2019 Cowen Healthcare Conference

March 12, 2019

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Forward-looking Statements

- This presentation and the accompanying oral commentary contain forward-looking statements that involve risks, uncertainties and assumptions. If the risks or uncertainties ever materialize or the assumptions prove incorrect, our results may differ materially from those expressed or implied by such forward-looking statements. All statements other than statements of historical fact could be deemed forward-looking, including, but not limited to, any projections of financial information; any statements about historical results that may suggest trends for our business; any statements of the plans, strategies, and objectives of management for future operations; any statements of expectation or belief regarding future events, future regulatory clearances or approvals, potential markets or market size, technology developments, or enforceability of our intellectual property rights; any statements regarding our ability to successfully launch and commercialize our GeoMx Digital Spatial Profiling and Hyb & Seq platforms and the timing thereof; and any statements of assumptions underlying any of the items mentioned.
- These statements are based on estimates and information available to us at the time of this presentation and are not guarantees of future performance. Actual results could differ materially from our current expectations as a result of many factors, including but not limited to: quarterly fluctuations in our business; market acceptance of our products; the effects of competition and technological advances on our ability to successfully commercialize our products; delays or denials of reimbursement for diagnostic products; the regulatory regime for our products; and any adverse changes in our strategic relationships, including with licensors of our technologies and manufacturers and distributors of our products. These and other risks and uncertainties associated with our business are described in our filings with the U.S. Securities and Exchange Commission. Except as required by law, we assume no obligation and do not intend to update these forward-looking statements or to conform these statements to actual results or to changes in our expectations.

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Overview

Addressing the Biomarker Challenges of Precision Medicine

Core Business

nCounter® Analysis System

- Gene expression profiling
- ~730 system base in academic, biopharma, & clinical labs
- $75-80K+ annualized consumables per system

Growth Catalyst

GeoMx™ Digital Spatial Profiler

- Ultra high-plex spatial profiling of protein and RNA
- Commercial launch in 1H'19
- Pre-orders for 30+ instruments

Pipeline

Hyb & Seq™ Clinical Sequencer

- DNA & RNA sequencing
- Simple clinical workflow
- Decentralized cancer and infectious disease testing

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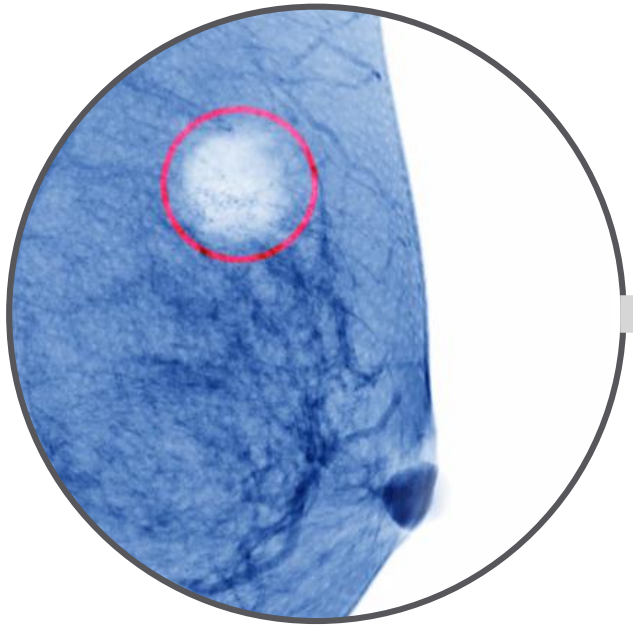
Overview

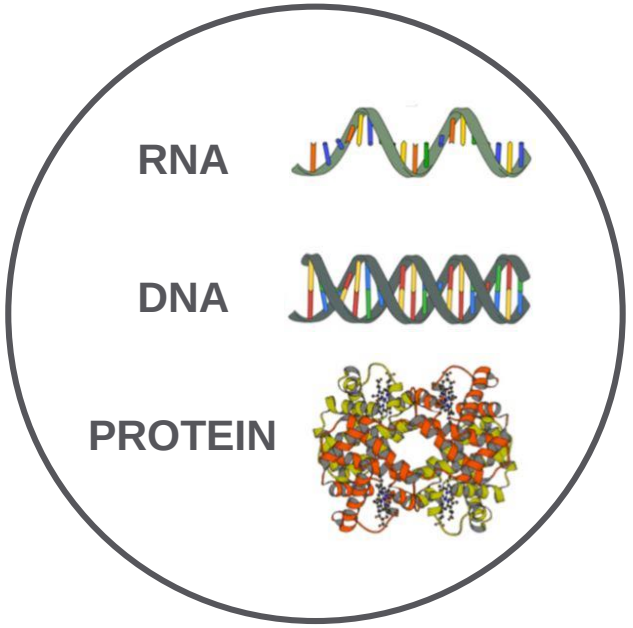
Extracting More Information From Less Tissue



Powerful Chemistry, Simple Workflow

Digitally Counts Single Molecules of Up to 800 Unique Targets

Rapid Downstream Validation of NGS-Generated Data



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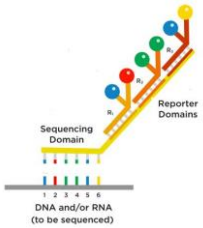
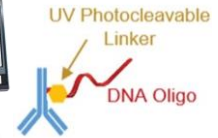
Overview

Universal Barcoding Chemistry Enables Multiple Platforms*

Hyb & Seq Sequencer



GeoMx Digital Spatial Profiler



nCounter Analysis System

2019 2020 2021

*-Expected timeline

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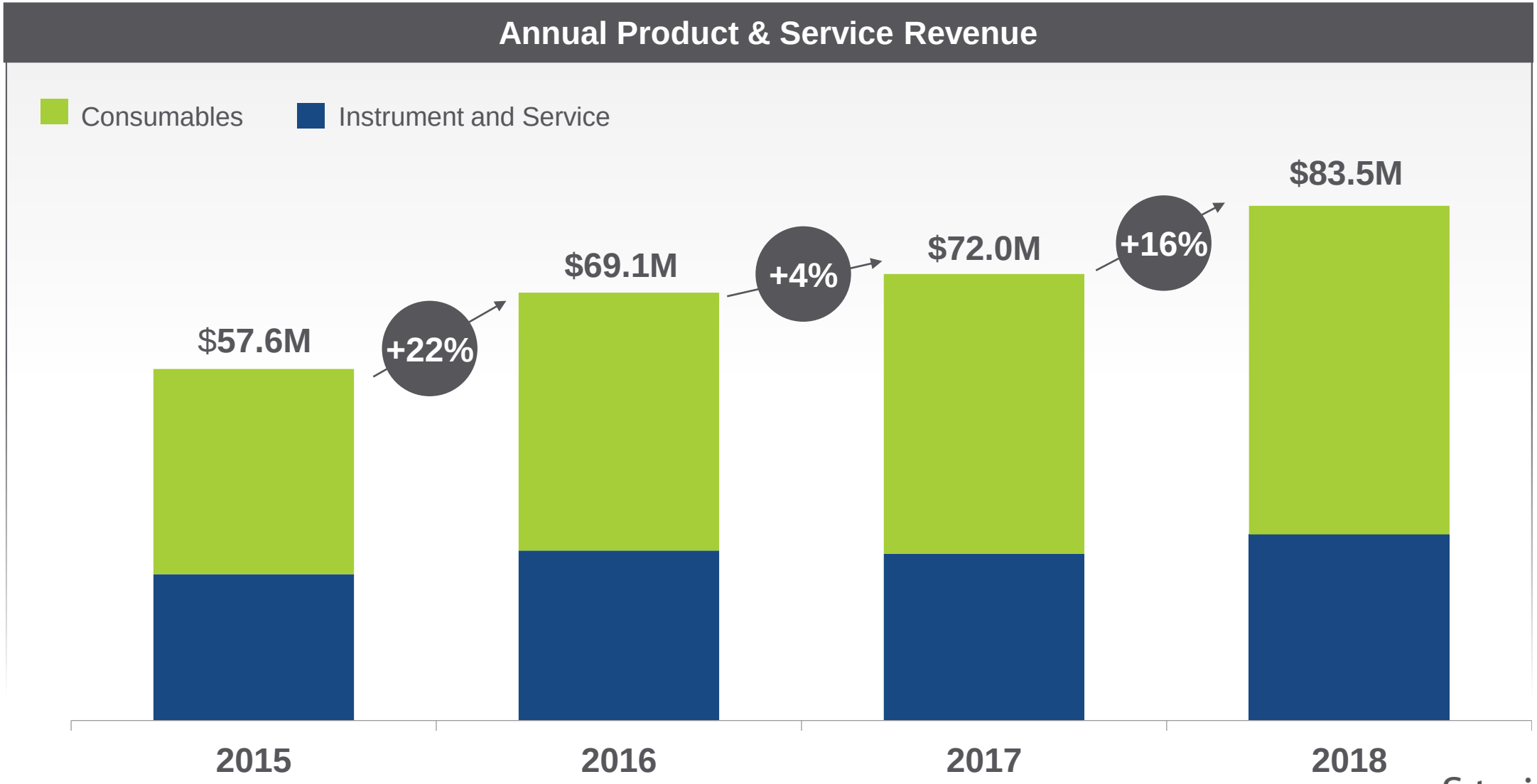
Achieved 2018 Strategic Objectives

