

Terumo's Efforts in Digital Transformation of Healthcare

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Corporate Overview

Terumo Was Founded by Medical Scientists

1921

With the intention of manufacturing the most reliable clinical thermometer possible, Terumo Corporation was founded by several medical scientists led by Dr. Shibasaburo Kitasato.



The origin of the company name

Terumo comes from the German word,
“Thermometer”

Terumo's company charter and thermometer at the time of establishment



Dr. Shibasaburo Kitasato (1853 -1931)

- Discovered the immune antibody against the tetanus toxin and established a serum therapy for tetanus.
- Identified a plague bacillus and paved the way for preventive medicine.
- Featured on the Japanese bank note (1,000-yen bill) since July 2024.

103 years later...

Delivering Our Products and Services Around the World

Fiscal year ended March 2024



Business in
over 160
countries and regions



Number of consolidated subsidiaries **98**



Number of associates
Terumo Group **30,591**
Terumo Corp. **5,554**



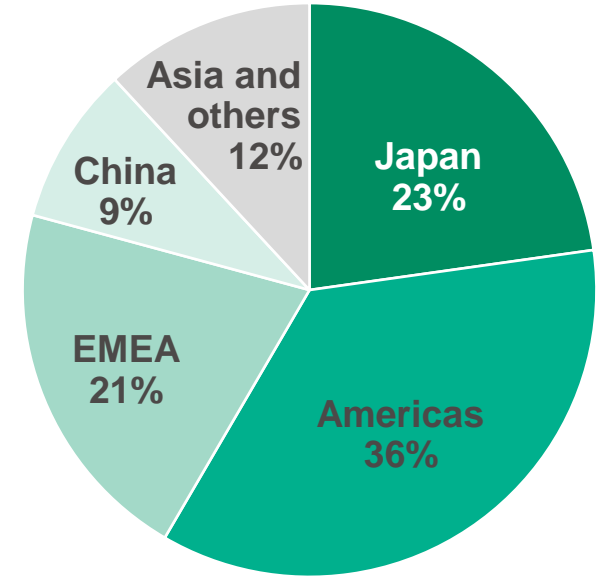
Number of products
More than 50,000



Number of R&D bases
Japan **6**
Outside of Japan **16**



Number of production bases
Japan **8**
Outside of Japan **22**



Revenue (consolidated)

921.9 BJPY

Overseas Revenue Ratio: **77%**

The percentage of revenue composition is rounded to the nearest whole number, and the total may not equal 100%.

103 years later...

Global Research & Development Network

R&D bases: 22
Japan 6
Overseas 16

Fiscal year ended March 2024



Terumo BCT, Inc.



Terumo Cardiovascular
Systems Corp.
Ann Arbor Factory



Terumo Aortic (Glasgow)



Shonan Center



Ashitaka Factory



ME Center



Fujinomiya Factory



Kofu Factory

Terumo Corp.

Terumo Bay Area Innovation Lab.



MicroVention, Inc.



Terumo Medical Corp.
Terumo Cardiovascular
Systems Corp.
Elkton Factory

Terumo Aortic (Sunrise).

Terumo BCT, Ltd.
Larne Factory

Quirem Medical B.V.

Terumo BCT Vietnam Co., Ltd.

Terumo Medical Products
(Hangzhou) Co., Ltd.

Terumo (Philippines) Corp.



Terumo Clinical
Supply Co., Ltd.



Terumo Europe N.V.



Terumo Penpol Pvt. Ltd.



