# Konica Minolta Precision Medicine: Ambry Genetics

Management Presentation

January 2021

CONFIDENTIAL | 1

## **INTRODUCTIONS**

Kiyotaka Fujii President - Global Healthcare, Konica Minolta



- In addition to his role as President Global Healthcare at Konica Minolta, Mr. Fujii serves as the Chairman of Ambry Genetics and Invicro
- Mr. Fujii has previously served as the Japan CEO of SAP, Louis Vuitton, Cadence Design Systems and Quintiles Transnational
- From 1986 to 1993, Mr. Fujii served as the first Japanese M&A investment banker in New York with Credit Suisse First Boston and Goldman Sachs
- Mr. Fujii received an MBA from Harvard Business School and a B.A. in Law from the University of Tokyo

#### Aaron Elliott, PhD CEO, Ambry Genetics



- Dr. Elliott joined the Ambry team in 2008 in the Research and Development department, working on development of diagnostic tests.
- During his time at Ambry, Dr. Elliott has served in several other capacities, including Director of Genomic Services, Chief Operating Officer and Chief Scientific Officer.
- Dr. Elliott began his career as a postdoctoral fellow at the Novartis Institute of Functional Genomics after receiving his PhD in Genetics from Thomas Jefferson University / The Johns Hopkins University School of Medicine.

Matthew Silva, PhD CEO, Invicro

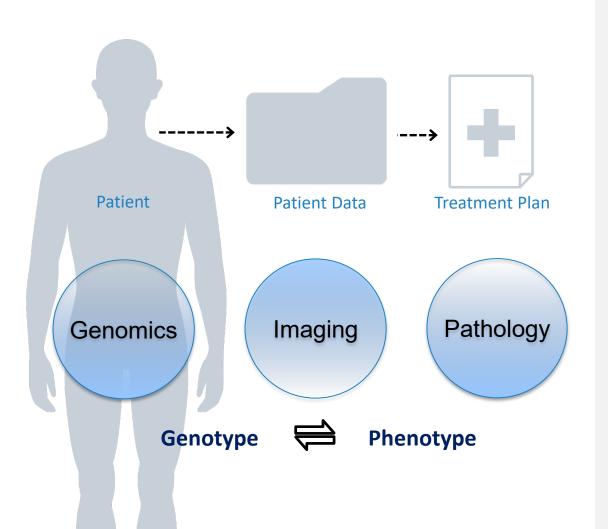


- Dr. Silva brings 18 years of industry experience, including 6 years at Invicro
- Prior to Invicro, Dr. Silva served as Senior Director of Translational Biology at Vertex Pharmaceuticals, where he ran the imaging and histopathology groups
- Previously, Dr. Silva also led groups at Amgen, Millennium and Takeda Pharmaceuticals, focusing on imaging biomarkers to support drug discovery and development
- Dr. Silva received his PhD in Biomedical Engineering from Worcester Polytechnic Institute

#### Tom Schoenherr CCO, Ambry Genetics



- Mr. Schoenherr came to Ambry with more than 20 years of experience in the molecular diagnostics space, most recently as the CCO of Omada Health
- Prior to Omada, Mr. Schoenherr served in similar roles at Counsyl, Quest Diagnostics, Siemens Healthcare and Abbot Diagnostics
- Mr. Schoenherr earned his B.S. from Michigan State University and completed the Executive Business Development Program from the University of Notre Dame



Precision Diagnostics are the Cornerstone of

PRECISION MEDICINE

The next-generation of Precision Medicine is INTEGRATED DIAGNOSTICS

# **KMPM** Empowering the Future of Healthcare



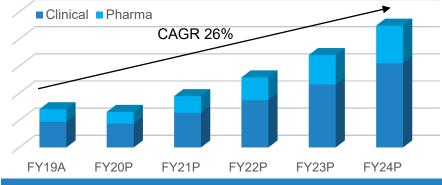
### PRECISION DIAGNOSTICS / HEALTH INFORMATICS CLINICAL AND PHARMACEUTICAL DECISION SUPPORT

#### **Company Overview**

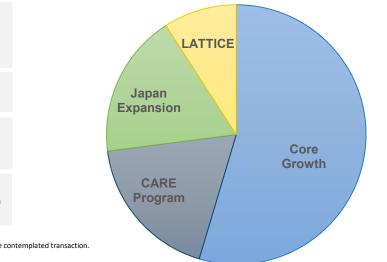
- Genomics division provides genetic testing and molecular services to evaluate genetic risk for clinical decision making
- Imaging Services division provides imaging and pathology on a proprietary informatics platform
- Pathology Services Tissue biomarker and advanced Quanticell technology