- Extended Leadership in Oncology Research & Diagnostics
- Drove nCounter into New Therapeutic Areas & Applications
- Shipped First Digital Spatial Profiling Instruments
- Advanced Hyb & Seq Toward Commercial Launch

Overview

Core nCounter Business Drove Product and Service Revenue +16% in 2018



2019 Outlook and Priorities

Product & Service Revenue of $98M – 103M (17 – 23% growth)

- **Sustain Double-Digit Growth of Core Business**
  - Revenue of $92M – 95M
  - Instrument revenue in-line with 2018
  - Annualized consumable pull-through of $75K – 80K per nCounter system

- **Launch GeoMx DSP on Trajectory for Long-Term Success**
  - Revenue of $6M – 8M
  - Rate of instrument installations throttled to maximum quality of customer experience

- **Advance Our Hyb & Seq Platform**
  - Reduce the sample input, increase targets profiled, and optimize gene expression profiling
  - Expect 2021 Commercial Launch

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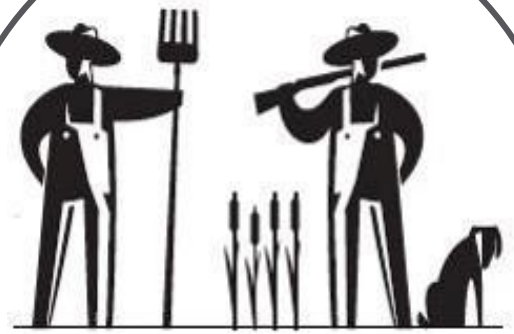
Crisp Execution and Improved Visibility

Strategic Content & Focus

- Oncology
- Immunology
- Neurology



Bifurcated Salesforce

- Consumable specialists
- Increased productivity
- Increased accountability

Commercial Excellence

- Seasoned leadership
- Forecast accuracy
- Disciplined execution

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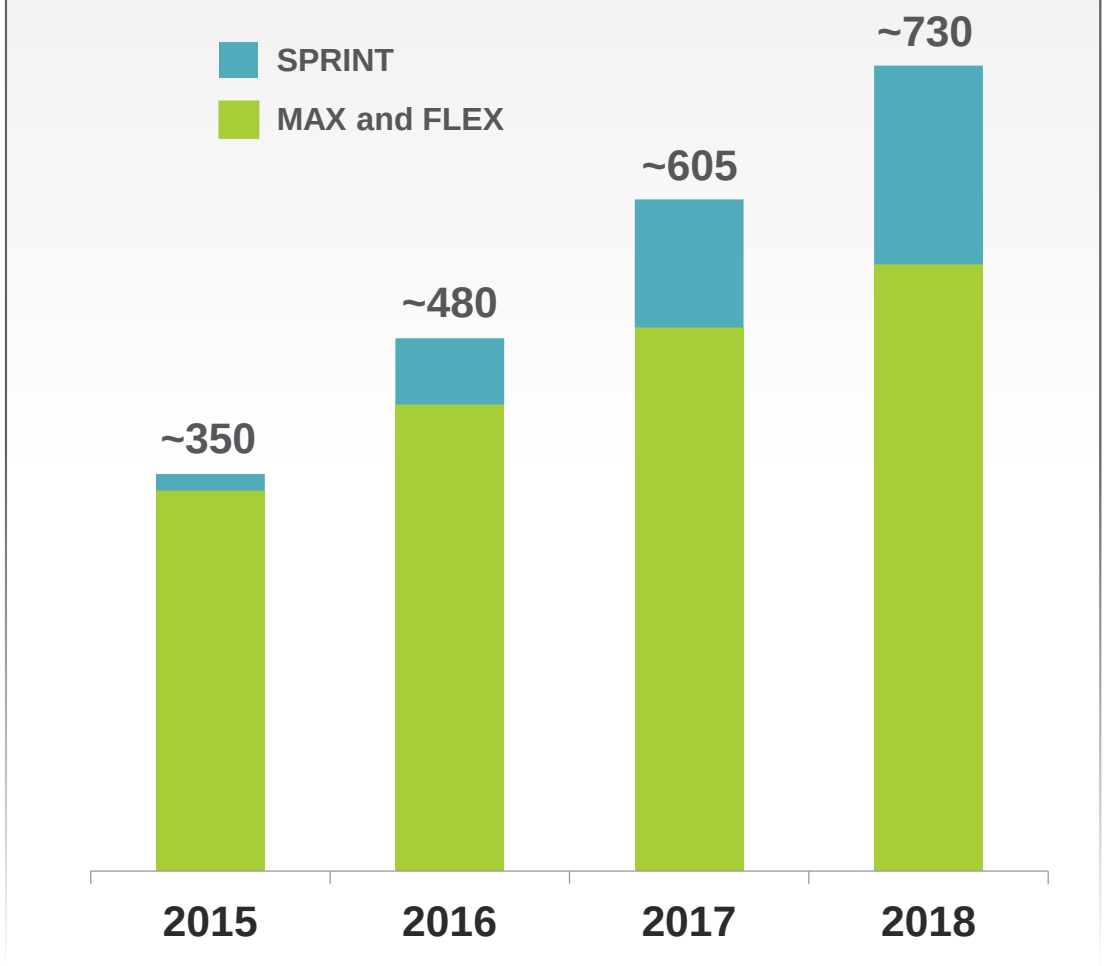
Steadily Growing Installed Base of nCounter Systems

nCounter Installed Base



2018 System Trends

- Continued linear growth of installed base, with approximately 135 new instruments sold
- Total installed base increased by >20% driving double-digit growth in consumable revenue
- SPRINT accounted for ~50% of units sold
- Non-oncology applications increased to ~40% of new system sales

