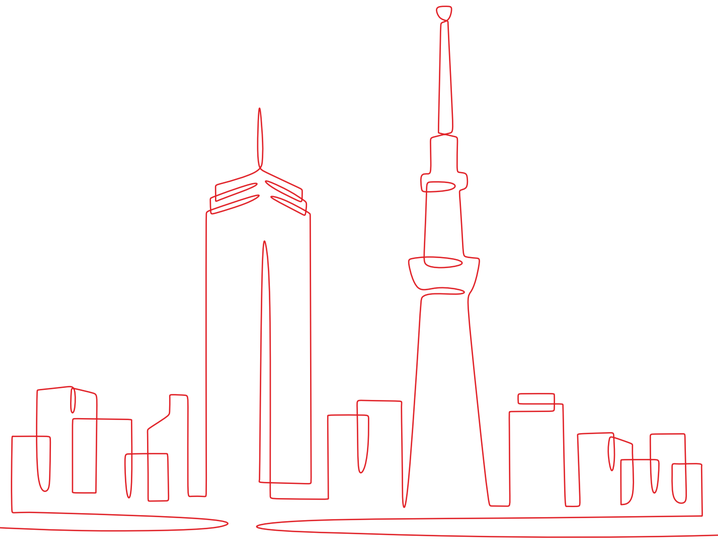
2025

# Annual Integrated Report

# Contents





# About this report

Welcome to Takeda's 2025 Annual Integrated Report. This report outlines the progress we've made over the past year to deliver on our purpose: *better health for people, a brighter future for the world.*

The report provides an overview of our strategy, business operations and performance during fiscal year (FY) 2024, based on four sections:

- An introduction to Takeda, with messages from our Chief Executive and Chief Financial officers
- *Corporate Philosophy,* which explains our approach to business
- *How We Create Value,* which describes how we're making a difference to people's and patients' lives in our imperatives:
  - In investing in **research and development** to deliver new, life-transforming treatments
  - In ensuring **equitable access** to treatments and vaccines, particularly in Low- and Middle-Income countries (LMICs)
  - In helping in the fight against rising cases of **dengue fever**, fueled by climate change
  - In using **data and digital technologies** to improve efficiency and speed up drug discovery and development
- Financial performance, which details Takeda's financial results for FY2024

## Scope of this report

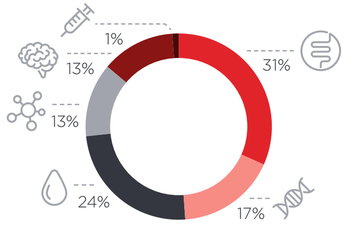
Our Annual Integrated Report covers operations of Takeda Pharmaceutical Company Limited and its consolidated subsidiaries. The report relates to fiscal year 2024 (April 1, 2024 to March 31, 2025), but may also include information reflecting events occurring after that period. For further details on our approach to this report, please see page 48. A list of abbreviations used in the report may be found on page 53.

# *Takeda* at a glance

## Our areas of focus

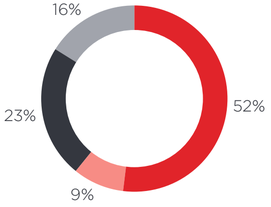
- Gastrointestinal and Inflammation
- Rare Diseases
- Plasma-Derived Therapies
- Oncology
- Neuroscience
- Vaccines

## Revenue by focus area




## Employees by country and region


## Revenue by country and region




U.S. Japan Europe & Canada Other

*as of June 2025

## Research & development (R&D)

Commitment to innovation

**4.9**

billion USD spent on R&D

Go to: R&D highlights and approach

## Financial performance

Growth & Launch Products

**48%**

Of our core revenue

Global revenue

**30.6**

USD billion

Go to: Financial performance

Core earnings per share

**3.28**

USD

All data above relates to fiscal year 2024. For financial data appearing in US dollars, we have used the following exchange rate: 1 USD = 149.90 JPY. Please see note on our use of exchange rates on page 48.

## Securing new licensing deals

During 2024, we completed several new licensing deals to support business growth and help us reach more patients with potentially life-transforming treatments.

- In May, we signed an option and licensing agreement with AC Immune for a potential first-in-class active immunotherapy, designed to delay or slow the progression of Alzheimer's disease.
- In June, we agreed an option to enter into an exclusive licensing deal with Ascentage Pharma for olverembatinib – a new drug currently in development for chronic myeloid leukemia (CML) and other hematological cancers. If exercised, the option would allow Takeda to license global rights to develop and commercialize olverembatinib in all territories outside of mainland China, Hong Kong, Macau, Taiwan and Russia.
- In December, Takeda obtained an exclusive license from Keros Therapeutics for elritercept, designed to treat anemia associated with certain hematologic cancers, including myelodysplastic syndromes and myelofibrosis. The agreement allows Takeda to further develop, manufacture and market elritercept worldwide outside of mainland China, Hong Kong and Macau.

# *Message* from our CEO

**Dear stakeholders,**
In bringing you our 2025 report, we look back on a year of strong business performance and solid progress in our R&D pipeline, giving us renewed confidence in our growth outlook.

The external environment is becoming more complex and challenging. Geopolitical and regulatory shifts, technology advances and pressure on health care budgets in many countries worldwide are just some of the factors currently affecting the pharmaceutical industry. Within this context, we remain vigilant and focused on responding with strategies to drive sustainable business growth and add value for society.

We publish this report each year to provide a comprehensive view into these strategies. Our approach to value creation is grounded in our corporate philosophy, aimed at benefiting patients, our people, the planet and our shareholders. In this report, we set out examples that bring to life the values that have guided our organization to success for more than 240 years.

We are enhancing efficiency, growth and resilience across our organization, using a values-based decision-making framework: Patient-Trust-Reputation-Business (PTRB), in that order. This ensures our decisions prioritize patients, build societal trust, reinforce our reputation and support sustainable business. This framework also helps us advance and deliver innovative medicines from discovery to patients quickly and safely, and is strengthened by the diversity of our people and the inclusion of a wide range of stakeholder voices in our decision-making.

In this past fiscal year, we achieved strong business momentum, advancing our portfolio of Growth & Launch Products and focusing on innovation while driving efficiency. Within this portfolio, ENTYVIO® (vedolizumab), FRUZAQLA® (fruquintinib) and immunoglobulin products are key growth drivers. Each performed strongly in FY2024. The launch of the Entyvio® Pen in the U.S. strengthened demand for Entyvio®, now with over 10 years of unique brand equity in a highly competitive market. In our oncology portfolio, Fruzaqla® launched or was approved in more than 20 countries, and our immunoglobulin products continued to see strong demand globally, coupled with steady supplies through expanded manufacturing capacity.

The positive momentum in our late-stage pipeline, enhanced by a combination of in-house discovery and targeted partnerships and acquisitions, is laying the foundation for long-term sustainable growth. Our late-stage programs continue to advance, and we anticipate filing for approval of three programs during FY2025-2026. An additional five indications are expected to file in FY2027-2029, underscoring the opportunities to bring innovative new medicines to patients.

Pipeline development requires higher investment in the later stages. We have closely managed this increased expenditure through rigorous R&D prioritization and a focus on efficient resource allocation and processes.

Our multi-year efficiency program progressed as planned in FY2024 and is contributing to our goal of returning our Core Operating Profit margin back to low-to-mid-30s%, balanced with the necessary increase in R&D, data, digital and technology (DD&T) and new product launch investment.

At the same time, we are applying DD&T throughout our value chain, encompassing R&D, manufacturing and commercial operations, leading to efficiency and productivity gains in areas such as research protocol optimization, quality control, manufacturing efficiency and personalized interactions with health care providers. More fundamentally, we're upskilling our people and making our organization ready for the future.

As announced in January 2025, I will be retiring from Takeda in June 2026. After a very thorough, multi-year succession planning process, Julie Kim, currently president of our U.S. Business Unit and U.S. Country Head, has been unanimously chosen by the Board of Directors to lead Takeda from there on. I have worked closely with Julie for the past six years and cannot think of a better leader for the role. Julie has the experience, grit and drive needed to realize the full potential of the new product launches expected from the second half of 2026 onwards, and I have no doubt that her total commitment to patients, our people, our values and our purpose will propel Takeda to further long-term success. I am proud of our transformation into a competitive, global R&D-driven biopharmaceutical company and confident that we have a sustainable business strategy that will serve patients, society and shareholders well in the years and decades ahead.

Sincerely,
**Christophe Weber**
President and Chief Executive Officer

# *Message* from our CFO

**Dear stakeholders,**
We have a clear vision at Takeda: to discover and deliver life-transforming treatments, guided by our commitment to patients, our people and the planet. We pursue our vision with a strong foundation in our values of Integrity, Fairness, Honesty and Perseverance, with Integrity at the core.

Takeda's diverse stakeholders choose to work with, invest in and partner with us because they are aligned with our vision, values and strategy. As CFO, my responsibility is to ensure that the resources provided by our stakeholders are leveraged efficiently to maximize enterprise value and the value we create is shared accordingly.

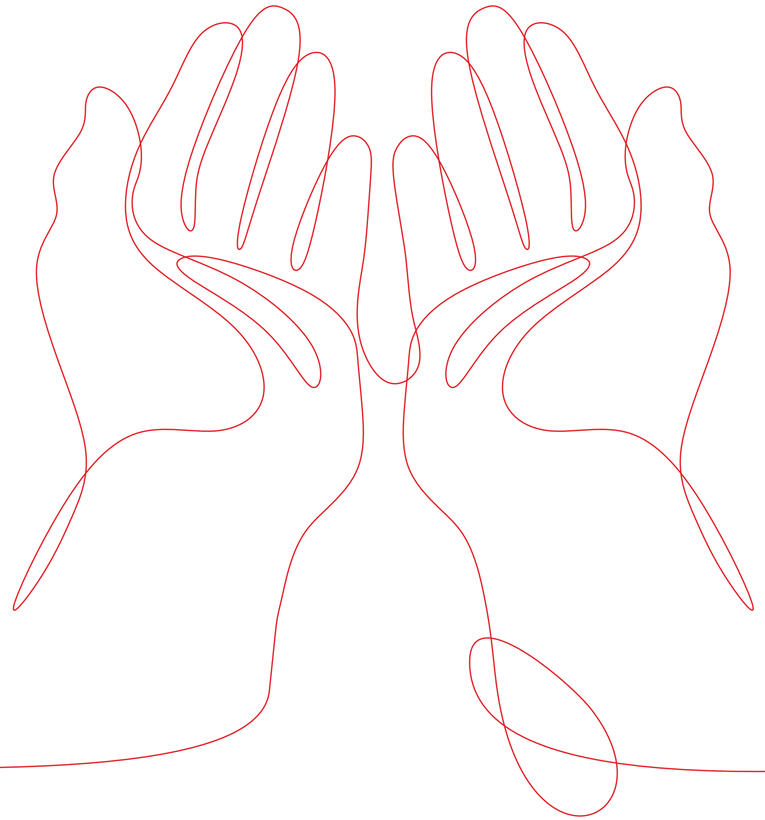
The discovery and development of new medicines is a complex, time- and resource-intensive process where potential success comes hand-in-hand with significant risk – but this is at the heart of what drives us as a company. Among the many investments we make, what we deploy for research and development is fundamental to our approach to value creation. This is why we are so excited to now have six programs in our late-stage pipeline with combined global peak revenue potential of USD 10 billion to USD 20 billion. We expect these programs to launch before the end of this decade, driving long-term growth.

Our efforts to drive efficiencies – improving organizational agility, optimizing external spend and leveraging digital technologies – are enabling us to create the financial capacity to increase investment in innovation while achieving healthy profitability. With our passion to pursue high performance, we are accelerating clinical trial operations, personalizing donor experiences while improving plasma collection costs and automating financial planning processes, to name a few.

We invest in innovation, while carefully managing our cost base and balance sheet. We believe that this will drive future growth, improve profitability and maximize cash flow. Over time, the results of these efforts will be reflected across our financial metrics and our focus on deploying capital with maximum efficiency will become clearly visible to all our stakeholders.

Thank you for your continued trust and support. We remain committed to delivering sustainable growth and creating long-term value for our stakeholders. Together, we will continue to drive innovation and transform the lives of patients and communities around the world.

Sincerely,
**Milano Furuta**
Chief Financial Officer



# *Corporate* **Philosophy**

# Takeda's corporate philosophy

**Takeda was founded in Osaka in 1781 by Chobei Takeda I, a seller of traditional medicines noted for his view that business should benefit not only merchants, but also people and society.**

**Our purpose:** Better health for people, a brighter future for the world

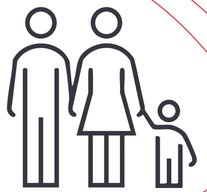
**Our vision:** Discover and deliver life-transforming treatments, guided by our commitment to patients, our people and the planet

**Our values:** We're guided by our values of *Takeda-ism*, which incorporates Integrity, Fairness, Honesty and Perseverance, with Integrity at the core. These values are brought to life through actions based on Patient-Trust-Reputation-Business: doing the right thing for patients, reinforcing trust and reputation and developing our business – in that order.

## Patient

We focus on the highest unmet need, both in rare and more prevalent conditions, to deliver high-quality medicines and vaccines to patients as quickly as possible. We also partner with diverse stakeholders to support the sustainability of health care systems.

## People



We aim to create a diverse and inclusive organization where people can thrive, grow and realize their own potential, while enabling our purpose.

## Planet

We will harness our unique capabilities to deliver a high standard of environmental stewardship that protects our planet's natural systems and human health.

Powered by:

## Data & Digital

We strive to transform Takeda into one of the most trusted, data-driven, outcomes-based biopharmaceutical companies.

# Our approach to business

Takeda is a global biopharmaceutical company – patient-focused, values-based and driven by innovative research and development (R&D). In FY2025, we expect to spend around USD 5 billion on R&D, bringing life-transforming medicines and vaccines to millions of people globally.