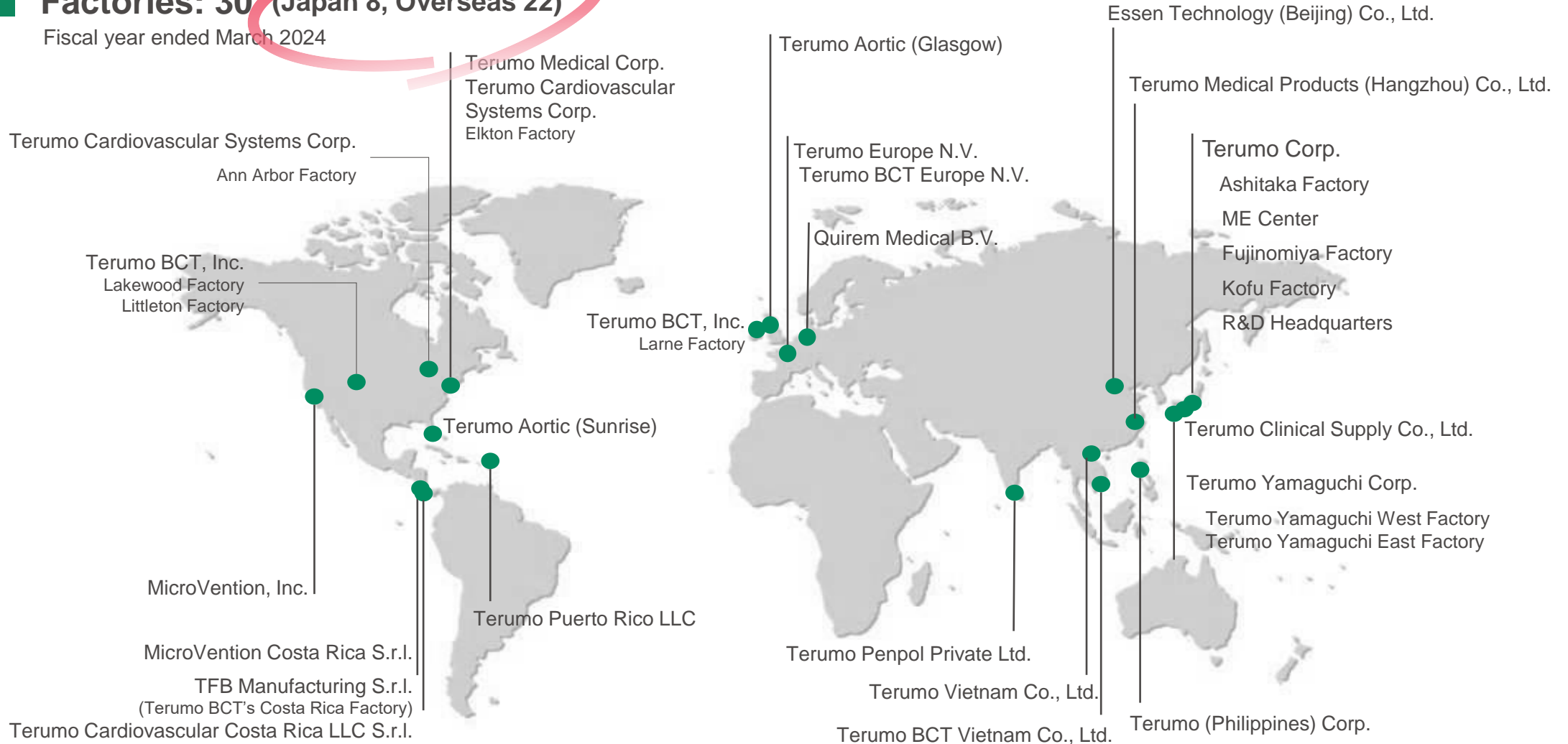
Essen Technology (Beijing) Co., Ltd.

103 years later...