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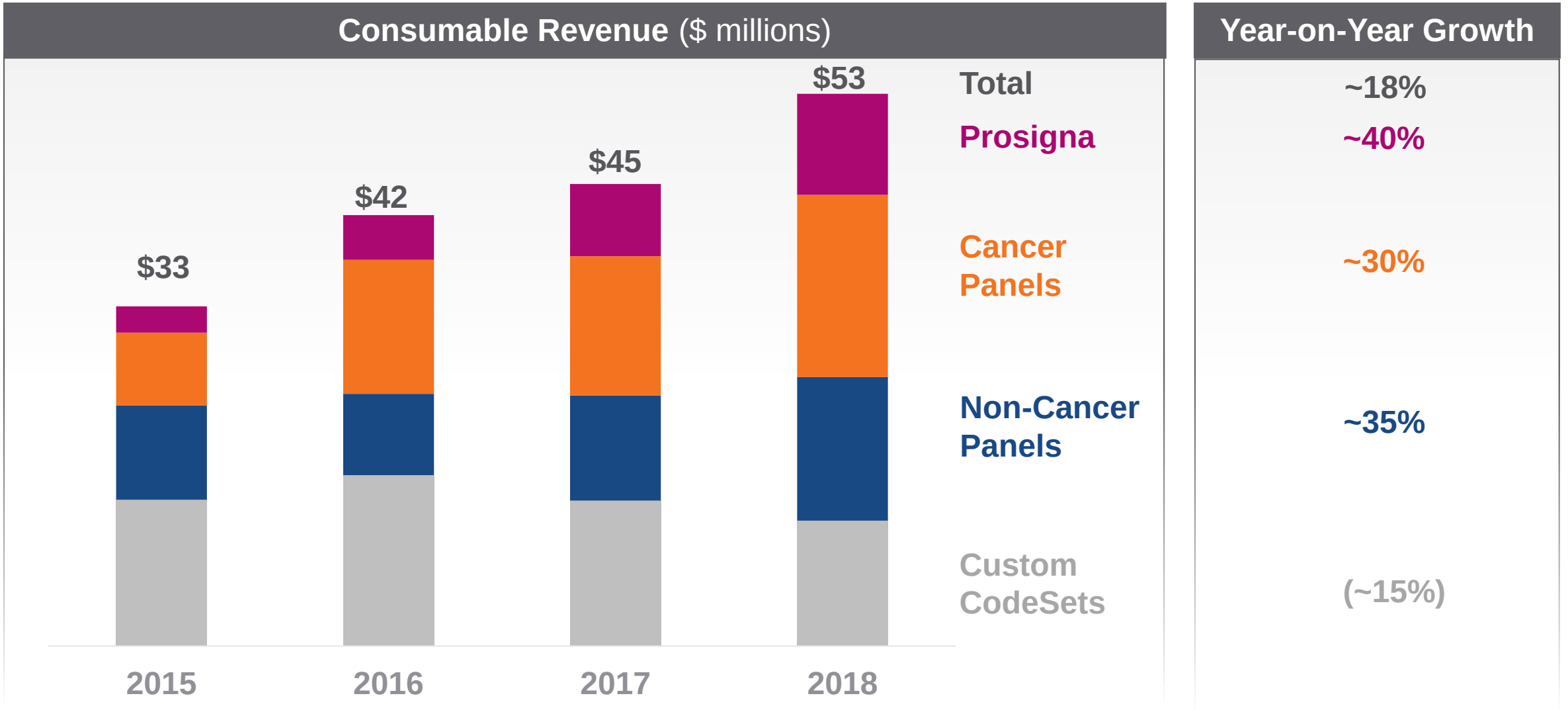
Total Consumable Revenue Grew by ~18% in 2018



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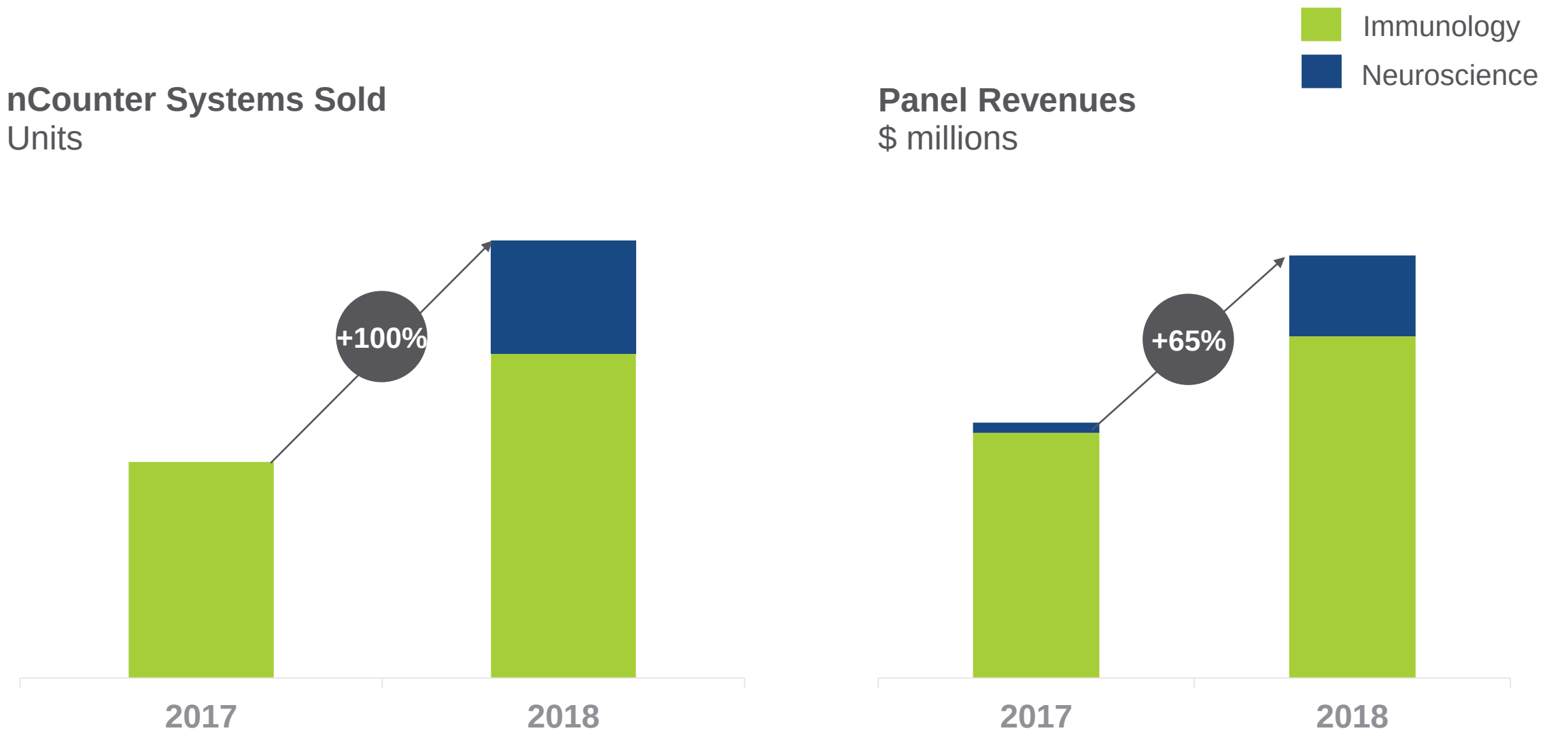
Expanding Beyond Oncology to Diversify the Business