## Our operations and activities

We have a value chain model based on three main activities:

- R&D: our aim is to discover and develop life-transforming medicines for patients with both rare and more prevalent diseases in our core therapeutic areas of Gastrointestinal and Inflammation, Neuroscience and Oncology. Our world-class research laboratories collaborate with partners around the world to unlock innovation.
- Manufacturing and supply: we have 22 sites worldwide, manufacturing our medicines and vaccines. These sites are the backbone of our supply chain, ensuring we deliver high-quality medicines to where they're needed. At all our sites, we apply stringent quality standards – and look to improve efficiency where possible. We're also working to reduce the effect of our manufacturing operations on the environment, using more renewable energy and cutting back on waste and freshwater withdrawal.
- Bringing our medicines to patients: throughout our operations, we always put patients first – that includes our commercial strategy. On the ground, our commercial teams combine expertise with local knowledge to meet the needs of patients. We work closely with health care professionals and patient groups, as well as health care providers and payers in around 80 countries and regions worldwide.

Data, digital and technology (DD&T) is embedded in all that we do to advance our pipeline with improved speed and quality.

### Recent initiatives

Over recent years, we've made considerable progress, strengthening Takeda's presence in key markets, developing innovative new medicines and advancing our environmental goals.

During FY2024, we launched a company-wide program to drive further growth and improve efficiency. As part of this program, we're simplifying our organization, rigorously prioritizing our R&D pipeline, investing in DD&T and identifying new opportunities for further cost savings in areas like procurement.

### Our focus areas

Commercially, we're focused on six business areas, listed on page 44. Each of these has high, unmet patient needs and strong potential for growth. In our R&D, we focus on three of these areas: Gastrointestinal and Inflammation, Neuroscience and Oncology. Elsewhere – in Vaccines and Plasma-Derived Therapies – our intention is to make targeted investments to meet increasing patient demand.

**Growth & Launch Products**

Underpinning our strategy are Takeda's Growth & Launch Products. Over the past fiscal year, these products contributed 48% of the company's revenue, and we expect them to provide strong sales momentum for the future. These Growth & Launch Products are testimony to Takeda's continued commitment to patient-centered innovation. They include Entyvio®, our treatment for ulcerative colitis and Crohn's disease, now available as a single-dose pre-filled pen – as well as QDENGA®, our dengue fever vaccine, and Fruzaqla®, used in the treatment of metastatic colorectal cancer. See page 44 for a full list of our Growth & Launch Products for FY2024.

# Our values-based governance

Takeda's values-based decision-making is the foundation of our approach to governance. It's these values – Integrity, Fairness, Honesty and Perseverance – brought to action through Patient-Trust-Reputation-Business (PTRB), in that order.

Our approach starts with the leadership – our Board of Directors (Board) and the Takeda Executive Team (TET). The Board is responsible for providing oversight as well as making decisions on strategic or particularly important matters. As of June 2025, Takeda has 14 directors – 11 of whom are independent, including the chair of the Board – ensuring independence and objectivity in our decision-making. The Nomination and Compensation committees, which Takeda established voluntarily as advisory committees of the Board, consist entirely of independent external directors. In nominating candidates for director roles, the Board considers various criteria, including both background and experience. Takeda's directors possess skills in areas such as global business and strategy; science and medicine; legal, regulation and public policy; corporate governance and sustainability; finance and accounting; health care; data and digital; and management, leadership and human capital.

The TET includes our President & CEO, and heads of our business units, global functions and corporate partner functions. The team takes decisions through three committees, with those decisions reported to the Board:

- **Business & Sustainability Committee**, responsible for corporate/business development matters, including our approach to sustainability
- **Portfolio Review Committee**, responsible for R&D and product-related matters
- **Risk, Ethics & Compliance Committee**, responsible for risk management, business ethics and compliance matters

## Director and executive compensation

Takeda's director and executive compensation is designed to attract, retain and motivate managerial talent to realize our vision and enhance corporate value by optimizing the company's mid- and long-term performance, and supporting alignment with shareholders.

Takeda's executive compensation strategy supports our position as a patient-focused, values-based, R&D-driven global biopharmaceutical company, and the programs are designed to be globally competitive and performance-oriented.

Please refer to Takeda's website and policies for more information:

- Governance Strategy
- Leadership: the Board of Directors and Takeda Executive Team
- Board of Directors' Skills Matrix
- Charters for Board committees, SEC filings and Takeda's Annual Securities Report
- Director's Compensation Policy
- Takeda's Executive Compensation Overview
- Takeda position papers

## Ethics and compliance

Throughout our business, we are committed to maintaining the highest ethical standards. That's important because everything we do affects the most vital aspect of people's lives – their health.

Takeda's values-based culture is the foundation of this commitment, encouraging ethical behavior and a strong sense of shared responsibility among all employees. More than 2,000 Values Ambassadors across the company serve as inspiring role models, helping bring our values to life by encouraging colleagues to engage in thoughtful reflection, make values-based decisions and strengthen personal accountability.

Speaking up is an important way we uphold our values. We encourage employees to voice concerns when we believe any action, behavior or decision could put the company or values at risk, and respect colleagues who do so. Fostering psychological safety is key to enabling employees to speak up – whether to report misconduct or to propose better ways of doing things. We support our leaders and teams in creating a safe, open and inclusive environment through workshops, resources and global recognition of initiatives that promote psychological safety.

All our policies and controls are reviewed regularly to ensure they remain relevant and effective, incorporating industry best practices. Our Global Code of Conduct sets the foundation for ethical behavior and shared accountability for all employees, outlining our values and expectations in areas such as patient safety, protecting personal data and responsible innovation. The Takeda Ethics Line provides a secure, anonymous channel for employees and external parties to report suspected violations of laws, regulations or our Code of Conduct without fear of retaliation.

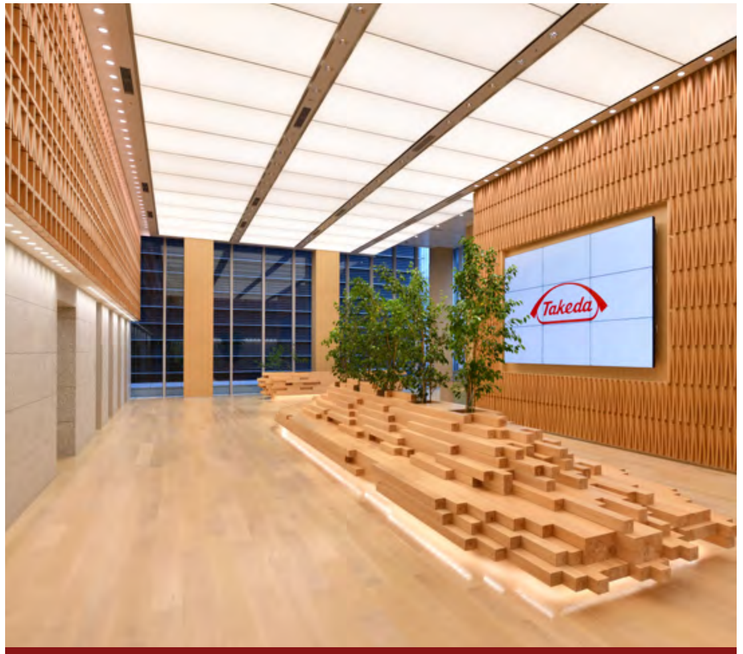
We also set clear standards for our suppliers. Takeda suppliers are required to adhere to our Supplier Code of Conduct, which contains provisions on environmental management, safety, data privacy, animal welfare, as well as protecting basic human and labor rights. To ensure compliance, we conduct regular independent audits and work closely with suppliers to correct problems if they arise. Globally, Takeda works with more than 40,000 suppliers. They provide the raw materials and services we need to produce and distribute our medicines and vaccines, so it's important that we conduct thorough due diligence to ensure we're not inadvertently causing harm to people or the environment.

### Respecting human rights

We're committed to respecting internationally recognized human rights within every aspect of our business, across our value chain, as well as in the communities we serve. Our Human Rights Commitment is embedded within Takeda's policy framework, including our Global Code of Conduct and Supplier Code of Conduct. In 2024, informed by the update of our global Human Rights Impact Assessment, we identified four prioritized human rights, which enables us to focus our efforts on promoting rights to:

- Health
- Safe, healthy, just and favorable conditions of work
- Freedom from discrimination
- Clean, healthy and sustainable environment

Additional information on our human rights efforts can be found on our website.




### Takeda Ethics Advisory Council

As Takeda advances clinical research, develops treatments and adopts new technologies, we recognize that ethical questions will continue to emerge. To guide our approach, we have established the Takeda Ethics Advisory Council (TEAC), bringing together Takeda leaders and external experts to provide independent advice. Members identify, discuss and integrate ethical principles and frameworks into our programs. In particular, TEAC's discussions have shaped Takeda's positions on data, data sharing and AI – resulting in clear guidance for employees and reinforcing the company's commitment to the highest ethical standards.

# Corporate philosophy metrics

**What are our corporate philosophy metrics?**

Our corporate philosophy tells the story of who we are, what we do, how we do it and why it matters.

Takeda's corporate philosophy (CP) metrics serve as quantitative indicators of our progress in key areas that drive our sustainable growth and help us fulfill our purpose of "better health for people, a brighter future for the world." These metrics are aligned with our commitment to patients, our people and the planet, underscoring our belief that Takeda's business success is not solely measured by financial performance.

**Patient**

| Metrics | FY2023 | FY2024 | Highlights: Achieving Pipeline Milestones |
|---|---|---|---|
| **Achieving Pipeline Milestones**<br># of pivotal study starts and approvals | **29** | **29** | Pivotal clinical studies generate the data that regulatory authorities use to decide whether to approve a treatment or vaccine. The initiation of pivotal studies, together with approval, demonstrates our progress in delivering new treatments to patients and people.<br><br>In FY2024, we continued to advance our pipeline by initiating several pivotal studies, including three for our six late-stage programs, marking important progress in bringing potential new therapies to patients. We also achieved regional new indication approvals for key programs, helping expand patient access to new treatments – most notably, Entyvio® SC administration for maintenance therapy of Crohn's disease in the U.S. |
| **Disclosing Clinical Trial Results**<br>% of achievement for timely disclosure of clinical trial summary results on public registries | **100%** | **100%** | |
| **Maintaining Uninterrupted Supply**<br>% of order lines dispatched on-time, in-full | **99.1%** | **99.5%** | |
| **Upholding Manufacturing Quality**<br>% of health authority inspections with no regulatory compliance actions | **100%** | **100%** | |
| **Global Access to Growth & Launch Products**<br># of key countries where patients have access to the product through reimbursement | TAKHZYRO® **9**<br>ALOFISEL® **4**<br>LIVTENCITY® **6** | LIVTENCITY® **9**<br>ADZYNMA® **3**<br>FRUZAQLA® **4** | |
| **Access to Medicines Programs in LMICs and Countries with Evolving Health Care Systems**<br># of newly enrolled patients in Takeda's affordability-based patient assistance programs (PAPs) | **1,682** | **1,975** | |

**People**

| Metrics | FY2023 | FY2024 | Highlights: Engaging Employees & Improving Employee Well-being |
|---|---|---|---|
| **Engaging Employees**<br>Average score on a 1–100 scale to questions regarding engagement in the annual Employee Experience Survey | **77** | **76** | We believe that a highly engaged workforce, whose well-being is satisfied, can align their individual purpose with our corporate purpose and reach their full potential at work. Our effort in creating such exceptional experience starts with actively seeking employees' feedback.<br><br>The increase of the well-being metric was driven by higher scores in work-life balance and disconnecting from work. Regarding employee engagement, our areas for improvement have been identified as speak-up culture and agility in FY2024. |
| **Improving Employee Well-being**<br>Average score on a 1–100 scale to questions regarding well-being in the annual Employee Experience Survey | **67** | **68** | |
| **Embracing Diversity**<br>Enterprise-wide gender breakdown | Female **52%**<br>Male **48%**<br>Other/Non-binary **0.1%** | Female **53%**<br>Male **46%**<br>Other/Non-binary **0.14%** | |

**Planet**

| Metrics | FY2023 | FY2024 | Highlights: Scope 1, 2 & 3 GHG Emissions Reduction |
|---|---|---|---|
| **Reducing Scope 1 & 2 GHG Emissions**<br>% of reduction in emissions below 2016 baseline | **53%** | **55%** | We have exceeded our FY2025 target of a 40% reduction in Scope 1 and 2 GHG emissions ahead of schedule. Building on this accomplishment, we have committed to new SBTi validated targets; 65% reduction by FY2030 and 90% by FY2035, maintaining the same baseline.<br><br>While we did not fully meet our Scope 3 goal for FY2024, we made progress with a six percentage point increase compared to FY2023. For FY2025, we have shifted our Scope 3 commitment to our new SBTi validated GHG emissions reduction target of 25% by FY2030.<br><br>We will continue our efforts in environmental sustainability, as we believe this strengthens our business continuity and opens up more opportunities for meaningful collaboration with stakeholders. For more information, please visit the Planet section on pages 20-23. |
| **Engaging Suppliers toward Scope 3 GHG Reduction**<br>% of emissions that are from suppliers who have committed to setting science-based climate targets, aligning with SBTi standards | **56%** | **62%** | |
| **Diverting Waste from Landfill**<br>% of waste diverted from landfills | **78%** | **75%** | |
| **Conserving Freshwater**<br>% of reduction below 2019 baseline | **4.9%** | **8.6%** | |
| **Making Paper and Paperboard Packaging from Sustainable Forest Certified or Recycled Content**<br>% of the secondary and tertiary packaging paper/paperboard by weight that is recycled content or sustainable forest certified | **53%** | **62%** | |

"As we navigate the external environment, we continuously reassess our metrics to stay aligned with our strategic objectives. By communicating our performance, we empower employees to align their efforts with our overall vision and create a shared language. Through this collective accountability, we remain committed to driving progress and delivering on our purpose."