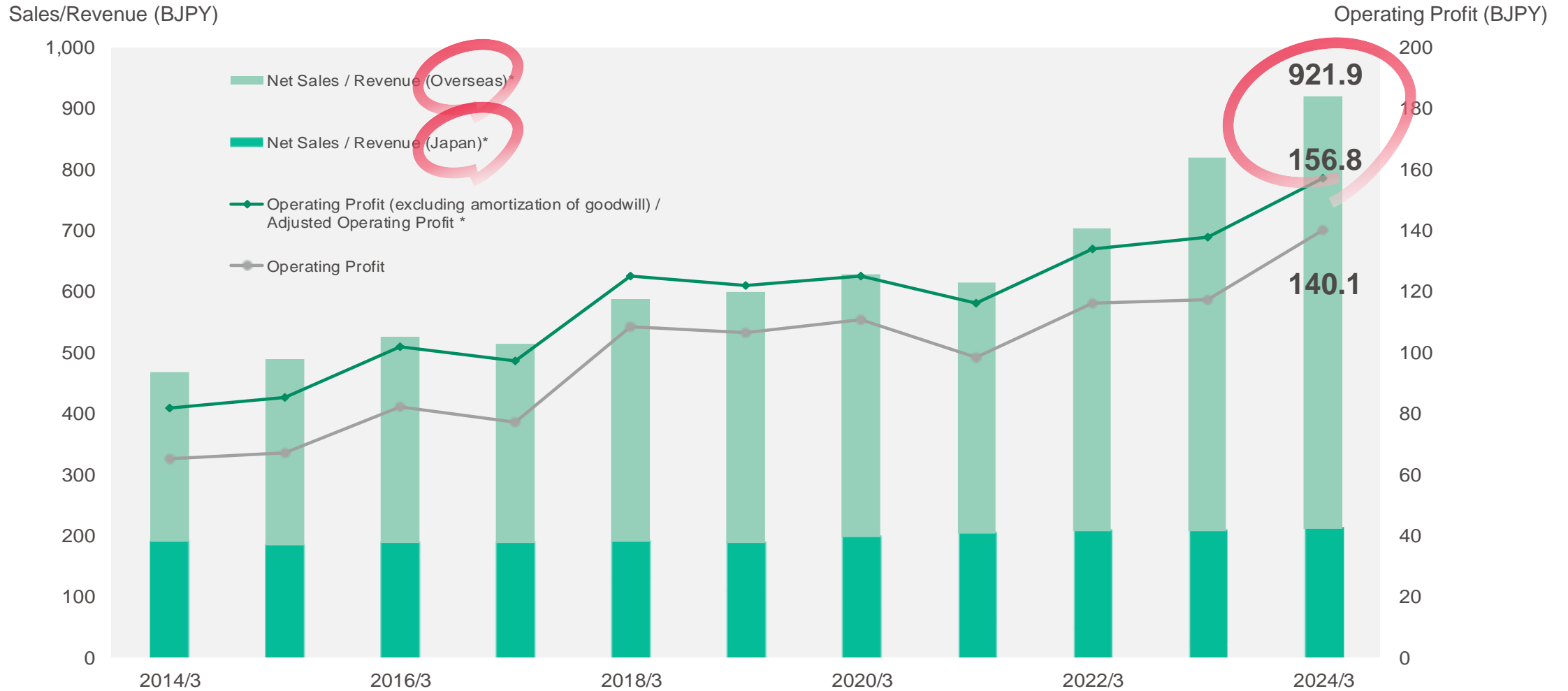
Globalized Production System

Factories: 30 (Japan 8, Overseas 22)

Fiscal year ended March 2024



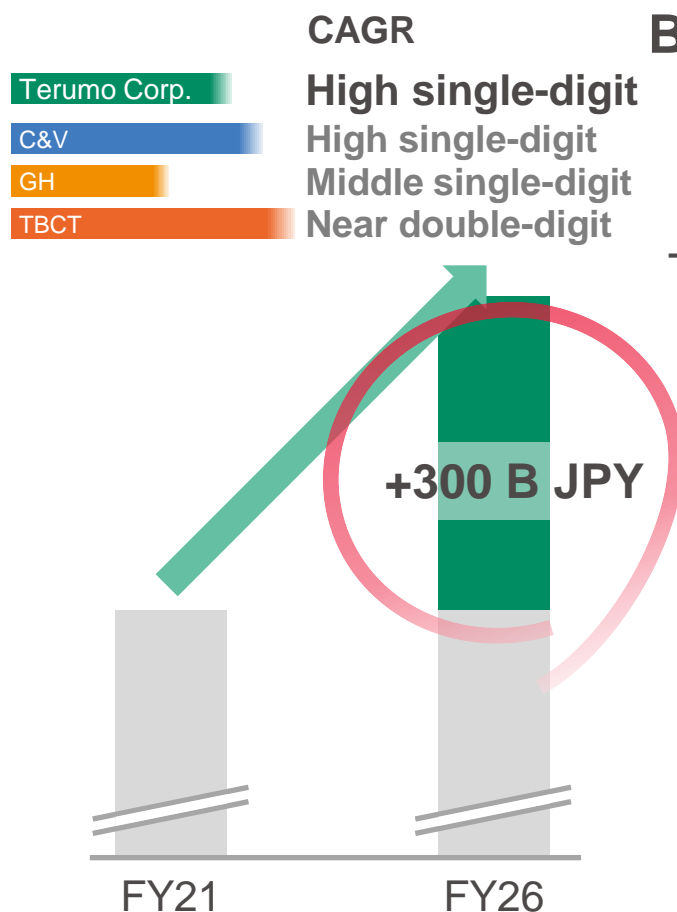
Continuing to Achieve Sustainable and Profitable Growth



*"Net Sales" and "Operating Profit (excluding amortization of good will)" are restated as "Revenue" and "Adjusted Operating Profit" in IFRS basis.

Drivers in the Growth Strategy 2026 (GS26) for FY2022 – 26

Group-wide revenue

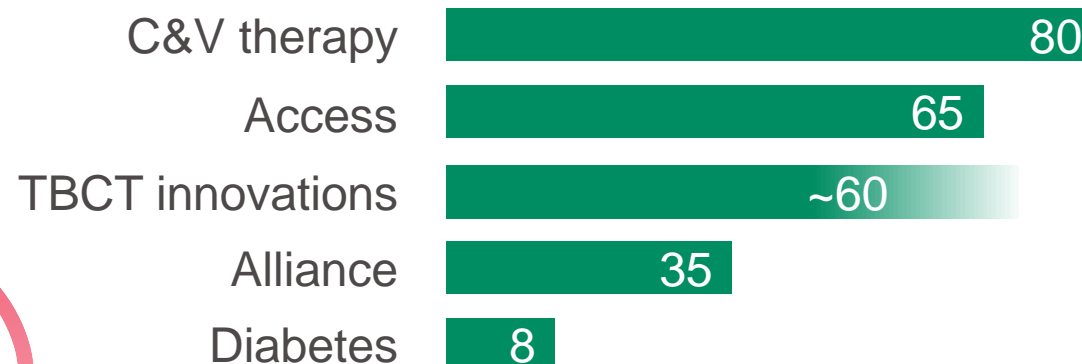


* 1 USD = 107 JPY, 1 EUR = 128 JPY

Growth drivers

Business segment (approx. 80% of growth)