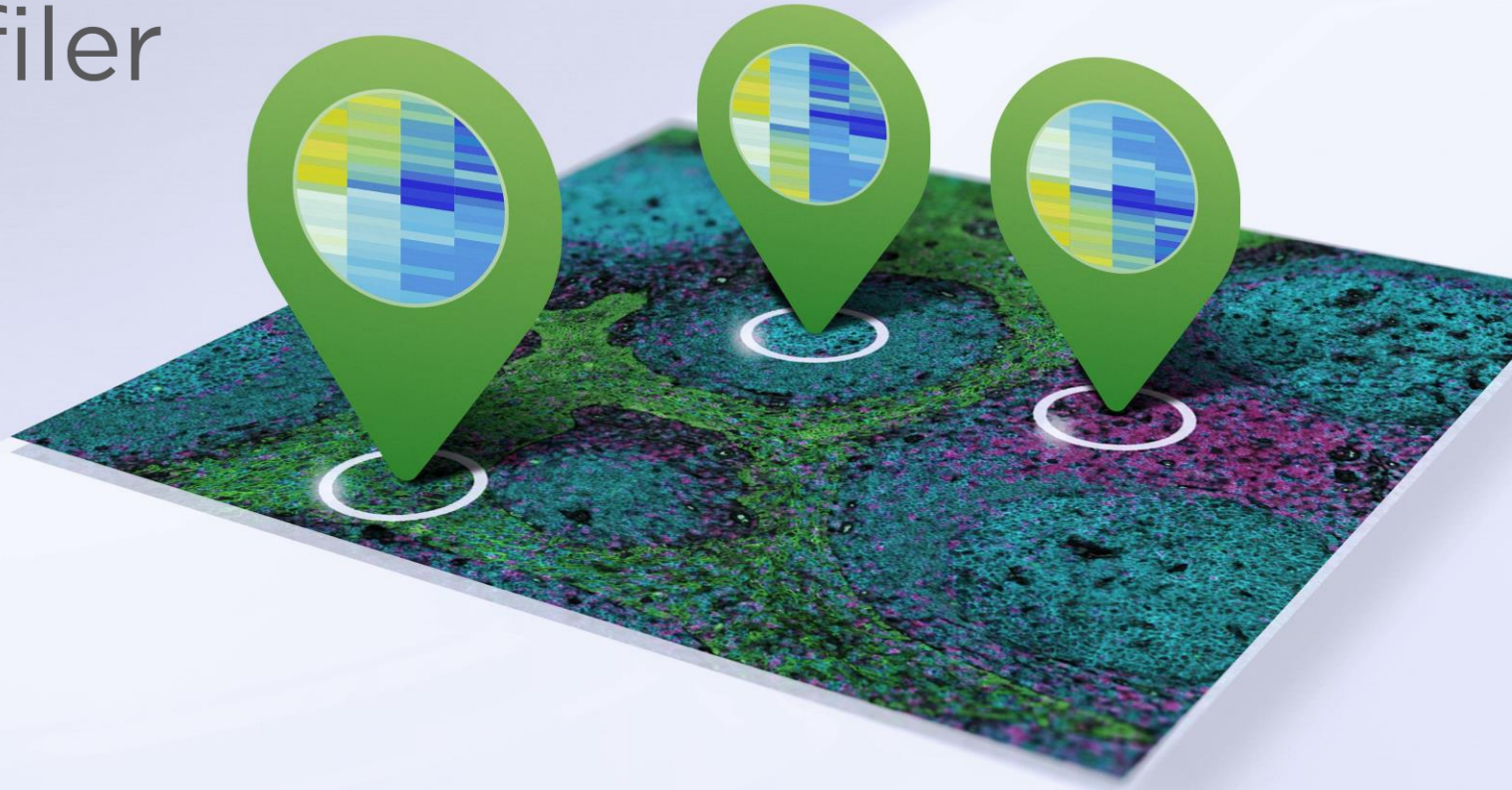


Introducing the GeoMx DSP Platform

GeoMx™

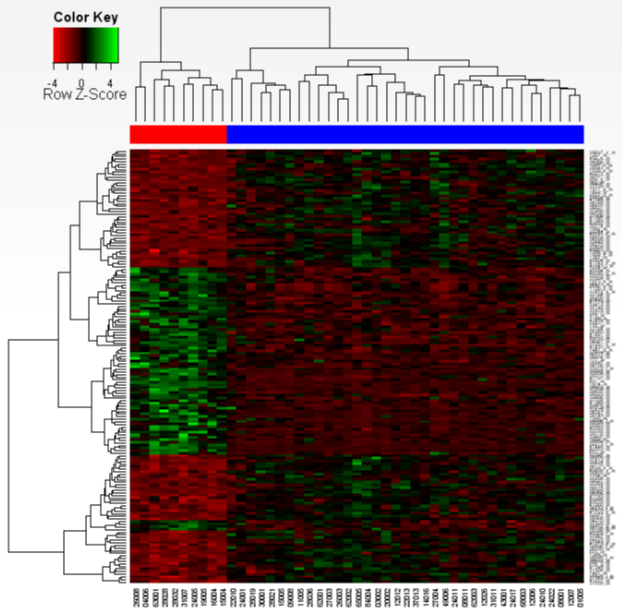
Digital Spatial Profiler

Your GPS for Biology

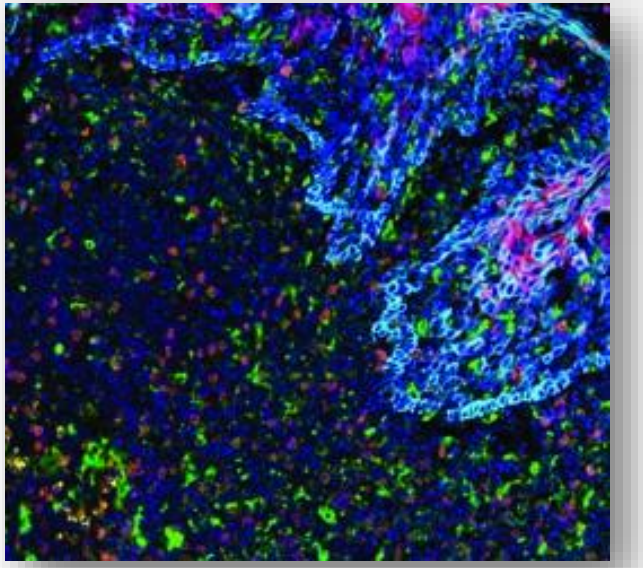


Tradition Paradigm Forces Trade Off: Spatial vs Plex

High-Plex Expression Profiling OR **Low-Plex Imaging**



+	PLEX	−
−	SPATIAL	+
+	QUANTITATION	−
+	PRECISION	−



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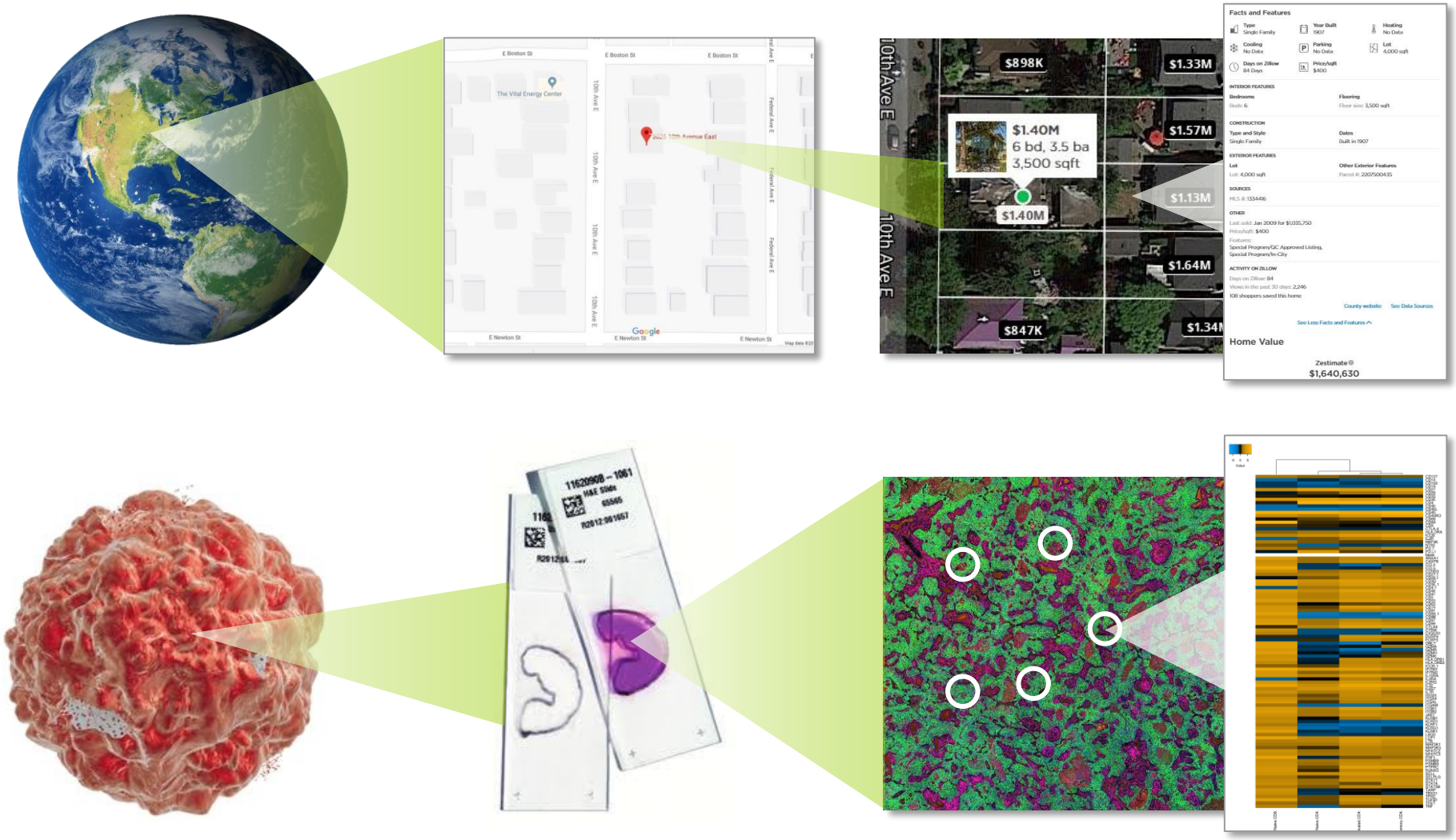
GeoMx DSP Provides Deep Spatial Profiling of Protein & RNA



