FLUIDIGM®

Investor Overview

November 2021

Legal Information

Forward-looking statements

This presentation and the accompanying presentations (including an oral presentation) contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, statements regarding: advantages of and prospects for Fluidigm's technologies and products; market opportunities and growth and Fluidigm access to and participation in such markets; revenue growth and profitability targets; strategic and operational plans; collaboration, OEM and other relationships with third parties; product plans, including development, launches, benefits, adoption and demand for new products; supply chain trends; expectations with respect to backlog and sales; exploration of options to maximize stockholder value; cash and financing plans; and revenue and net loss guidance for future periods. Forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from currently anticipated results, including but not limited to risks relating to the potential adverse effects of the coronavirus pandemic on our business and operating results; the possible loss of key employees, customers, or suppliers; customers and prospective customers continuing to curtail or suspend activities utilizing our products; our ability and/or the ability of the research institutions utilizing our products and technology to obtain and maintain Emergency Use Authorization from the FDA and any other requisite authorizations or approvals to use our products and technology for diagnostic testing purposes; potential changes in the priorities of government agencies; challenges inherent in developing, manufacturing, launching, marketing, and selling new products; reliance on sales of capital equipment for a significant proportion of revenues in each quarter; seasonal variations in customer operations; unanticipated increases in costs or expenses; risks related to our cash management plans and financing alternatives; uncertainties in contractual relationships; reductions in research and development spending or changes in budget priorities by customers; Fluidigm research and development and distribution plans and capabilities; interruptions or delays in the supply of components or materials for, or manufacturing of, Fluidigm products; potential product performance and quality issues; risks associated with international operations; intellectual property risks; and competition. Information on these and additional risks and uncertainties and other information affecting Fluidigm's business and operating results is contained in its Annual Report on Form 10-K for the year ended December 31, 2020, and in its other filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. Fluidigm disclaims any obligation to update these forward-looking statements except as may be required by law.

Non-GAAP financial information

This presentation and the accompanying presentations (including an oral presentation) include certain financial information in accordance with U.S. GAAP and also on a non-GAAP basis for the three-month and nine-month periods ended September 30, 2021, and September 30, 2020, and for the fiscal years ended December 31, 2018, 2019 and 2020, as well as guidance for non-GAAP net loss for fiscal 2021. Management believes that non-GAAP financial measures, taken in conjunction with GAAP financial measures, provide useful information for both management and investors by excluding certain non-cash and other expenses that are not indicative of the company's core operating results. Management uses non-GAAP measures to compare the company's performance relative to forecasts and strategic plans and to benchmark the company's performance externally against competitors. Our estimates of forward-looking non-GAAP net loss exclude estimates for stock-based compensation expense and depreciation and amortization; loss on disposal of property and equipment; future changes relating to developed and acquired technologies; other intangible assets; and income taxes, among other items, certain of which are presented in the tables accompanying our earnings release. A reconciliation of adjusted guidance measures to corresponding GAAP measures is not available on a forward-looking basis without unreasonable effort due to the uncertainty regarding certain expenses that may be incurred in the future. The time and amount of certain material items needed to estimate non-GAAP financial measures are inherently unpredictable or outside of our control. Material changes to any of these items could have a significant effect on guidance and future GAAP results. Non-GAAP information is not prepared under a comprehensive set of accounting rules and should only be used to supplement an understanding of the company's operating results as reported under U.S. GAAP. Fluidigm encourages investors to carefully consider its results under GAAP, as well as its supplemental non-GAAP information and the reconciliation between these presentations, to more fully understand its business. Reconciliations between GAAP and Non-GAAP operating results are presented in the tables of this presentation or in the accompanying "Reconciliations and Financial Package" available at supplemental financials.

Trademarks

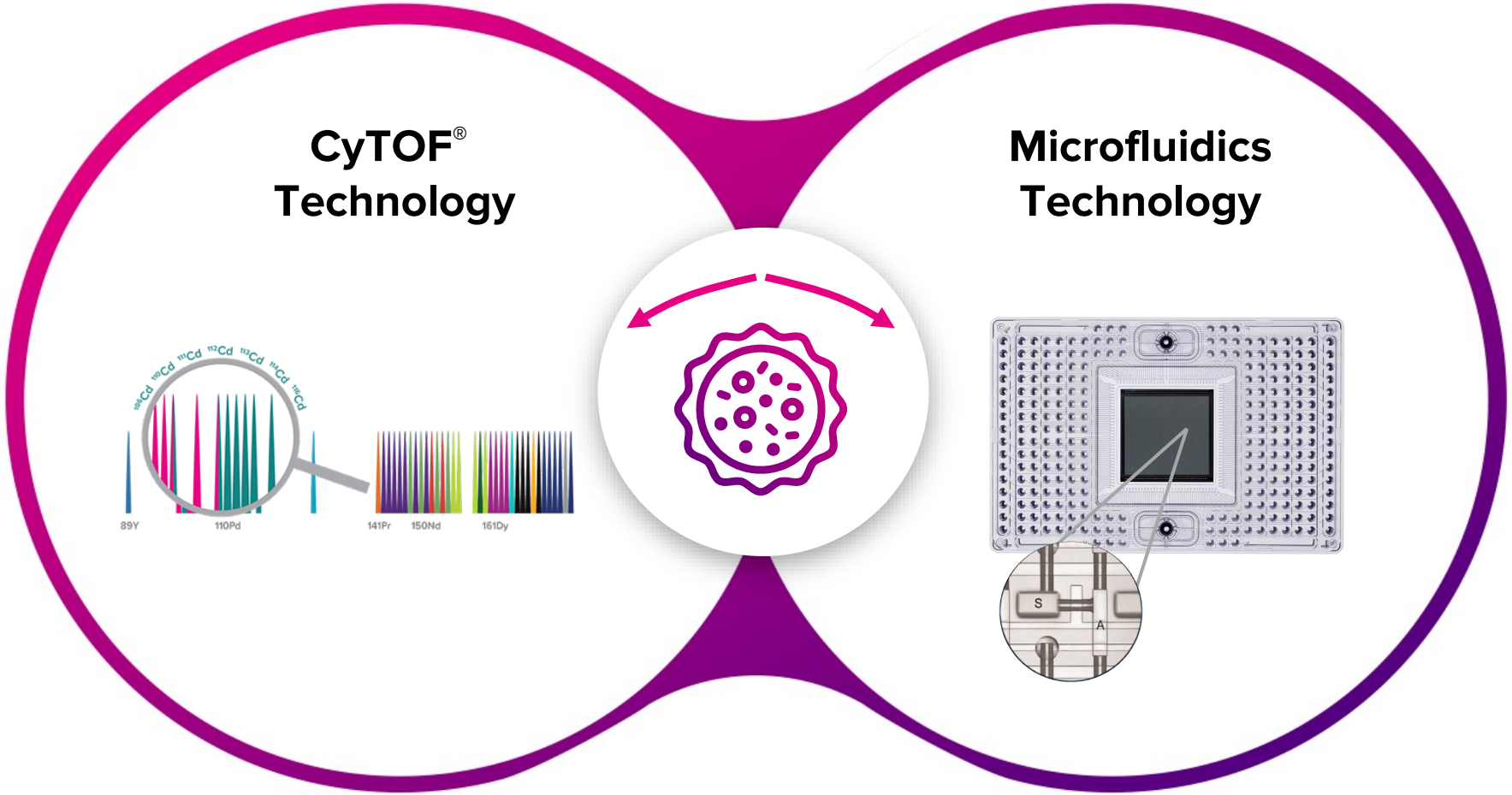
The Advanta™ Dx SARS-CoV-2 RT-PCR Assay is for In Vitro Diagnostic Use. Advanta is for Use under Emergency Use Authorization Only and Rx Only. Other Fluidigm products are provided for Research Use Only and Not For Use in Diagnostic Procedures.