**Akiko Amakawa, Corporate Strategy Officer & CEO Chief of Staff**

**Data, Digital and Technology**

| Metrics | FY2023 | FY2024 | Highlights: Improving Personalized Digital Experience for HCPs: Takeda-ID |
|---|---|---|---|
| **Improving Personalized Digital Experience for HCPs: Takeda-ID**<br># of Health Care Professionals (HCPs) who subscribe to Takeda-ID | — | **51,412** | Takeda-ID, a single identity for Takeda's digital ecosystem, plays a pivotal role in providing a secure and personalized experience for HCPs. For example, in Japan, it helps us optimize our communications to HCPs to meet their individual needs for better serving their patients by leveraging access logs in Takeda Medical Site*. Increased usage of Takeda-ID indicates that Takeda's digital ecosystem is meeting HCPs' information needs. |
| **Leveraging AI and Automation to Enable Workforce**<br>% of workforce actively using the Generative AI tools as of March 31, 2025 | — | **46.6%** | |
| **Upskilling Employees in Progressive Technologies**<br>Cumulative % of employees who have taken at least one data, digital and technology training course since the first quarter of FY2020 | **49%** | **55.1%** | |

*A member site for Japanese HCPs that provides information and webinars on the proper use of our prescription pharmaceuticals.

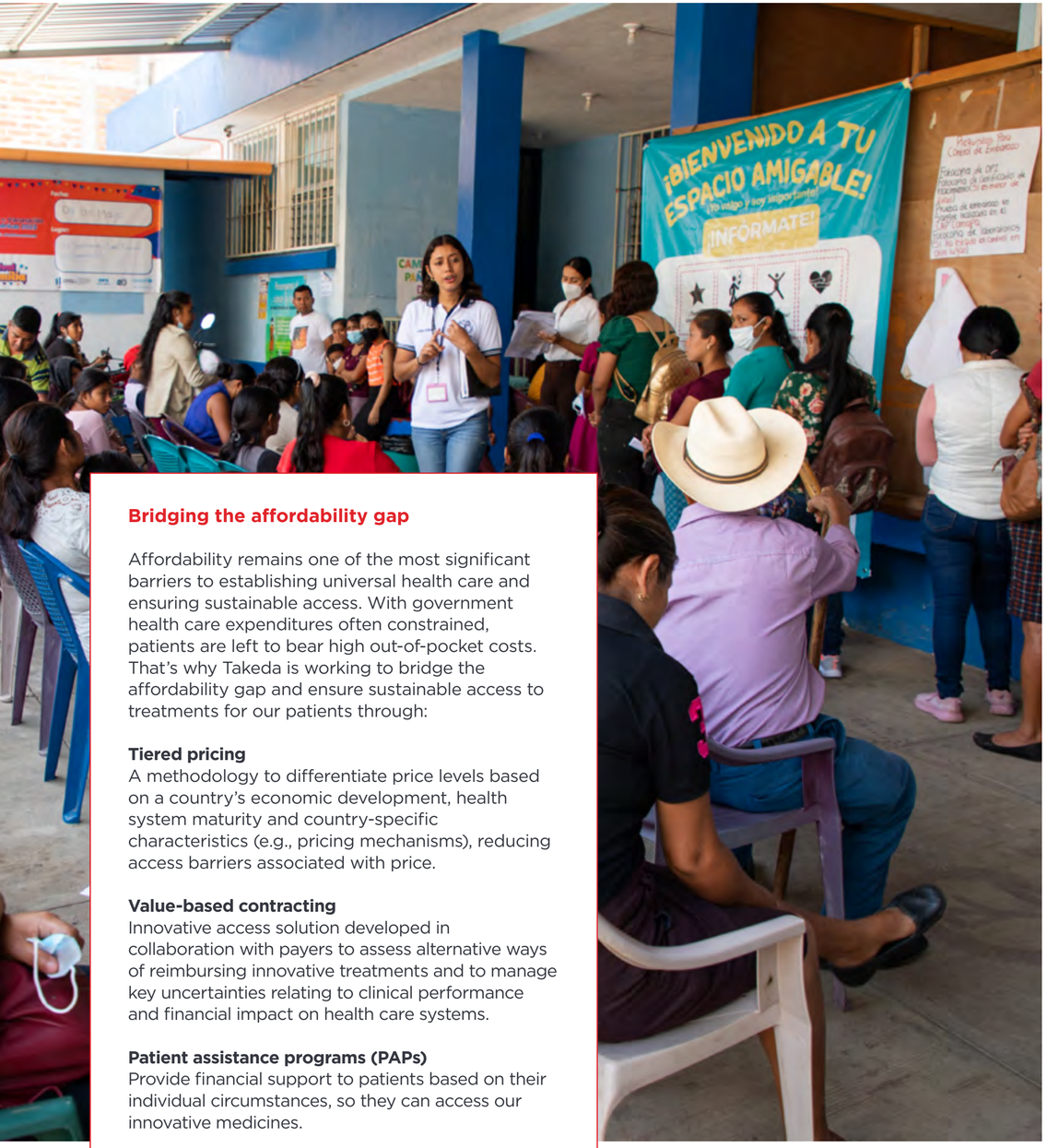
**Business Growth**

| Metrics | FY2023 | FY2024 |
|---|---|---|
| **Driving Business Growth**<br>% of year-over-year Growth & Launch Products incremental core revenue growth vs. target | **79.5%** | **87.9%** |

For the analysis of this fiscal year's results, please refer to page 43.

**Notes:**

- FY2023 and FY2024 results have been assured by KPMG AZSA Sustainability Co., Ltd. (KPMG). Detailed information on the assured metrics, including definitions, scope, and calculation methodologies, is available in the 2024 ESG Databook for FY2023 results and the 2025 ESG Databook for FY2024 results.
- Our corporate philosophy metrics are also included in our Annual Securities Report (under Corporate Sustainability Policies and Initiatives).




### Bridging the affordability gap

Affordability remains one of the most significant barriers to establishing universal health care and ensuring sustainable access. With government health care expenditures often constrained, patients are left to bear high out-of-pocket costs. That's why Takeda is working to bridge the affordability gap and ensure sustainable access to treatments for our patients through:

**Tiered pricing**
A methodology to differentiate price levels based on a country's economic development, health system maturity and country-specific characteristics (e.g., pricing mechanisms), reducing access barriers associated with price.

**Value-based contracting**
Innovative access solution developed in collaboration with payers to assess alternative ways of reimbursing innovative treatments and to manage key uncertainties relating to clinical performance and financial impact on health care systems.

**Patient assistance programs (PAPs)**
Provide financial support to patients based on their individual circumstances, so they can access our innovative medicines.



# Putting patients first

## We work to remove the many complex barriers to access and equity that may prevent people from getting the treatments they need.

As a global biopharmaceutical company, our strength is translating science into innovative medicines and vaccines – and manufacturing and delivering safe, quality treatments to patients worldwide. At the same time, we contribute to closing local gaps in prevention, screening and diagnosis of diseases and improving long-term health outcomes related to developing health care infrastructure and climate change in affected countries and communities. Affordability is a significant barrier to access, and we address this using a multi-layered approach tailored to the local environment. We offer tiered- and value-based pricing, and patient assistance programs (PAPs). We also work alongside community organizations and governments around the world to strengthen local health care systems and address barriers to access along the patient journey.

Lack of access may be attributed to various barriers along the patient journey from a lack of disease awareness and diagnosis to developing health care infrastructure. That's why we believe that efforts to increase access – and make this sustainable – must be based on an understanding of the problems encountered locally by both patients and health care professionals.

Since 2017, Takeda has enrolled 8,193 patients in LMICs and countries with evolving health care systems in affordability-based PAPs, helping bridge the affordability gap for patients who would not otherwise be able to access prescribed treatments. In India, for example – thanks to our PAP – more than five times as many patients have received Takeda's innovative treatment for Hodgkin's lymphoma than would have been possible without our program.[1]

**8,193**

Patients enrolled in our patient assistance programs since 2017

## Working with World Federation of Hemophilia

For more than 30 years, we've worked alongside the **World Federation of Hemophilia** (WFH) to support people suffering from this rare genetic bleeding disorder. Hemophilia affects over 200,000 people worldwide and it's those in LMICs who often struggle the most to get the right treatment.

During our partnership, we've supported the WFH's efforts to improve diagnosis and collect data for evidence-based advocacy. We joined the WFH Humanitarian Aid Program in 2021 by donating Hemofil M and, importantly, also a bypassing agent (FEIBA®). Without FEIBA®, patients with inhibitors* in many countries would be left without therapeutic options for bleeds and surgeries. In 2024, more than 2,500 people were treated with products from Takeda's contribution to the program. Starting in FY2026, we'll be delivering a total of 65 million units of FEIBA® and Immunate over the next five years to the WFH for distribution to hemophilia treatment centers in countries where there is little to no care today, for example across Latin America, Africa and Asia.

Please click here for more information on rare bleeding disorders and the World Federation of Hemophilia.

*In hemophilia, inhibitors are antibodies the body produces against infused clotting factor replacement products, making the treatment ineffective. FEIBA® (factor eight inhibitor bypassing activity) is a medication used to control bleeding in hemophilia patients with inhibitors. It works by bypassing the inhibitor's effect and facilitating the formation of a clot.

## Access principles

Takeda has principles governing access to medicines and vaccines as follows:

- Focus on unmet medical needs
  - › *This means:* Ensuring rapid, global access to our life-transforming medicines and vaccines – all the way from R&D to commercialization. This is important because Takeda medicines are often the first and only treatment available, particularly in the case of rare diseases.
- Balance, speed, breadth, value and sustainability of access
  - › *This means:* At Takeda, our access and pricing strategies for medicines and treatments are tailored to achieve the optimum balance of speed and breadth and sustainability of access and, within the unique context of each medicine, reflect their value to payers, the health care system and society.
- Partner to strengthen and support health care systems
  - › *This means:* Partnering with diverse stakeholders to address the barriers to access to our medicines and related care that exist within health care systems. In doing so, we strengthen health care systems in ways that are sustainable, aligning with national priorities and local communities.

To put these principles into practice, Takeda:

- **Integrates access into our business** – from R&D to commercialization, taking a locally driven approach to delivering our medicines, which allows us to be responsive to local patient needs and address the unique barriers to access in each health care system.
- **Aims to achieve equitable access** by addressing the broader socio-economic barriers to accessing medicines and related health care – for example, through our programs to improve long-term community health in the U.S.
- **Looks to bridge the affordability gap** with different pricing and access solutions based on a country's stage of economic development and health system maturity.

# 10.8 million

People were reached by Takeda's community health programs in the U.S. in FY2024

# 47

Partnerships with U.S. community-based organizations to drive long-term health at the local level

## Improving long-term community health in the U.S.

In the U.S., an estimated 1 in 10 people lack adequate access to health care simply because of social factors, including where they were born, went to school or where they live and work.

To help address this, we partner with community organizations across the U.S. because we understand that lasting impact doesn't come through decisions at company headquarters, but in partnership with the local community, with community leaders at the helm of designing solutions. We complement their initiatives with the power of our resources – from our repositories of diverse data, funding, employee volunteerism, broad network and deep bench of subject-matter expertise.

Through the programs we support, we're focused on three strategic priorities: Improving equitable access to high-quality health care, nutritious food, and education in science, technology, engineering and math (STEM). These priorities are supported by employee volunteering programs.

As communities' needs evolve, so does our strategy. Last year, we created a dedicated U.S. Community Health group bringing together teams that drive our strategic priorities and employee volunteer programs to achieve more measurable, sustainable impact in U.S. communities.

For more information, please see our U.S. Community Impact Report.

## Our partnership with Partners In Health

Since 2017, our work with non-profit **Partners In Health** has helped identify health inequities in local communities and improve long-term patient care worldwide. In FY2024, we extended that partnership closer to home – to address social barriers to health and increase access to care in communities across Massachusetts, United States. With our support, Partners In Health will work with the state to deploy more community health workers, establish health equity communities of practice, and work with local health departments and community organizations to plan and deliver new programs addressing health inequities and improving access to care. Massachusetts is one of the U.S.' wealthiest states, but many people still struggle to get the medicines and treatments they need, often because of deep-rooted racial or social disparities.

Commitment to people

# Supporting performance and innovation

Takeda employs approximately 50,000 people around the world. We're constantly looking to the future, developing the skills and talent we'll need in the years ahead. We do that by encouraging a culture of lifelong learning, and creating a diverse and inclusive work environment.

## Empowering lifelong learning

We want employees to take charge of their own careers – that's what we mean by a culture of lifelong learning. Our role at Takeda is to support and enable employees. To do this, we offer extensive online and in-person learning resources, mentoring programs and our Career Navigator, which allows employees to explore new career growth opportunities. In 2025, we added short-term assignment opportunities on Career Navigator as a way for employees to learn skills and gain experience while contributing to Takeda's business.

At the same time, we are also investing in a new online platform that can deliver integrated learning experiences, incorporating live sessions, self-directed learning, mentoring and group discussions to thousands of employees.

AI is transforming our HR approach. With AI, we're able to provide more personalized resources and advice. For our employees, this means they can increasingly find learning resources for the skills they need, either for their current job or for the job they aspire to. We're experimenting with AI coaches and AI-facilitated role-playing, so employees can practice new skills, such as providing feedback, in a risk-free environment. And, through *Performance Pal*, we're using AI to make our performance review process more efficient and effective.

We are aware that we also need to further develop employees' digital skills and mindset to help future-proof our business and make technology an integral part of our everyday work. In July 2024, we launched the Everyday AI journey in our learning platform – the first major step in our new Digital Dexterity framework, aimed at strengthening essential digital skills at both our offices and manufacturing sites. In 2025, we'll continue to develop employees' skills and encourage them to experiment with new digital tools and technologies.

Leaders, we believe, have a critical role to play in inspiring and motivating employees – that's why we've made leadership development a priority. In FY2024, we launched an integrated Change Management toolkit and introduced a comprehensive suite of development programs – a Senior Leader Induction Program designed to effectively onboard those who are either newly hired or recently promoted to senior leadership positions, and a 16-month Takeda Aspire Program, which helps prepare emerging senior leaders for future strategic roles.