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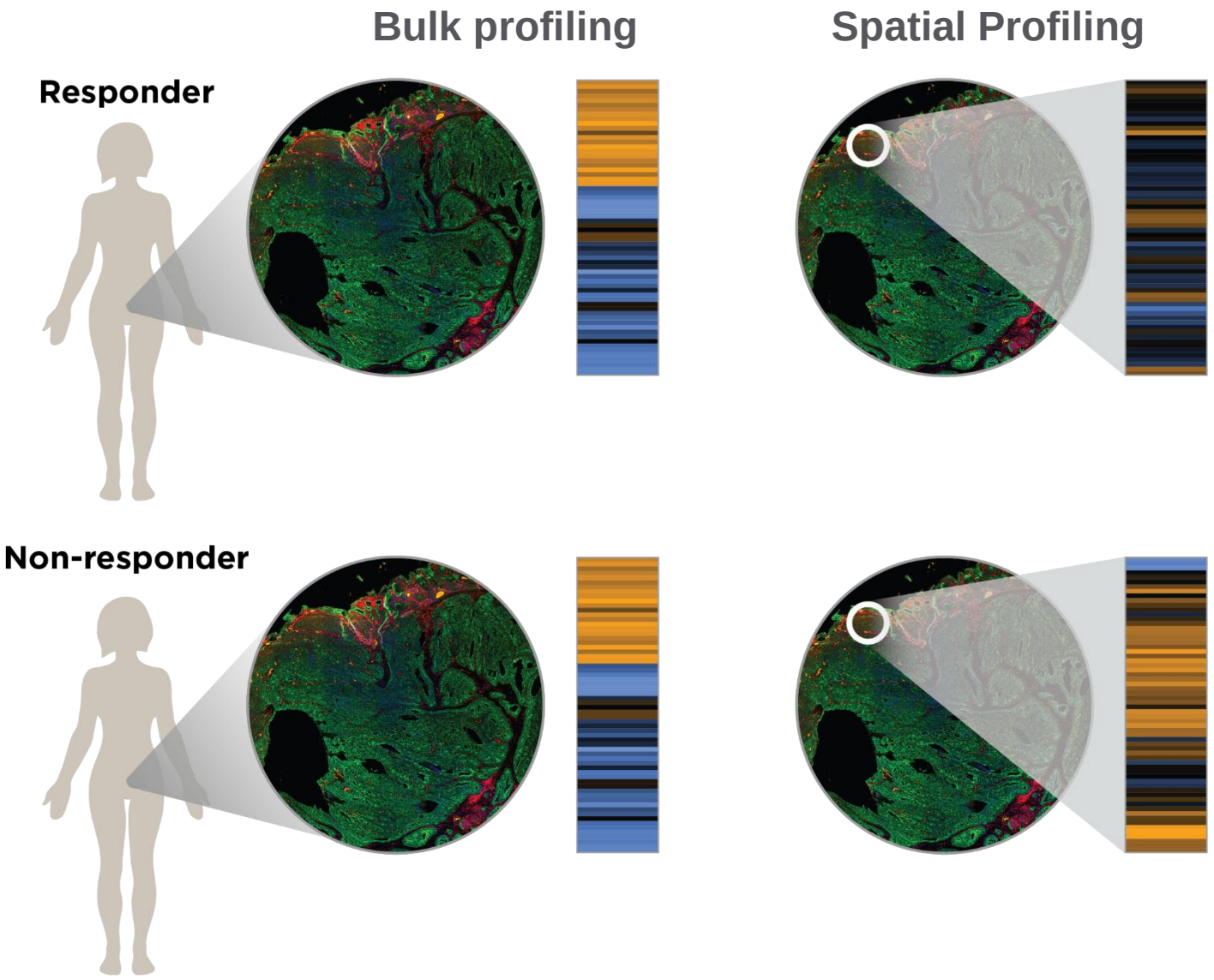
Discover Hidden Spatial Biomarkers



Spatial profiling will reveal expression differences NOT discernable by standard profiling or immuno-histochemistry (IHC)

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GeoMx Digital Spatial Profiler

Readout on nCounter or NGS Expands Market and Customer Access

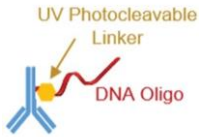
Slide Processing

Instrument

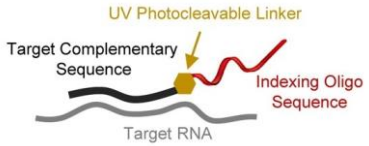
GeoMx DSP

Reagents

Protein



RNA



Molecular Barcode Analysis

nCounter

OR

Next Generation Sequencer

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GeoMx Digital Spatial Profiler

