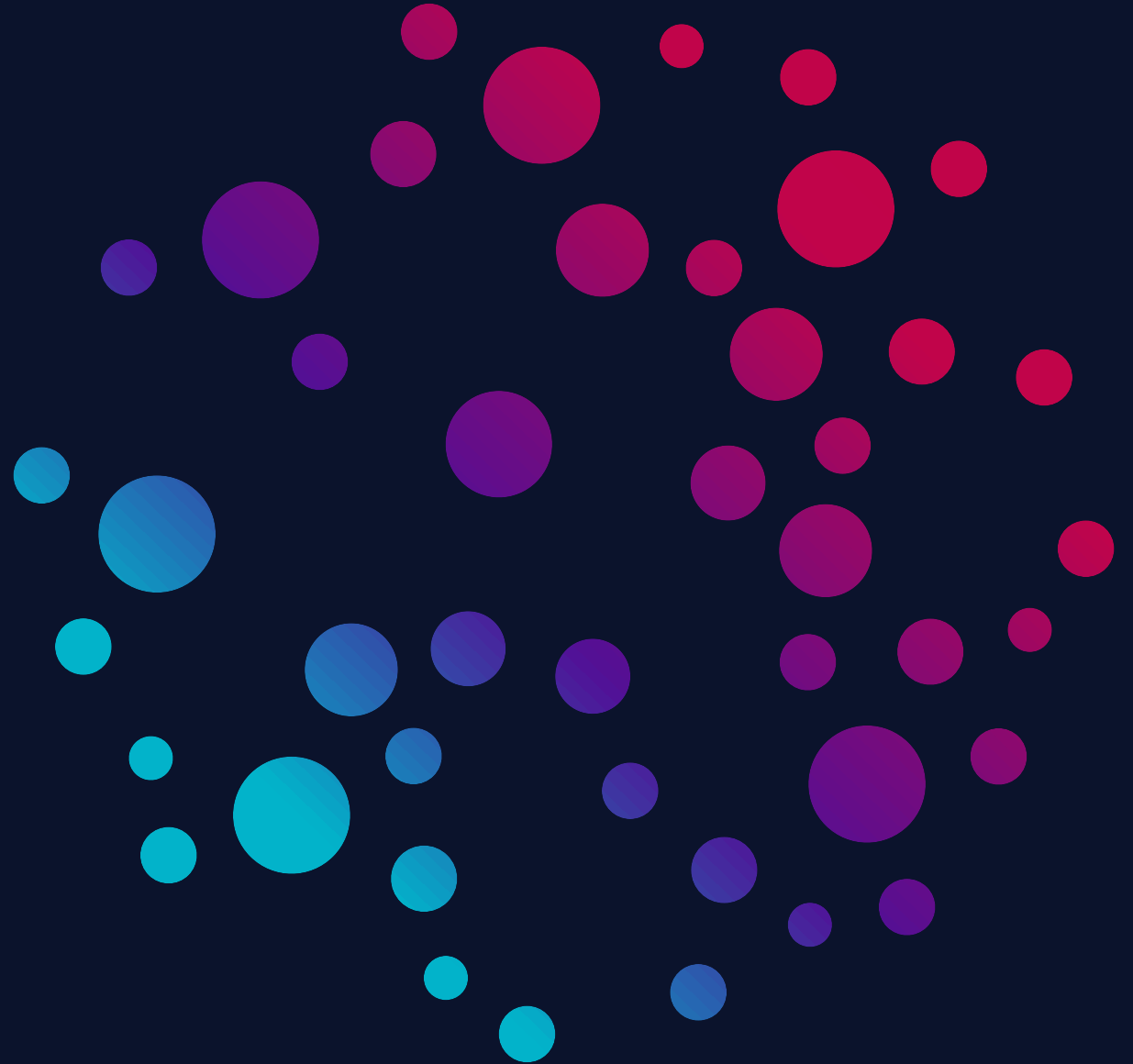


# Spatial Day 2021

December 15, 2021



# Disclaimer

## Cautionary Note Regarding Forward-Looking Statements

This presentation includes express and implied “forward-looking statements.” In some cases, you can identify forward-looking statements by terms such as “anticipate,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “project,” “will,” “would,” “should,” “could,” “can,” “predict,” “potential,” or the negative of these terms, and similar expressions intended to identify forward-looking statements. However, not all forward-looking statements contain these identifying words. These statements may relate to our strategic plans or objectives, revenues or earnings projections, or other financial items. By their nature, these statements are subject to numerous uncertainties, including factors beyond our control, that could cause actual results, performance or achievement to differ materially and adversely from those anticipated or implied in the statements. You should not rely upon forward-looking statements as predictions of future events. Although our management believes that the expectations reflected in our statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Moreover, neither we, nor any other person, assumes responsibility for the accuracy and completeness of these statements. Recipients are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made and should not be construed as statements of fact. We undertake no obligation to update these forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of unanticipated events.

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# Welcome & Introduction



## Brian McKelligon

CEO, Akoya Biosciences

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# Spatial Day Agenda

## Welcome & Introduction

**Brian McKelligon**, CEO, Akoya Biosciences

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## Revolutionizing Our Understanding of Disease Biology

**Kai Kessenbrock, Ph.D.**, Principal Investigator, University of California, Irvine

**Robert Schreiber, Ph.D.**, Professor of Pathology, Washington University, St. Louis

Q&A Roundtable – Hosted by **Niro Ramachandran, Ph.D.**, CBO, Akoya Biosciences

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## Changing the Standard of Care Using Spatial Biomarkers

**Carl Barrett, Ph.D.**, VP of Translational Medicine, AstraZeneca

**Kurt Schalper, M.D., Ph.D.**, Professor of Pathology and Oncology, Yale University

**Michael Montalto, Ph.D.**, CSO, PathAI

Q&A Roundtable – Hosted by **Pascal Bamford, Ph.D.**, SVP of R&D, Akoya Biosciences

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## The Future Direction of Akoya

**Niro Ramachandran, Ph.D.**, CBO, Akoya Biosciences

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## Closing Remarks

**Brian McKelligon**, CEO, Akoya Biosciences

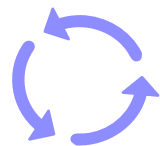
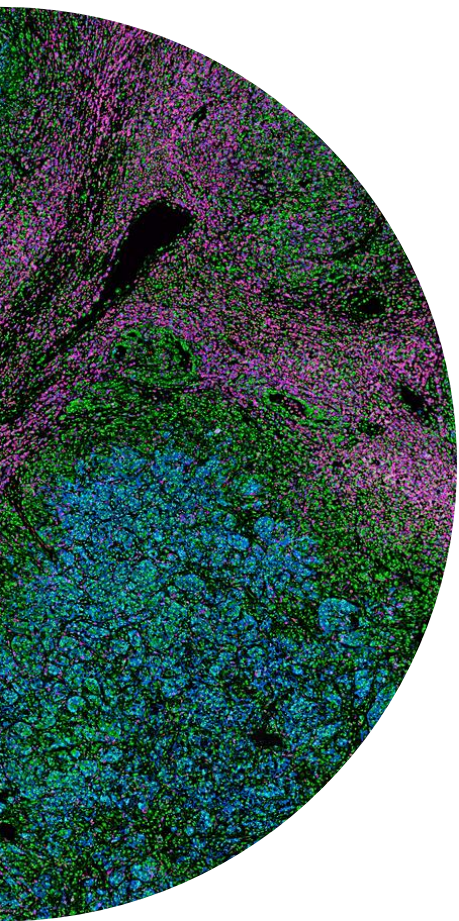
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## Audience Q&A

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# Akoya is Leading the Spatial Biology Revolution

