Konica Minolta to Acquire Ambry Genetics (US)

Full-fledged Entry into Precision Medicine

KONICA MINOLTA, INC.

July 6, 2017
1. **Transaction Details and Positioning in KM’s Strategy**

2. Full-fledged Entry into Precision Medicine

3. About Ambry Genetics

4. Strategic Significance

5. Global Expansion

6. Transaction Structure and Schedule
Vision: Digital Company with Insights into Implicit Challenges

- Business System by Product / Customer
- The entire company works together to support the transformation of client companies by sector and industry.
- Predicts potential issues for client companies and create solutions together.

A company that continues to create new value to business and human societies
Entering into Precision Medicine on the back of Evolution of Core Technologies

KONICA MINOLTA

Core Technologies
Materials
Optics
Imaging

HSTT: High Sensitive Tissue Testing

Precision Medicine Market
### Target Company

<table>
<thead>
<tr>
<th>Ambry Genetics Corporation</th>
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<tbody>
<tr>
<td><strong>HQ:</strong></td>
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<tr>
<td><strong>Acquisition Price:</strong></td>
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<td></td>
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<tr>
<td><strong>Investment Ratio:</strong></td>
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### Strategic Significance

- Full-fledged entry into precision medicine
- Combining the world’s most advanced genetic diagnostic technology and KM’s protein technology
- Establishing highly profitable business in healthcare
- Business model targets both patients and pharmaceutical companies
- Global expansion including Japan
Collaborating with INCJ in Japan

<table>
<thead>
<tr>
<th>Regulators</th>
<th>Approval for services to be included national medical insurance</th>
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<tbody>
<tr>
<td></td>
<td>Streamline guidelines to establish Japanese genome data base</td>
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<table>
<thead>
<tr>
<th>Medical Research Institutions</th>
<th>Collect test samples for clinical treatment, not for research</th>
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<tbody>
<tr>
<td></td>
<td>Improve awareness by presenting at academic conferences</td>
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<tr>
<td></td>
<td>Develop new genetic testing technology</td>
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<thead>
<tr>
<th>Hospitals</th>
<th>Advance knowledge on genetic testing</th>
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<td></td>
<td>Establish counseling structure for patients</td>
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<tr>
<th>Operators</th>
<th>Secure capacity that can accommodate certain number of tests</th>
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<tbody>
<tr>
<td></td>
<td>Reports on test results for Japanese</td>
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<tr>
<td></td>
<td>Structure of supporting doctors on site</td>
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Support from INCJ

- Strengthening communications with relevant ministries and agencies to promote national genome strategy
- Promote activities such as establishment of genetic bank that includes medical and research institutions
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KM Healthcare Business

Our Goal
(What problems are we trying to solve?)
- Enhance Clinical Value
- Contain Healthcare Costs
- Improve QOL

Our Approach
(Who are we?)
- Primary Care
- Precision Medicine
- Diagnostics

Our Strengths
(Why us?)
- Optical Technology
- Image Processing
- Advanced Materials
- Nano Fabrication
- IT
What is Precision Medicine?

Standardized Medicine

- By Organs
- By Diagnosis And Treatment Dept.

Precision Medicine

- Recognizing gene mutation and protein expression on molecular level
- Grouping patients based on their characteristics

Patient Group through Molecular Analysis

- Prevention • Prognosis
- Treatment • Medication
- Drug Discovery

Medicines:
- Medicine A
- Medicine A
- Medicine B
- Medicine under Development
Value of Precision Medicine

Patients
Choosing the most appropriate drugs, treatment and prevention
Reducing side effects

Improving QOL

Medical Cost
Efficient matching right drugs and medical care
Reducing social welfare spending

Recognition by Molecular-level Characteristics

Pharmaceutical Companies
Improving the chances of new drug approval
Discovering drug discovery biomarkers
Optimization of clinical trials

Offering valuable treatments to the world
Value of HSTT

Evolving Film Technology
Nanoparticles through Original Technology
Leveraging AI for Image Recognition

Advanced Recognition and Quantification with AI

Locating Cancer and Immune Cells
Quantifying Expression Levels of Protein

Immune Cells (T Cell)
Target Protein
Cancer Cell
Key for Cancer Treatment – Precision Medicine

Molecular Target Drugs and Immune Checkpoint Inhibitors Market Revenue Estimate

(JPY, Trillion)

- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021

Immune Checkpoint Inhibitors
Molecular Target Drugs
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## Why Ambry?