Drive Meaningful Insight in Health and Disease to Improve Life

Advance human health by deploying innovative technologies.

Reveal, understand and address the biological complexities of disease.

Harnessing the Power of Two Technologies



Powerful Growth Drivers

Vision 2025

We will span the spectrum from discovery to diagnostics, delivering double-digit revenue growth with sustained profitability.

Innovation

Launching instruments, expanding our menu and creating new content and workflows

Partnerships

Building new capabilities, broadening our customer base and penetrating applied markets

Beachhead Expansion

Building a transformative diagnostics base and moving closer to health care decision making

Key Investment Highlights

1. Addressing large market opportunities

2. Offering proprietary platform technologies with demonstrated clinical research and real-world utility

3. Driving recurring revenue streams

4. Targeting long-term double-digit revenue growth and sustained profitability

Leading Provider of Indispensable Tools and Consumables

$28.5M

Q3 revenue

46.9% | 58.9%

Q3 product and service margin
GAAP | Non-GAAP

Manufacturing

Singapore | Ontario, Canada | South San Francisco

Headquarters

South San Francisco, CA, USA

~600

employees worldwide

>175

clinical trials

>1,740

mass cytometry publications

550

issued and pending patents (worldwide)

For the quarter ended September 30, 2021. For reconciliations of the Non-GAAP financial measures to the GAAP measures, please refer to: supplemental financials.

Operational Efficiencies Driving Productivity

Long-Term Recurring Revenue Growth

Consumables

Recurring revenue from content, software and workflows used with installed instruments

Instruments

Revenue from adoption of instruments across a broad product portfolio and variety of technology platforms

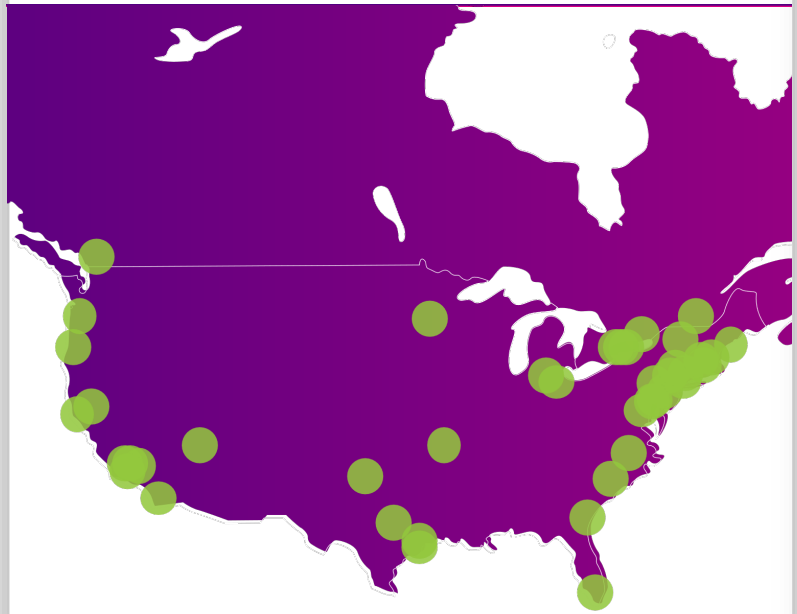
Service

Recurring revenue from active, installed instruments

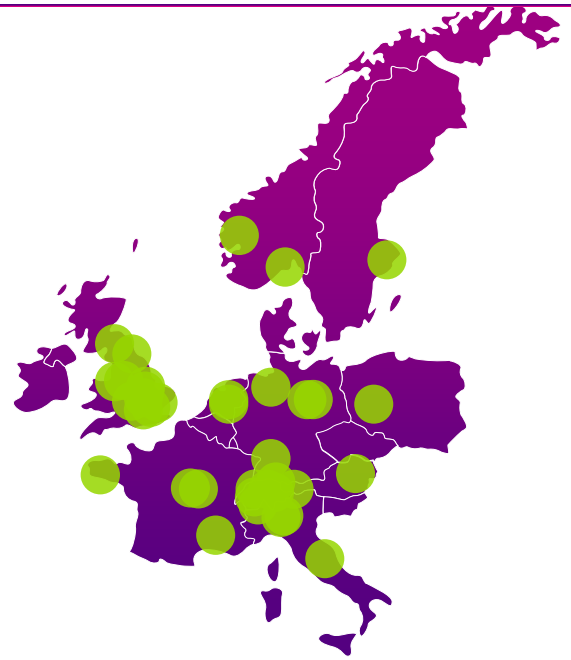
Global Presence

Presence in 9 of Top 10 Pharma (WW) and 61% of Comprehensive Cancer Centers (US)