Advancing Toward Commercial Launch in April ‘19

Qualify Technology
Early exposure to DSP as a service

70+
projects completed

Oversubscribed

Scientific Excellence
Top tier sites pioneer GeoMx applications

3
centers announced

Product Quality
GeoMx instrument feedback from key customer segments

5
labs selected

Oversubscribed

Early Adoption
Convert early interest into GeoMx orders

30+
orders received

Oversubscribed

Global Access
Satisfy global demand for GeoMx

AACR

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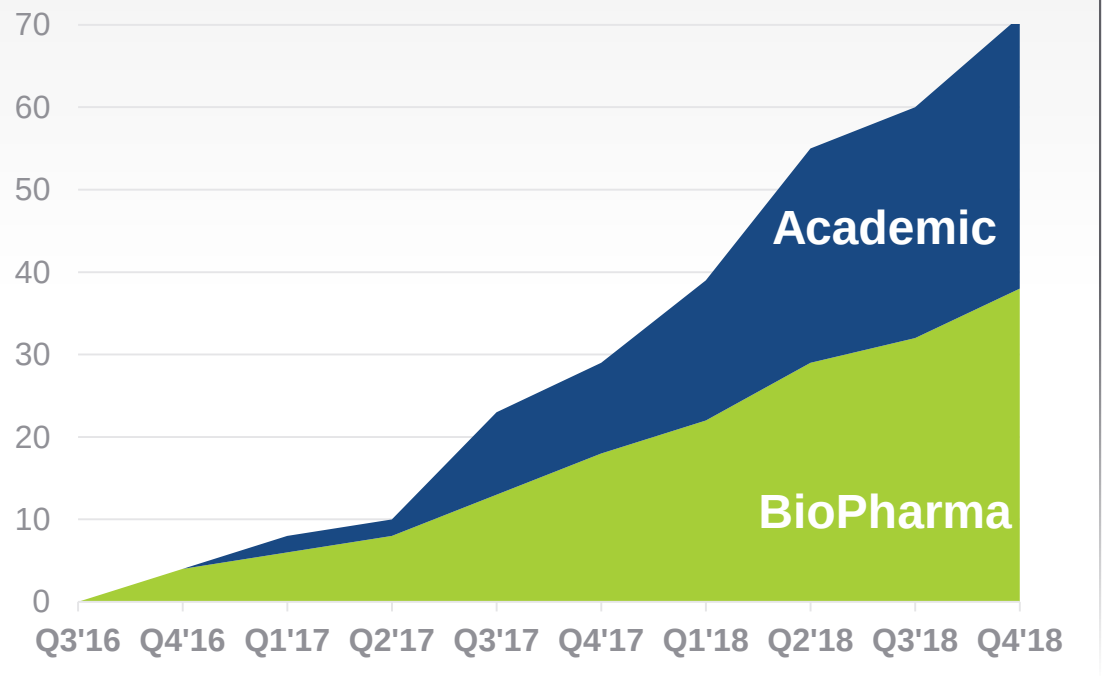
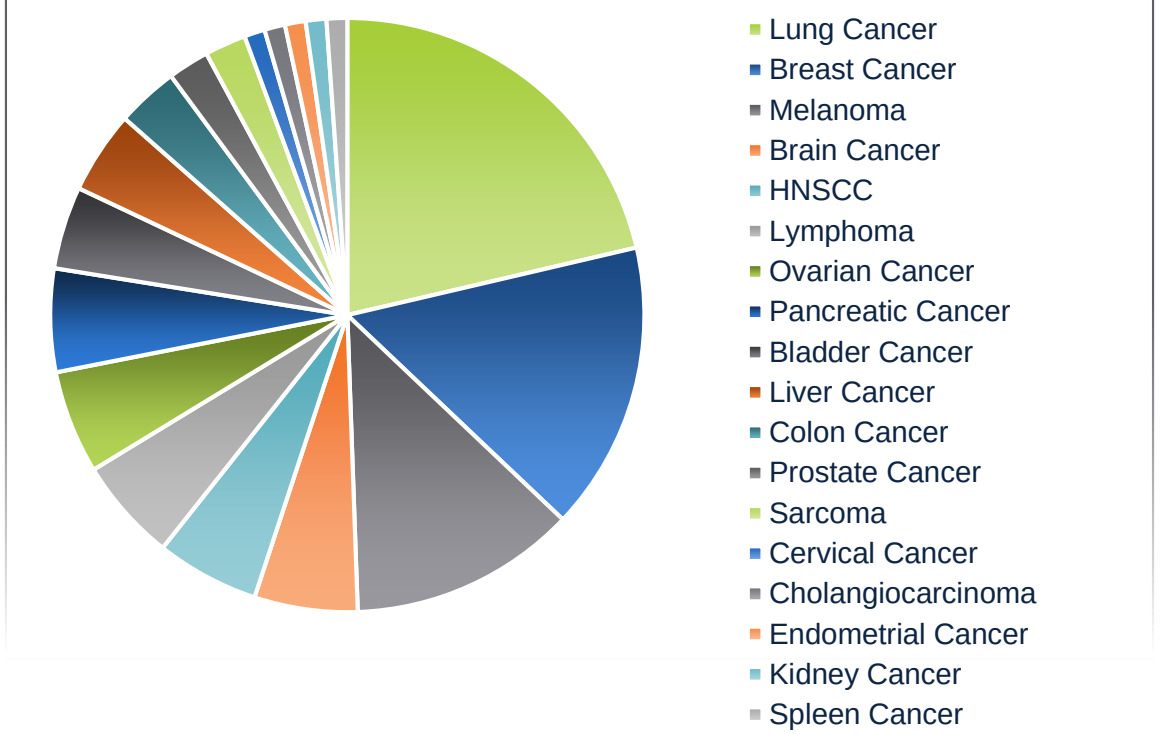
GeoMx Digital Spatial Profiler

Translational Oncology has Fueled Technology Access Program (TAP)

70+ TAP Projects Completed



25+ Cancer Types Studied



1,000+ DSP TAP samples run to-date

50+ customers served

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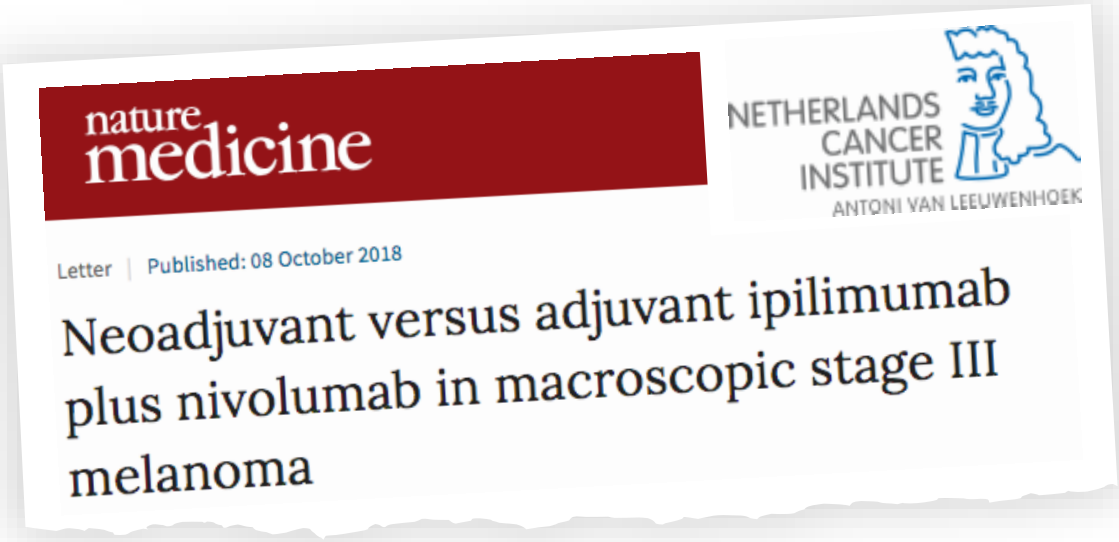
2019 Launch Will Focus on Translational Oncology with nCounter Read-Out



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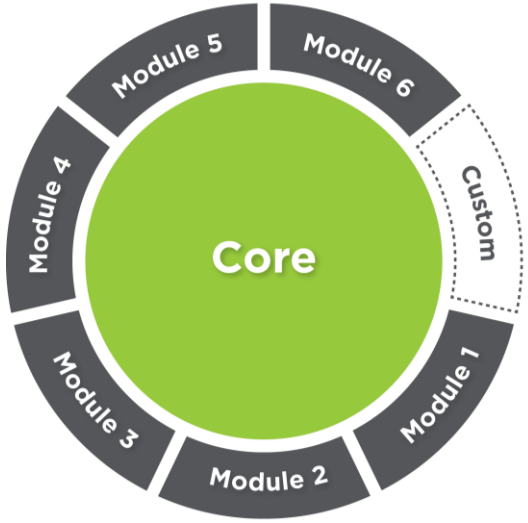
GeoMx Digital Spatial Profiler

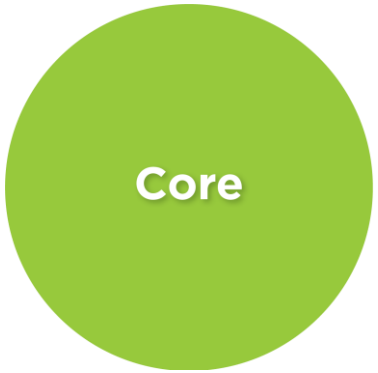
Immuno-Oncology and Neuroscience Content Target Translational Research

