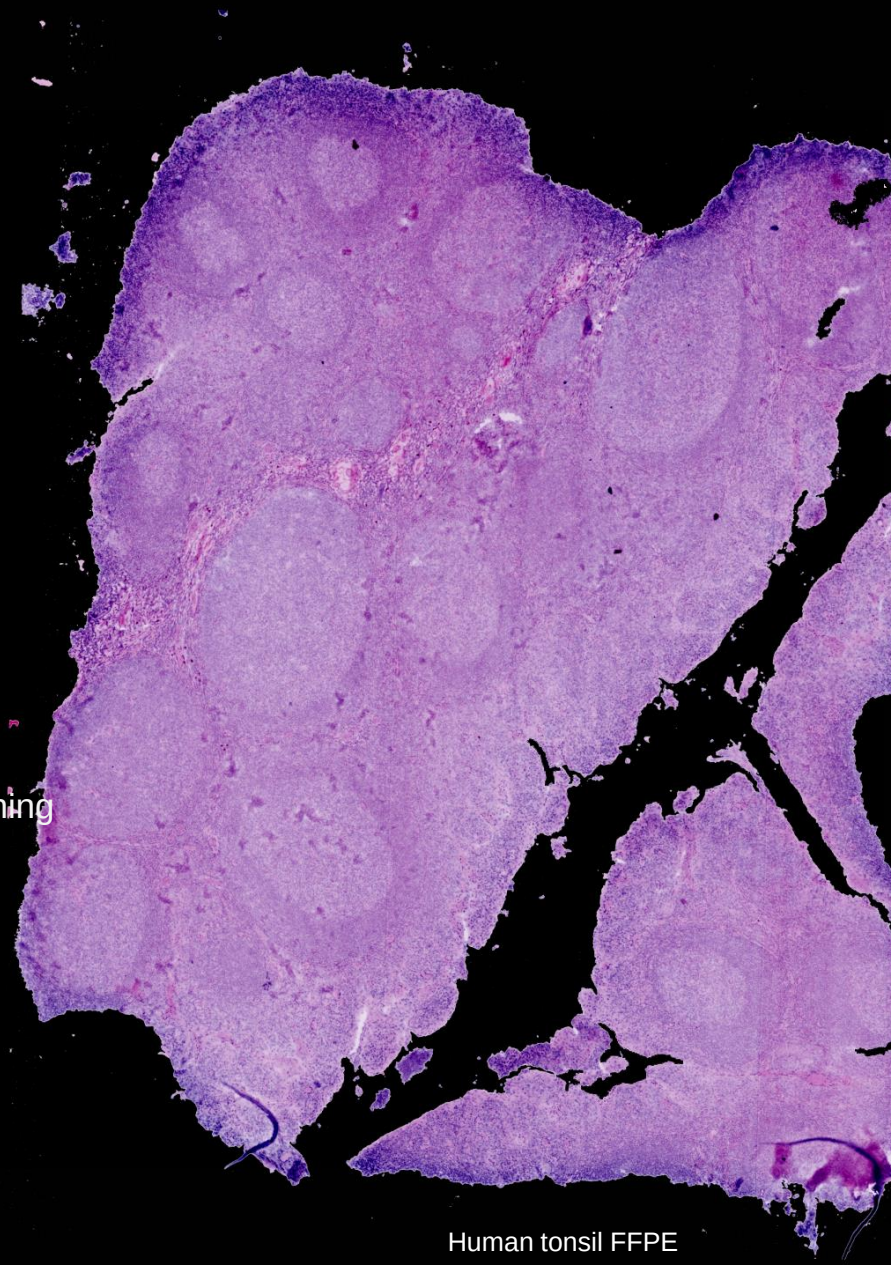
Visualize tissue morphology

Features:

- On-instrument fluorescent imaging
- Automates traditionally manual steps

Applications:

- Identify tissue morphology
- Connect into standard histopathology data streams for AI training



Human tonsil FFPE

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G4X WILL DRIVE HIGHER THROUGHPUT