- Technology leadership
   Market leading in Cancer + Neurology
   +RNAinsights and Neuro IQ
- Software and Analytics Platforms iPACS | IA×AI | LATTICE | AVA | Backpack Health
- Biomarker research recognized leader in development, deployment and scaled delivery

#### Financial Summary – Revenue Forecast<sup>1</sup>



#### **Growth Initiatives FY2024**



#### Key Facts

	Global Presence	<ul> <li>Headquarters in Aliso Viejo, CA</li> <li>Locations in Boston, New Haven, London and Tokyo</li> <li>8 laboratories including 2 clinics (total of 130,000 sq. ft)</li> <li>65,000 sq. ft "super lab" genetic testing facility</li> </ul>
	Customers	<ul> <li>9,500+ active ordering healthcare providers</li> <li>200+ pharma sponsors, including 23 of top 25</li> </ul>
	Technical Capabilities	<ul> <li>Highly scalable capacity</li> <li>20 million images under management</li> <li>120-person software analysis and bioinformatics team</li> </ul>
	Employees	<ul> <li>1,300 employees</li> <li>500+ scientific and technical personnel (100+ PhDs and/or MDs)</li> <li>Senior leadership with extensive industry experience</li> </ul>
1) All financials assume that Ambry, Invicro, KMPMJ and related entities are reorganized into the KMPM entity concurrently with the		

2) Fiscal years end March of the following calendar year. For example, FY19 ended March 31, 2020.

# IMAGING



#### **Biomarker Experts**

- Translational biomarker services focused on *pathology and radiology*, leveraging Ambry genetic testing
- Experts in pharmaceutical drug discovery and development and the application and regulations of integrated biomarkers, from research to clinical trials to CDx
- 12+ year history of pharmaceutical services and innovation

#### Advanced Capabilities

- 100+ PhDs and MDs with expertise in life sciences and technology
- End-to-end solution offering project management, quality assurance and regulatory compliance

#### Innovative Platform Technology

- Proprietary software and analytics infrastructure combining scientific and medical expertise and cuttingedge informatics and ML/AI
- 120-person software analysis and bioinformatics team developing tools for data management, data science and regulatory submission

- Global infrastructure with 8 laboratories including 2 clinical imaging centers
- Expanding *qualified partner network* of ~1,800 global centers

#### **Trusted Partner**

- 200+ Pharma clients: 23 of top 25
- Supporting studies from *discovery* research through clinical trials and expanding into clinical medicine
- 2+ new customers per month
- Record sales in 2020



# GENOMICS

=



#### The Most Trusted Name in Genetic Testing

- Branded as Ambry Genetics
- 20+ year history of innovation, quality & scientific integrity
- +RNAinsight<sup>™</sup> technology is the new goldstandard in hereditary cancer genetic testing

#### First in Innovation

- 2019: first combined RNA/DNA test: +RNAinsight<sup>™</sup>
- 2017: first paired tumor/ germline Lynch panel
- 2013: first NGS, BRCA1&2 Post-SCOTUS decision
- 2012: first NGS hereditary cancer panels
- 2011: first CLIA/CAP appr. Exome test
- 2010: first commercial assay using NGS

#### Next-Generation Laboratory

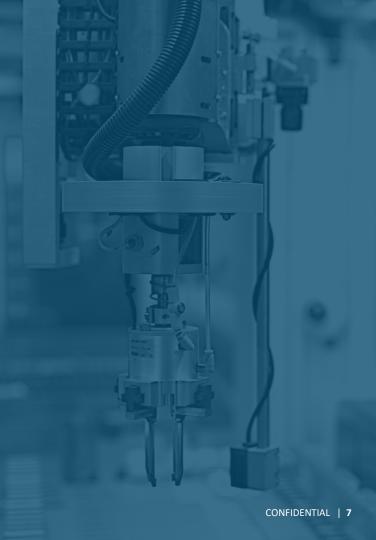
- Customized testing workflows
- Proprietary LIMS (lab information system)
- Highly scalable capacity
- *Highly automated* sample processing with 50+ Tecan robots
- Dedicated onsite Tecan & Illumina engineers

- 1.5M+ tests run
- Market leader among US Genetic Counselors
- #3 share in US oncology, neurology & cardiology markets