GeoMx Protein Assays for nCounter



- ✓ ~90 modular targets for immuno-oncology
- ✓ ~40 modular targets for neuroscience
- ✓ Customizable
- ✓ Protein sample prep and morphology reagents
- ✓ nCounter readout reagents

GeoMx RNA Assays for nCounter



- ✓ 84 RNA targets for immuno-oncology
- ✓ Customizable
- ✓ RNA sample prep and morphology reagents
- ✓ nCounter readout reagents

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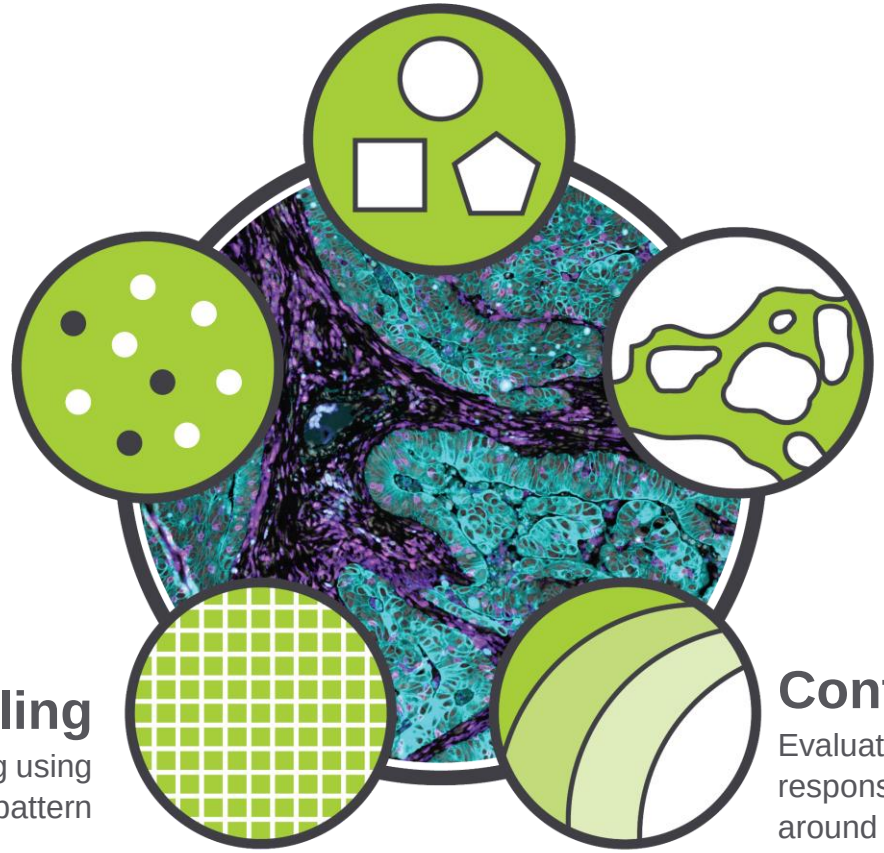
GeoMx Digital Spatial Profiler

Flexible Region Selection Supports Numerous Applications

Geometric Profiling

Assess tissue heterogeneity profiling standardized geometric shapes across distinct tissue regions



Rare Cell Profiling

Reveal the function of distinct cell populations with cell type specific morphology markers guiding ROI selection

Segment Profiling

Maximize cellularity using morphology markers to identify and profile distinct biological compartments within a ROI

Gridded Profiling

Perform deep spatial mapping using a tunable gridding pattern

Contour Profiling

Evaluate the how proximity affects biological response and the local microenvironment around a central structure using radiating ROIs

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Two Unique Customer Segments Addressed by GeoMx System

Translational Research

Christian Blank PhD
Netherlands Cancer Institute

Performing multiplexed IHC and targeted RNAseq.
Pathology informed.

User need: Ability to perform targeted multiplexed spatial profiling of FFPE samples at high throughput

Basic Discovery Research

Sarah Teichmann PhD
Wellcome Trust Sanger Institute

Performing biomarker discovery using RNAseq.
Pathology naïve.

User need: Ability to perform unbiased, quantitative spatial profiling at maximum plex

Protein	**Analyte**	RNA
<96	**Plex**	~1000
12-24	**Regions of interest**	96
10-20	**Throughput (sections/day)**	<5

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GeoMx Digital Spatial Profiler

GeoMx DSP Has Multiple Distinctive Features

Spatial Genomics Platforms				
	GeoMx DSP	Spatial Transcriptomics	FISSEQ	MERFISH
Readout	NGS (spatial profiling)	NGS (spatial profiling)	Imaging (spatial imaging)	Imaging (spatial imaging)
Analyte	RNA & Protein	RNA	RNA	RNA
Throughput (slides per day)	10-20 Slides	1-2 slides	1-2 slides	1-2 slides
Sample type	FFPE/Fresh Frozen	Fresh Frozen	Fresh Frozen	Fresh Frozen
Sample coverage	6mm^2	8mm^2	1mm^2	1mm^2
Resolution	10-100's cells	100um geometric circles	Sub-cellular	Sub-cellular

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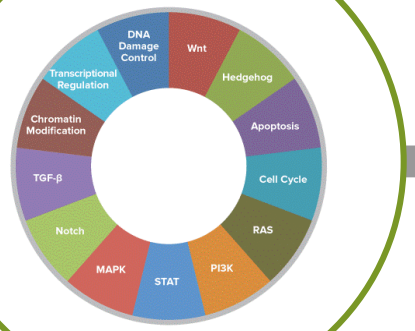
NGS Read-Out Enables Ultra-High-Plex RNA Analysis on GeoMx DSP

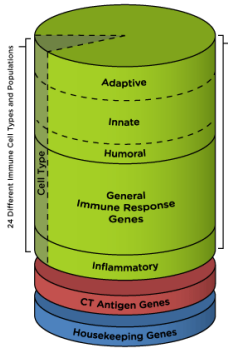
Every transcript uniquely indexed to support multiplexing of panels

PanCancer Pathways



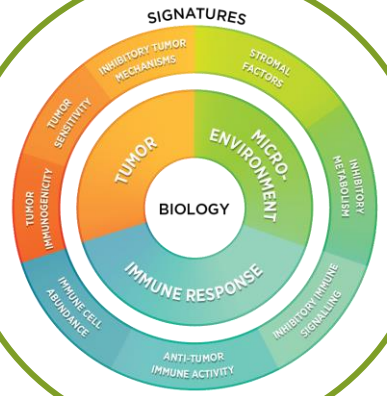
500+ targets

PanCancer Immune Profiling



500+ targets

PanCancer IO 360



500+ targets

New targets...

Transcriptome …

- ✓ **Plex-able Modules**
- ✓ **Customization**
- ✓ **Library Prep Reagents**

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GeoMx Digital Spatial Profiler

AGBT 2019 Highlighted Spatial Genomics and GeoMx DSP

NanoString events

- NanoString hosted an Inaugural Spatial Genomic Summit that drew 150+ attendees
- NanoString workshop on Biomarker discovery and sub-classifying cancer drew ~ 300 attendees
- Generated hundreds of GeoMx DSP leads

AGBT

Scientific Abstracts and Presentations

- 3 oral presentations
- 9 posters

DeciBio Annual Most Memorable of AGBT Survey

- 1st Place: Spatial Profiling
- 2/3 of surveyed attendees said that NanoString was “Top of Mind” coming out of AGBT

DECIBIO
DECISIVE BIO-INSIGHTS

GeoMx Digital Spatial Profiler

Multiple Presentations Highlight Discovery Applications of Spatial Genomics

Cell Atlases as road maps to human disease

- **Aviv Regev, The Broad Institute**
- Plenary Session Oral Presentation

Mapping the microenvironment composition in metastatic prostate cancer by multi-analyte profiling using GeoMx Digital Spatial Profiler