Transforming discovery to clinical research



## **Complete end-to-end solutions**

with instruments, reagents, software, and services



## **Consistent growth with recurring revenue**

from global installed base of > 650



## **Well-capitalized to drive portfolio expansion**

through new products and commercial development

# Announcing New Spatial Biology Solutions

Key drivers for continued high growth



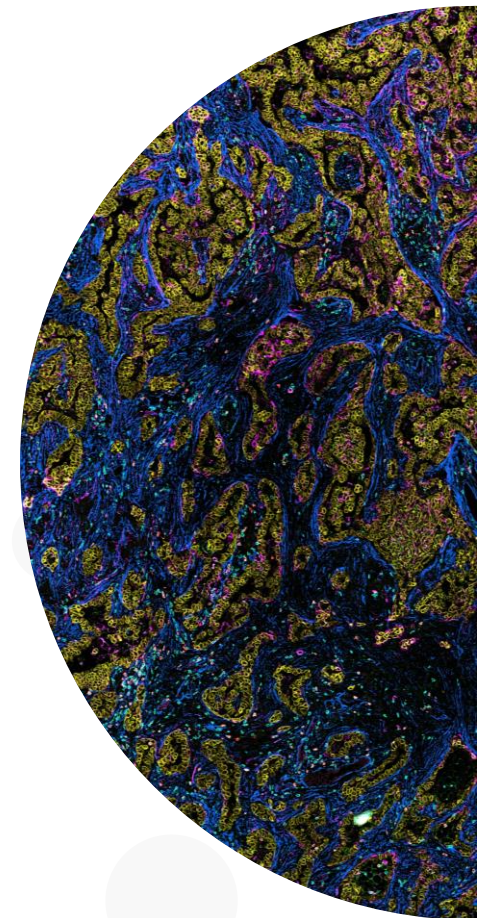
**New spatial phenotyping solutions**  
for increased multi-plexing and throughput



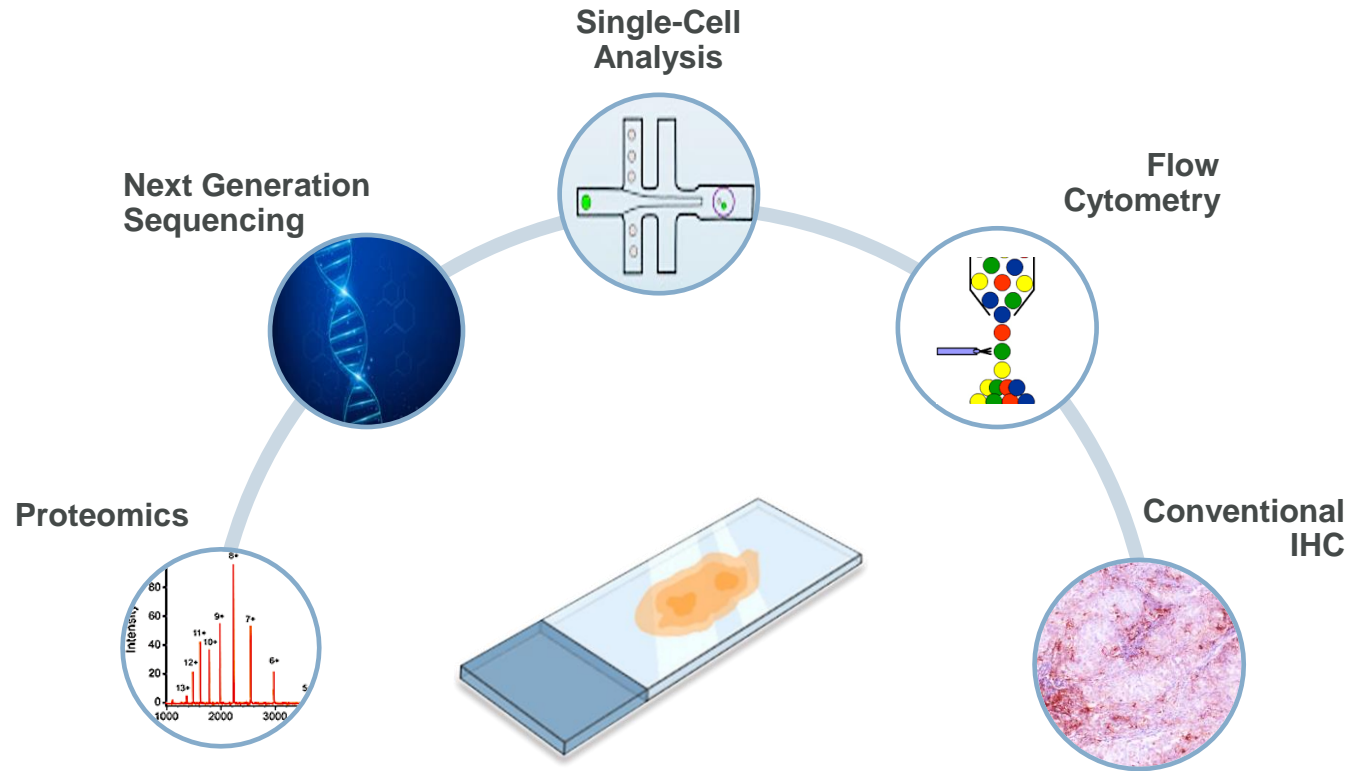
**New multi-omic applications**  
to enable spatial RNA analysis



**Clinical advancements**  
with proven robustness and workflow; continued  
investments and partnerships expand clinical impact



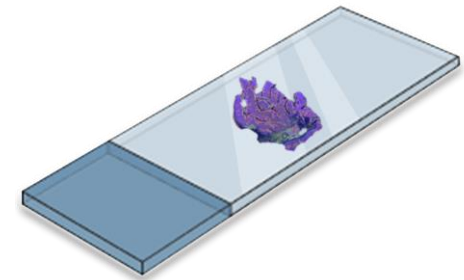
# Current Tissue Analysis Methods Migrate to Spatial