# 68

Takeda's performance on well-being improved in FY2024, according to our latest Employee Engagement Survey. Scores for *disconnecting from work* and *work-life balance* also increased compared with the previous year

# 8th

Takeda has been recognized by the Top Employers' Institute as a top global employer for the eighth consecutive year. We're one of just 17 companies to receive this global recognition. In the latest Top Employers' Institute survey, we were also named top employer in 24 countries, including the U.S., Japan, Germany, the U.K., Brazil, Canada and South Korea

## Fostering an inclusive culture

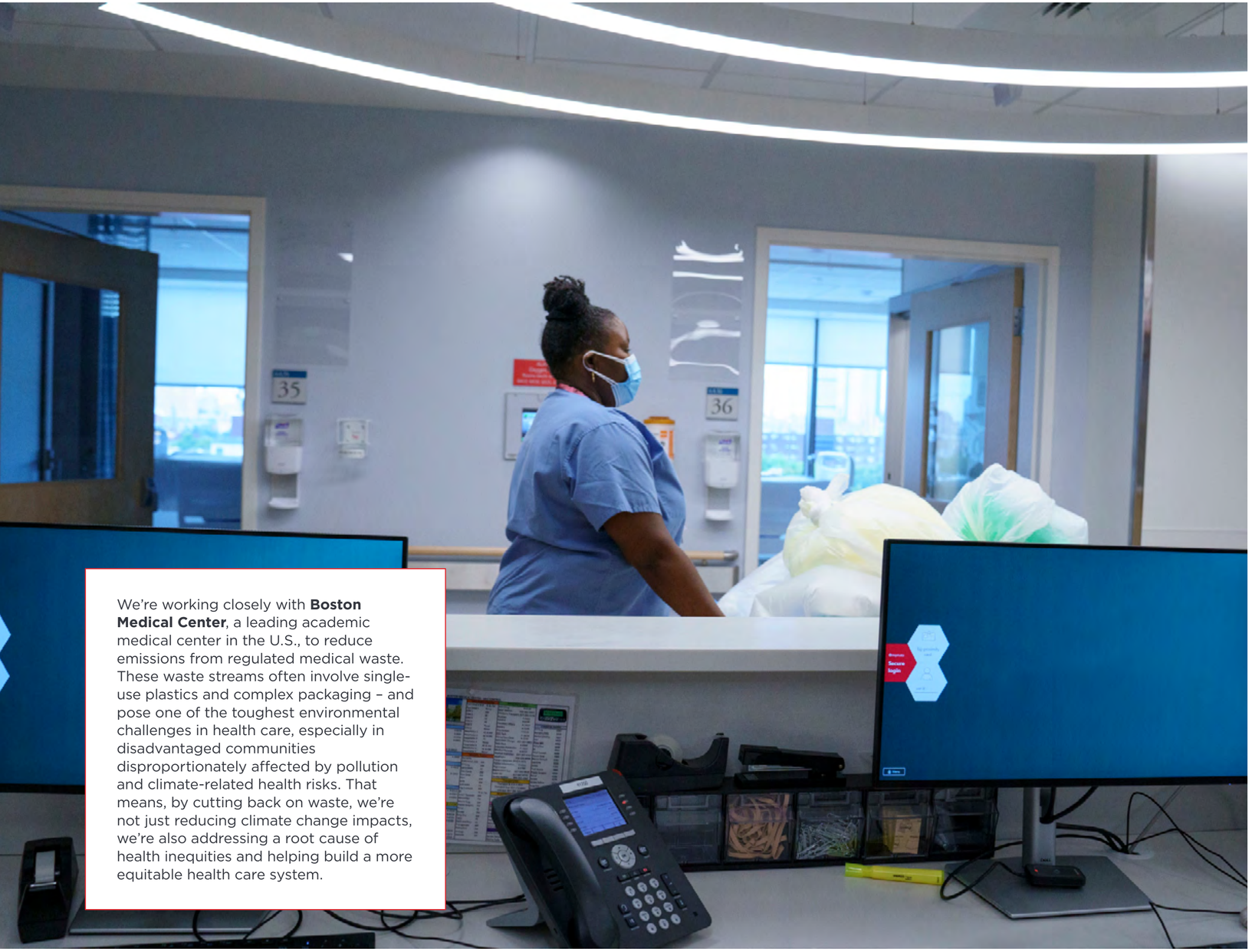
At Takeda, we embrace diversity by fostering a safe and inclusive workplace where individuals feel empowered to voice their perspectives. This commitment is reflected in the results of our latest Employee Engagement Survey, which highlighted respect and acceptance as core strengths of Takeda's culture.

Beyond the workplace, Takeda has achieved recognition for our efforts. For the fourth consecutive year, we were named Japan's top company in Equileap's annual gender equality ranking and we also received the Healthcare Businesswomen's Association's Advancement, Commitment, Engagement (ACE) award, underscoring our dedication to inclusion.

Our philosophy extends to patients, ensuring equitable access to vital medicines and appropriate support for patients. For instance, in Brazil, we rolled out a 24/7 sign language chatbot to support patients with disabilities, demonstrating our innovative and inclusive approach to addressing diverse needs.

## Supporting health and well-being

We promote health and well-being, so that employees can thrive, grow and realize their full potential. Our global well-being program encompasses physical, emotional, financial and social well-being. All employees have access to our Thrive Global program, allowing them to monitor well-being factors, such as sleep, nutrition and movement. Over the past year, we have also taken further measures to strengthen our approach to well-being. In the U.S., we introduced new musculoskeletal and weight management programs, and increased employee access to specialized health care for women and those wanting to start families. We also harmonized HR practices to ensure all employees now have access to Takeda's Employee Assistance Program.



We're working closely with **Boston Medical Center**, a leading academic medical center in the U.S., to reduce emissions from regulated medical waste. These waste streams often involve single-use plastics and complex packaging – and pose one of the toughest environmental challenges in health care, especially in disadvantaged communities disproportionately affected by pollution and climate-related health risks. That means, by cutting back on waste, we're not just reducing climate change impacts, we're also addressing a root cause of health inequities and helping build a more equitable health care system.



# A healthier planet means healthier people

The well-being of patients and communities depends on a healthy planet. The environment impacts health across Takeda's therapeutic areas.

We are acting with urgency to minimize the environmental impact of our operations and to develop more sustainable solutions to health, while simultaneously driving value for our business. For example, we're reducing our greenhouse gas (GHG) emissions, reducing waste to landfill and lowering freshwater withdrawal, utilizing more sustainable packaging and building sustainability into our products right from the design phase.

## Advancing our net-zero ambition

In recent years, we have significantly reduced GHG emissions from our operations by increasing energy efficiency and switching to renewables at our offices, R&D buildings and factories, and installing photovoltaic panels at our manufacturing sites. Taken together, these measures have helped reduce emissions by 55% since FY2016 – well ahead of our original target.

At the same time, we realize that the majority of our emissions – approximately 90% – are Scope 3 emissions that come from outside our own operations:

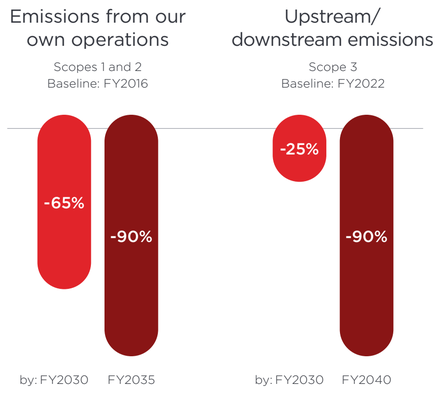
- Upstream – from the goods and services we use to make our medicines and vaccines and their transportation and distribution
- Downstream – from the disposal of products and packaging after use

To address these emissions, we're working closely with our suppliers to help them set science-based emission reduction targets. In FY2024, we did not fully meet our FY2025 goal of obtaining commitments to establish science-based targets from 67% of our suppliers by emissions, having obtained commitments from approximately 62%. We are committed to continuing to engage with our vendors and suppliers to encourage them to set targets, which will support us in achieving our commitments.

In FY2024, our net-zero targets were validated by the Science Based Targets initiative (SBTi). To support our targets, we've established comprehensive net-zero roadmaps for each manufacturing site to reduce emissions across the business.

Over the next five years, we're committed to further reducing Scope 1 and 2 emissions to 65% compared with FY2016. For Scope 3 emissions, we're shifting emphasis to emissions reduction rather than supplier target-setting, aiming to reduce total Scope 3 emissions by 25% compared with FY2022. By FY2040, our aim is to have reduced combined Scope 1, 2 and 3 emissions by 90% against their respective base years, with Scope 1 and 2 achieving that reduction level by FY2035. For the remaining 10%, we're currently building our strategy to invest in high-quality carbon removal projects through the Voluntary Carbon Market (VCM).

## Takeda's net-zero targets




For definitions of Scopes 1, 2 and 3, please refer to the Greenhouse Gas Protocol.

Targets for Scopes 1 and 2 include emissions related to land use and removals from bioenergy feedstocks.

Takeda biotechnology manufacturing site in Neuchatel, Switzerland

# 75%

In FY2024 we achieved a 75% waste diversion rate, in support of our goal of 100% of waste diverted from landfill by FY2030. We have also reduced freshwater withdrawal by 8.6% compared with FY2019, beating our target of a 5% reduction by FY2025, while growing our business

Alongside partners Schott Pharma and Corplex, we ran a pilot project at our manufacturing site in Singen, Germany, to reduce the environmental impact of single-use plastic trays used to transport glass vials for our medicines.
By recycling these trays and keeping them in a closed loop, we can reduce emissions by up to 50%. The pilot showed the feasibility of including 70% recycled content in the trays without compromising on either safety or quality. We're now using these results – validated in a successful large-scale study in FY2024 – to begin switching to recycled plastic trays in our day-to-day business.

## Conserving natural resources

Preserving ecosystems, reducing harmful emissions and managing natural resources efficiently not only helps safeguard the environment but also improves public health outcomes. As a biopharmaceutical company, we depend on natural resources to make our medicines and vaccines. So, it's important that we help protect these natural resources.

To protect precious resources, we are focused on water stewardship, responsible waste management and biodiversity protection, implementing resource efficiency measures, pollution prevention practices and reducing the environmental impact of our operations.

Over the past year, we've conducted comprehensive risk assessments to better understand how we're affecting the natural world around us and potential risks for our business resulting from issues such as climate change and nature loss. Our climate risk assessment covered both physical and transition risks across our global operations and key suppliers. For nature, we've identified priority sites in water-stressed areas in the U.S., Europe and Japan, where we are working to reduce freshwater withdrawal through greater efficiency by adopting new water treatment and reuse techniques. For example, at our manufacturing site in Osaka, Japan, we used data and digital technology to reduce freshwater withdrawal by up to two million liters a year. In Lessines, Belgium, we're recycling wastewater for reuse in manufacturing, which by 2027 aims to reduce our freshwater withdrawal from local city supplies by as much as 90%.

## Designing with sustainability

We're building sustainability into the design of our products because more than 80%[2] of the environmental impact of products is locked in during the design phase. Takeda's Sustainability by Design program focuses on integrating environmental considerations into every stage of product development – from R&D to packaging and delivery. This proactive approach ensures that sustainability principles guide decisions on materials, chemicals of concern, energy use and waste. We're also using life cycle assessments to map out our products' environmental impact, from raw materials to disposal. For our packaging, we are switching to recycled or certified sustainable paper and fiberboard, having achieved 62% in FY2024.

55%

Since FY2016, we've reduced combined Scope 1 and 2 GHG emissions by 55%, putting us on course to meet our FY2030 near-term target of 65%

Through our Climate Action Program at Sites, at the Oranienburg, Germany site, a cross-functional team launched two energy-saving initiatives projected to reduce consumption by over 6 GWh annually – enough to power around 600 homes for a year. First, the team implemented weekend Heating, Ventilation and Air Conditioning shutdowns in select areas during cooler months, balancing energy savings with safety and contamination risks. Second, they reassessed room humidification, finding that only 6% of rooms (30 out of 500) required it. By turning off humidification in non-critical areas and piloting changes elsewhere, the site is significantly cutting energy use without compromising product quality or safety.

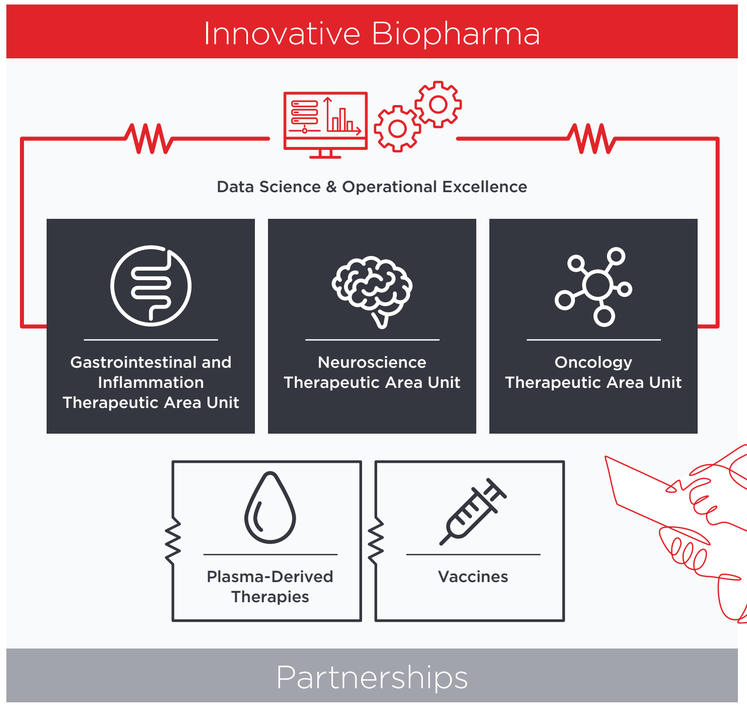
# *How We*
# Create Value

R&D highlights and approach

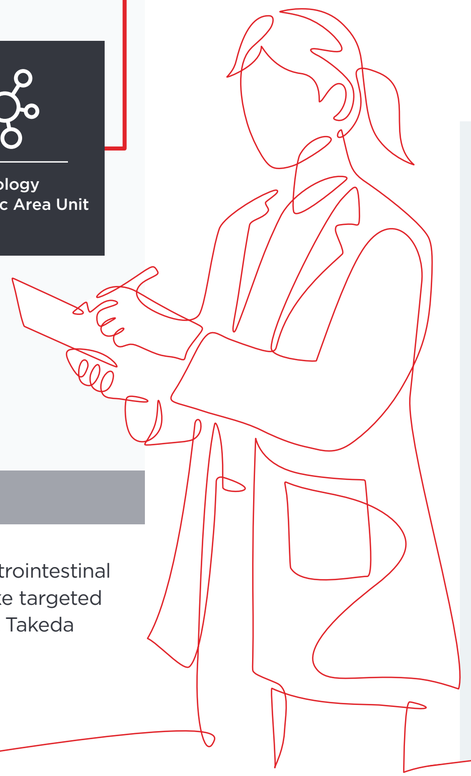
# Groundbreaking scientific discoveries

Research and Development (R&D) goes to the heart of what we do as a company – discovering and developing life-transforming medicines for patients with both rare and more prevalent diseases. Over the past few years, we have established an exciting late-stage pipeline, which has the potential to deliver significant value to patients and Takeda. To fuel our pipeline, we support a cutting-edge research organization, progress a highly innovative early- to mid-stage pipeline and pursue creative business development approaches across all stages of R&D.