Leading *In Situ* Platforms

More samples per run

40 cm^2 imaging area

More samples per week

Fast run times

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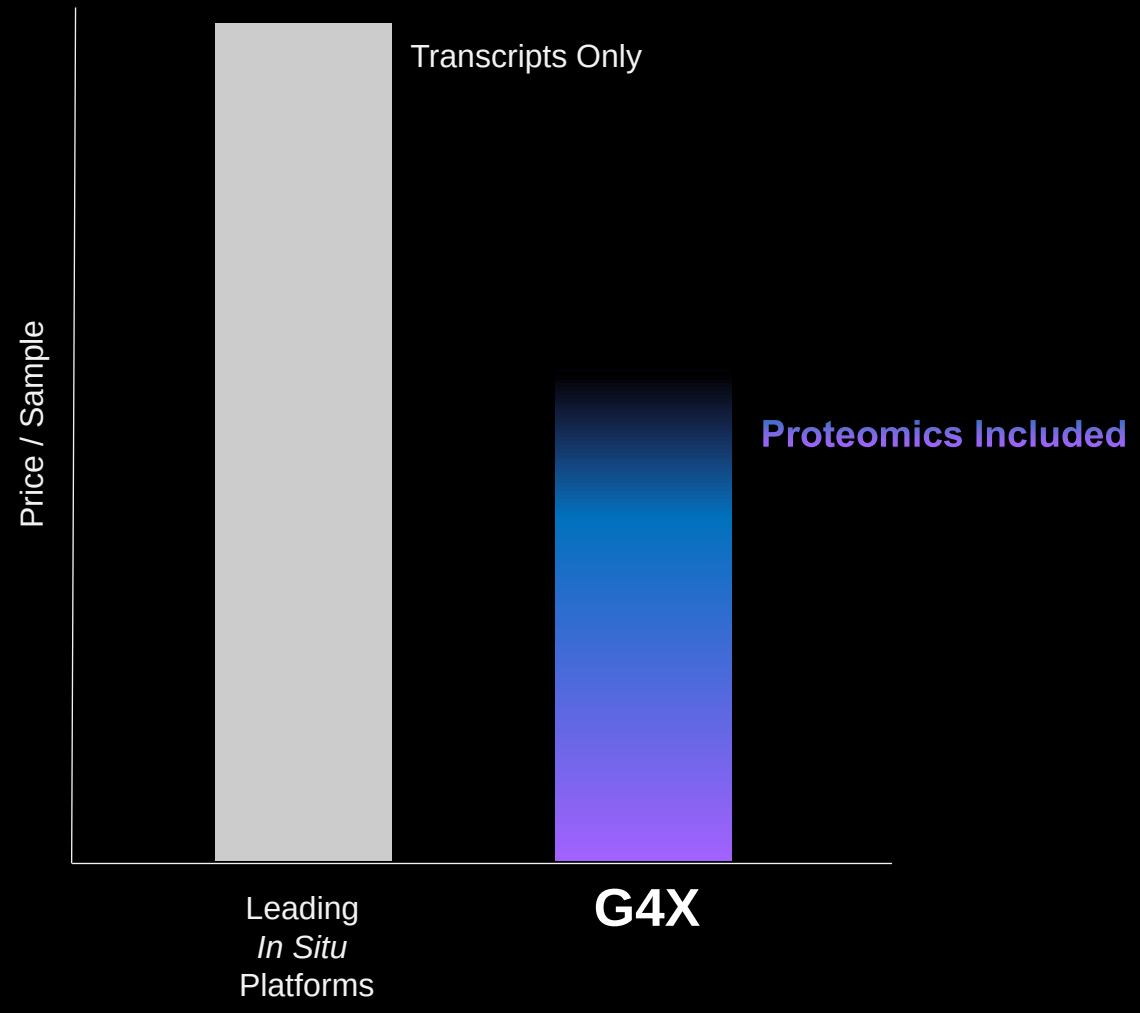
HIGHER THROUGHPUT DRIVES COSTS DOWN

PLATFORM ALSO INCLUDES ADDITIONAL FEATURES



More G4X features…

- Upgradeable from G4
- Streamlined pre-sequencing workflow
- Flexible imaging area and run sizes
- Off-the-shelf and custom panels
- Onboard storage, standard file outputs