**Current tissue analysis methods deliver no or very limited spatial information**



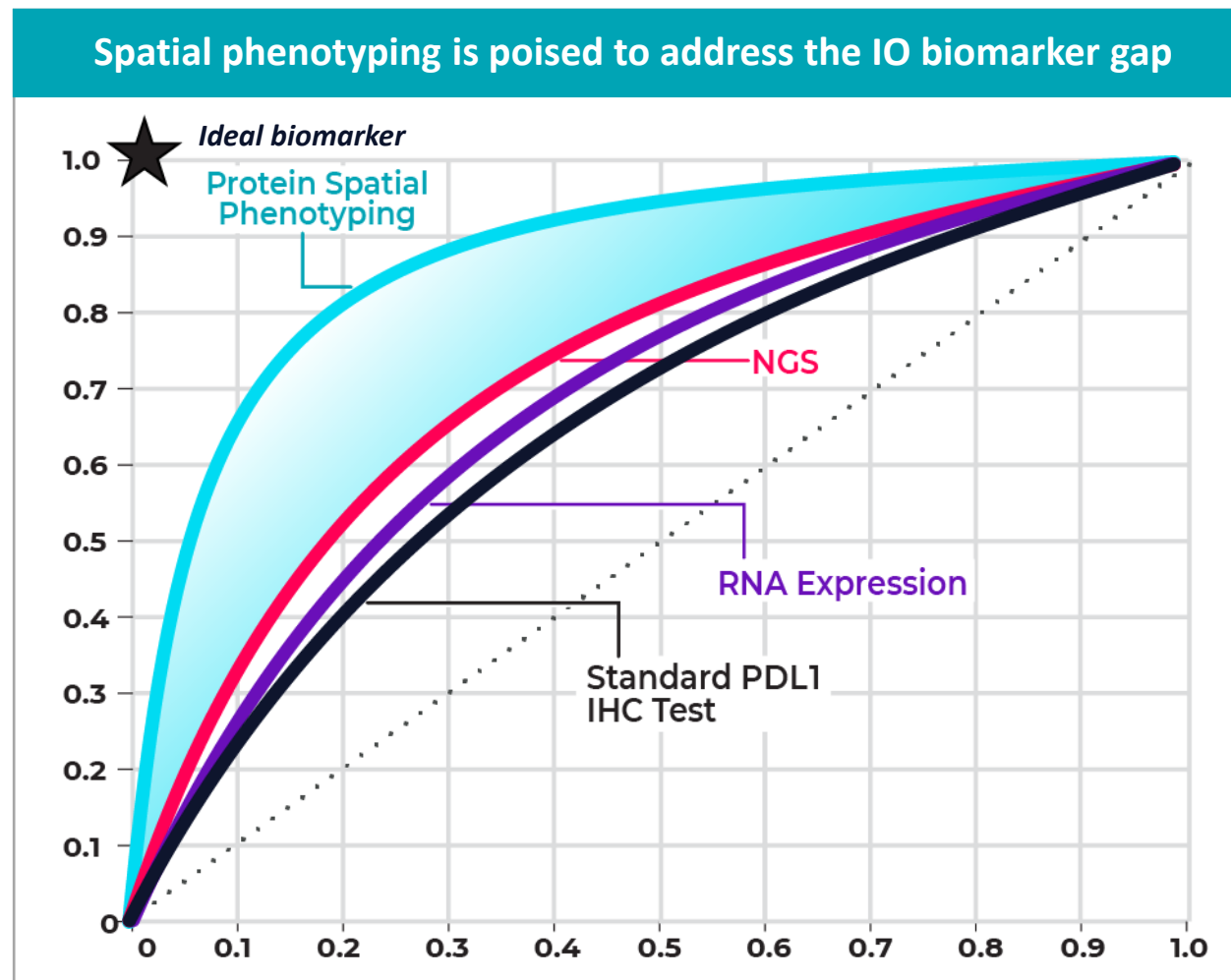
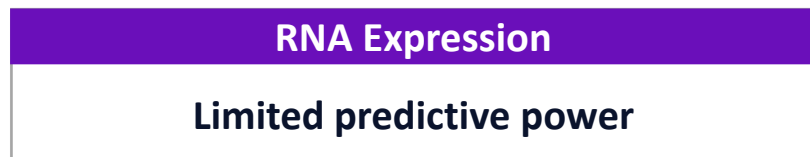
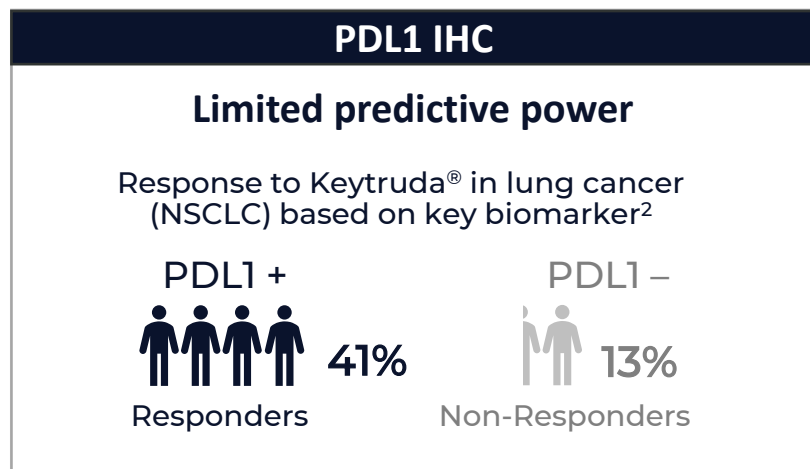
**Spatial Phenotyping**



**Understanding biomarkers in tissue context**

# Significant Unmet Medical Need in Immunotherapy

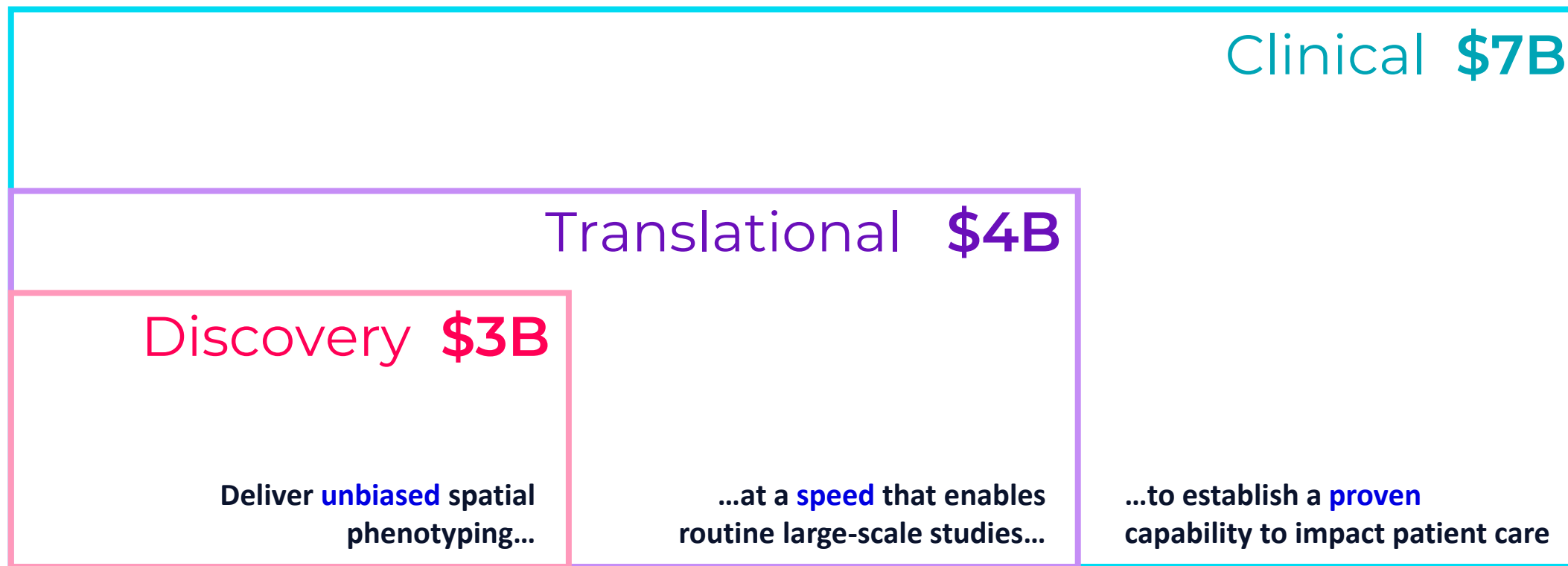
JAMA publication highlights spatial phenotyping as a superior approach<sup>1</sup>