## R&D strategy




Our R&D efforts are focused on three therapeutic areas: Gastrointestinal and Inflammation, Neuroscience and Oncology. We also make targeted R&D investments in Plasma-Derived Therapies and Vaccines. Takeda invested just over USD 4.9 billion in R&D in FY2024.



**135+**

Takeda laboratories collaborate with more than 135 partners across biotechnology, academia, public-private partnerships and more to unlock scientific innovation no matter where it resides

**Gastrointestinal and Inflammation:**

Our vision is to restore life to living for patients suffering from gastrointestinal (GI) and inflammatory diseases by delivering innovative, life-changing therapeutics. For over 30 years, Takeda has been a leader in advancing the science and treatment of GI diseases. The focus of our GI pipeline comprises inflammatory bowel disease (IBD), alpha-1 antitrypsin deficiency liver disease, celiac disease and neurogastric disorders. We have built a particularly deep understanding of IBD, a chronic and devastating immune-mediated condition affecting millions of patients.

**Neuroscience:**

Neurological conditions affect individuals of all ages, presenting them with profound struggles and isolation. Our passion and expertise across neurology with special focus on sleep-wake disorders, neurodegenerative and rare neurological conditions, drive our commitment to address the unmet needs of these patients. We are dedicated to transforming the lives of patients with neurological diseases through groundbreaking research and innovative treatments that aim to address the profound impact these disorders have on people and society.

**Oncology:**

In Oncology, we are committed to ensuring that patients globally can benefit from and access our portfolio of medicines, while also progressing a pipeline of potential treatments for the future. Our R&D efforts are focused on three disease areas and four modalities. We are advancing medicines for thoracic, gastrointestinal and hematologic cancers. Within hematologic cancers, we are growing a portfolio of medicines for myeloid cancers. Our core modalities include antibody drug conjugates (ADCs), complex biologics, small molecules and gamma delta T cell therapies.

Please refer to our website for more information on our R&D approach.

# USD 10-20 billion

We expect our six Phase 3 development programs to generate potential peak revenue of USD 10-20 billion

## Pipeline and R&D investments

Nearly half of our R&D investments are currently committed to late-stage Phase 3 medicines. These programs are expected to provide a significant source of revenue growth for Takeda through 2030 and beyond. Combined, we estimate that our six Phase 3 development programs could generate potential peak revenue of USD 10-20 billion (see below).

Alongside these Phase 3 programs, we also have promising early- to mid-stage programs targeting diseases where there are significant unmet patient needs in our core therapeutic areas.

Takeda's R&D is externally facing – we partner with collaborators across industry, academia and public-private partnerships to unlock innovative science. We partner to expand our pipeline and maximize our R&D investments. Closely aligned with our therapeutic area strategies, we pursue acquisitions, late-stage commercial opportunities, in-licensing deals and creative option agreements.

Developing new medicines requires significant investment – that's why we maintain a disciplined approach to program prioritization and resource allocation. Every program is evaluated against the:

- Unmet medical need it addresses
- Scientific validity of the approach
- Potential for an accelerated development path
- Commercial opportunity it represents

## Late-stage programs

Of our six late-stage programs, we anticipate Phase 3 readouts from three programs in 2025. In March, rusfertide read out positive Phase 3 data in a study of patients with polycythemia vera, a type of blood cancer. Later this summer, we anticipate Phase 3 readouts for oveporexton in narcolepsy type 1 and, later this year, Phase 3 results for zasocitinib in the treatment of psoriasis. Regulatory filings for these three indications are expected in FY2025 and FY2026. Phase 3 studies for mezagitamab, fazirsiran, elritercept and zasocitinib are expected to read out later this decade and have target regulatory filings in FY2027-FY2029. Please click here for further details.

**Key late-stage development programs**

### Oveporexton
Narcolepsy type 1

### Zasocitinib
Psoriasis
Psoriatic arthritis

### Rusfertide
Polycythemia vera

### Fazirsiran
Alpha 1 antitrypsin deficiency liver disease

### Mezagitamab
Immune thrombocytopenia
Immunoglobulin A nephropathy

### Elritercept
Myelodysplastic syndromes

In recent years, our pipeline has matured to focus increasingly on late-stage programs. We doubled the number of programs in late-stage development from FY2021 to FY2024 and, as a result, a greater portion of our R&D spend supports the late-stage pipeline.

## Accelerating pipeline development

We work hard to deliver new medicines to patients as quickly as possible. Future Fit is our end-to-end drug development model, leveraging modern ways of working, data, digital and technology to improve the speed, quality and efficiency of programs across the pipeline. We're using data, digital and technology to provide more insights and shorten cycle times. With oveporexton, for example, we're now on course to complete the process from the first in-human trials to regulatory filing two to three years sooner than the average for comparable sleep medications. We also completed enrollment in two Phase 3 trials for zasocitinib – for treatment of psoriasis – seven months ahead of schedule.

### A real-world approach to clinical trials in psoriasis

More than 7.5 million Americans and 60 million people worldwide live with psoriasis, a chronic skin disease. The prevalence of psoriasis is similar in men and women, but can vary according to race and geography. Also, psoriasis symptoms can manifest differently in skin of color. Despite these realities, participants in clinical trials are predominantly white men – a patient population that doesn't reflect that of the real world.

Takeda's ambition in FY2024 was to enroll patients in our pivotal Phase 3 psoriasis trials that better represented real-world populations. Using a data-driven approach, we set U.S. enrollment targets for our Phase 3 trials with the goal to increase participation from Black, Hispanic and Asian populations and begin to address health inequities in dermatology. With this approach, we achieved nearly all our enrollment goals as we met our Asian enrollment target, nearly doubled Black enrollment and more than doubled Hispanic enrollment.

## Supporting inclusive clinical trials

Ensuring medicines are studied in the patient populations they are designed to treat will lead to better research, treatments and health outcomes for all people.

Once approved, medicines are prescribed to treat people of different ages, genders, races, ethnicities, geographies, socioeconomic status and other characteristics. Historically, clinical trials have not always been representative of patient populations. That's important – because we know medicines work differently in different people.

Making our trials more representative leads to better research and, ultimately, better health care for everyone. It's also part of health equity – making sure that people have access to the best possible care, regardless of their social background.

All Takeda's clinical trials in the U.S. now include plans to ensure appropriate patient representation. At the same time, we have community awareness and outreach campaigns in more than 40 locations across the U.S. as part of our Communities as Partners programs. Alongside this, we're working closely with partners including Black Health Matters, the HCN Global (formerly Hispanic Communication Network), BlackDoctor.org and Inside Edge, as well as with neighborhood pharmacies – to encourage more people from underrepresented and underserved communities to consider clinical trials.

Outside the U.S., we're developing a global diversity strategy. We contributed to recent guidance on clinical trials in the U.K. and Canada. In the European Union, we're working with the Innovative Health Initiative to improve the design of clinical trials. We're also looking to diversify to other countries, beginning with those that already have experience in organizing clinical trials, such as Brazil, South Africa and Australia.

**Making breakthroughs in the treatment of narcolepsy**

Narcolepsy is a chronic, rare neurological disease. Narcolepsy type 1 (NT1) is a type of narcolepsy that is caused by loss of the orexin-producing neurons in the brain, which regulate wakefulness, sleep and attention through activation of orexin receptors.

People with NT1 experience a range of symptoms, including disrupted night-time sleep, excessive sleepiness during the day, and sudden muscle weakness, known as cataplexy. This disruption at all hours of the day and night severely impacts every aspect of their daily life.

NT1 is difficult to diagnose accurately as many of the symptoms are common to other disorders. An accurate diagnosis can take up to 8-15 years. While treatments do exist, none of them target the underlying cause, orexin deficiency, that causes NT1. As a result, nearly 60% of diagnosed patients with NT1 take five or more medicines and other treatments to manage their symptoms and conditions.

Takeda is leading the field of orexin science. With our deep expertise in neuroscience, we are developing a portfolio of treatments for people living with NT1 and other rare sleep-wake disorders where orexin plays a role. Oveporexton (TAK-861) is the lead orexin receptor 2 (OX2R) agonist asset in our orexin franchise in Phase 3 development for the treatment of NT1 with readout anticipated this summer.

The research and development of our orexin franchise is a true global, homegrown effort. Oveporexton was discovered at our Shonan research facility in Japan and developed in Cambridge, MA, U.S. We've been able to accelerate the development of oveporexton from the first in-human studies to Phase 3 trials, through the increased use of advanced data and digital technology. With results from Phase 3 trials expected later in 2025, we believe oveporexton has the potential to become the first-in-class treatment for people living with NT1.

We realize that treating narcolepsy requires more than just innovative, new medicines. Therefore, we conducted one of the largest real-world studies to date to better understand the disease. This "for patients, with patients" approach enables us to identify the breadth of symptoms affecting people living with NT1 to map out the true impact of the disease on patients. Through the Health Outcomes Observatory (H2O), we're actively working to develop standardized outcomes for narcolepsy. This includes collecting both clinical outcomes and patient reported outcomes (PROs) to help understand the impact of the disease and the treatment. PROs will be digitally collected directly by patients, enabling more meaningful and continuous engagement throughout their care journey.

The standardized outcomes set will be developed using H2O's proven Delphi multi-stakeholder consensus approach, which ensures active involvement from both patients and health care professionals. By supporting better doctor-patient dialogue and enabling health care professionals to focus on outcomes that matter most to patients, we aim to drive real, measurable improvements in patients' day-to-day lives.

As one of few companies addressing narcolepsy's underlying cause, Takeda is pioneering a transformative orexin-centered therapeutic landscape. In addition to oveporexton for NT1, we are investigating TAK-360 for narcolepsy type 2, idiopathic hypersomnia, and exploring other potential indications where orexin signaling is implicated.

# Patient-centered innovation to deliver life-transforming treatments

Chief Global Corporate Affairs and Sustainability Officer Takako Ohyabu talks to President of R&D Andy Plump about how Takeda's culture of putting patients first is helping raise the bar on scientific innovation and discovery.

**Takako** When we talk about sustainability at Takeda, it's about how we manage the business to create sustained growth through our enduring corporate values – *Takeda-ism* – Integrity, Fairness, Honesty and Perseverance, with Integrity at the core. Every day, we put these principles into practice through our decision-making framework: Patient-Trust-Reputation-Business, in that order. R&D is crucial to achieving our vision of discovering and delivering life-transforming treatments. With that in mind, Andy, could you tell us what has inspired you as the head of Takeda's R&D for the past decade?

**Andy** I'm inspired by our company's culture. Takeda has a rich history of putting patients first, and a deep commitment to raising the bar on scientific innovation to provide patients with medicines that can transform their lives. And that's a unique combination.

> I'm an unapologetic optimist. In this line of work, you have to believe that cures are possible for both rare and more prevalent diseases. They're possible because we're living at a time of unparalleled scientific understanding and discovery. Through advances in genetics, we can identify a drug target, understand the biology of how it causes disease, and tackle those underlying causes through a growing range of medicines and other therapies.

**Takako** I agree. It's inspiring to see how our commitment to innovation continues to drive us forward. I'm convinced that having a culture rooted in values supports scientific innovation – and your leadership has played a role in helping develop that culture.

I've always said innovation requires constraints and perseverance. After all, successes and setbacks are inherent in our industry. That said, our dedication to advancing innovation is paying off as our pipeline has entered an exciting phase that could have significant positive impact for patients, as well as for our business. Can you tell us what's next for R&D?

**Andy** Well, the deliberate and thoughtful approach we have taken over the last few years has resulted in Takeda's most robust late-stage pipeline in our modern history. Our teams are working diligently to deliver these new medicines to patients as quickly as possible. We now have six potentially transformative treatments across our core therapeutic areas: that's Gastrointestinal and Inflammation, Neuroscience and Oncology.

The first of these, rusfertide, read out positive Phase 3 data in a study last March of patients with a rare blood cancer called polycythemia vera, led by our partner Protagonist Therapeutics. In addition, we're expecting Phase 3 data for oveporexton in narcolepsy type 1 and zasocitinib in psoriasis in 2025. We expect to make regulatory filings for all three of these programs during FY2025-FY2026. Phase 3 studies for mezagitamab, fazirsiran, elritercept and zasocitinib are expected to read out later this decade and have target regulatory filing in FY2027-FY2029.

**Takako** That's exciting – and testimony to the potential of our pipeline to address patients' unmet needs. What it shows is the strength of our approach, given the rapid progress of molecules discovered in-house such as oveporexton, and the success of programs like rusfertide and zasocitinib, which were developed with our R&D partners.

We know that time is a critical factor for patients and caregivers who are waiting for these transformational new therapies. What are we doing to deliver to patients as quickly and effectively as possible?

**Andy** That's an important question, Takako, and this is an area where I'm particularly proud of the innovative approaches we're developing, not only in our laboratories, but across all aspects of R&D.