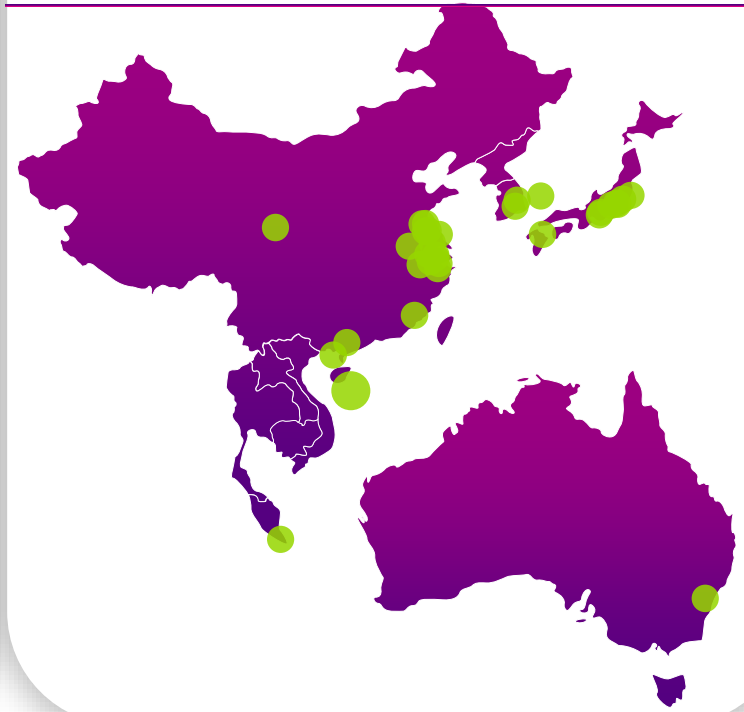
US and Canada



Europe



Asia-Pacific

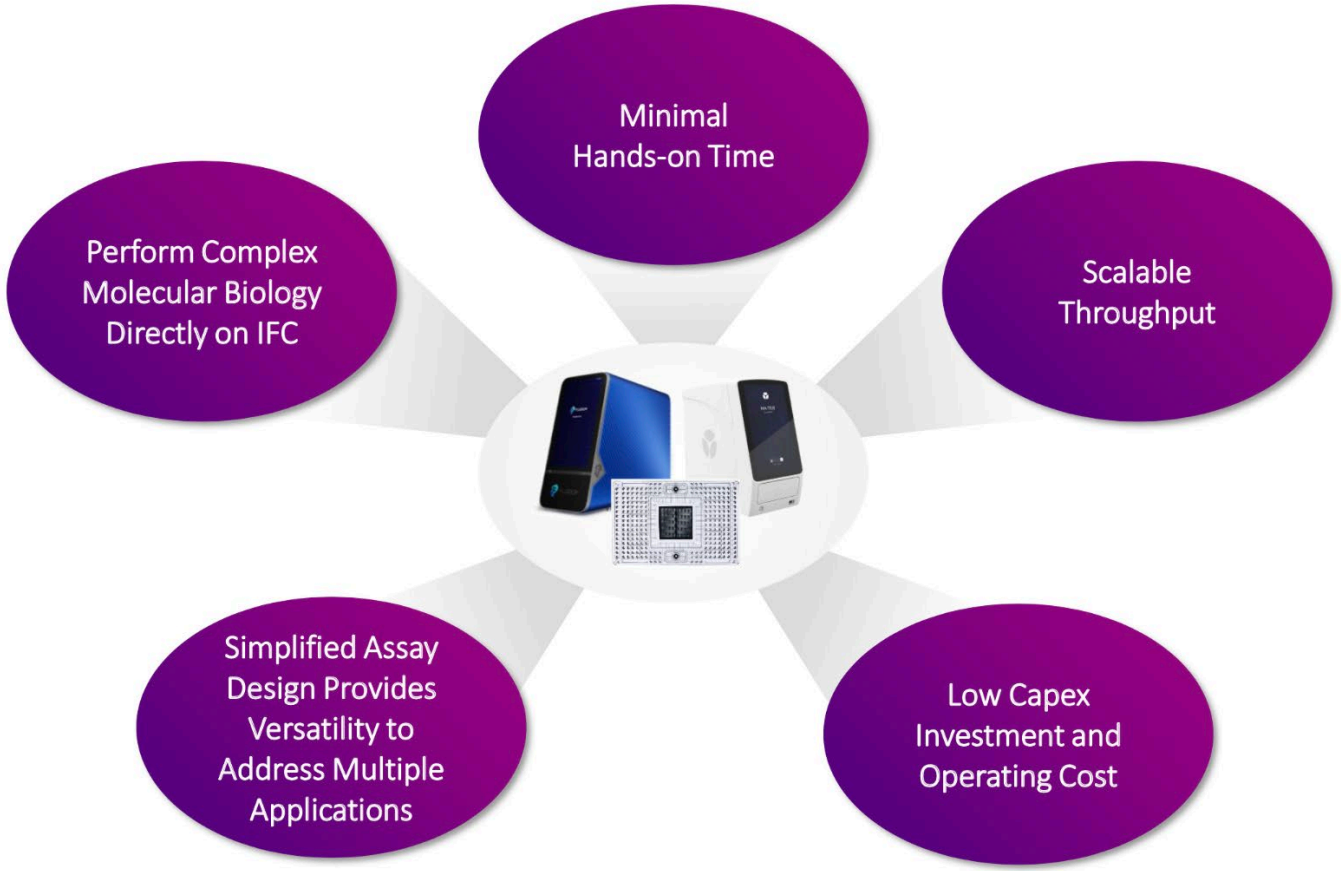


Microfluidics

Attractive markets that extend beyond COVID-19

Fluidigm Microfluidics Platform

Offers ease of workflow, cost savings and turnaround time without sacrificing performance

