

Business Strategy

Bioscience Business



Nichirei Biosciences Inc.
<https://www.nichirei.co.jp/bio/english/>

President's Message



Hideo Yokoi

Executive Officer, Nichirei Corporation
President, Nichirei Biosciences Inc.

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 import and sale of fetal bovine serum required for cell culture, we expanded our business through 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 business* (involving the sale of powders and other products made from acerola), and molecular diagnostics and rapid diagnostics businesses (involving the development, manufacture and sale of diagnostic agents using antibodies produced from cultured cells).

* The functional materials business was transferred to Nichirei Foods in June 2021.

Progress of Medium-term Business Plan WeWill 2021

Medium-term Business Plan Main Measures

- Develop and commercialize next-generation diagnostic drugs and devices
- Promote overseas business
- Create a business model that captures technological innovations and changing needs
- Create an environment where diverse talent can play active roles

Main Products



Histofine ALK IAEF® Kit companion diagnostic



Histostainer-AT
automated immunostaining device

About Companion Diagnostics

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.

• Business Scale

- Total assets: ¥8,727 million
- Employees (non-consolidated): 110

• Main Facilities

Nichirei Biosciences Global Innovation Center
(production and R&D facilities)
Pathcom Systems Corporation (California, U.S.A.)

• Main Products

- Molecular diagnostics
- Rapid diagnostics
- Biomedical materials

In FY2021, because of the COVID-19 pandemic there were fewer hospital visits by patients and people refrained from going for check-ups at private clinics. This had the greatest impact on the rapid diagnostics business, where there was a decrease in sales volume of influenza antigen test kits, which account for about 80% of sales. The molecular diagnostics business also continued to face difficult conditions due to the decrease in the number of pathological examinations. As a result, net sales decreased. Operating profit also decreased due to tough sales conditions in Japan and a slump in performance at our U.S. subsidiary.

On the other hand, development of drugs in the new fields of regenerative medicine and cell therapy has been brisk at pharmaceutical companies, and since their manufacturing processes often use serum, demand has increased for the serum handled by our biomedical materials business. Sales of serum products have also increased partly due to the success of our early switchover to online sales. In FY2022, we aim to secure profit by expanding sales in Japan of our COVID-19 antigen test kit and improving the performance of our U.S. subsidiary.

• Advantages of Nichirei Biosciences Inc.

We have three main advantages: possessing technologies for developing diagnostic agents for biomarkers using antibodies, such as the companion diagnostic *Histofine ALK iAEP* kit (a mainstay product of the molecular diagnostics business); a

system for stable supply of these products; and the technology to develop automated immunostaining devices used to perform immunohistochemical (IHC) staining with these diagnostic agents. In short, our business model is to sell and install medical devices at medical institutions that use our specialized reagents, and our IHC staining technology is difficult to replicate. We currently sell raw materials for these diagnostics directly and IHC staining devices as an OEM,* and have received numerous inquiries from all over the world.

We also have advantages in technologies for developing, producing and evaluating antibodies, as well as the know-how for stable production and supply of high-quality products using the technologies we have cultivated over many years. Moreover, the number of cancer patients in Japan is rising as the population rapidly ages. Because pathological diagnoses are important in cancer treatment, we believe that the molecular diagnostics business will be a growth driver going forward.

* OEM: Original equipment manufacturer



Global Innovation Center (Sayama City, Saitama Prefecture)

Close Up

Launch of Rapid Diagnostic Kit for Detecting COVID-19 and Influenza Antigens

- A rapid diagnostic kit that simultaneously detects antigen for COVID-19 and influenza A and B went on sale in May 2021.
- Simple determination of positive or negative results in about 15 minutes without the need for special testing equipment