<sup>1</sup> Lu S, Stein JE, Rimm DL, et al, JAMA Oncology 2019;5(8):1195–1204

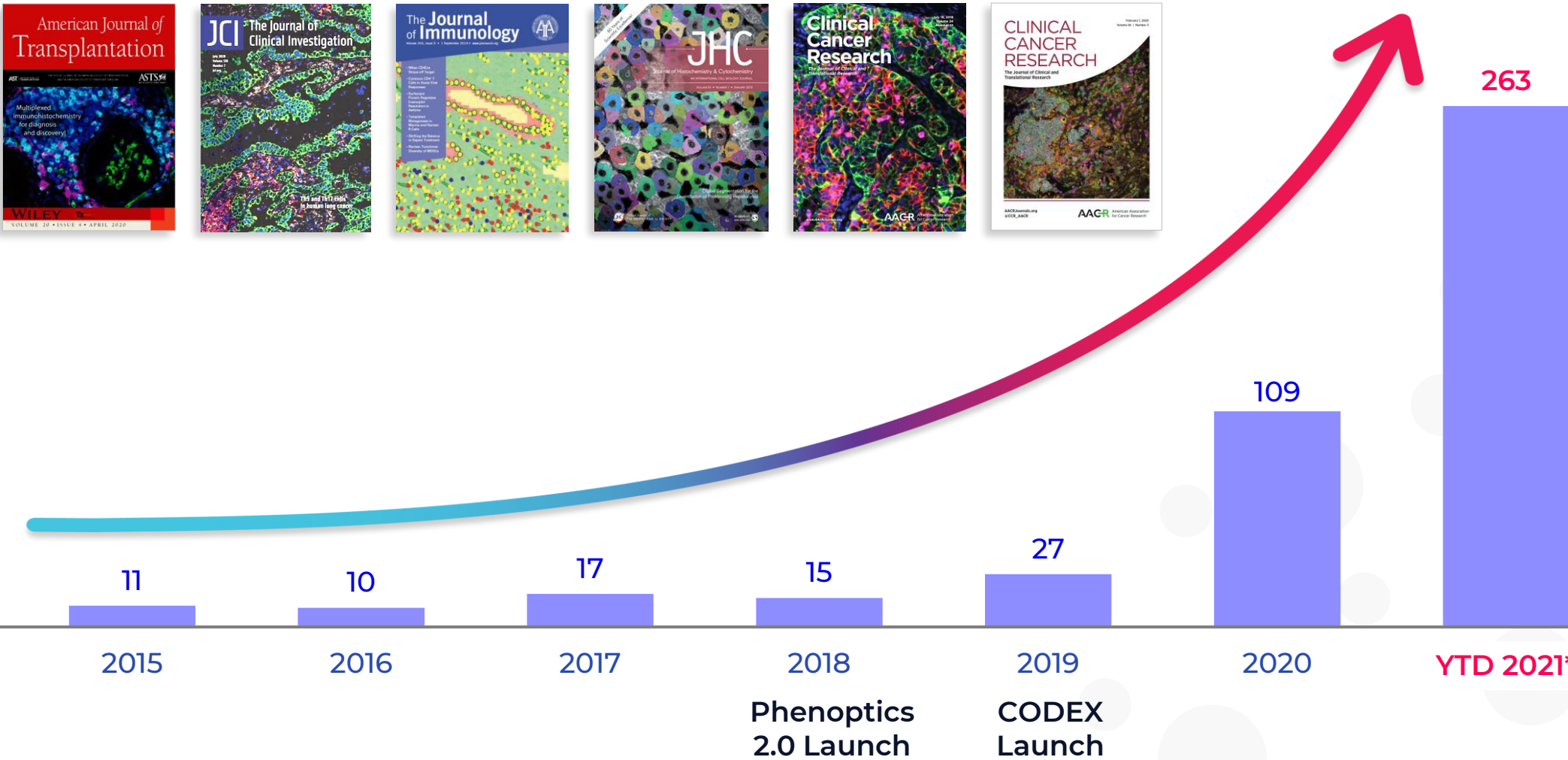
<sup>2</sup> Diggs and Hsueh Biomarker Research (2017) 5:12

