Investment Opportunities
Pharma/Healthcare: Cancer Diagnostic Device

Investment Highlights

• **Cancer self-diagnostic device that uses urine as a specimen:** This device is designed to diagnose cancer in 20 min using an automated mass-processing method. It can identify the presence of cancer and eight major carcinomas. In addition, it can be used for non–face-to-face examinations in various places, such as hospitals, medical examination centers, community health centers, pharmacies, convenience stores, coffee shops, and homes.

• **In vitro diagnostics market:** The demand for diagnostic products is increasing worldwide because of the growing elderly population, chronic diseases, respiratory infections, immunodeficiencies, and other infectious diseases. In addition, the development of biotechnology and the increasing demand for minimally invasive and noninvasive diagnostic devices are also leading the growth of related markets. According to Technavio, the global in vitro diagnostics market is projected to reach USD 83.1 billion by 2023 from USD 60 billion in 2018, with a compound annual growth rate (CAGR) of 6.73% during the forecast period. According to MarketsandMarkets, the point-of-care testing (POCT) market and self-testing market size is also projected to reach USD 20.2 billion by 2023 from USD 14.6 billion in 2018, growing at a CAGR of 6.7%.

Products and Services

Products and Technology

- [Multichannel automated diagnostic device](#)
- [Biosensor](#)

• **Key features of core technology**
  - Based on an electrochemical analysis, our sensor can conduct a qualitative analysis of metabolite traces in conjunction with multiple and complex analyses.
  - When an input voltage is applied to the sensor’s potentiostat, urine and a urine mixture react with our sensor at a specific voltage and create a product through an oxidation-reduction reaction.
  - The impedance value of the resulting product is used for the qualitative analysis of the metabolite concentration in an unidentified urine specimen. This allows for the identification of cancer and the type of cancer.

• **Competitiveness of core technology**
  - Our automated diagnostic system requires only a few personnel, thereby allowing medical institutions to increase their system efficiency.
  - As a noninvasive method that uses urine, our system neither causes pain nor risks radiation exposure to patients.
  - Compared to existing diagnostic kits, this is a cost-effective product that is easy to operate and ensures faster processing.
  - The product can automatically analyze multiple samples simultaneously.

Brief History

• 2011: Founded the company
• 2017: Obtained permissions to be a manufacturer of medical devices and to manufacture and export medical devices
• 2019: Awarded at the Korea Invention Patent Exhibition
  - Awarded at Money Today Innovative Technology Awards
  - Received a Global Top Technology Grand Prize at the World Class Small-Mighty Enterprise Award ceremony
  - Participated in the Union for International Cancer Control (UICC)–led World Cancer Leaders’ Summit in Kazakhstan as a Patron Partner
• 2020: Obtained an export license and a certificate of free sale
  - Received a 2020 Korea Outstanding Bio Enterprise Award
  - Acquired ISO 13485:2016 certification
Company Profile

Date of Establishment • November 2011

Investment Performance • Attracted an investment of KRW 5.5 billion from BW in June 2019
• Attracted an investment of KRW 4.2 billion from BW in December 2019
• Attracted an investment of KRW 6.7 billion from BW in June 2020

Listed or Unlisted • Unlisted

Patents and Certificates • Registration of 31 domestic patents, including a multichannel automated diagnostic device (CMDD series)

Financial Figures

(Unit: USD million)

<table>
<thead>
<tr>
<th>Division</th>
<th>2017 (Audited)</th>
<th>2018 (Audited)</th>
<th>2019 (Audited)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operating Income</td>
<td>(2.87)</td>
<td>(3.17)</td>
<td>(3.28)</td>
</tr>
<tr>
<td>EBITDA</td>
<td>(2.64)</td>
<td>(3.02)</td>
<td>(2.98)</td>
</tr>
</tbody>
</table>

Business Plan

(Unit: USD million)

<table>
<thead>
<tr>
<th>Division</th>
<th>2020 (Forecast)</th>
<th>2021 (Forecast)</th>
<th>2022 (Forecast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>37.5</td>
<td>779.05</td>
<td>1,302.45</td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>5.9</td>
<td>31.31</td>
<td>4.72</td>
</tr>
<tr>
<td>Working Capital</td>
<td>0.19</td>
<td>3.01</td>
<td>3.39</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>0.26</td>
<td>5.45</td>
<td>9.11</td>
</tr>
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• **Sales plan:** Our company has conducted national projects based on partnerships with the Ministry of Health and Welfare and the National Cancer Center. Moreover, an export agreement worth USD 3.0 billion was signed with a Russian company that had acquired a letter of credence from the National Medical Research Radiology Center under the Russian Ministry of Health. Consequently, sales have been stabilized through the mass supply of our cancer diagnostic device tailored for Russia. Currently, discussions on memorandums of understanding and nondisclosure agreements are in progress with companies from the Middle East, Japan, China, the United States, and Malaysia. As such, it is expected to achieve sales of USD 1,302.45 million in 2022.

• **Investment required:** A total of USD 66.2 million (including USD 42.5 million in capital expenditures and USD 15.1 million in R&D) will be invested for the next 3 years to expand production lines and support product localization in response to the increasing demand attributed to partnerships with global organizations.

Investment Requirements

<table>
<thead>
<tr>
<th>Investment Structure</th>
<th>• All available</th>
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<tbody>
<tr>
<td>Amount</td>
<td>• USD 200 million</td>
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<tr>
<td>Region</td>
<td>• North America, Japan, Middle East, Southeast Asia</td>
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</tbody>
</table>

For more detail Teaser Memorandum and information please contact below Project Manager
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