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TWO TECHNOLOGIES, ONE SINGULAR PLATFORM

Next-Gen Sequencing

Flexible
4 flow cells, 16 lanes

Fast
Daily sequencing

Powerful
480 Gb & 1.6B paired reads

Spatial Sequencing

Multiomic
RNA, Protein, H&E

Subcellular resolution
Precision single-cell insights

High-throughput
40 cm^2 imaging area

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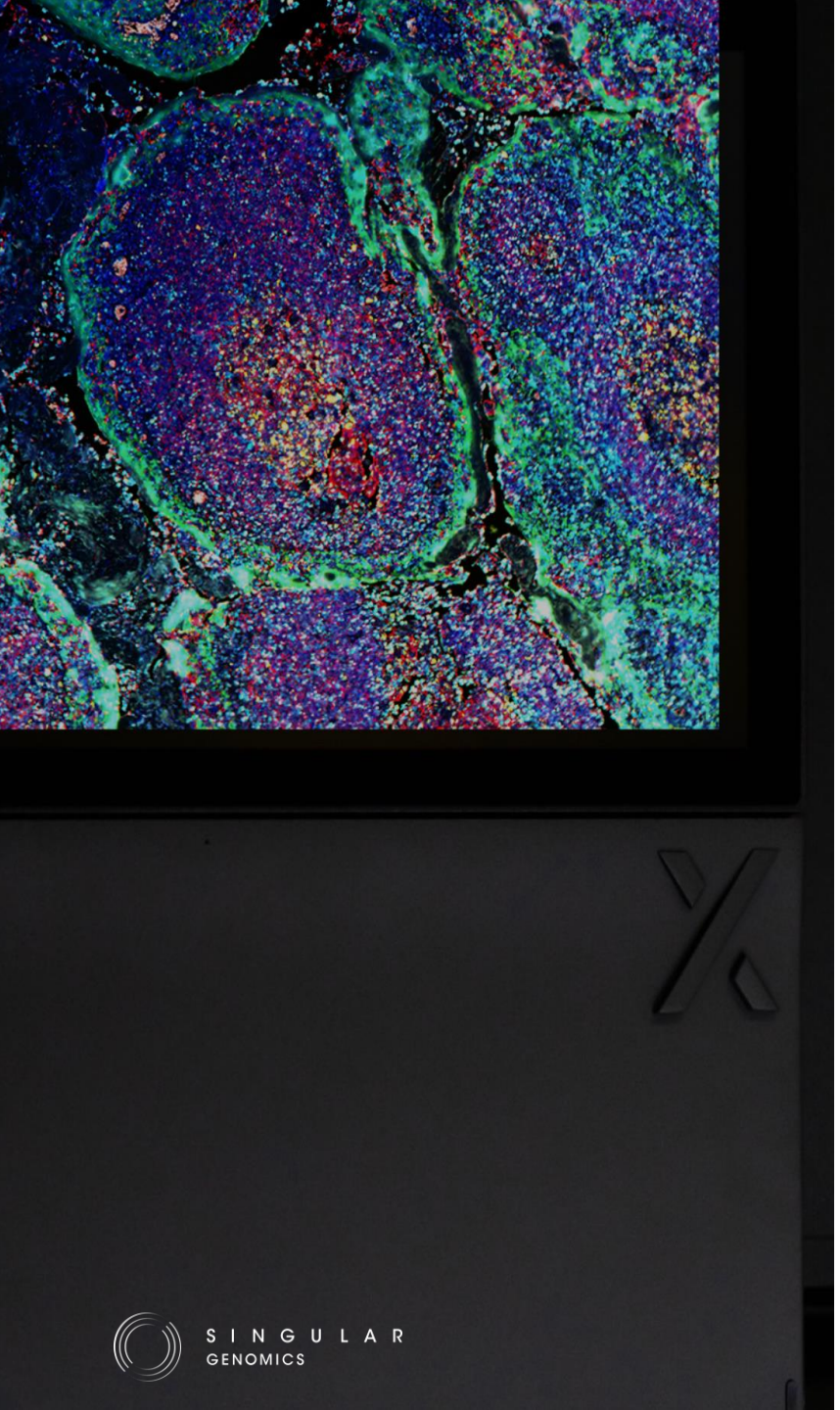