| High Level Bioscience | - Precise diagnostic capabilities which decide courses of treatment  
|                        | - Accumulated database  
|                        | - Analysis through subject’s own bioinformatics |
| Advanced Product Development | - Multiple “world’s first” tests  
|                             | - Extensive testing menus  
|                             | - Open genetic database |
| Efficient Operation | - Most sophisticated and large-scale laboratory  
|                      | - High quality and short turnaround operation  
|                      | - Providing easy-to-understand reports |
| Strong Ecosystem | - Leader in GC (Genetic Counselor) channel  
|                   | - Insurance reimbursement by almost all major insurers  
|                   | - Collaborating with influential research institutions |
Efficient Operation and Powerful Ecosystem

- More than 50 specialists in medicine, genetics, and bioinformatic fields
- Reducing BRCA1/BRCA2 VUS ratio to 1.1%/2.2%
- Always testing 20,000 genes
- Capacity that allows more than 3,000 tests a day
- Short turnaround – returning test results in 14 to 21 days
- 70% share of Genetic Counselors channel
- Insurer network covering 97% of insured patients

※VUS (variant of unknown significance) : Pathogenicity of the variant can neither be confirmed or ruled out
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Diagnostic Service Model Using Both Genetics and Protein Analysis

- Genetic analysis
- Protein analysis
- Diagnostic imaging
- Database
- AI

High Accuracy Gene And Protein Diagnostic Service Model

Precision Medicine

- Advanced Molecular Diagnosis
- Patient stratification
- Discovery of Biomarkers
- Pharmaceutical Companies

Patients
Target Market Size by Domains

Pharmaceutical Companies

- 2016: $1.0B
- 2021: $2.1B
- 2026: $3.4B

Hospitals · Patients

- 2016: $2.7B
- 2021: $4.5B
- 2026: $6.7B
Business Model and Profitability in Healthcare Market

EBITDA Margin

30%

Pharmacy

High Value-Added Diagnosis Services

Testing Equipment

20%

Expendables

CRO (Contract Research Organizations)

Medical Care IT Services

10%

Medical Institutions

Medical Insurance

Medical Diagnostic Equipment

Medicine Distribution
Future Plan for Bio–health Business

- Expansion of Ambry businesses
- Globalizing Ambry’s services
- Synergies with KM Healthcare Business

Sales (JPY, Billion)

FY2017  FY2018  FY2019  FY2020  FY2021
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Mortality and Exam Rate for Breast Cancer in Japan

Mortality Rate is Increasing Only in Japan Amongst Major Developed Countries

Examination Rate is Low for Japanese Females

Sources:
Cancer Research UK  Surveillance Research Program, NCI
In Japan, there is no high precision genetic testing service based on the results of large-scale genetic data analysis.

Ambry has established the business in US, and operates a proven high precision genetic testing service.

Genetic analysis designed for Japanese characteristics

- Contribution to promotion of national genome strategy
- Collaboration with world-leading Japan’s genome Research studies (3 large genome banks)
- Network with core medical institutions
- Expansion of the genetic counselors’ community
- Support medical insurance
Collaboration with Institut Pasteur

Research Findings

Behavior Observation of Antibody Drugs with super-resolution microscope Conical Diffraction Microscopy (CODIM)

- Leveraging Japan–France international fund
- Japan–France co–research to develop support system for drug discovery
- Contributing to improve drug discovery process by developing PK/PD testing technology, taking advantage of HSTT

Conventional Technology

Latest Technology

Source: News Release NEDO website
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6. Structure and Schedule
# Acquisition Structure and Schedule

<table>
<thead>
<tr>
<th>Acquisition Price</th>
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<tbody>
<tr>
<td>▪ Ambry acquisition price : USD 800 Million</td>
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<tr>
<td>▪ Performance-linked earn-out : USD 200 Million (max)</td>
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<th>Investment Ratio</th>
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<tbody>
<tr>
<td>▪ KM (US sales subsidiary) : 60%</td>
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<td>▪ INCJ : 40%</td>
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<th>Funding</th>
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<tbody>
<tr>
<td>▪ Considering use of available cash and hybrid loans</td>
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<th>Impact on Financials</th>
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<tr>
<td>▪ Scheduled to announce the impact of goodwill, amortization of intangible assets and fixed assets after the completion of acquisition</td>
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<th>Schedule Going Forward</th>
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<tbody>
<tr>
<td>▪ Closing expected in October, 2017</td>
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<tr>
<td>▪ Expected to be reflected on consolidated results from Q3 FY2017</td>
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Giving Shape to Ideas