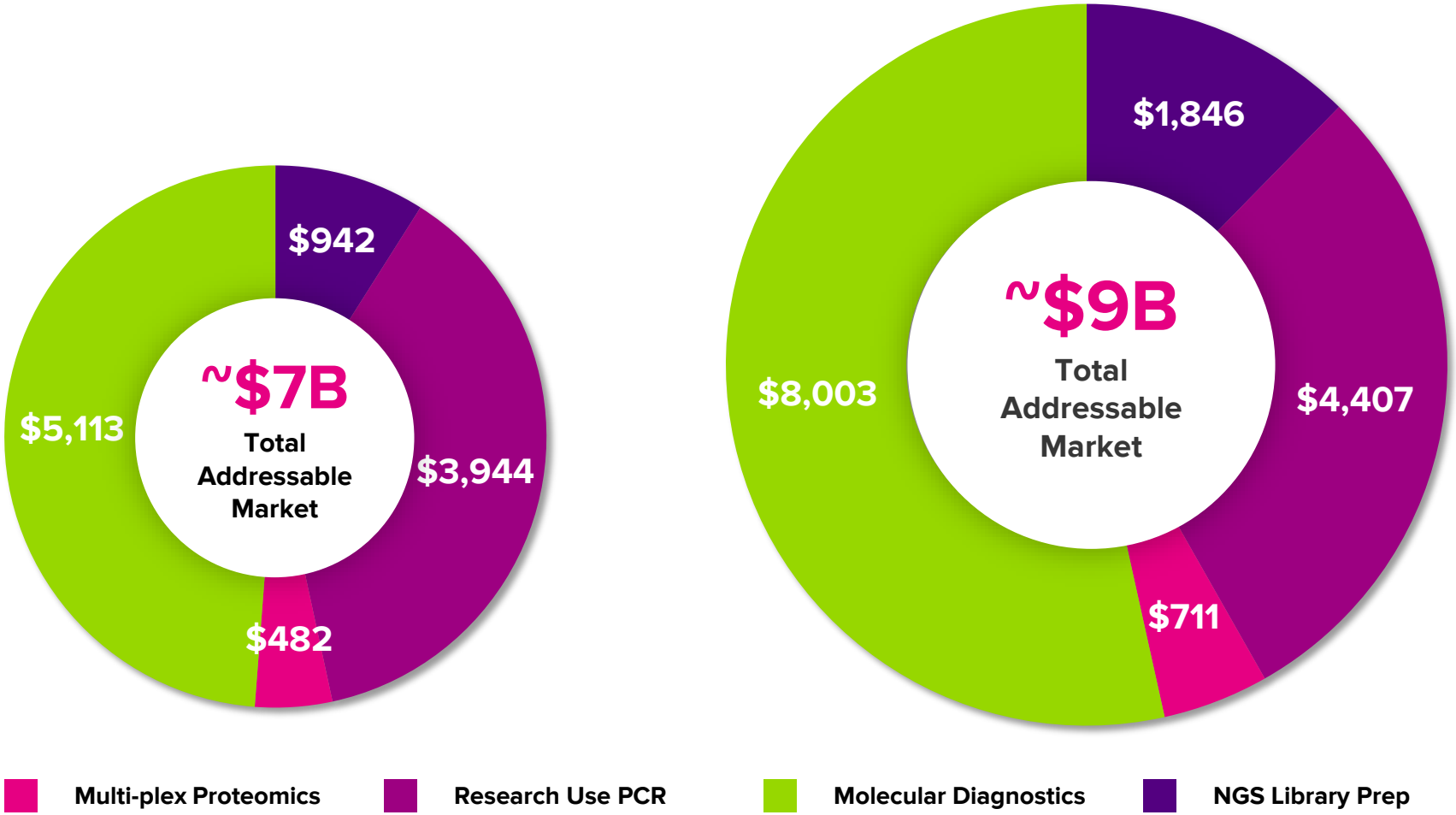


FLUIDIGM

Used Non-Dilutive Funding to Upgrade Microfluidics Platform and Manufacturing Capacity

- Investment in new Biomark™ platform
- Expanded manufacturing capabilities
- Development of new Sample-to-Answer IFC (integrated fluidic circuit) to significantly expand installed base into mid-throughput labs that value assay flexibility, scalable throughput, cost and data quality as their main drivers to scale up their testing menu
- Experience bringing new tools through regulatory review and approval, building upon market experience
- Allows for Fluidigm's Microfluidics business to have an advantaged role in serving currently 200 specialty labs running high-complexity molecular laboratory developed tests (LDTs) with an addressable market of $2B

Large Market Opportunities

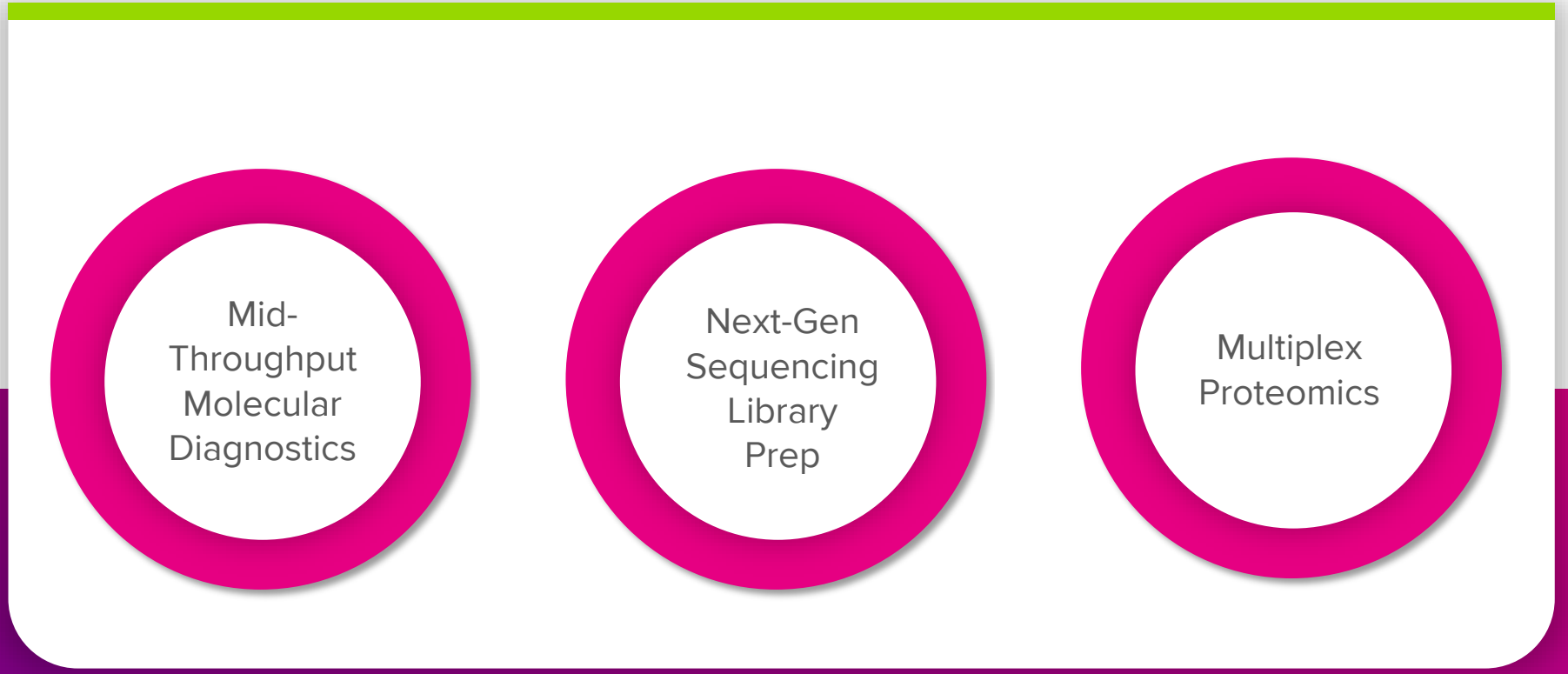


5%

Growth from 2020 to 2025

FLUIDIGM

With Three Focus Areas



2020–2025
Estimated CAGR ~9%

2020–2025
Estimated CAGR ~14%

2020–2025
Estimated CAGR ~8%

Platform Represents a Scalable Solution for Other Attractive Markets

	Consumer Genomics Providers	Clinical Research Laboratories
Target Customers	• Telemedicine and Walk-In Clinics • Personal Genomics	• Clinical Laboratories developing novel LDTs • Clinical Labs supporting digital health
Key Needs	• Ability to work with low or high sample volumes • Customizable menu • Flexible solutions with high test capacity	• Scalable solutions • Flexible solutions • Integrated workflows