PRESENTATION CONTENTS

G4X SERVICES
NOW AVAILABLE

Access tomorrow's *in situ* sequencing technology today with cost-effective subcellular spatial multiomic services on the G4X

Click to Learn More:
Services | Singular Genomics

"The high sample throughput and the excellent data quality that has been generated on the G4X *with our bone marrow samples—notoriously a very difficult tissue type—have been impressive and have allowed us to envision much larger studies that have not been previously possible…* ***The scale provided by the G4X promises to have a tremendous impact*** *on expanding our understanding of the tumor microenvironment in acute myelogenous leukemia (AML) and beyond."*

- Catherine Wu

Dana-Farber Cancer Institute

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G4X SERVICES

FROM CONSULTATION TO DATA DELIVERY

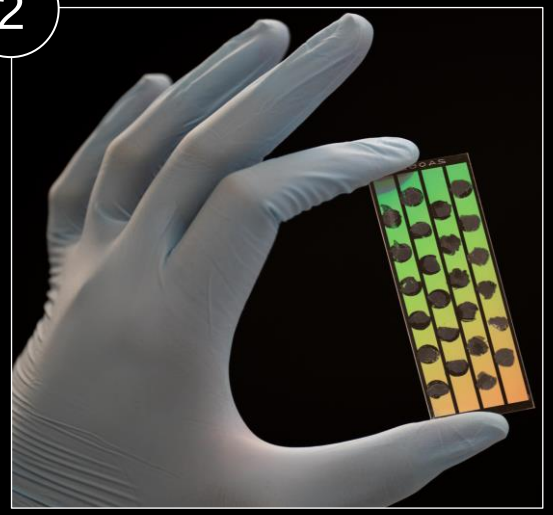
1

	Modalities	Tissue Types	Customization
Standard	IO Transcript (300) IO Protein (12) fH&E	Tonsil Kidney Colon Lymph Breast Lung	None
Custom Projects Choose from several customization options from add-on targets to fully custom panels to support your s			
Standard Plus	IO Transcript (300 + 25) IO Protein (12) fH&E	Tonsil Kidney Colon Lymph Breast Lung	RNA Only: < 25 adc RNA Targets
Advanced	IO or New Transcript (300) IO Protein (12 + 2) fH&E	Any Human FFPE	RNA: Full Custom u Protein: Add on 2 ta
Pro	IO or New Transcript (300) IO Protein (15) fH&E	Any Human FFPE Mouse FFPE	RNA: Full Custom u Protein: Full Custon

Consultation

- Project initiation and planning
- Standard panel or custom design

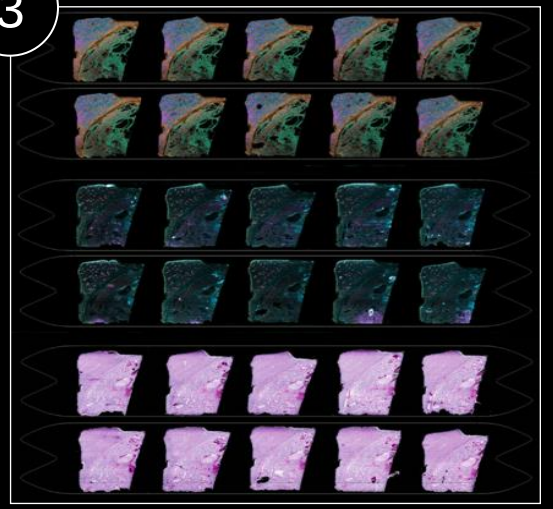
2



Sample Processing

- FFPE tissue sectioning & transfer
- Spatial sequencing on G4X

3



Data Delivery

- Data review and analysis
- Files for downstream analysis

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3010 Science Park Rd
San Diego, CA 92121

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