(B JPY)



Geographic segment (approx. 50% of growth)



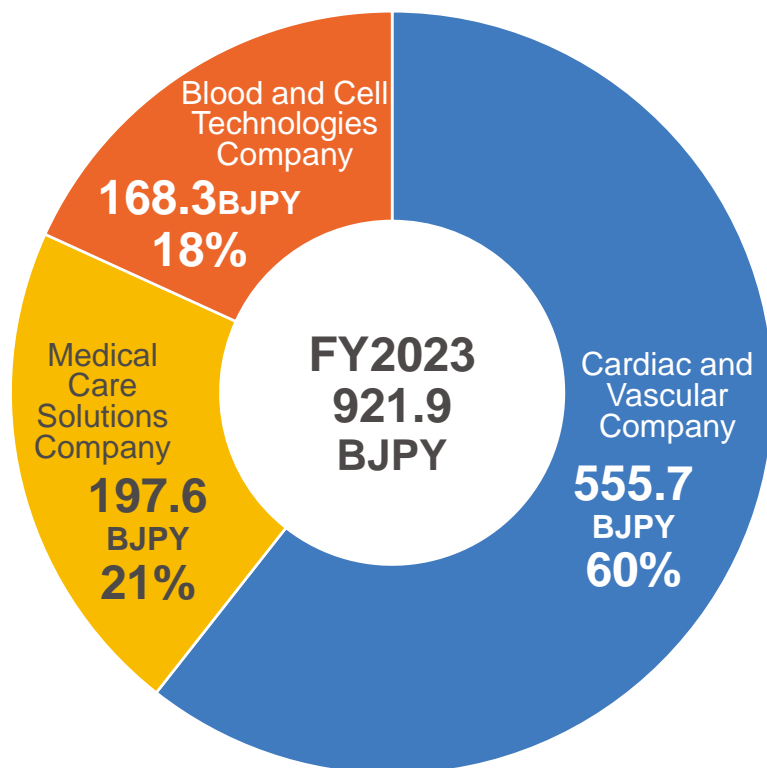
* Outside Japan revenue ratio: 70% (FY26)

Client segment



Contributing to Medical Care through 3 Companies and 8 Divisions

Revenue by Business



*The percentage of revenue composition is rounded to the nearest whole number, and the total may not equal 100%.

Cardiac and Vascular Company

Realizing minimally invasive treatments in vascular intervention and cardiac surgery

- TIS Division (Terumo Interventional Systems)
- Neurovascular Division (MicroVention)
- Cardiovascular Division (Terumo Cardiovascular)
- Vascular Graft Division (Terumo Aortic)

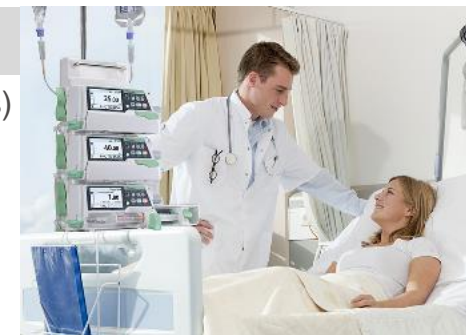


Medical Care Solutions Company

(Terumo Medical Care Solutions)

Contributing to better patient care and transformation toward “yasashii” medical care for everyone involved.

- Hospital Care Solutions Division
- Life Care Solutions Division
- Pharmaceutical Solutions Division



Blood and Cell Technologies Company

Sustaining blood transfusions worldwide, contributing to the advancement of blood and cell treatments



Cardiac and Vascular Company: Major Products

TIS Division (Terumo Interventional System)

Products for cardiac and lower-limb ischemic disease along with devices for intravascular diagnosis and treatment.



Guidewire



Drug eluting stent (DES)



Peripheral stent



Micro balloon catheter



Micro catheter



Drug-elutable beads



Intravascular Imaging System

Neurovascular Division (MicroVention)

Catheter-based neuroendovascular technologies that provide therapeutic advantages for neurovascular disorders.



Intrasaccular device



Flow diverter



Aspiration catheter



Liquid embolic agent
※ Image GG

Cardiovascular Division (Terumo Cardiovascular) / HeartSheet Division

Devices and regenerative medicine products that perform extracorporeal circulation for the patient's heart or lungs when the heart is stopped during cardiac surgery or for patients with impaired cardiopulmonary functions.



Oxygenator with integrated arterial filter



Autologous skeletal myoblast sheet



Heart-lung machine



CDI blood parameter monitoring system

Percutaneous cardiopulmonary support system / extracorporeal membrane oxygenation (ECMO) system

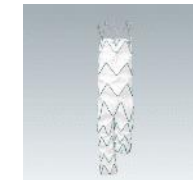


Vascular Graft Division (Terumo Aortic)

Products including surgical grafts and stent grafts that are used to treat patients with aortic disease.