# Immediate Opportunity in Discovery and Translational Markets with Clinical Rapidly Emerging



Meeting customer and market segment **requirements** drives market expansion

# Accelerating & Market Leading Publication Volume



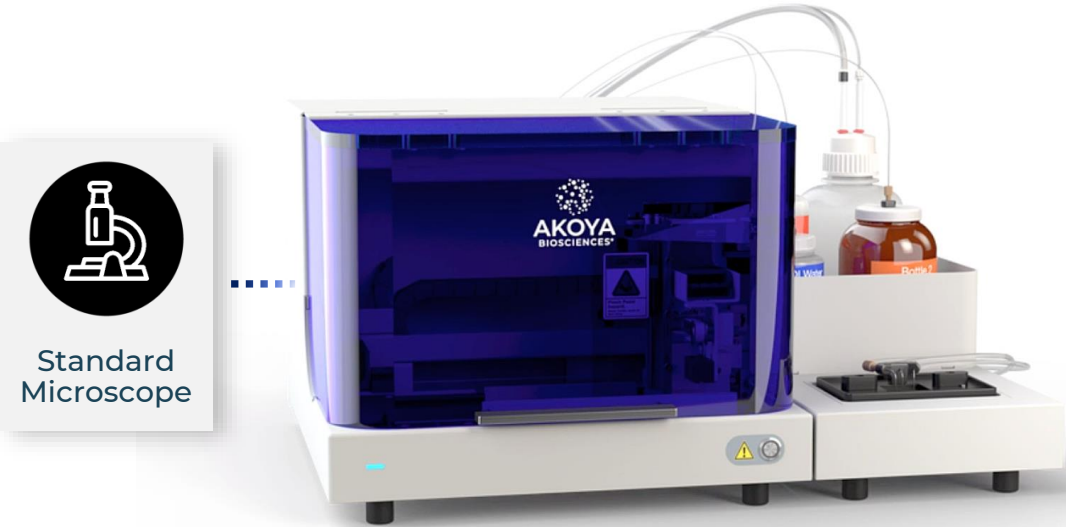
\*As of December 15, 2021

# Akoya's Current Spatial Phenotyping Platforms



**Unbiased and high-parameter** via in-situ reagent delivery

**Robust and high-throughput** with industry-leading imaging technologies



CODEX



Phenoptics

# of Markers per run

# of Samples per day

# New Instrument and Workflow Solutions Drive Growth

Accelerating the discovery and validation of spatial biomarkers

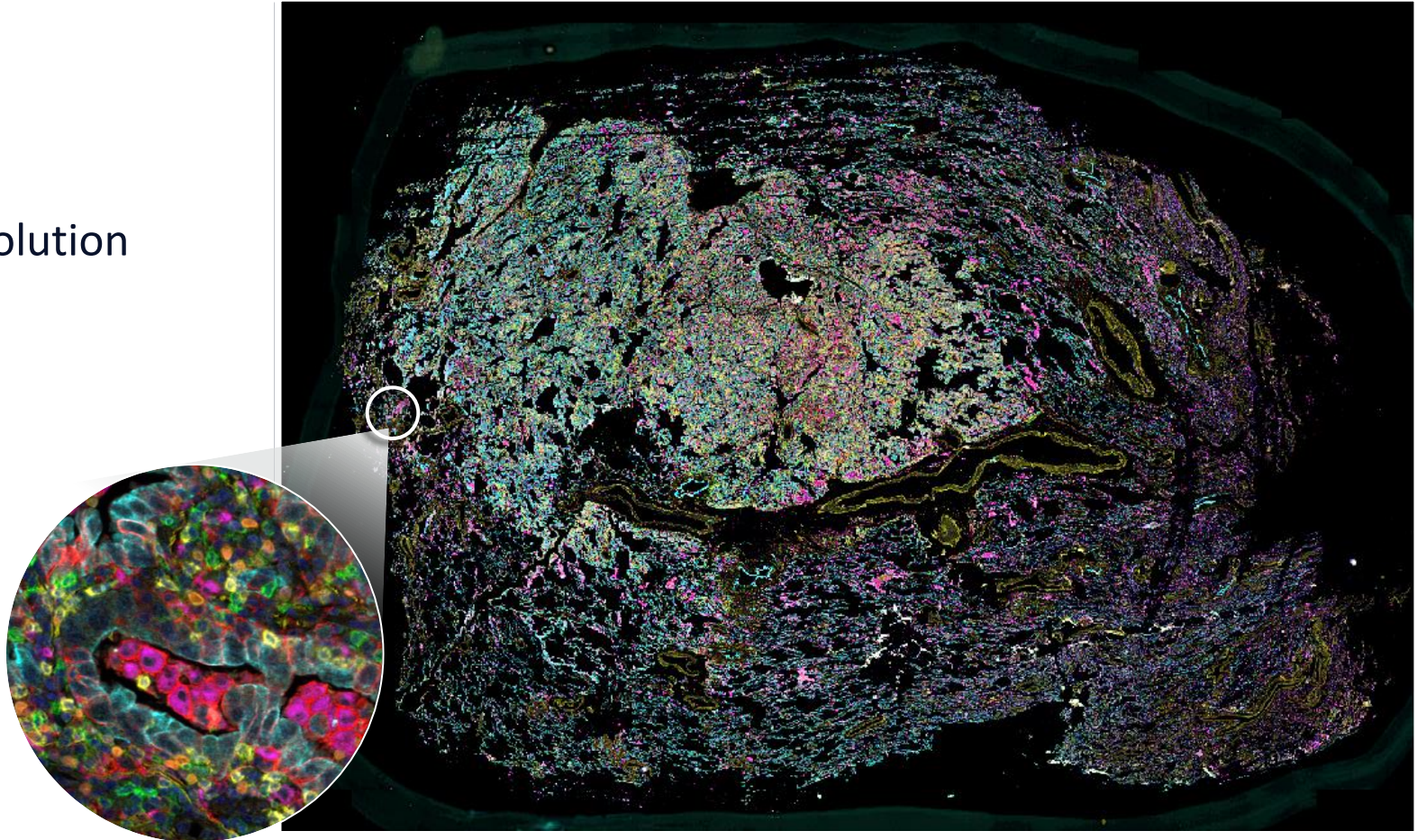
Discovery

Translational

**Unbiased tissue analysis** at  
single cell, whole slide and high resolution

**Increased throughput and plex**  
delivering scale and speed

**Expanding menu** of applications  
and multi-omic capabilities



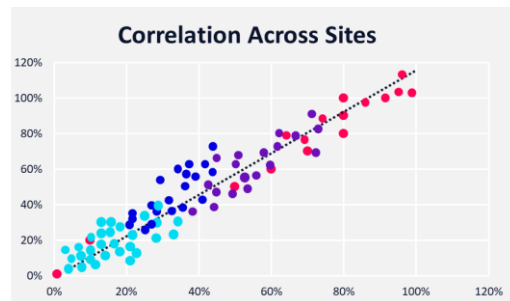
# Advancing Akoya's First Mover Advantage

Translating discoveries to the clinic and building the foundations for diagnostics

## Translational



**Solutions** to enable rapid and seamless biomarker validation  
**Spatial Biomarkers**



**Proven clinical robustness** with high reproducibility and throughput  
**>30 slides/day**



## Clinical



**Regulatory requirements**  
**CLIA**  
**ISO**  
**Quality System**



and many more...

**Partnerships to establish clinical use**  
**Advanced Biopharma Solutions** in clinical trials  
**KOLs** establish clinical evidence  
**AI** maximizes platform predictive power



# Akoya Biosciences - The Spatial Biology Company

Discovery

Translational

Clinical

Delivering **unbiased** spatial phenotyping, at a **speed** that enables routine large-scale studies, and establishing a **proven** capability to impact patient care in order to address a significant unmet medical need.



Complete end-to-end solutions



Rapidly increasing high-impact publications



New spatial phenotyping solutions and applications



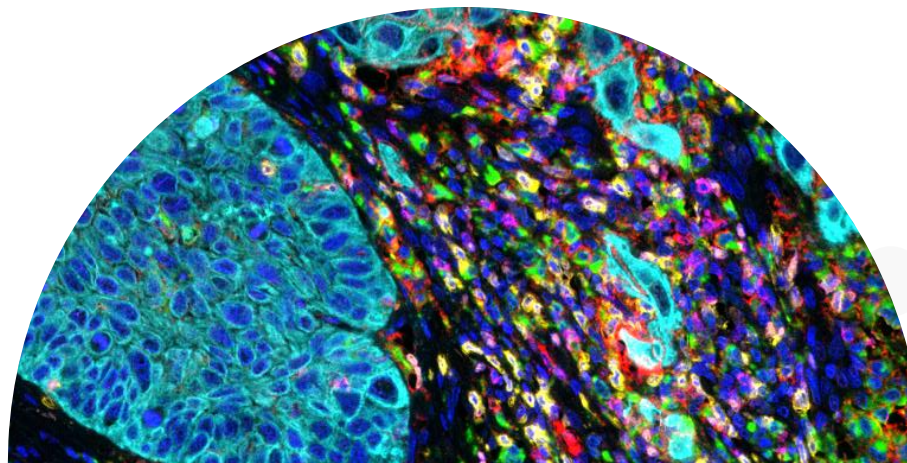
Consistent growth with recurring revenue



Advancing clinical impact



Well-capitalized to drive portfolio expansion





# Revolutionizing Our Understanding of Disease Biology



## Niro Ramachandran, Ph.D.

CBO, Akoya Biosciences

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# Revolutionizing Our Understanding of Disease Biology



**Kai Kessenbrock, Ph.D.**

Principal Investigator, University of California,  
Irvine

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**UCI**IRVINE  
UNIVERSITY of CALIFORNIA • IRVINE

# Revolutionizing Our Understanding of Disease Biology



**Robert Schreiber, Ph.D.**

Professor of Pathology, Washington University  
St. Louis



Washington University in St. Louis

# Q&A Roundtable



**Niro Ramachandran, Ph.D.**  
CBO, Akoya Biosciences

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**Kai Kessenbrock, Ph.D.**  
Principal Investigator, University of California,  
Irvine

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**Robert Schreiber, Ph.D.**  
Professor of Pathology, Washington University,  
St. Louis

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# Changing the Standard of Care Using Spatial Biomarkers



**Pascal Bamford, Ph.D.**  
SVP of R&D, Akoya Biosciences

---



# Changing the Standard of Care Using Spatial Biomarkers



**Carl Barrett, Ph.D.**

VP of Oncology & Translational Science,  
AstraZeneca

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# Changing the Standard of Care Using Spatial Biomarkers



**Kurt Schalper, M.D., Ph.D.**

Professor of Pathology & Oncology,  
Yale University

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Yale

# Changing the Standard of Care Using Spatial Biomarkers



## Michael Montalto, Ph.D.

CSO, PathAI

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# Q&A Roundtable



**Pascal Bamford, Ph.D.**

SVP of R&D, Akoya Biosciences

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**Carl Barrett, Ph.D.**

VP of Oncology & Translational Medicine, AstraZeneca

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**Kurt Schalper, M.D., Ph.D.**

Professor of Pathology & Oncology, Yale University

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**Michael Montalto, Ph.D.**

CSO, PathAI

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# The Future Direction of Akoya