#### **Excellent Payer Positioning**

- In network with 95%+ of health plans
- 9,500+ active ordering healthcare providers
- Premium pricing driven by higher quality (+RNAinsight<sup>™</sup>)

- Over 20 Next-Gen Sequencing instruments including MiSeqs | NextSeqs | HiSeq4000's | NovaSeqs
- Proprietary sample tracking process including tube and plate barcoding as well as DNA fingerprinting of every sample



# LARGE AND GROWING MARKET



+35,000,000

## **Significant Unmet Need**

- Global genomics market estimated over ~\$40B
- ~800K hereditary cancer tests per year, US
- 35M+ people meet criteria for testing, US

## **Challenges in the Market**

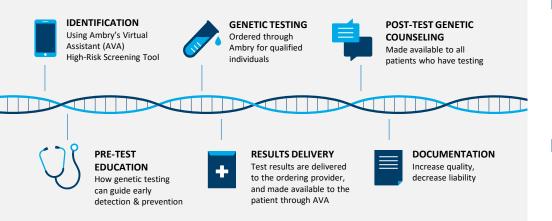
- Identifying the high-risk patients
- Comfortability with genetic testing
- Population health initiatives
- Lack of genetic counselors both US and Globally

## CARE

- Expanding the genomics market
- Identifying individuals at high risk
- Fully automated the genomics process for patients and clinicians

# **POPULATION HEALTH PLATFORM**

# **Comprehensive Assessment, Risk and Education (CARE)**



# **CARE Program Overview**

### **OPPORTUNITY**

- Millions of high-risk patients unidentified
- CARE (Comprehensive Assessment Risk & Education) Fully automated solution | Revenue generation | Increase quality of patient care

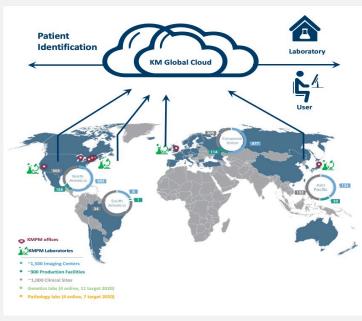
### DIFFERENTIATION

- Automation of patient identification
- Platform can be applied across a health system to all specialties and disease states

## **POPULATION HEALTH**

- CARE for COVID launched 2020
- 500,000+ patients served
- Incremental disease state proof point

# **KMPM INTEGRATION** LATTICE Platform



### **OPPORTUNITY**

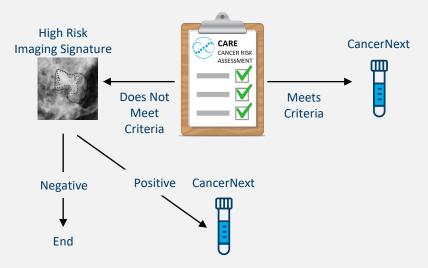
- Global expansion of multi-modal core lab
- Cloud Provider KMPM Clinic and Laboratory Partnership

### DIFFERENTIATION

- Advanced & validated data management, analytics, interpretation, and reporting across genomic, pathology and imaging
- Network of ~1,500 imaging centers and ~300 imaging agent production facilities, targeting 20+ genomic labs
- Best-in-class clinical trial services workflow primed for expansion and integration with genomics and pathology services
- Decentralizing lab via certification of partnered labs and clinics
- Centralizing data interpretation and reporting

### MOMENTUM

- Supply chain, quality, analytic and reporting capabilities integration plan to collect, standardize and port data
- Proof of concept: Lihpao exclusive 3-year agreement to build out genetic testing in China





# Improved Cancer Risk Stratification Using Integrated Diagnostics in Screening

- More than 50% of BRCA1/2 carriers missed by current NCCN testing criteria
- Digitized mammographic features can help distinguish BRCA1/2 mutation carriers<sup>1,2</sup>
- Incorporate image probability score into hereditary cancer risk modeling for genetic testing
- CARE imaging center sites for study and implementation
- Potential to expand eligible population (>35M) for hereditary cancer testing

1. Li H, et al. Med Phys 2004, 31:549 2. Gierach et al. Breast Cancer Research 2014, 16:424

# HIGHLIGHTS

1

5

Konica Minolta Precision Medicine Significant market tailwinds

2 Differentiated technology & services

3 Multiple pillars of growth

4 Opportunity to unlock value

Significant value creation opportunity

THANK YOU