One critical component is our Future Fit development model – this is delivering improved speed, quality and efficiency across the pipeline. There are two key features to this model. First, rebuilding key capabilities within Takeda, like analyzing clinical data in-house, which helps us close out trials quickly and analyze data in real time. Second, deploying more data, digital and technology (DD&T) throughout our process. For example, we've built new digital tools that help us plan and track our trials. With the push of a button, we can now access the latest data and predict timelines, which means that, if we see a problem, we can intervene more quickly.

At the same time, we've been able to accelerate our late-stage pipeline. For zasocitinib, our two Phase 3 trials completed enrollment seven months ahead of schedule. And with oveporexton, we went from the first in-human trials to filing two to three years sooner than expected, if compared with other, comparable sleep-related medicines.

**Takako** Getting medicines to patients faster by building up our own internal capabilities and using the power of data and digital – this is a great example of what sustainability means to us. And making the most of data and digital allows us to adapt quickly to changing markets and scientific and technological advances.

But, for us to continue delivering benefits to patients in the long term, it's essential to have resilience in our strategies. With our late-stage pipeline, we have important milestones coming up over the next five years. How are we ensuring innovation beyond that – beyond 2029, in other words?

**Andy** It's important to understand that we're not sacrificing our future for the present. We're continuing to expand the capabilities of our world-class research organization, particularly as we build laboratories of the future, making the most of AI and automation to reduce experiment timelines, increase lab efficiency, and bring data closer to our scientists.

"Getting medicines to patients faster by building up our own internal capabilities and using the power of data and digital – this is a great example of what sustainability means to us."

**Takako Ohyabu, Chief Global Corporate Affairs and Sustainability Officer**

With these laboratories of the future and our expertise across four core modalities – small molecules, biologics, antibody drug conjugates and cell therapies – we'll be able to create a steady tempo of investigational new drugs entering the Takeda pipeline.

Another key factor is our exciting early- to mid-stage pipeline – programs which address considerable unmet patient needs and meet our high bar for innovation. Of course, no company can develop truly transformational medicines on its own, so we'll continue with our business development and partnerships to further expand our pipeline.

Last, but certainly not least, are our people. Every day, thousands of colleagues in our labs and offices convert innovative science into potentially life-transforming medicines. For us, what we do is not simply a job, it's our passion – and that passion is evident in everything we do.

**Takako** I completely agree that Takeda's talented people are the catalysts for the company's success and the driving force behind our pipeline of potentially life-transformative treatments. Whatever their role, our people understand how the work they do impacts patients' lives, because it's embedded in our philosophy and culture, and sustained by how we do business.

By empowering our people, we're not just advancing medicine – we're shaping the future of health care. It is inspiring to see that leadership and commitment reflected in our pipeline today, and I'm excited for the possibilities ahead.

# Breaking down the barriers to health care

We want as many people as possible to benefit from Takeda's medicines and vaccines. With health care systems in many countries under strain, that's not always possible. That's why we're working with governments and non-governmental organizations (NGOs) to strengthen health care systems, to train new health workers, improve diagnosis and raise standards of clinical care, including in many Low- and Middle-Income countries (LMICs) where resources are constrained.

In many LMICs, average per capita spending on health is often a fraction of what it is in higher-income countries. Added to that is climate change, fueling the spread of mosquito-borne diseases like malaria and dengue fever. Populations are also growing – and many countries are seeing a rise in non-communicable illnesses like cancer and heart disease. All these factors threaten to overwhelm health care systems in resource-constrained countries across Asia, Africa and Latin America, leaving them without the necessary resources to secure medicines and equipment, or train sufficient numbers of health care workers.

### Improving diagnosis for HAE in Vietnam

HAE – or hereditary angioedema – is a very rare genetic illness. Those with the disease face the possibility of years of misdiagnosis, with symptoms often mistaken for allergies or appendicitis. HAE can be life-threatening. Attacks lasting several days cause swelling all over the body, and a constricted throat, leaving patients struggling to breathe. In Vietnam, the disease affects between 1,000-2,000 people.

To improve diagnosis of HAE, we've been working with both Ho Chi Minh City's Society of Asthma, Allergy and Clinical Immunology and Japan's National Center of Global Medicine. It's a collaborative approach that is now bearing fruit – along with our partners, we've provided free family screening for HAE, reached over 7,500 doctors and nurses through 79 training and scientific events, and opened new treatment centers in Hanoi and Ho Chi Minh City, with a third planned for Da Nang in central Vietnam.

Addressing barriers to access can be complex – it starts with an understanding of the unique barriers that may exist within each health care system.

That's why we collaborate with policymakers and NGOs, as well as making sure that our work aligns with national health priorities and that our programs are integrated into local health systems. Currently, Takeda is collaborating in health care system-strengthening programs in more than 80 countries across Asia, Africa and Latin America – training health workers, setting up treatment and diagnosis centers, raising disease awareness and providing financial assistance to patients who can't afford treatment.

## What obstacles do patients face?

Patients face significant obstacles when looking for treatment, from a lack of basic health care infrastructure to shortages of necessary medicines and vaccines. These obstacles exist in all countries – but they are most acute in LMICs.

| | Awareness and prevention | Screening and diagnosis | Treatment | Aftercare |
|---|---|---|---|---|
| **Potential obstacles faced by patients** | Low awareness of disease symptoms and knowledge of preventative measures | Lack of access to diagnostic centers or slow diagnosis, particularly in the case of rare diseases | Treatment that is unaffordable, shortages of necessary drugs or inadequacies in local health care systems, making treatment difficult or impossible | Lack of support for either patients or caregivers, high costs of aftercare and unsuitable living conditions for recovering or long-term patients |
| **Takeda's access and equity approach** | Promoting awareness of disease and health care options | Providing training to HCPs and supporting mass screenings | Offering tiered- or value-based pricing, PAPs and training for doctors, nurses and midwives | Enabling support for patients and caregivers to provide long-term care |

# USD 58

Annually, LMICs spend an average of less than USD 58 per capita on health. In low-income countries, that figure goes down to just USD 10, compared with around USD 8,000 in high-income countries like Germany and Switzerland[5]

## Stepping up care for Egypt's cancer patients

As Egypt moves toward universal health coverage, the country is prioritizing cancer care. We're supporting that by helping develop a new Integrated Practice Unit (IPU) – a team dedicated to providing comprehensive care to the country's oncology patients. The new IPU will act as model for other, similar units across Egypt's health care system. In many LMICs – including Egypt – out-of-pocket expenses can reach up to 70% of total treatment costs. That leaves effective treatment out of reach for many patients. In response, Takeda has pioneered a new groundbreaking approach: personalized financial assistance tailored to each patient's own circumstances. Beginning with Hodgkin's lymphoma, we're now expanding this approach to other areas, ensuring more patients can access the care they need. With these efforts, we're addressing both Egypt's immediate needs and laying the groundwork for a more sustainable, inclusive health care system that serves all Egyptians.

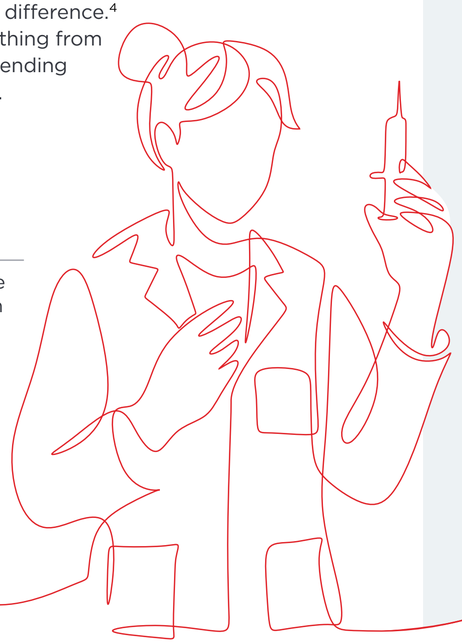
## Global CSR Program

Around the world, we also donate to NGO programs to expand health services in LMICs. Our Global CSR Program provides long-term funding, with projects lasting generally 4-10 years. That's because we recognize that there are no quick fixes, and that it takes time to reform and change health care systems.

Since the start of our Global CSR Program in 2016, we've committed a total of 28.8 billion yen (USD 200 million) to programs across Asia, Africa and Latin America. All programs are voted for by Takeda employees around the world with an equal vote, ensuring that our philanthropic giving reflects where they want to make a difference.[4] Programs currently underway cover everything from tackling neglected tropical diseases to extending health care to those living in remote areas.

**27 million**

By 2030, our Global CSR Program will have reached an astonishing 27 million people in more than 90 LMICs across the globe



### Pure Earth

It's estimated that one in three children have enough lead in their blood to cause permanent neurological, cognitive and physical harm. We're supporting Pure Earth's five-year program which, in partnership with Ministries of Health, aims to strengthen national health care systems to prevent, identify and treat lead poisoning in five countries: Colombia, India, Indonesia, Kyrgyzstan and Peru. Ours is the first major contribution to this issue from the global health care industry.
Read more about our work with Pure Earth

### Pathfinder International

Our four-year program with Pathfinder International aims to give women and girls in Bangladesh and Pakistan better access to essential health care and the tools to adapt to climate shocks. The program works with communities at risk from natural disasters like flooding and drought. So far, the program has trained 11,500 new health workers; it's also provided basic health education and worked with communities to help build resilience to climate change, using nature-based solutions such as planting coastal mangroves to protect against storm damage and supplying new climate-resistant seeds to local farmers.
Read more about our work with Pathfinder International

### Bridges to Development

For the past four years, Bridges to Development has been working with communities in Vanuatu and Papua New Guinea to control or eliminate five neglected tropical diseases, or NTDs – intestinal worms, yaws, scabies, elephantiasis and leprosy. According to the World Health Organization (WHO), NTDs affect more than a billion people worldwide. Smaller countries are particularly at risk because many communities are hard to reach, and there's a lack of basic health infrastructure. Since Bridges to Development's program started, despite severe adversity including volcanos, cyclones, flooding and the pandemic, over 495,000 people have received treatment, and all targeted diseases have decreased, with health workers now trained to continue the work in both Vanuatu and Papua New Guinea.
Read more about our work with Bridges to Development

# 11 million

According to the WHO, 11 million additional health workers will be needed by 2030, most in LMICs. Many of these shortages stem from underinvestment in training and education, compounded by difficulties in deploying health workers to remote, rural and underserved areas

"At the heart of Takeda's work is a belief that lasting health equity begins with skilled, local professionals. By training and supporting health care workers, we're laying the groundwork for resilient systems in Africa that deliver care today and lead change tomorrow."

**Andrew Musoke, Chief Operations Officer of Seed Global Health**

**Training new health workers in Africa**

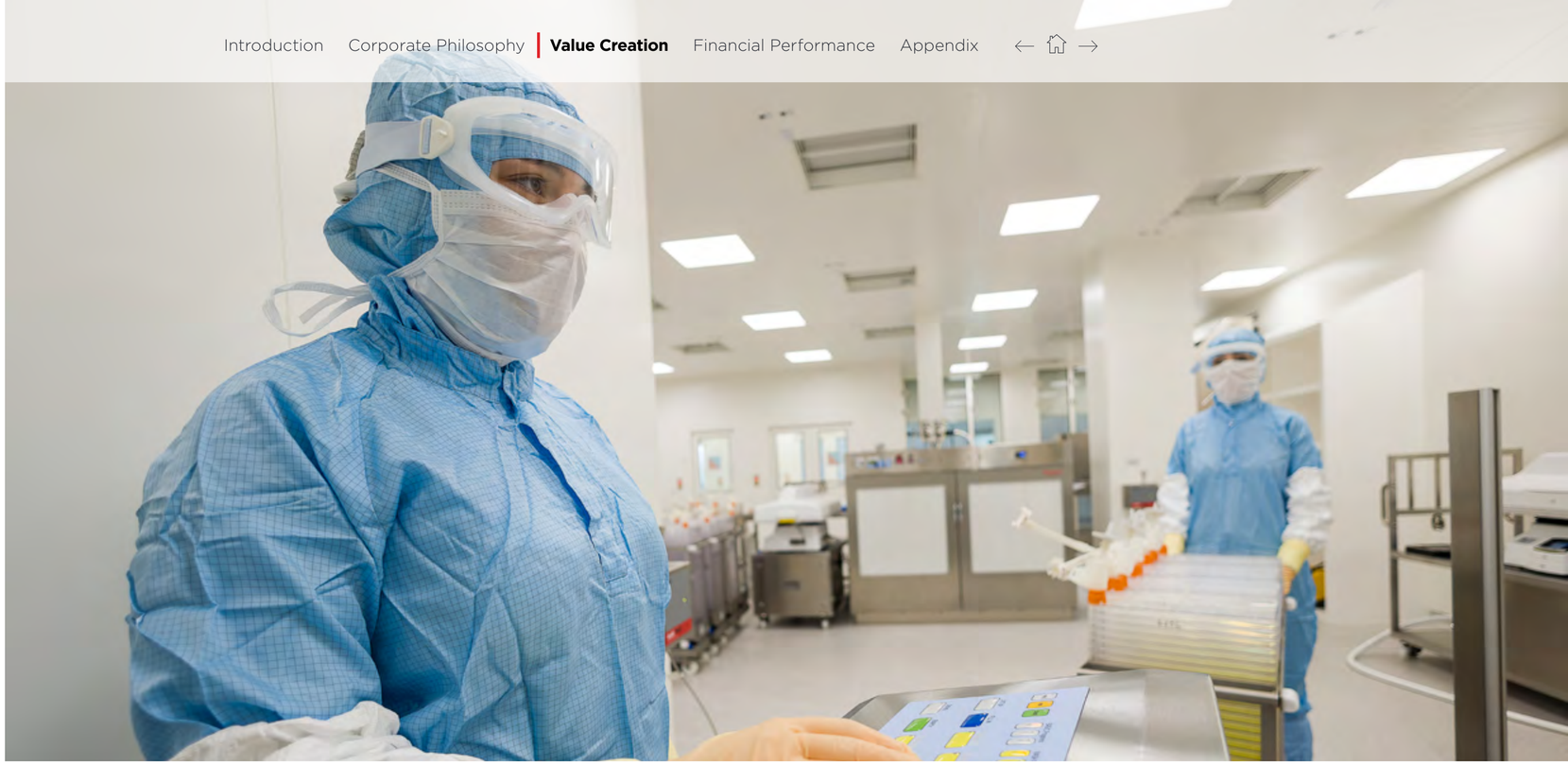
Over the next five years, we'll be supporting Seed Global Health to train more health care professionals across sub-Saharan Africa. Many African countries face dire shortages of doctors, nurses and midwives. Seed Global Health's program will train 5,900 new health workers, including in OB/GYN[5] and newborn emergency care in Sierra Leone and Uganda. Seed Global Health and its partners will also establish three new centers of excellence for maternal and neonatal health service training in Malawi, Zambia and Sierra Leone.