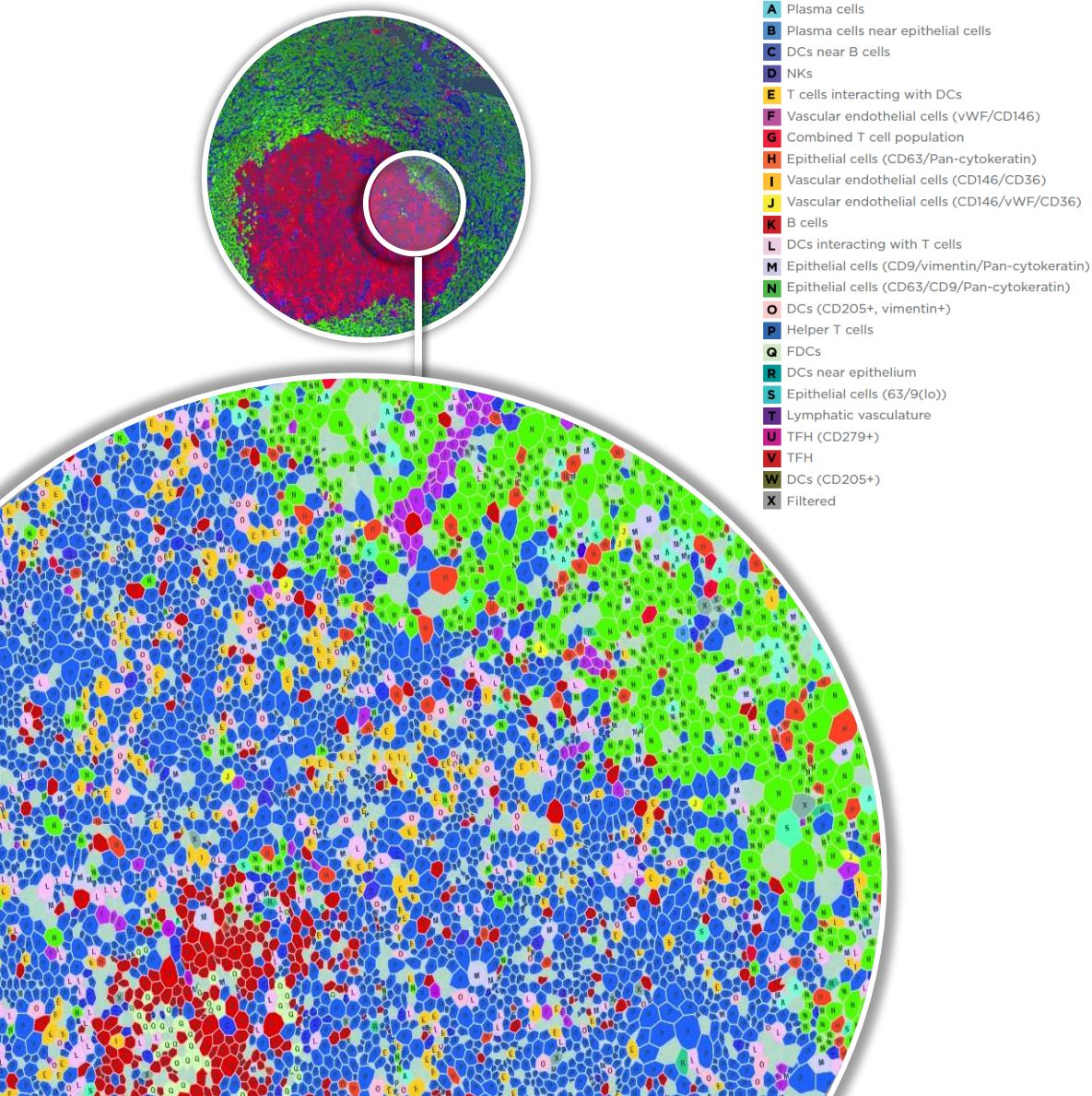
## Niro Ramachandran, Ph.D.

CBO, Akoya Biosciences

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# Spatial Phenotyping: Transforming Tissue Biology



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Spatial phenotyping is **identifying every cell** within the tissue microenvironment

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Spatial phenotyping requires every cell to be analyzed across the **entire tissue section**

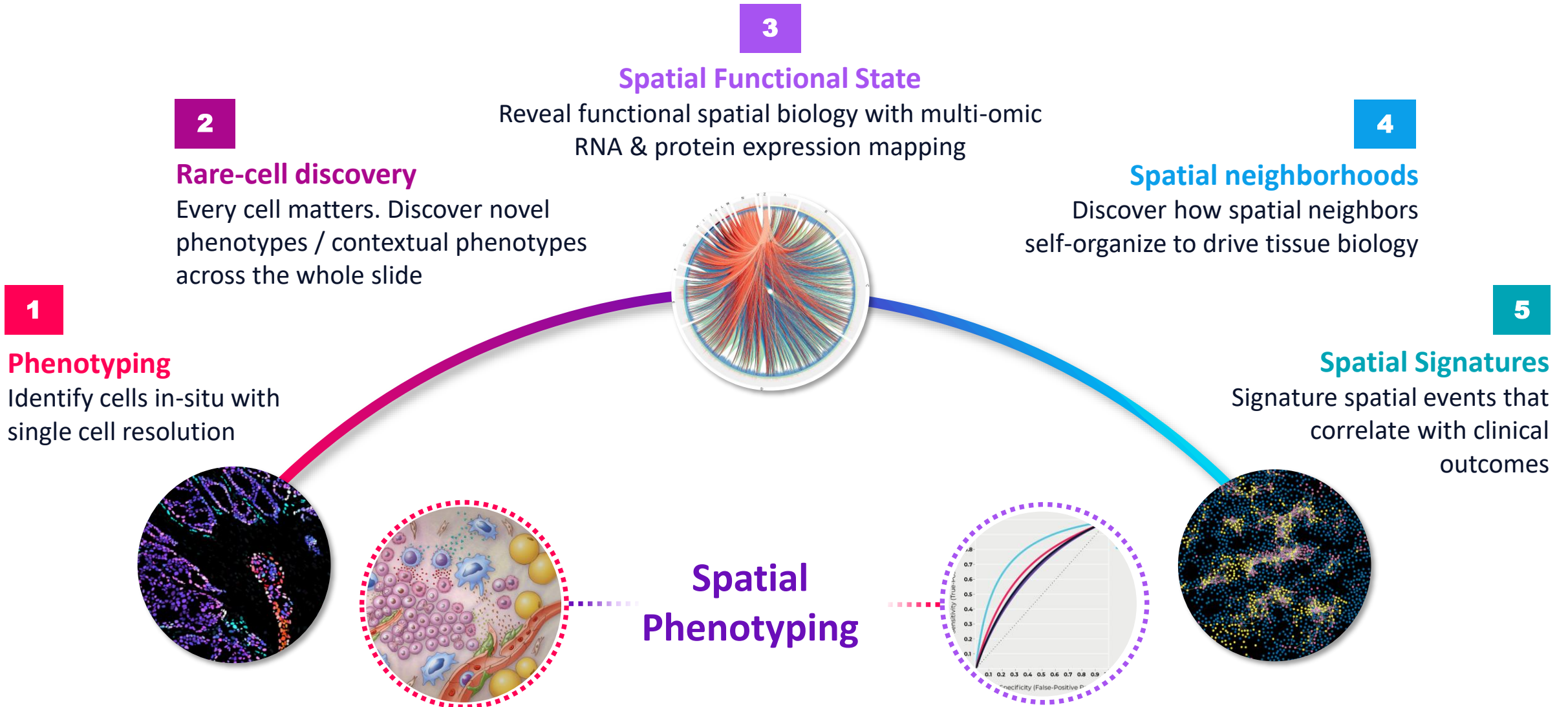
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Spatial phenotyping will reveal cell-cell interactions, **cellular neighborhoods, rare cell types** and predictive **spatial signatures**

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# Spatial Applications Defined