Fluidigm's Solution

Fluidigm's Next-Generation Biomark X and the Sample-to-Answer IFC

- **Highly Scalable Solutions**
- **Flexible Assay Design**
- **Lowest Cost**
- **Works with Low Sample Volumes of Blood, Nasal Swabs and Saliva**

Microfluidics OEM Opportunities

A key exemplar of future partnerships to grow revenue

- Provided development revenue for new instrument (derivative of future next-gen Biomark) to be sold by Olink®
- Major milestone in Q2 2021 when Olink launched the instrument branded as the Signature Q100, a designated benchtop system for protein biomarker analysis
- Signature Q100 will utilize proprietary IFCs from Fluidigm providing attractive recurring revenue stream and supporting margins.
- Partnerships like that with Olink will help us penetrate new markets and advance the field of proteomics and serve as a first-mover exemplar of our OEM strategy to propel Microfluidics growth.

OEM revenue is anticipated to expand rather significantly through 2025 as a result of current and contemplated partnerships with key industry players.

Microfluidics Innovation

Innovative solutions to expand market opportunities

Integrated System

Platform Will Open Up New Markets

- Molecular Diagnostics
- Expand Addressable Market for PCR
- Clinical Labs developing LDTs
- Personal Genomics

Sample-to-Answer IFC and Biomark X

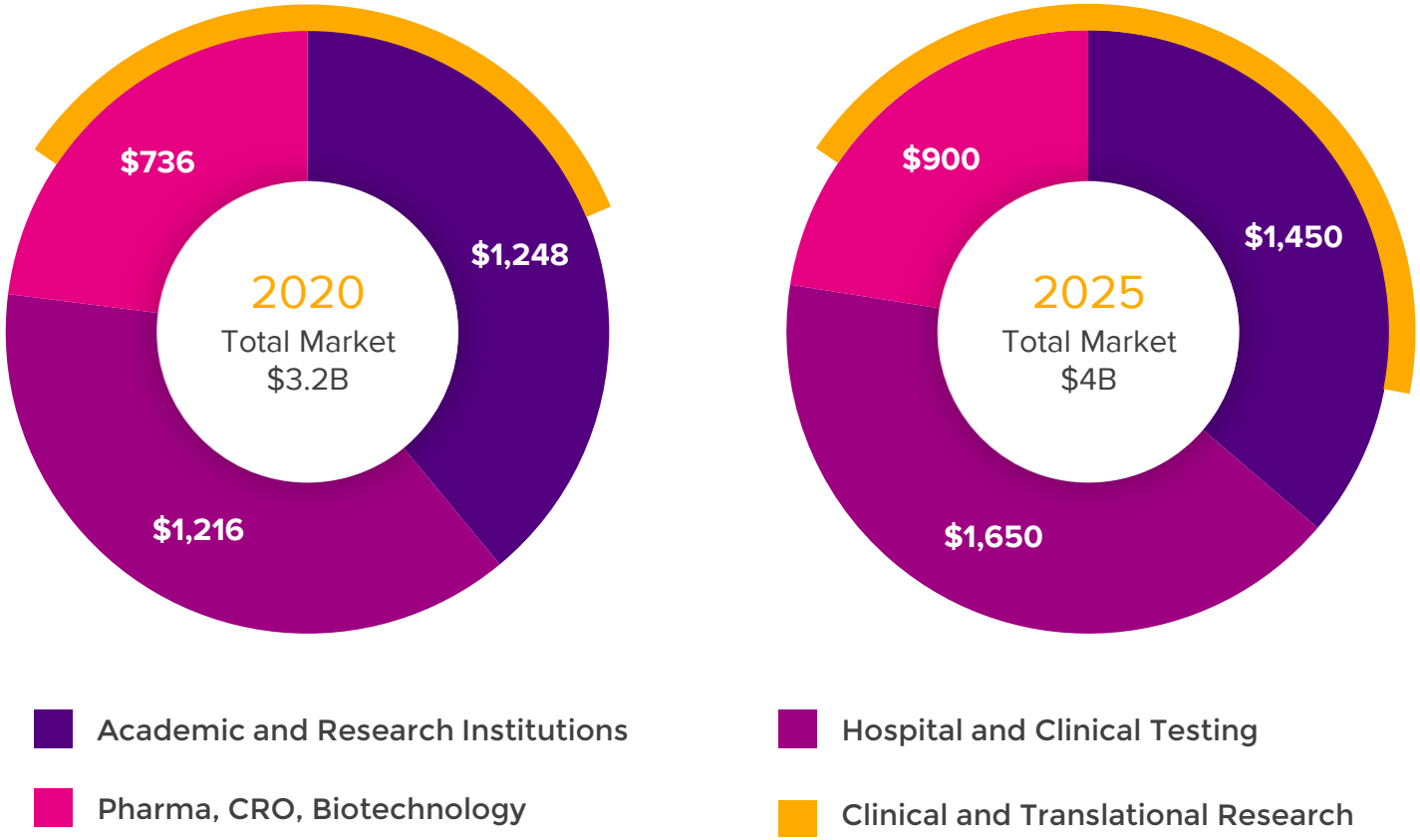
Key Highlights

- Integrated fluidic circuit (IFC) loading and qPCR function (no more Juno™ or Controller)
- 6x less volume (dimension) with same robustness of Biomark HD
- User-installable
- Compatible with new IFC enabling sample-to-answer workflow

Mass Cytometry

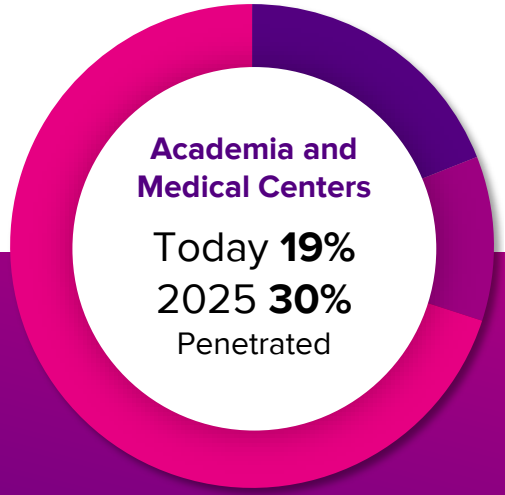
The world’s most advanced single-cell proteomics technology

