

# Life Science

Through our proprietary technologies, we are aiming for the top of our global niche and will contribute to healthy living and health care for people worldwide



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 Managing Executive Officer  
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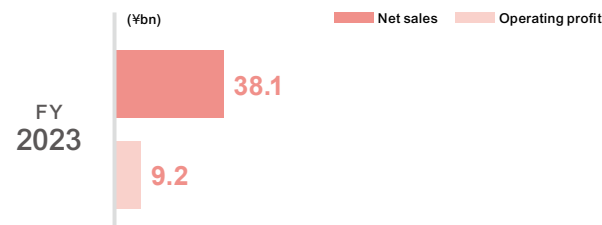
## The strengths of Toyobo

- Integrated development and manufacturing that spans raw materials to end products in the diagnostic reagent and drug domain; securing of dominance in quality
- Film forming technology for hollow separation membranes (development began in the 1970s)
- Exclusive position in the global market for CTA membranes for dialysis applications

## Opportunities and risks

Opportunities	<ul style="list-style-type: none"> <li>• Expansion of demand for genetic testing (PCR) amid the spread of infectious diseases</li> <li>• Acquisition of national policy-based development support and subsidies for antibody drugs and testing systems</li> </ul>
Risks	<ul style="list-style-type: none"> <li>• Sharp exchange rate fluctuations</li> <li>• Soaring oil and coal prices due to shift away from fossil fuels</li> <li>• Shortages of supplies of goods procured overseas</li> </ul>

## Net sales and operating profit (¥billion)



## Business overview in fiscal 2023

In the bio business, sales of PCR test reagents decreased as cases of COVID-19 infections fell significantly in the 4th quarter, but sales of raw material enzymes for diagnostic drugs and genetic testing reagents in overseas markets remained strong. To expand the infection diagnosis solution business, in fiscal 2023 we introduced new products including in vitro diagnostics and reagents for simultaneous detection of whooping cough bacteria + para whooping cough bacteria, SARS-CoV-2 + respiratory syncytial virus, and SARS-CoV-2 + influenza virus.

In the medical materials business, sales of artificial kidney hollow fibers remained strong but were affected by soaring prices of raw materials and fuels. In policy measures, the business made preparations for the implementation of market evaluations ahead of the market launch of continuous renal replacement treatment (CRRT) in the next fiscal year.

The contract manufacturing business of pharmaceuticals ran up expenses related to dealings with the U.S. Food and Drug Administration (FDA), but sales recovered as production and shipment of over-the-counter formulations resumed in turn.

As a result, net sales in the segment were ¥38.1 billion and operating profit was ¥9.2 billion (results for new segment).



Reagents for the GENEcube® fully automated gene analysis system SARS coronavirus nucleic acid kit

## Life Science

### Capital investment and R&D investment

In the bio business, we have invested about ¥6.5 billion in the Tsuruga Biochemicals Plant to create new manufacturing facilities, and are undertaking development of raw materials for PCR test reagents and genetic diagnostic drugs along with strengthening of our production system. A third cultivation and purification building will be built in first-stage construction, going into operation in April 2024. A research reagent building and genetic testing building will be built in second-stage construction, with completion and operation expected during fiscal 2025. We plan to further continue investments with the aim of tripling development and production capacity.

In the medical materials business, we have invested about ¥5 billion in the launch of an integrated production plant for dialysis equipment together with NIPRO Corporation. As this business's hollow fiber membrane manufacturing site is located in Yamaguchi Prefecture with assembly performed at a customer's plant in Akita Prefecture, issues have occurred in dealing with customers and the risks of long-distance transport. With the new investment, we are constructing and readying manufacturing facilities in an integrated production plant that connects our hollow fiber membranes and NIPRO's Odate Plant assembly lines, with the building structure and other components already completed.

Full-scale shipment of products is scheduled for July 2024.

We have also been tackling the development of CRRT with the aim of entering the field of acute blood purification therapy for conditions such as sepsis. In May 2023, we were granted approval by the Pharmaceuticals and Medical Devices Agency (PMDA). We will continue investing in a manufacturing and sales structure to achieve market launch in the near future.

### Growth strategy

The Life Science Division is tackling innovation by generating new chemical reactions, combining the cutting-edge technologies that Toyobo has built up in the medical treatment, medicine, and pharmaceutical fields. As technologies and products related to medicine cannot be supplied without production structures that

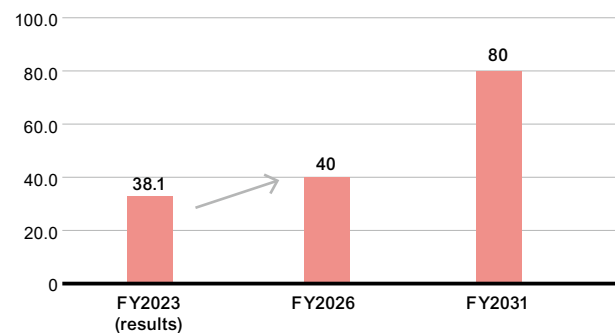
meet strict standards, we are constructing a leading world-class quality management system (QMS) along with structures for drug manufacturing management and quality control standards (GMP). To deliver peace of mind and smiles to people worldwide, we have put forth a business policy of seeking to maximize future value.

Nearly all of the main products of the bio business are used in clinical testing, but its product groups are largely unrelated to each

other. Accordingly, we are working to concentrate resources in the field of epidemiology, establish the Toyobo brand in the infectious disease testing market, and provide value through one-stop solutions for infectious disease.

In the medical materials business, we are focused on the development of applications other than membranes for dialysis, including acute blood purification membranes and process separation membranes that take our strengths in hollow fiber membrane manufacturing technology as their starting point. In the field of process separation membranes in particular, we have begun supplying products to major overseas vendors and are engaged in sales promotions toward major manufacturers in every market. We will also focus on our Bonarc<sup>®</sup> bone regeneration-inducing materials in the dental area, constructing a stable supply structure to contribute to new dental treatments.

### Net sales target of the life science business (¥bn)



Integrated production plant for dialyzers

### Realizing sustainable growth

This division is active in the areas of diagnosis and treatment in the patient journey. While these areas largely go unseen by the general public, they make great contributions to health and treatment for people around the world. As one of the social issues in Sustainable Vision 2030, we are focusing on “a healthy lifestyle and health care.” Our people involved in this business work with great pride.

To make a greater contribution to society by providing higher-performance products to the clinical testing market in the diagnostic area, we are tackling two targets in the bio business: A yearly 10 million tests that contribute through the provision of diagnostic drugs for infectious diseases, and a 30% market share in raw materials for biochemical tests, etc.

In the medical materials business, we will take advantage of our world-class hollow fiber development and manufacturing technologies, as well as our materials development capabilities, to expand into the area of treatment, thereby contributing to society through products that medical professionals and patients can use with confidence.