# Suite of Solutions Provide Spatial Phenotyping at Any Scale

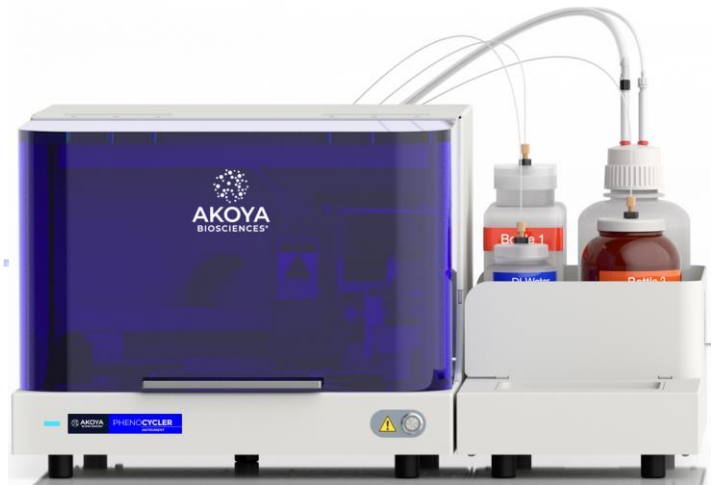
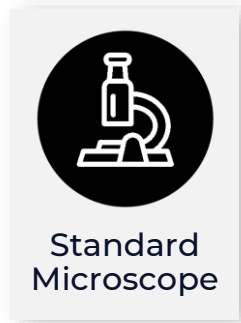
Discovery

Translational

Clinical

Simplest Cycling Platform

Highest Throughput Imaging Platform



CODEX

PHENOCYCLER



Phenoptics [Polaris]

PHENOIMAGER HT

# Spatial Biology 2.0

Unbiased



Speed



Proven

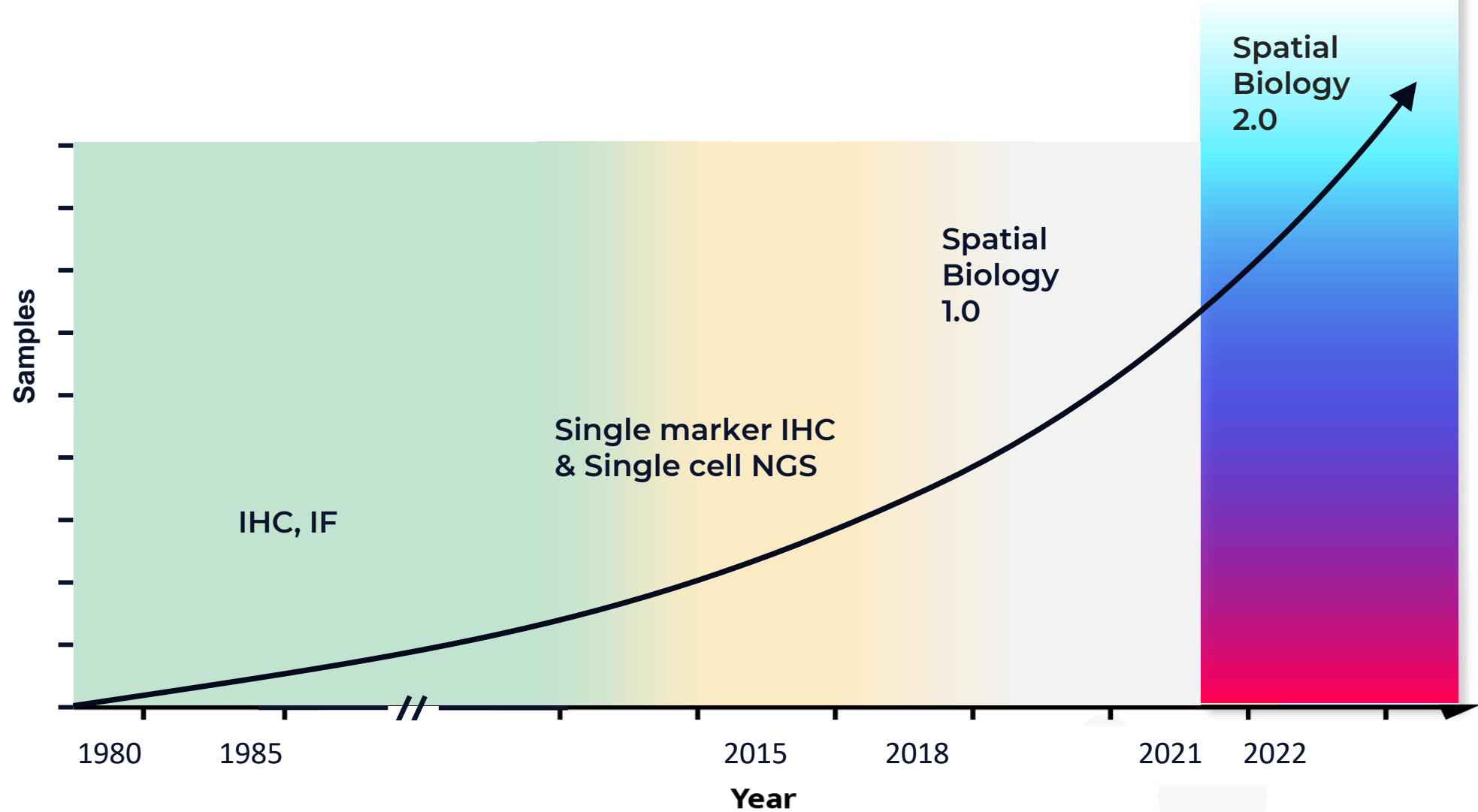


Discovery

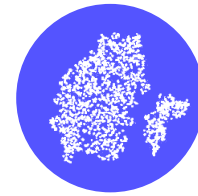
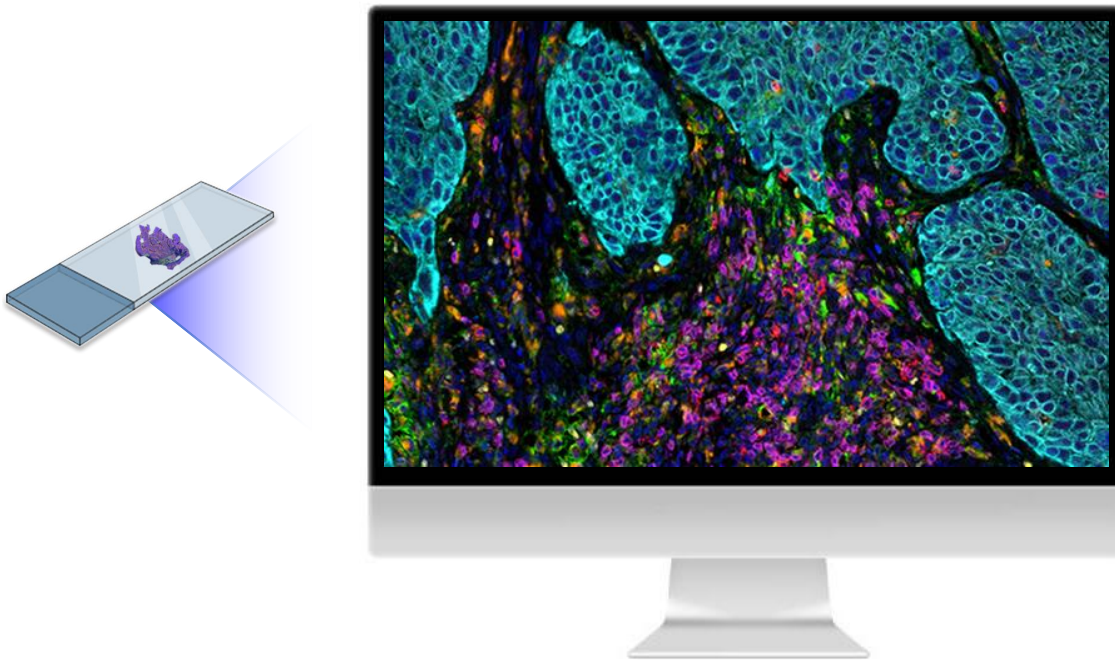
Translational