Surgical graft



Stent graft



Thoracic frozen elephant trunk

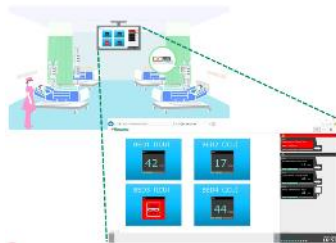
Medical Care Solutions Company: Major Products

Advanced Infusion System Products

ICU and OR: fusing drug administration systems and digital health



Syringe pump with system connectivity



Pump monitoring system



Safety IV catheter



Closed infusion system



IV solution bag for safe administration



Closed system drug transfer device (CSTD)



Ultraviolet irradiation robot



Hand sanitizer

Perioperative, Oncological Products

Supporting patient recovery with products that reduce postoperative pain, and prevent organ adhesion



Analgesic



Sprayable adhesion barrier gel

Peritoneal Dialysis Products

Ongoing treatment support: easing patient burden with user-friendly convenience



Peritoneal dialysate



Manually connected peritoneal dialysate exchange system



Sterile Tubing Welder

Medical Care Solutions Company: Major Products (continued)

Vital Sign Management Products

Timely measurement/recording of vital signs in ward rooms, improving accuracy and efficiency



Measuring Devices System with Communications Functions

Diabetes Care Products

Ongoing treatment support: easing patient burden with user-friendly convenience



Insulin patch pump



Needle for pen injector
used for self-injection



Blood glucose self-
monitoring system

Blood and Cell Technologies Company: Major Products

Plasma Innovations

Enhancing efficiency and quality in the field of source plasma collection.



Plasma donation system

Blood Center Solutions

Providing products to automate and optimize collection and blood component preparation in blood centers



Component collection system



Automated blood processing system



Blood bag sets with leukocyte filter



Pathogen reduction system

Therapeutic Apheresis and Cell Collection

Developing devices that use centrifuge technology to enable separation, collection, and removal of blood components, leading to new treatment options.



Centrifugal apheresis system

Cell Processing

Automating and optimizing cell processing; bringing efficiency to therapies and research conducted by pharmaceutical companies and research institutions. Terumo supports developments in cellular therapy, an area with the potential to offer fundamental improvements in healthcare.



Cell expansion system



Cell therapy fill and finish system

Challenges Terumo faces with Software as a Medical Device

■ Terumo Group

- | Lack of the necessary capabilities to effectively develop and market software

■ Cardiac and Vascular Company

- | Primarily engaged in the production of therapeutic consumables like catheters and guidewires, which have limited compatibility with digital technology

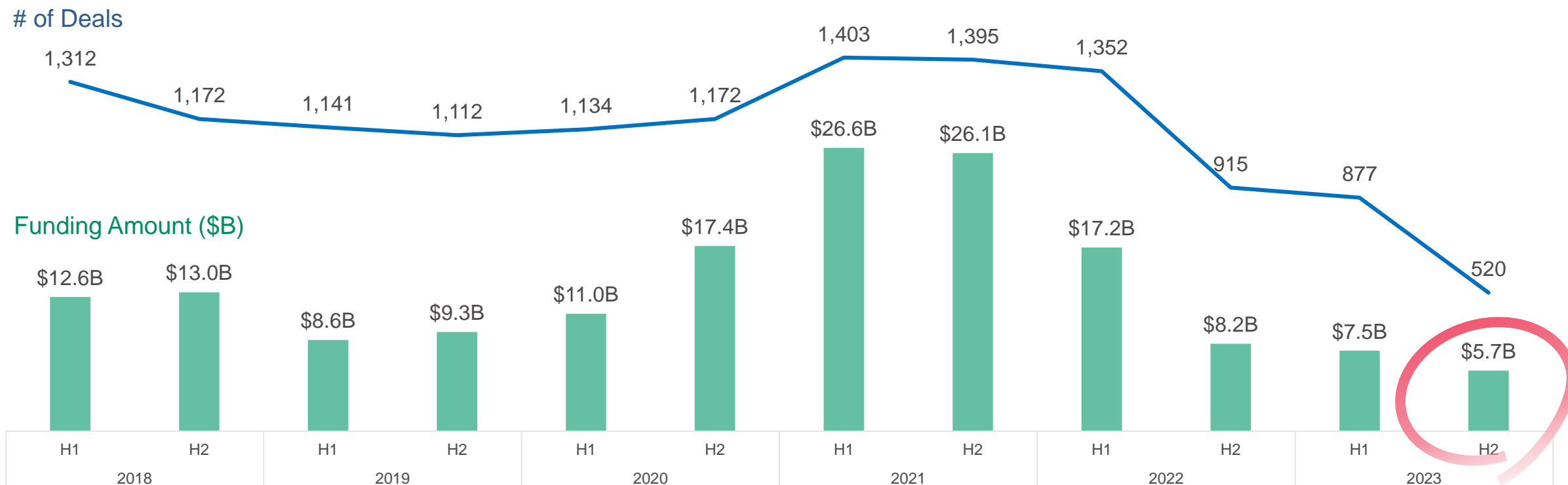
■ Medical Care Solutions Company

- | Mainly operating within the Japanese market, where the future of Software as a Medical Device (SaMD) as a significant industry remains uncertain