Across sub-Saharan Africa, too many people still die of preventable and treatable illnesses, partly because of a lack of trained health workers. Training health workers will build local expertise and help African countries move toward universal health coverage – important in a continent that still has a high burden of infectious diseases like malaria, tuberculosis and HIV.

The new program builds on Takeda's previous work with Seed Global Health, training nearly 8,000 health care specialists since 2019 in family medicine, OB/GYN, critical care nursing and pediatrics across Malawi, Uganda and Zambia.

# Rolling out our dengue fever vaccine in affected communities

In recent years, the number of dengue fever cases has been rising sharply. One of the main reasons is climate change – rising temperatures and changing precipitation patterns create favorable conditions for mosquitoes that spread the disease. It's estimated that nearly half the world's population now live in areas where a dengue outbreak could occur. Since 2022, Takeda has been working closely with governments, manufacturers and NGOs to increase the supply of our Qdenga® vaccine, protecting millions of people across Asia and Latin America.



## The threat from dengue fever

Dengue fever is transmitted by the Aedes and Aegypti mosquito, found in tropical or sub-tropical climates. This mosquito thrives in stagnant water – in buckets, for example, mud pools and storm drains. Most people who get dengue have mild symptoms or no symptoms at all. For those who do develop symptoms, the most common are high fever, headaches, nausea and skin rash. Some, however, will develop severe dengue, which can be life-threatening. People can also be infected more than once – subsequent infections may increase the risk of developing severe dengue. The best way to prevent the disease is to avoid getting bitten. Vaccines like Qdenga® reduce risk of infection and hospitalization, but no one method will ever be 100% effective. The best approach is to combine personal protection – avoiding getting bitten – with vaccination, community awareness and controls on mosquito populations.

Fueled by climate change, growing urbanization and increased international travel, cases of dengue fever have been rising quickly. In 2024, the WHO reported 14.3 million cases worldwide, the highest number ever recorded.[6] The majority of these cases – over 13 million – were reported in Latin America. However, the actual number of cases could be significantly higher, as many instances of dengue are either unreported or misdiagnosed.

Once dengue outbreaks occur, they are notoriously difficult to control and, with the acceleration of climate change, these outbreaks are becoming increasingly frequent. Recent research has also indicated a rise in dengue cases in regions previously unaffected, including parts of Europe and the continental U.S.

## Increasing production of our Qdenga® vaccine

Qdenga® was first approved for use more than two years ago – it's now available in 29 countries across Latin America, South America, Asia and Europe. The vaccine has proved effective against all four strains of dengue and is the first vaccine approved for use in individuals regardless of whether they've been previously infected by dengue. This makes it easier to provide Qdenga® to larger populations given that no pre-vaccination screening is required.

To meet growing demand, we are ramping up production of Qdenga®. By 2030, we aim to produce 100 million doses annually. Recently, we entered a new partnership with Biological E Limited in India to manufacture up to 50 million doses a year for use in national immunization programs in endemic countries. Additionally, we have a long-standing partnership with IDT Biologika in Germany to produce Qdenga® under license, and we're almost doubling production capacity at our Singen facilities.

## Working with country immunization programs

On a regional level, we're working closely with national governments to ensure Qdenga® reaches the people who need it. In doing so, we prioritize countries most affected by the disease. To maximize access, we also offer tiered pricing to private sector hospitals, pharmacies and HCPs.

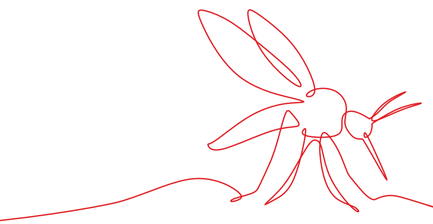
**Qdenga® has been added to the WHO's List of Prequalified Vaccines. Importantly, this means the vaccine can be procured by UN agencies like UNICEF, the Pan American Health Organization (PAHO) and GAVI, the global vaccine alliance.**

We're working closely with PAHO to address rising dengue infections across Latin America. Currently, Qdenga® is being used in national vaccination campaigns in both **Peru** and **Honduras**. In **Argentina**, we're partnering with UNICEF, the NGO Fundacion Mundo Sano and the Health Observatory at the University of Buenos Aires to combat rising infections in the country.

Since 2023, Qdenga® has been included in **Brazil's** national immunization program. Vaccinations focused initially on 10-14-year-olds, one of the highest at-risk groups. In FY2024, Takeda delivered more than six million doses to Brazil to enable this program. We're committed to supporting Brazil's government in its future dengue immunization efforts. Also in Brazil, we're working with UNICEF to vaccinate thousands of schoolchildren, adolescents and HCPs in the north and north-east of the country.

In **Indonesia**, we're working with partners across both public and private sectors to combat dengue fever. We're supporting vaccination programs for children, working hand-in-hand with the government to raise awareness of dengue and develop new predictive modeling. At the same time, we're promoting more innovative solutions like the introduction of *Wolbachia* bacteria in the mosquito population to prevent transmission. Indonesia is aiming for zero deaths from dengue fever by 2030.

**Thailand** has seen a surge in dengue infections, putting the country's health care system under severe strain. In cooperation with the government, we're using digital technology to support public awareness and build a database to help predict new outbreaks.



## Reducing Qdenga®'s carbon footprint

As demand for Qdenga® grows, we have been working to reduce the vaccine's environmental footprint, using renewable energy in our internal manufacturing and identifying more sustainable packaging materials. Qdenga® contributes to Takeda's broader efforts to protect the environment and mitigate the effects from climate change on human health.


**Drug substance manufacturing**

Sub-contracted manufacturing and energy use

**Takeda manufacturing**

Energy use and primary packaging (glass vials)

**Diluent manufacturing**

Additional primary packaging and pre-filled syringes

**Secondary and tertiary packaging**

Packaging materials

**Distribution**

Air freight

**Use**

Administration of vaccine

**End of life**

Disposal of packaging

Key initiatives and opportunities include:

- At our Singen manufacturing site in Germany, we've switched to renewable energy, including photovoltaic panels and our new biomass energy plant inaugurated in May 2025.
- We're piloting efforts to switch from air to sea freight, and working to implement the use of multi-dose vials.

**-25%**

Reduction of carbon footprint through implementing the biomass boiler

To assess Qdenga®'s carbon footprint, Takeda conducted an ISO 14040 and 14044 compliant life cycle assessment involving more than 30 company experts across supply chain management, engineering, manufacturing and packaging. The chart above shows the percentage of Qdenga®'s total carbon footprint attributable to each stage of the vaccine's production, distribution and use, considering the multipack version and the Brazilian end market, prior to implementing the biomass boiler.

# Creating a digital pipeline to bring better medicines to patients faster

Digital technology is transforming health care – from smart packaging in clinical trials to using AI to speed up diagnoses and monitor disease in real time. At Takeda, we're taking a systemic approach where data and digital pervades every aspect of our operations and across the pharma value chain, fundamentally reimagining the value we can deliver for patients and our people. We're using data and digital technologies, including AI, not only to transform our operations but to amplify the value of our therapies by advancing research into potentially life-transforming medicines, increasing productivity and working to improve health outcomes for patients.

Since Takeda's digital transformation started three years ago, we've been creating a digital pipeline to augment our R&D pipeline. We identify, build and deploy digital investments that will yield the most value. To help us prioritize and ensure transparency, we established a Digital Portfolio Committee. With Takeda Executive Team involvement, the committee makes decisions on digital investments and monitors the impact of these investments on patients and our people, as well as sustainable business growth.

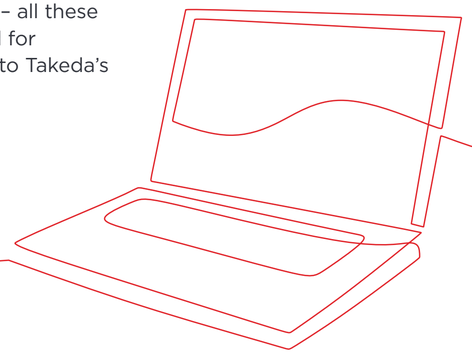
55%

More than half of Takeda's workforce is actively engaged in digital learning, powering data and digital's role in advancing treatments for patients

Some digital solutions aim to enhance patient outcomes, while others optimize business operations or improve our people's productivity and create a digitally fluent workforce. Improving patient outcomes through technology starts with our people. The Digital Dexterity program, which more than half our workforce participates in, equips employees with essential skills like automation, productivity and data literacy. By offering learning opportunities – from everyday AI to specialized programs such as data analytics and agile methods – both technical and non-technical roles gain the fluency to use digital effortlessly and thrive in a digital-first environment.

Integrating data and digital involves creating and connecting communities across Takeda. We've launched Takeda.AI – a hub that brings together our AI initiatives and provides tools and guidelines to ensure we use AI responsibly. We've also introduced Takeda.IO, which allows teams to create and develop prototypes and explore new digital solutions in a controlled, secure, "sandbox" environment.

We continue to build our own digital solutions with and for the business through five Innovation Capability Centers (ICCs) globally. With our ICCs, we're building many of our own AI and generative AI (GenAI) models – all these models are auditable, checked for unintentional bias and adhere to Takeda's Ethical AI Framework.



## Our new digital pipeline

Realizing the impact of digital investment lies in the strength of the digital pipeline woven throughout the pharma value chain. We're seeing more and more uses for AI – in everything from processing clinical trial data to identifying new efficiencies in our manufacturing. In the years ahead, these new digital investments will revolutionize our approach to developing, manufacturing and marketing Takeda's life-transforming medicines and vaccines.

### Research and development

**Benefits:**

Shorten cycle times for drug development

Improve design of clinical trials

Provide more accurate insights into research

- We're using AI to digest large quantities of research data and identify new targets during the drug discovery phase.
- Smart technology, AI and real-world data are helping us improve the design and structure of our clinical trials, making it easier to select the best trial sites and connect to participants more easily.
- We're investing in AI partnerships. With Nabla Bio, for example, we're piloting a new protein design GenAI model that can shorten cycle times for drug discovery of therapeutic molecules. Meanwhile, with Weave, we're working on using AI to write the first draft of regulatory filings. These usually take medical writers around two weeks. With AI, it can be done immediately.[7]

### Manufacturing and supply

**Benefits:**

Increase productivity and speed up key processes

Reduce potential downtime

Optimize inventory management

- As a key element of our Factory of the Future Initiative, we want to develop and scale up digital solutions.
- We're using AI to predict maintenance needs and so-called AI digital twins to optimize manufacturing processes. These digital twins have already helped improve productivity at both our Singen and Neuchâtel manufacturing sites.
- AI models are also enabling us to optimize inventories and streamline quality testing to shorten lead times for product batch releases – this means we can get vital medicines and treatments to patients more quickly.
- We're using data analysis to forecast the pattern of plasma donations, helping us ensure adequate supplies so we can continue manufacturing life-transforming medicines to treat often rare and complex diseases.

### Outreach to patients and health care professionals

**Benefits:**

Help patients better manage their conditions, especially those with chronic diseases

Increase engagement with patients and HCPs

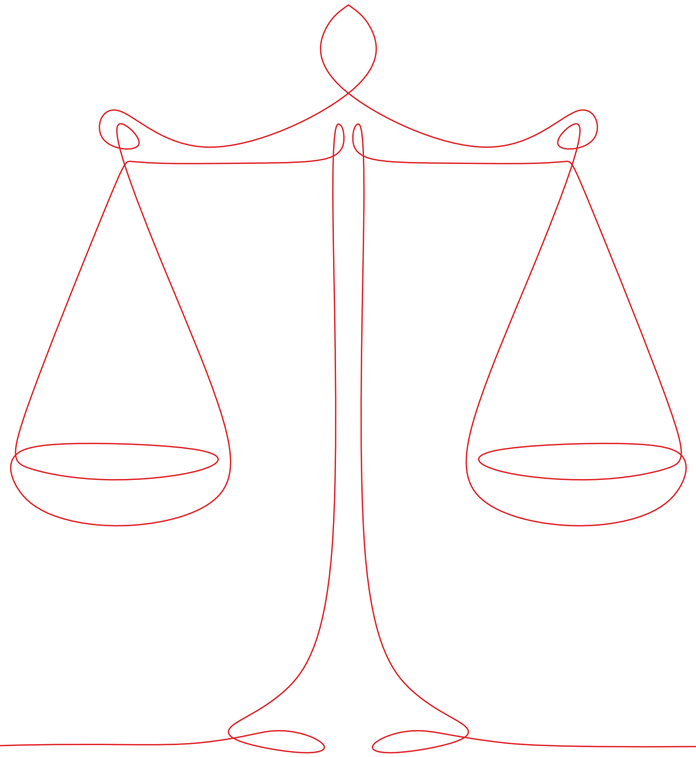
- Patients and HCPs operate in an increasingly digital world. We're developing apps, using AI and predictive analysis, to improve both care and engagement.
- With patients, we've co-created apps for those with IBD and ADHD. These apps help patients manage their disease, track symptoms and allow them to download data for their physicians.
- Among these applications is INfusion INsIght™, a training tool designed for nurses that uses a popular virtual assistant. INfusion INsIght™ provides step-by-step instructions and FAQs to help train nurses who administer HyQvia subcutaneous maintenance therapy to patients living with CIDP.[8]

Despite more treatment options for Crohn's disease, fewer than one-third of patients treated with biologic therapy achieve corticosteroid-free remission at one year. Clinical decision support tools like the VDZ-CDST may help identify patients more likely to respond to vedolizumab (VDZ), sold under the brand name Entyvio®. Now available in more than 20 countries across Europe, Canada and emerging markets, the VDZ-CDST in Crohn's disease reflects Takeda's commitment to **precision medicine** by supporting early intervention, aiding physicians in the clinical decision-making process and ultimately with the goal of personalizing treatment with VDZ and selecting the right treatment for the right patient at the right time.[7]

With the rise of digital technologies, more **real-world data** is available. That's useful in the design of clinical trials, particularly where basic patient data may be missing. Recently, for example, we used real-world data in trials for a new drug to combat AATD-LD[9], a rare disease which causes a build-up of protein in the liver. It took just four months to assemble the right data – less than half the time it would usually take – allowing us to start trials much sooner.