Clinical

# Spatial Biology 2.0

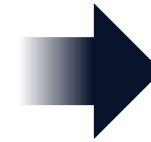


# Spatial Biology 2.0 Driven by Speed



From

**10's**



**100's** of targets



Million cells in

**Hours**



**Minutes**

# Introducing: The PhenoCycler-Fusion System

The **FASTEST, MULTI-OMIC, SINGLE-CELL** spatial biology solution



**SPATIAL BIOLOGY NOW HAS  
A PASSING LANE**

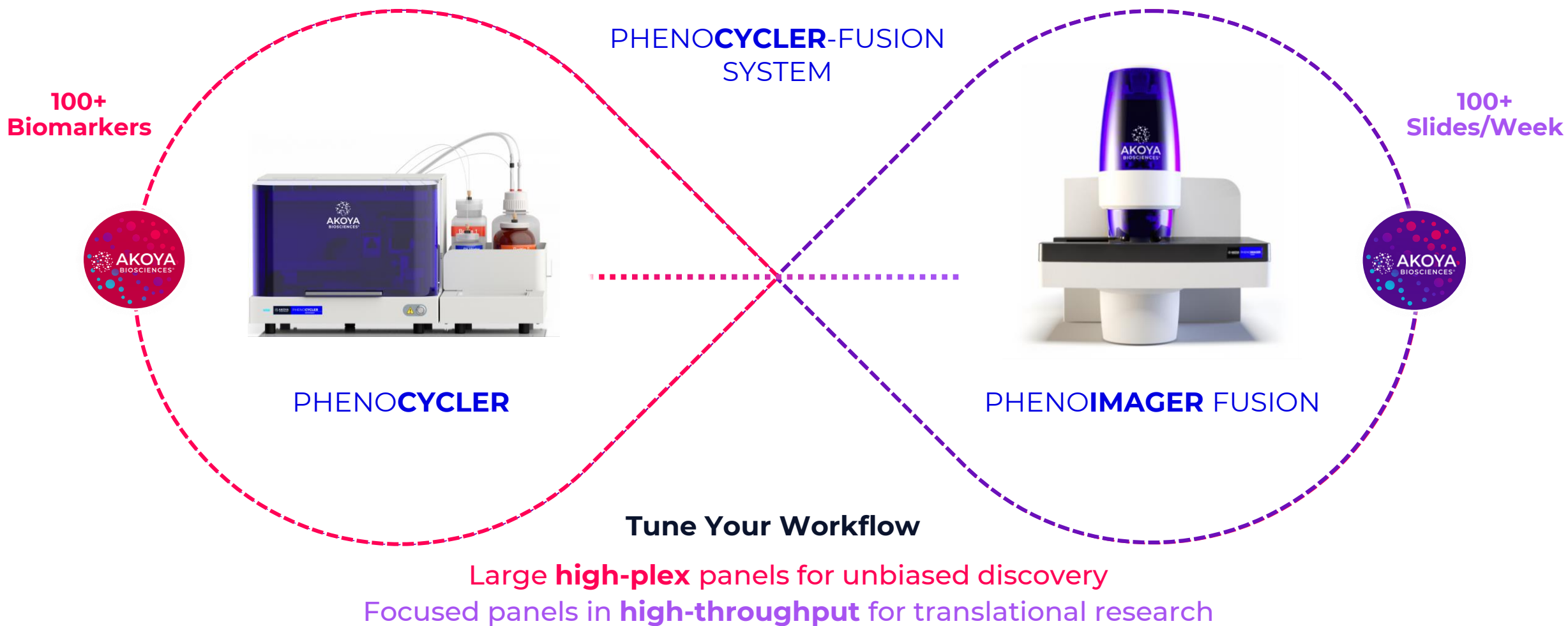
Map 1-million cells in just 10 minutes

Limited shipments in 2021  
**Full commercial launch in January 2022**



# World's First Integrated Spatial Biology Solution

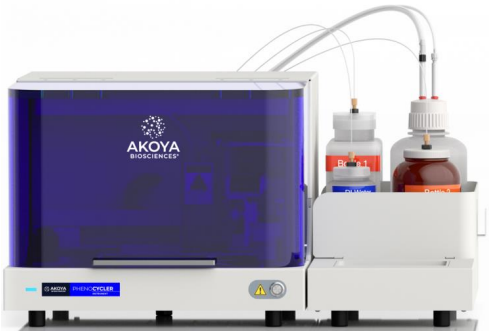
Flexible & scalable to meet your needs of tomorrow



# A Solution For Every User : Any Target, Any Scale



Unbiased



PHENOCYCLER

Speed



PHENOIMAGER FUSION

Proven



PHENOIMAGER HT



Opal®

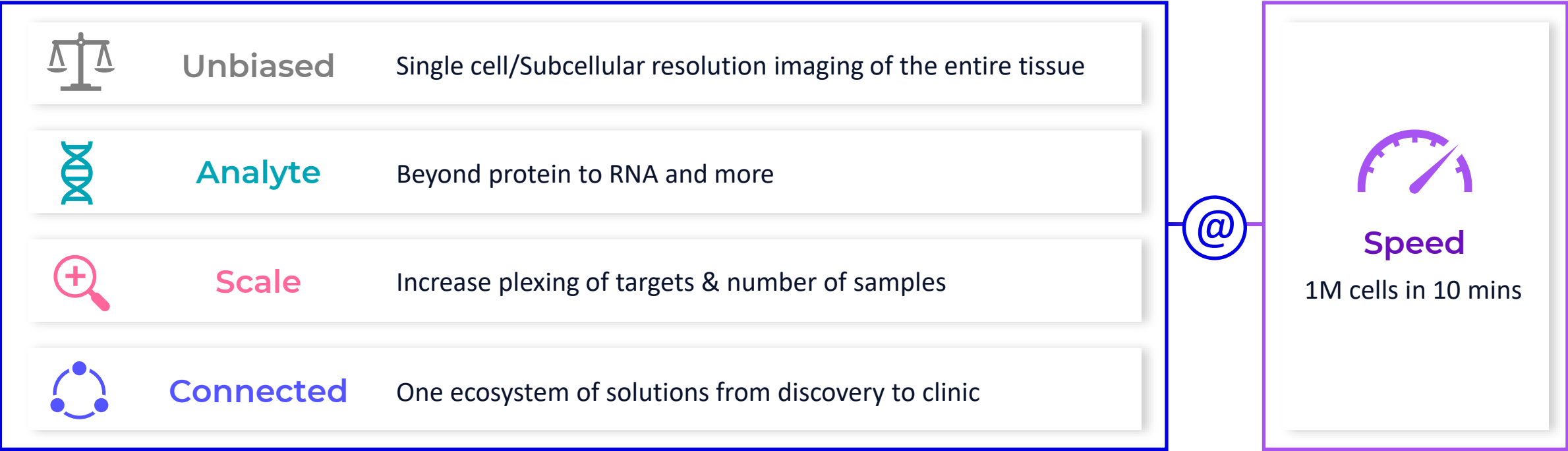


Protein



RNA

# Akoya's Technology Stack Will Transform the Pace of Spatial Biology Research



# Closing Remarks



## Brian McKelligon

CEO, Akoya Biosciences

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# Summary : Akoya Spatial Day 2021

Discovery

Translational

Clinical



## Unbiased PHENOCYCLER

High-parameter spatial multi-omics



## Speed PHENOIMAGER FUSION

Spatial phenotyping at scale



## Proven PHENOIMAGER HT

Advancing spatial phenotyping to the clinic



### Complete end-to-end solutions

with instruments, reagents, software, and services



### New spatial phenotyping solutions and applications

for increased throughput, multi-plexing and multi-omics



### Advancing clinical impact

with proven robustness, workflow and partnerships



### Rapidly increasing high-impact publications

with ~450 to date, 370 in '20 and '21



### Consistent growth with recurring revenue

from global installed base of > 650



### Well-capitalized to drive portfolio expansion

through new products and commercial development

Catalyzing Discovery and Improving Patient Care