Focused on Highest-Growth Cytometry Market Segments



- Clinical and Translational Research Market $700M–$1,200M (2020) growing to $1,300M–$2B in 2025
- Clinical and Translational Research Market is growing at 10%-plus

Opportunity to Expand Market Penetration



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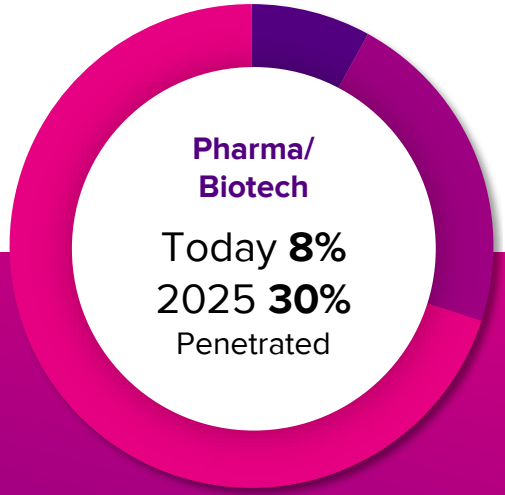

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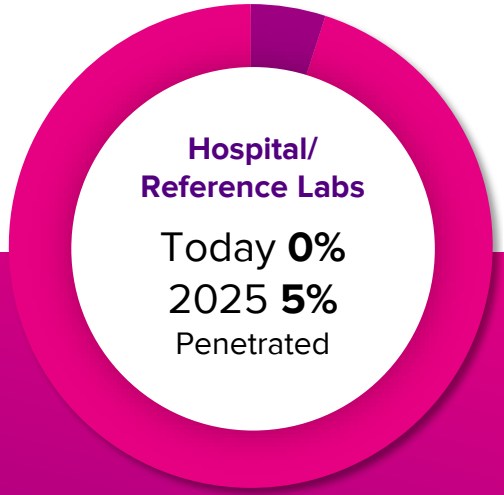

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Introducing CyTOF XT

Mass cytometry product enablement roadmap

CyTOF XT

- Reduced total cost of ownership
- Automated setup and data acquisition
- Extended run times and system monitoring
- Ten systems placed since launch*

Enables

- Site standardization
- Increased productivity
- Studies with larger sample sizes

*Two additional systems are in backlog.

FLUIDIGM

CyTOF XT™: Affordable High-Parameter Cytometry

Anticipated ASP: $365K to $410K USD. Positioned to drive unit placements.
High-margins Service offering in line with market expectations.

Instrument Price

35% Lower

Operational Cost

30% Lower

Operator Time

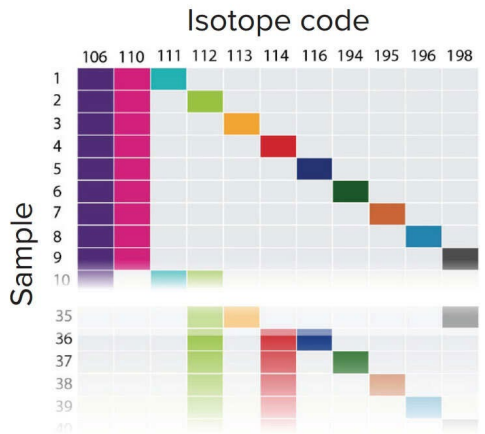
50% Lower

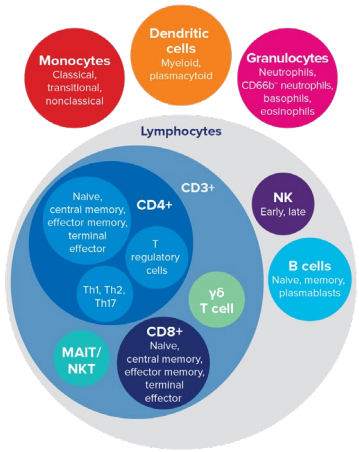
Sample Throughput

2–3x Higher

Consumables

Setting the standard in clinical research





Live-cell barcoding

- Sample multiplexing for increased efficiency
- Enhanced data quality and workflow

Expansion modules for Maxpar® Direct™ Immune Profiling Assay™ (H2 2021)

- Deep profiling of >35 immune cell populations with enhanced phenotyping of activation states, cytokine production

Enables

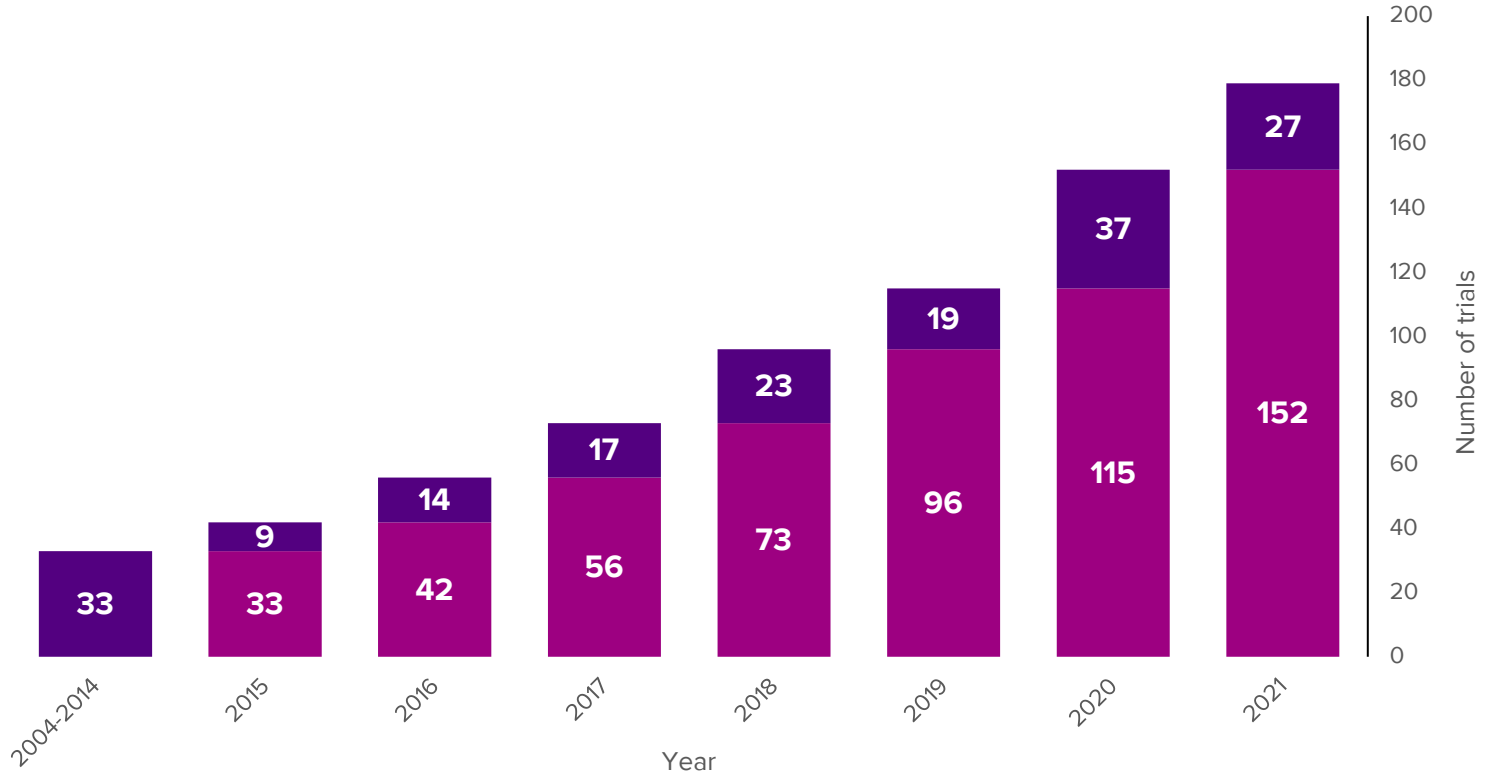
- Larger studies
- Access to more applied markets (infectious disease)
- Standardization across sites