Terumo's Perspectives on Digital

Fundraising Environment for Digital Health Startups

■ Most recent half-year period at its lowest level since 2017



Source: CB Insights Community Briefing on Digital Health Tech Trends. CB Insights State of Digital Health 2023 Reports

Market “Metabolism”

■ While “high-profile” startups went bankrupt or forced to downsize...

- A leading digital therapeutics firm filed for bankruptcy in 2023 due to insurance payment issues.
- An AI-based remote monitoring company laid off over 100 employees globally and its CEO resigned.
- A telehealth startup, once valued at nearly \$2 billion, went bankrupt and sold its U.K. subsidiary after its U.S. shares became worthless.
- A major telehealth provider cut 6% of its non-clinical staff due to redundancies and restructuring for profitability.
- A digital therapeutics company laid off 40% of its staff and shifted from its prescription model for sustainable growth.

What Made the Difference?

■ After all, the key is whether the business model is clear or not



■ DTx and telehealth hyped up

■ Rushed to scale the business when the **business models were still premature**



■ **Clear clinical & economic values**

■ Replacing manual with digital and/or...

■ Solving big burdens: CKD, drug discovery, staff shortages, diabetes, etc.

Medtech Companies' Digital Initiatives

■ Even for global players, digital initiatives are limited in scope

Digital Natives

- Leveraging data generated by the core
- Digital platform play for a specific place or disease

Market Leaders

- Trial and error with digital across broad areas
- But lately with focus on robotics

Realistic benchmark for Terumo

Specialists

- Focused on point solutions
 - Company A: Diabetes, Diagnostics
 - Company B: HF, Pain Management

Terumo's Efforts in Digital

Core Values

Respect – Appreciative of others

We show respect and appreciation toward associates, customers, and business partners. We value individuality and diverse cultures, and listen widely and carefully to different opinions and the voice of society.

Integrity – Guided by our mission

As associates of Terumo Group, responsible for life and health, we always act with sincerity and a sense of mission. Through our daily efforts, we build trust among all stakeholders.

Care – Empathetic to patients

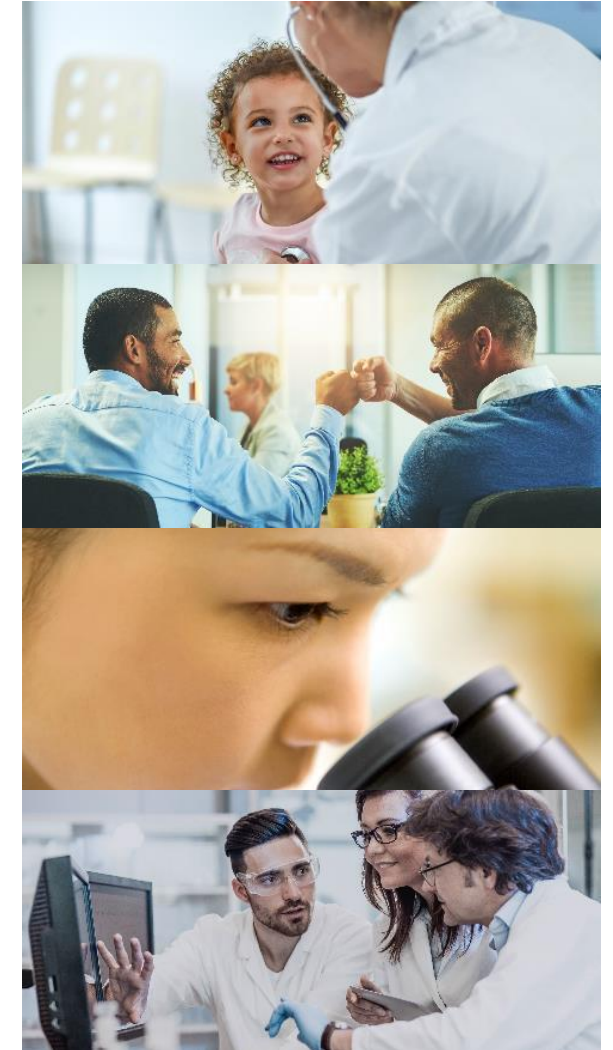
We are mindful that everything we do ultimately connects us to patients. We strive to understand healthcare providers deeply and work together with them to give patients a better future.