- **Peter Nelson, Fred Hutch Cancer Research Center**

Spatial and temporal profiling of protein and RNA in the tumor-immune microenvironment during short-term targeted therapy in HER2-positive breast cancer using GeoMx Digital Spatial Profiler

- **Katherine McNamara, Stanford University**

Spatially resolving RNA biomarkers using GeoMx Digital Spatial Profiler for early diagnosis and prognosis of melanoma

- **John D. McPherson, University of California, Davis**

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GeoMx Digital Spatial Profiler

Product Launch Cadence

GeoMx Instrument, Software and Reagent Release

Translational Research Product Release at AACR

Shipping and Installation

Basic Discovery Product Release

Q2

Q3

Q4

~90 validated **antibodies** and **84 RNA** panel for applications in Immuno-oncology

40 validated **antibodies** for applications in neuroscience

nCounter Readout Kit

~1000 plex RNA in **early access** for applications in oncology

~70 additional validated **antibodies** in IO and neuroscience

NGS Protein Readout Release

NGS library prep kit

NGS data analysis solution

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Hyb & Seq: Developing Potentially Transformative Sequencing Technology

- Simple and fast sequencing method
- No library prep, enzymes, or amplification
- Start sequencing from FFPE tumor biopsy in <60 minutes
- High consensus accuracy at low coverage
- Simultaneous capture and sequencing of DNA and RNA
- Long reads – No theoretical upper limit

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Major Advances in Hyb & Seq Over Past Year

Sequencing Chemistry

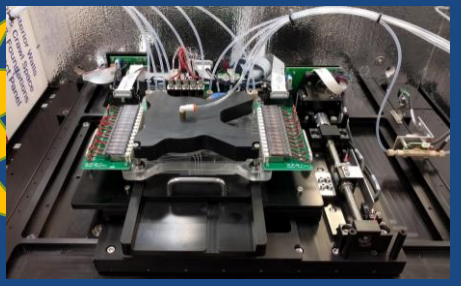
25X

1 target
160 barcodes

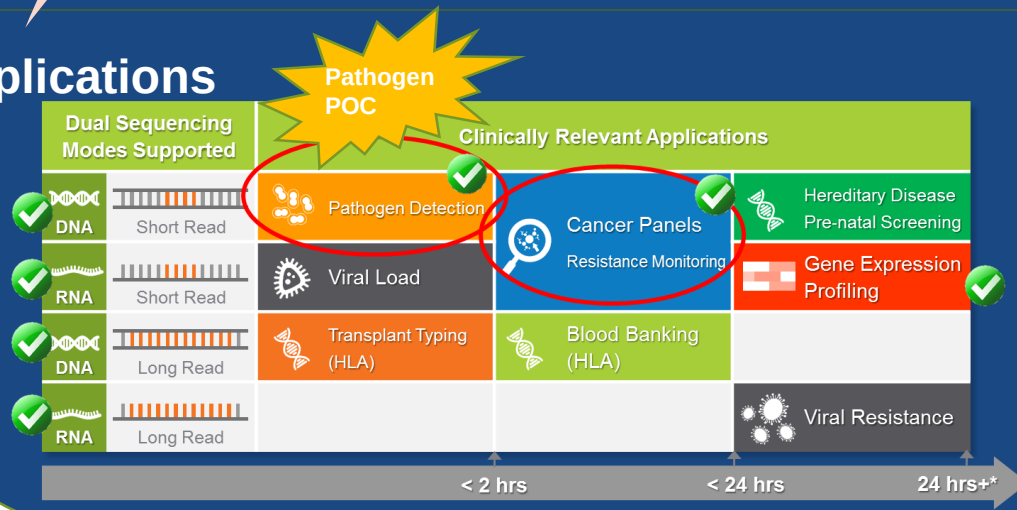
75 targets
4096 barcodes

New Instruments and Flow Cell

>100X more data



Applications



Commercial

New Market: *NGS Infectious Disease*

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Hyb & Seq

Instrument Prototype Designed & Tracking to 2021 Commercial Launch

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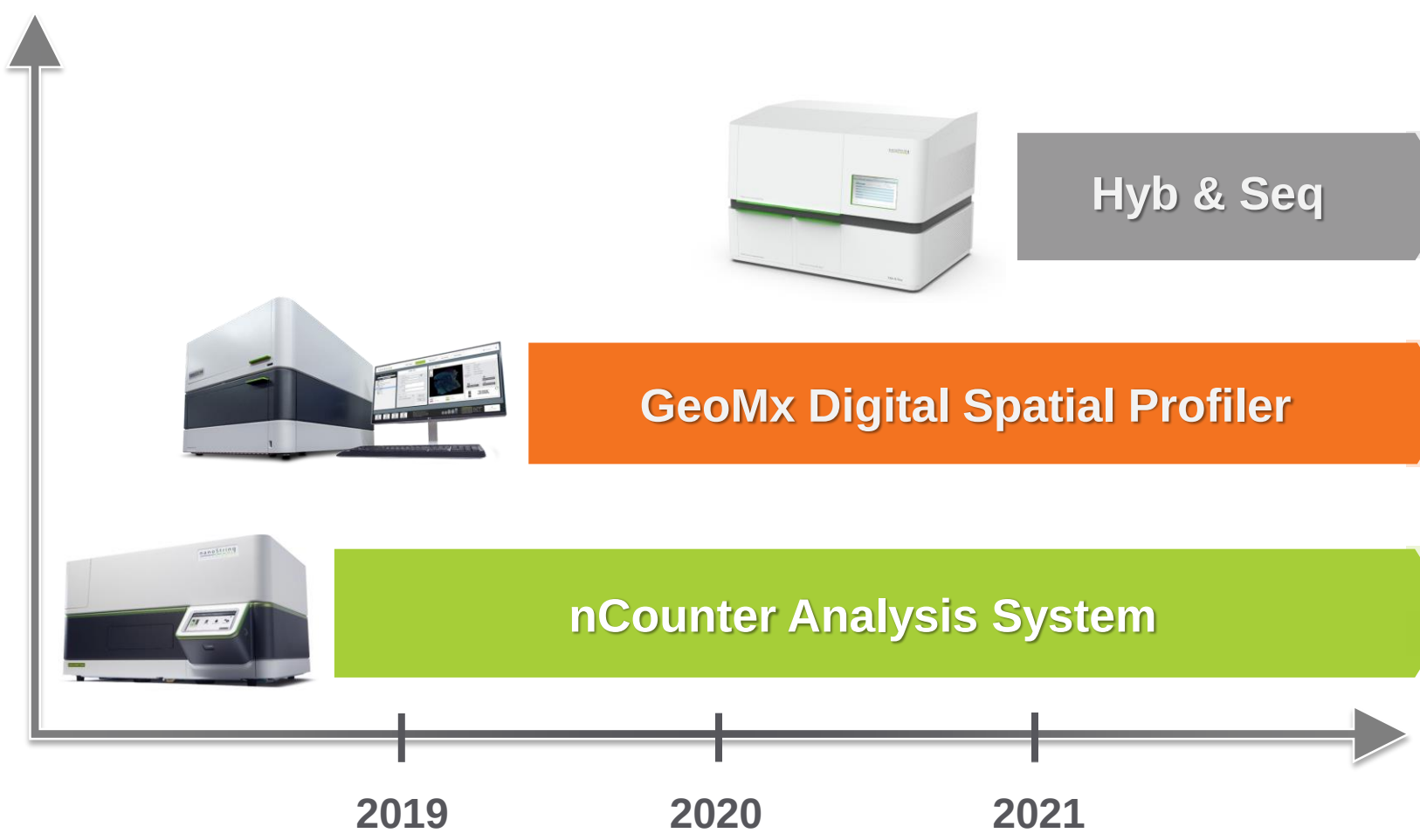
Summary

Universal Barcoding Chemistry, Multiple Platforms to Drive Future Growth



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