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Transformation of the Bioscience Business

Nichirei launched its bioscience business in the 1980s as part of a drive to create new businesses. In addition to the import and sale of fetal bovine serum required for cell culture, we expanded our business through the manufacture and sale of cow placenta extract, which is a raw material for cosmetics.

Since the 1990s, we have also been conducting a biomedical materials business (involving the import and sale of growth media used for cell culture), a functional materials business¹ (involving the sale of powders and other products made from acerola), a molecular diagnostics business (involving the development, manufacture and sale of diagnostic agents using antibodies produced from cultured cells), and an immunochromatographic assay business.²

1. The functional materials business was transferred to Nichirei Foods in June 2021.
2. The rapid diagnostics business changed its name to the immunochromatographic assay business in April 2022.

Review of Medium-term Business Plan WeWill 2021

In the molecular diagnostics business, sales were weak due to a decline in the number of pathological examinations as people tended to refrain from visiting medical institutions during the COVID-19 pandemic. On the other hand, we launched two types of diagnostic agents for automated immunostaining devices in FY2022, and we expect to expand sales during Compass Rose 2024. Although it took time to integrate the medical instrument manufacturing subsidiary in the United States that we acquired in 2019, as a growth

Business Scale

Total assets	¥7,847 million	Employees (non-consolidated)	96
Main facilities	Nichirei Biosciences Global Innovation Center (production and R&D facilities) Pathcom Systems Corporation (California, U.S.A.)		
Main products	Molecular diagnostics, biomedical materials and immunochromatographic diagnostic reagents		



Histofine ALK iAEP® Kit companion diagnostic



Histostainer-AT automated immunostaining device

Advantages

- Accumulated technologies for development, production, and quality evaluation of diagnostic agents that use antibodies
- A molecular diagnostics business model that combines the development and production of both diagnostic agents and immunostaining devices

business it has steadily increased sales.

The impact of COVID-19 was greatest in the immunochromatographic assay business, where there was a decrease in sales volume of influenza antigen test kits, which had accounted for about 80% of sales. Although we increased sales of antigen test kits for COVID-19, it was not enough to compensate, due in part to the smaller overall number of test kits in the market in comparison with those for influenza.

Thus the COVID-19 pandemic led to substantial changes in the market, resulting in decreases in sales and profit during WeWill 2021. Selection and concentration to rebuild our businesses in line with these changes in our operating environment is an issue to address in Compass Rose 2024.

Policies of Medium-term Business Plan Compass Rose 2024

Under Compass Rose 2024, we will redirect management resources to the molecular diagnostics business, which is a growth area. *Histofine ALK iAEP® Kit*, our mainstay companion diagnostic,³ is representative of our diagnostic agents that use antibodies to detect biomarkers in oncology tests. The number of cancer patients is rising globally, including in Japan, where the population is aging. Given this, the need for diagnostic reagents in selecting optimal treatment methods is expected to continue increasing. In addition to developing, producing and selling diagnostic reagents, we sell automated immunostaining devices for immunohistochemical staining tests. A business model that integrates these product areas is not one that other companies can immediately copy. In addition to antibody-based diagnostics, we are also moving forward with an application for regulatory approval for a molecular diagnostic product from

Biocartis SA, a Belgian company with which we formed a business alliance in 2019, with plans for a launch during Compass Rose 2024.

In the biomedical materials business, given expectations of growth in the biopharmaceutical development and regenerative medicine markets, we will work to maintain and expand sales of serum, which has been an area of strength for us.

Sales of the immunochromatographic assay business are dependent on the state of the COVID-19 pandemic. However, once influenza becomes prevalent again, we foresee increased needs for simultaneous testing for influenza and COVID-19. We therefore intend to provide the necessary test kits in line with market needs to help resolve social issues and generate economic value.

3. In-vitro diagnostics for testing one's biomarkers or genes, enabling patients to receive appropriate drugs or therapies. They are used to improve the efficacy and safety of certain drugs, and now several companion diagnostics are used to assess whether patients are eligible for molecular targeted cancer therapies.

Material Matters for the Group

Nichirei Biosciences' vision is to offer ongoing support for health by providing new value. Consequently, the Nichirei Group's material matter of "creating new value in food and health" is not so much a focus area for us as the very essence of our business. We also work for "realizing sustainable food procurement and resource recycling" as a common theme throughout the Nichirei Group. In the FY2022 sustainability assessment by EcoVadis, we received a silver rating,⁴ an evaluation we intend to maintain and improve.

4. EcoVadis, which provides comprehensive assessments of corporate sustainability, has rated approximately 80,000 companies in 200 industries in 160 countries in the areas of the environment, labor and human rights, ethics, and sustainable procurement. The silver rating is awarded to only the top 25% of all companies that undergo the assessment.



Close Up

Letter of Appreciation from the Ministry of Health, Labour and Welfare and the Ministry of Economy, Trade and Industry for the Supply of COVID-19 Antigen Test Kits

As the Omicron variant of COVID-19 spread rapidly in January 2022, the Ministry of Health, Labour and Welfare asked manufacturers to increase production of antigen test kits. We received a message of gratitude from the ministry for fulfilling our corporate responsibility of providing a stable supply of such kits.