Quality – Committed to excellence

To ensure safety and reliability in healthcare, we view each issue from a “gemba” perspective in order to find the optimal solution. As well as product quality, we pursue excellence in all we do, from product supply to customer care.

Creativity – Striving for innovation

We promote a mindset that embraces challenge for the future, and work with curiosity and passion. We respond to the needs of “gemba” by delivering products and services that create meaningful value in a timely manner.



Terumo's Direction Defined by Global Leaders

■ Linked to the Core Values, confirming the focus on therapeutic areas

Respect

– Appreciative of others

In each region, we will deliver comprehensive solutions with deep understanding of customer needs.

Integrity

– Guided by our mission

We will ethically use medical data and artificial intelligence in accordance with Terumo group-wide guidelines.

Care

– Empathetic to patients

As with our conventional products and services, we will provide solutions that focus on medical care for patients and practitioners.

Quality

– Committed to excellence

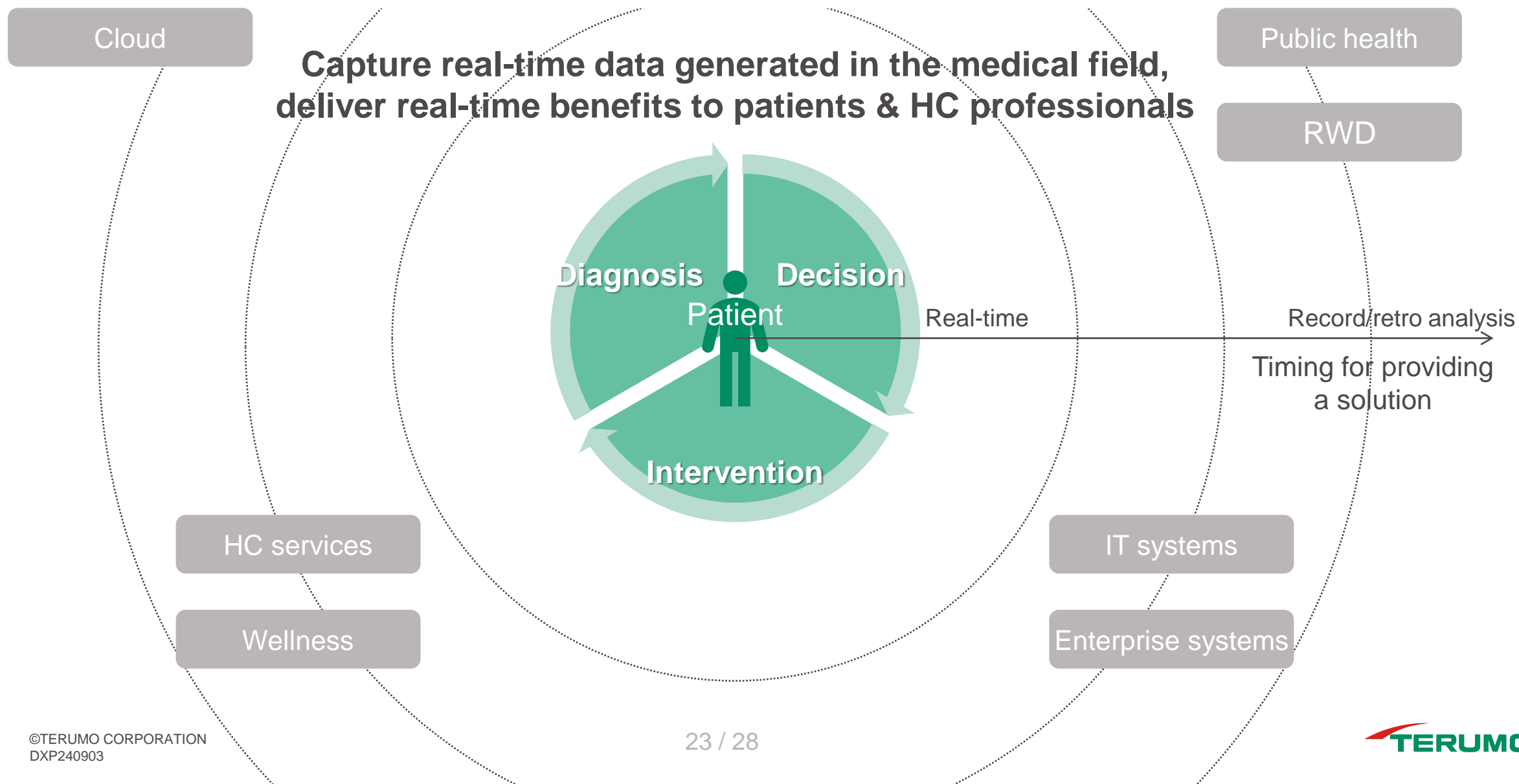
In digital area as well, we will focus on the quality of software, applications, cloud systems, etc. and work to improve quality throughout the group.