FLUIDIGM®

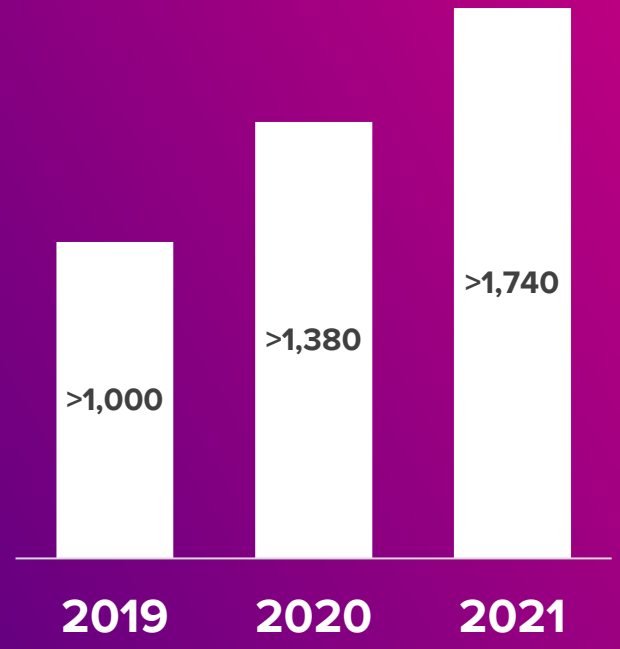
Accelerated Pace of Adoption

National Clinical Trials Citing CyTOF Technology*

By Study Start Date



Cumulative Publications*



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*Clinical trials and publication numbers are YTD 2021.
Source: clinicaltrials.gov September 2021

Innovation Accelerates Segment Growth

Higher-Throughput Platforms

H2 2021
- CyTOF XT

2022
- Clinical cytometry entry in China via PLT partnership

2023–2025
- Planned platform upgrades

Fixed and Flexible Assays

H1 2021
- 687 conjugates
- 28 panels
- 53 parameters

H2 2021
- ~750 conjugates
- 31 panels
- 57 parameters

2022
- 1,000–1,400 conjugates
- >35 panels
- 60-plus parameters

2023–2025
- >2,000 conjugates
- >50 panels
- 70-plus parameters

Automated Analysis

H2 2021
- Instrument remote monitoring
- Maxpar Pathsetter™ customization (automated analysis for immune monitoring)

2022
- CyTOF XT user interface upgrade

2023–2025
- Disease research-specific modules
- Blood cancer diagnostic and immunotherapy guidance (PLT)
- Cloud analysis

Tissue Imaging

The most proven approach to high-multiplex imaging and single-cell protein analysis

Meeting the Needs of Target Markets

Translational and Clinical Research

Translational

- ***Segment/Customer Need:*** High-multiplexing, working with limited blood/tissue samples and inclusion of spatial information
- ***Fluidigm Solution:*** Mass cytometry combined with tissue imaging has shown it provides Fluidigm customers with the highest plexity for protein targets and is identifying new biomarkers associated with alternate disease prognoses and therapy guidance.