Creativity

– Striving for innovation

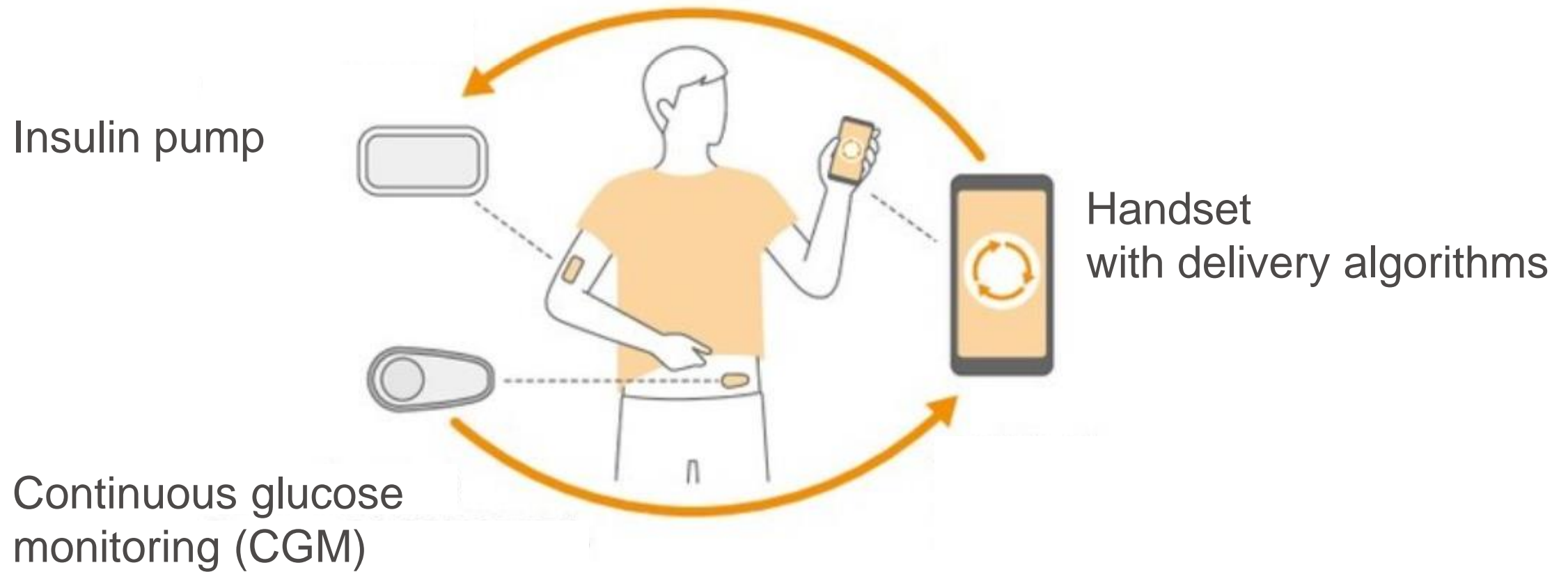
As One Terumo without being bound by organization, we move fast and create unique, integrated solutions by employing what we have, and sometimes combining them with what our business partners have.

Closer to Patients and Focus on Real-Time Care



Symbolic Example Representing Our Focus

- Automated insulin delivery system aiming for fine control of blood glucose level





<https://www.youtube.com/watch?v=R3cExa2yPWI>

Review of the Scenes in the Video



Digital therapeutics (DTx) for managing chronic diseases



Data solutions for blood centers



Smart drug delivery/infusion systems based on real-time monitoring beyond the confines of the hospital



Surgical planning and clinical decision support systems based on images and data for device selection



Smart drug delivery/infusion systems based on real-time monitoring to create time with patients

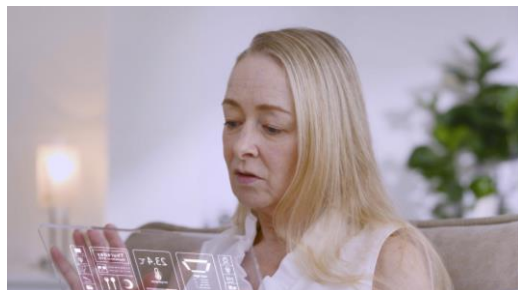


Surgical planning and clinical decision support systems based on images and data for risk prediction

Review of the Scenes in the Video (continued)



Clinical decision support systems based on real-time data and enhanced recovery after surgery (ERAS)



Remote patient monitoring



Digital ecosystem combining clinical settings and supply chains

Summary

- **Only one reason we are committed to digital: to realize our purpose.**
 - Advancing healthcare
 - Enhancing patients' quality of life
- **Whether this is achieved through SaMD or not is not the most important issue for us.**
- **We aim to provide digital solutions that address clear clinical needs in each region and disease area, are business-viable, and comply with local regulations and ethical use of data and AI.**