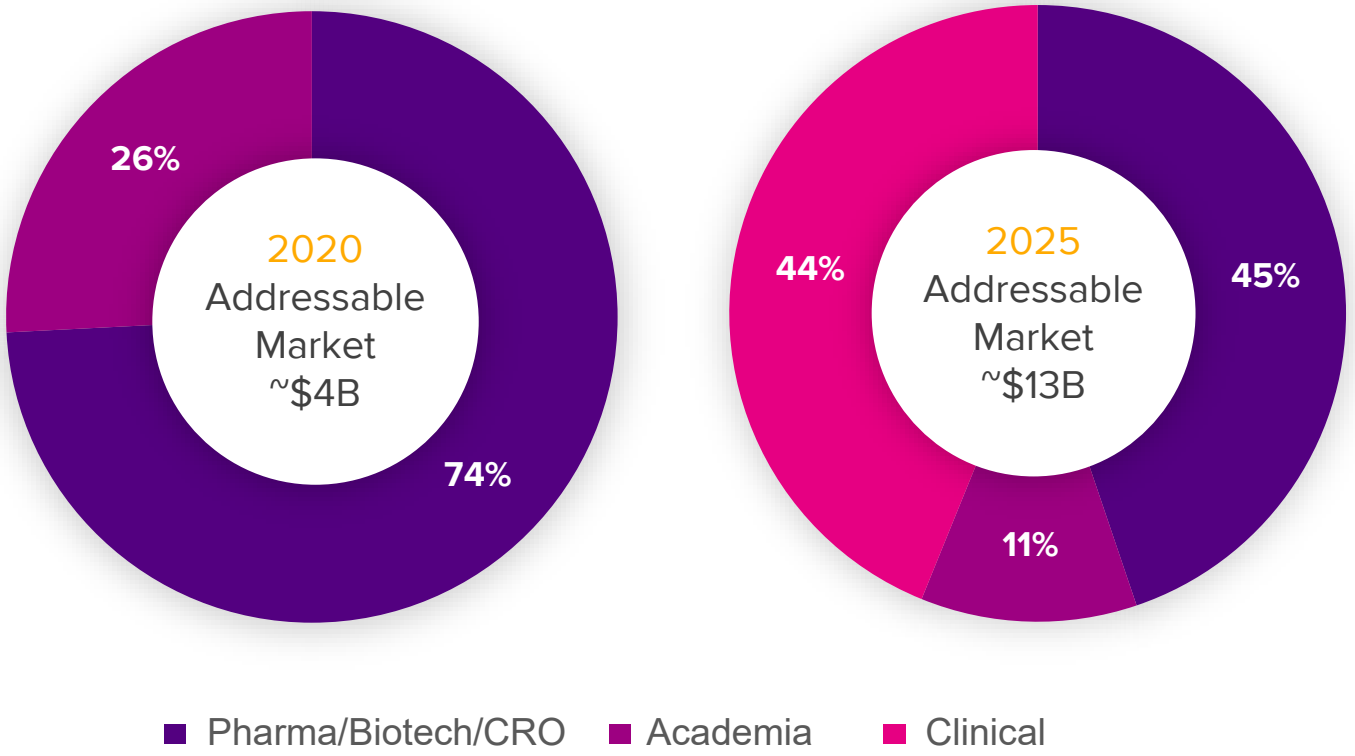
Clinical

- ***Segment/Customer Need:*** Automation, consistency and standardization, fixed and validated panels, unbiased analysis
- ***Fluidigm Solution:*** Foundational technology provides consistent and stable measurement/readout. Mass cytometry has shown it provides Fluidigm customers with an ability to test new biomarkers associated with disease prognoses and therapy guidance.

Research Genre Description	Discovery Research	Translational Research	Clinical Research
	Systematic study directed toward greater understanding of fundamental mechanisms that drive disease	Transfers new understandings into the development of new methods for diagnosis, therapy and prevention in humans	The study of human subjects and samples, testing new methods of diagnosis, prevention and treatment

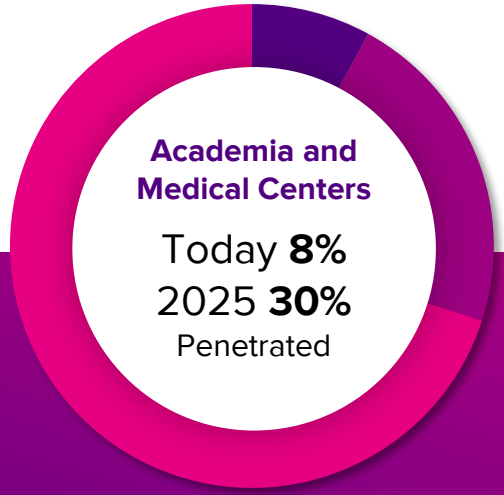
Fluidigm Strength in Translational Markets

Spatial proteomics is largely translational today, but the potential for spatial in the clinical setting is growing rapidly.



- Total Tissue Imaging market is growing at ~12% CAGR.
- Translational segment is driving demand for high-plex platforms.
- Increased future addressable market:
  - Improved workflow by aggregating current immunohistochemistry biomarkers into one test
  - Improved predictive value compared to existing prognostic therapy guidance test with potential novel content unique to spatial

Opportunity to Expand Market Penetration



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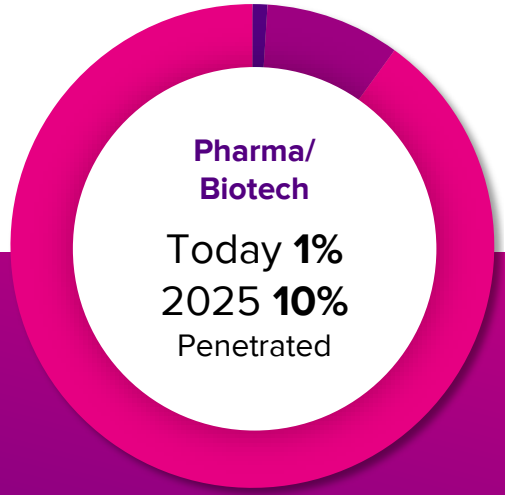

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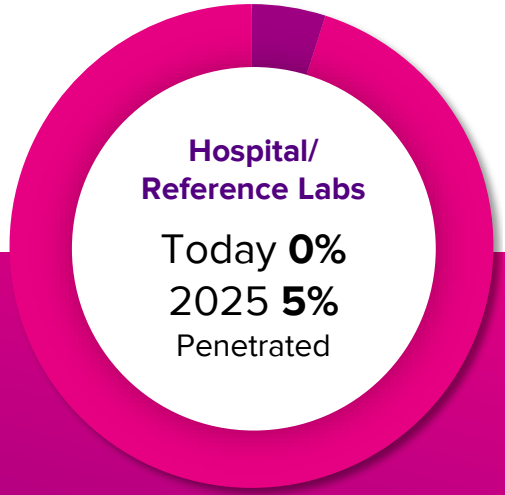

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Fluidigm Offers the Most Complete Solution

Translational and Clinical Research

	Marker Type	Multiplexity	Resolution	Cost per Sample	Sensitivity	Verified Reagents
Spatial Proteomics (Fluidigm)	✓	✓	✓	✓	✓	✓
Cyclic Immunofluorescence	✓	✗	✓	✓	✗	✗
Spatial Transcriptomics	✗	✓	✗	✗	✗	✗

Highlights

Fluidigm continues to be at the cutting edge of innovation.

Vision 2025: Innovation

To penetrate future clinical settings

Platforms

Q4 2021
- New Tissue Imager early access

H1 2022
- Commercial release of new Tissue Imager

2022–2025
Future platform development focused on:
- Increased speed, sensitivity, throughput and robustness
- Simplified user experience
- Automation

Fixed and Flexible Assays

H2 2021
- 150–200 conjugates
- 6 panels
- 39 channels

2022
- 400–600 conjugates
- 10-plus panels
- 40 channels

2022–2025
- >1,000 conjugates
- >20 panels
- 50-plus channels

Automated Analysis

H2 2021
- Semi-automated analysis

2022
- Application-specific output
- AI cell segmentation

2023–2025
- Disease-specific modules
- Cloud-based personalized applications

Bringing New Insights to Life™

FLUIDIGM®