For clinical trials, we're developing **smart packaging**, which automatically records when patients open and take their medicine. Pilots in the U.S. and China have shown that using the packaging provides more accurate data – and reduces reliance on patients' diaries. The new smart packaging will be available for all Takeda clinical trials from 2025.

We've developed **automated visual inspections (AVIs)** for injectables like vaccines. AVIs have the ability to increase efficiency while also enhancing reliability. Similarly, we're using self-operating microscopes to identify pathogens in plasma, increasing accuracy and our ability to identify pathogens more quickly.



# *Financial* **Performance**

# Takeda's FY2024 financial performance

In FY2024, Takeda's Reported Revenue was 4,581.6 billion yen (USD 30.6 billion[10]), with growth of +7.5% on an actual exchange rate (AER) basis. Core Revenue was 4,579.8 billion yen (USD 30.6 billion[10]), which was adjusted to exclude revenue items unrelated to the underlying trends and business performance of Takeda's core operations, and grew +7.4% at AER, or +2.8% at constant exchange rate (CER). Revenue growth was driven by our Growth & Launch Products (please see page 44 for more information), which grew +14.7% year-over-year at CER, more than offsetting the Loss of Exclusivity (LOE) impact, mainly from VYVANSE® (lisdexamfetamine dimesylate) and ADDERALL XR® (mixed salts of a single-entity amphetamine) in the U.S., and AZILVA® (azilsartan) in Japan.

Core Operating Profit grew +4.9% at CER to 1,162.6 billion yen (USD 7.8 billion[10]), benefitting from OPEX savings realized from our Efficiency Program, in addition to the momentum of Growth & Launch Products. The Efficiency Program, initiated in FY2024, had captured approximately 200.0 billion yen in annualized cost savings by March 31, 2025. Reported Operating Profit grew +60% year-over-year due to Core Operating Profit growth and lower impairment of intangible assets. Core EPS and Reported EPS were 491 yen and 68 yen respectively, both lower compared with the previous year on a CER basis due to higher tax expenses.

Takeda generated 769.0 billion yen of Adjusted Free Cash Flow – a significant improvement, reflecting Core Operating Profit growth, lower cash taxes and lower business development spend compared with the previous year. Adjusted Net Debt to Adjusted EBITDA was 2.8x as of March 31, 2025.

**Results for FY2024**
(billion yen)

| | FY2023 | FY2024 | Change vs. Prior Year | |
|---|---|---|---|---|
| **IFRS-based Metrics** | | | AER % change | CER % change[11] |
| Revenue | 4,263.8 | 4,581.6 | +7.5% | +2.9% |
| Operating Profit | 214.1 | 342.6 | +60.0% | +51.2% |
| *Margin* | 5.0% | 7.5% | +2.5 pp | +2.4 pp |
| Net Profit | 144.1 | 107.9 | (25.1)% | (33.2)% |
| EPS | 92 yen | 68 yen | (25.8)% | (33.8)% |
| **Non-IFRS[12,13]** | | | | |
| Core Revenue | 4,263.8 | 4,579.8 | +7.4% | +2.8% |
| Core Operating Profit | 1,054.9 | 1,162.6 | +10.2% | +4.9% |
| *Margin* | 24.7% | 25.4% | +0.6 pp | +0.5 pp |
| Core Net Profit | 756.8 | 775.6 | +2.5% | (3.4)% |
| Core EPS | 484 yen | 491 yen | +1.5% | (4.3)% |
| **Cash Flows and Dividends** | | | | |
| Operating Cash Flow | 716.3 | 1,057.2 | +47.6% | - |
| Adjusted Free Cash Flow[14] | 283.4 | 769.0 | +171.3% | - |
| Dividend per share | 188 yen | 196 yen | +4.3% | - |
| **Leverage Metrics** | | | | |
| Adjusted Net Debt | 4,091.3 | 3,975.5 | - | - |
| Adjusted EBITDA | 1,319.9 | 1,441.0 | - | - |
| Adjusted Net Debt/Adjusted EBITDA Ratio | 3.1x | 2.8x | - | - |

Please see page 54 for endnotes.

# Growth & Launch Products

Our Growth & Launch Products generated revenue of 2,201.9 billion yen (USD 14.7 billion) in FY2024, representing 48% of total Core Revenue, with growth of +14.7% on a CER basis.

| Business area | Growth & Launch Products | Indication | Revenue (billion yen) | CER % Change[11] |
|---|---|---|---|---|
| Gastroenterology **(GI)** | Entyvio vedolizumab | Moderate to severe ulcerative colitis or Crohn's disease | 914.1 | +8.5% |
| | Eohilia (budesonide oral suspension) 2mg | Eosinophilic esophagitis | 5.5 | +2,501% |
| **Rare Diseases** | TAKHZYRO (lanadelumab-flyo) injection 300mg/2.0mg | Prevention of hereditary angioedema attacks | 223.2 | +18.9% |
| | LIVTENCITY (maribavir) tablets 200mg | Post-transplant CMV infection (refractory, with or without resistance) | 33.0 | +64.5% |
| | ADZYNMA ADAMTS13, recombinant | Congenital thrombotic thrombocytopenic purpura (cTTP) | 7.1 | +1,516% |
| **Plasma-Derived Therapies (PDT)** | HyQvia (Immune Globulin Infusion 10% (Human) with Recombinant Human Hyaluronidase) Cuvitru (Immune Globulin Subcutaneous (Human) 20%) GAMMAGARD LIQUID (Immune Globulin Infusion (Human)) 10% | Primary and secondary immunodeficiencies and multifocal motor neuropathy | 757.8 | +11.5% |
| | Flexbumin 5% [Albumin (Human)], USP, 5% Solution | Hypovolemia, hypoalbuminemia, for use during cardiopulmonary bypass surgery, and hemolytic disease in newborns | 141.4 | +1.1% |
| **Oncology** | Fruzaqla (fruquintinib) capsules 5mg • 1mg | Metastatic colorectal cancer | 48.0 | +351% |
| | ALUNBRIG BRIGATINIB | ALK-positive non-small cell lung cancer | 36.4 | +22.7% |
| **Vaccines** | Qdenga | Prevention of dengue disease | 35.6 | +259% |

- All figures in table relate to fiscal year 2024
- Growth rates are year-on-year change at constant exchange rate (CER)
- CMV: cytomegalovirus
- ALK: anaplastic lymphoma kinase

Please see page 54 for endnotes.

# FY2025 outlook: final year of significant Vyvanse® generic headwind; preparing for new product launches from late-stage pipeline

We expect FY2025 to be the final year of significant headwind from the loss of high-margin Vyvanse® to generic erosion in the U.S. Revenue is expected to be broadly flat at CER, reflecting continued momentum in Growth & Launch Products, offsetting the carry-over of Vyvanse® LOE impact. Our revenue forecast also takes into consideration headwinds from U.S. pricing pressure, including Medicare Part D redesign and 340B expansion.

Core Operating Profit and Core EPS are also expected to be broadly flat year-over-year at CER, reflecting anticipated savings from our Efficiency Program and investments in R&D and data, digital and technology. We also assume a ramp-up in launch investment for the late-stage pipeline as we now expect rusfertide (for polycythemia vera) and oveporexton (for narcolepsy type 1) to be filed in the U.S. in the second half of FY2025, and zasocitinib (for psoriasis) to be filed in the U.S. in FY2026.

We expect Reported Operating Profit growth of +38.7% and Reported EPS growth of +111.8% compared with the previous year. This growth is primarily due to lower amortization expenses as a result of Vyvanse® amortization concluding in January 2026, lower restructuring expenses, and an assumption of lower impairment losses.

**Outlook for FY2025**
(billion yen)

| | Results FY2024 | Forecast FY2025[15] | Change vs. Prior Year | | FY2025 Management Guidance Core Change at CER[11] |
|---|---|---|---|---|---|
| **IFRS-based Metrics** | | | | | |
| Revenue | 4,581.6 | 4,530.0 | (51.6) | (1.1)% | - |
| Operating Profit | 342.6 | 475.0 | +132.4 | +38.7% | - |
| Net Profit | 107.9 | 228.0 | +120.1 | +111.3% | - |
| EPS | 68 yen | 145 yen | +76 yen | +111.8% | - |
| **Non-IFRS[12,13]** | | | | | |
| Core Revenue | 4,579.8 | 4,530.0 | (49.8) | (1.1)% | Broadly Flat |
| Core Operating Profit | 1,162.6 | 1,140.0 | (22.6) | (1.9)% | Broadly Flat |
| Core EPS | 491 yen | 485 yen | (6) | (1.2)% | Broadly Flat |
| **Cash Flows and Dividends** | | | | | |
| Adjusted Free Cash Flow[14] | 769.0 | 750.0 – 850.0 | - | - | - |
| Dividend per share | 196 yen | 200 yen | +4 yen | +2.0% | - |

Please see page 54 for endnotes.

# Foundations in place to support new growth chapter for Takeda

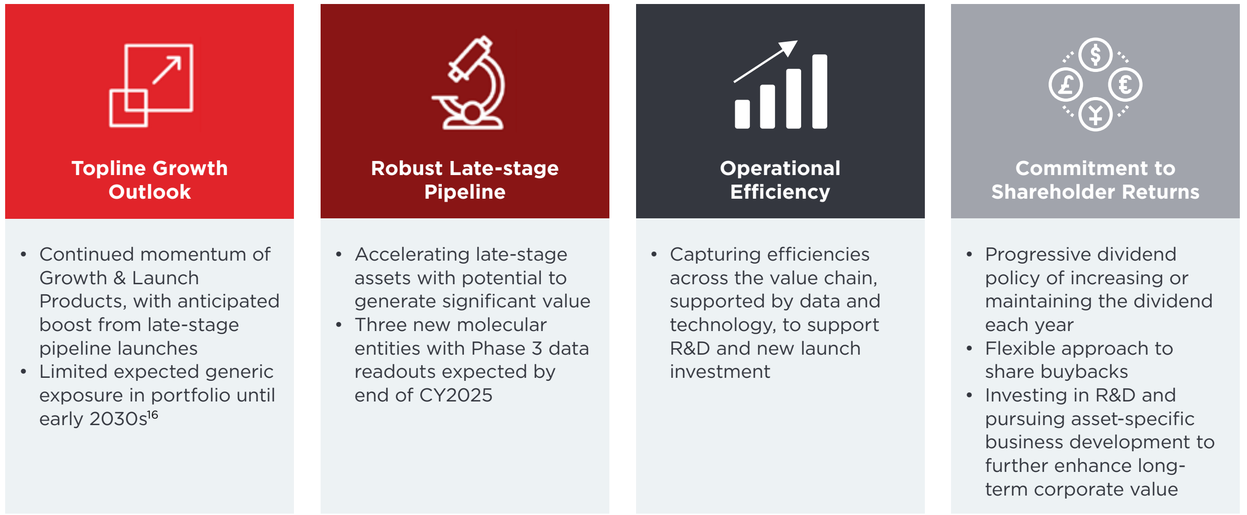
As we look to the future, we expect FY2025 to be a pivotal year for Takeda.

We are accelerating development of late-stage pipeline assets with potential to generate significant value, including three new molecular entities with Phase 3 data readouts already completed or expected by end of calendar year 2025. We continue to transform the company to capture efficiencies across the value chain, which enables us to accommodate R&D acceleration and new launch investment.

The momentum of our current Growth & Launch Products portfolio will continue to drive growth, with an anticipated boost from these late-stage pipeline launches through the remainder of this decade – a period during which we face only limited generic exposure.

We remain focused on delivering topline growth and capturing operational efficiencies across the value chain, supported by data and technology, and we are targeting Core Operating Profit margin improvement to reach low-to-mid-30s%.

We have the foundations in place to support a new chapter of growth. Guided by our vision to discover and deliver life-transforming treatments, and supported by our balance sheet (maintaining solid investment-grade credit ratings; targeting 2x Adjusted Net debt / Adjusted EBITDA), we will allocate capital to deliver sustainable value to patients and attractive returns to our shareholders. In alignment with our progressive dividend policy, we plan to raise our dividend from 196 yen to 200 yen per share in FY2025.




Targeting Core Operating Profit margin improvement to reach low-to-mid-30s%

Please see page 54 for endnotes.

# Appendix

# Our approach to reporting

- This report provides a summary of Takeda's strategy, performance and impact on stakeholders and society during FY2024.
- All content is based on internal reporting. Where external sources are used, this is clearly indicated in the text.
- Data is based on Takeda's own operations and activities with its suppliers, customers and other business partners.
- This report is intended for all Takeda stakeholders.
- Content was chosen based on our assessment of its impact, or potential impact, on stakeholders and the communities Takeda serves.

## Scope and reporting boundaries

Unless otherwise stated:

- This report covers the operations of Takeda Pharmaceutical Company Limited and its consolidated subsidiaries.
- Annual data relates to Takeda's 2024 fiscal year (April 1, 2024 – March 31, 2025).
- Financial data is generally presented in Japanese yen, Takeda's reporting currency, though certain data in this report is presented in U.S. dollars.

Please also note that:

- Some figures have been rounded – and percentages may have been calculated using rounded numbers.

## Use of exchange rates

- In this report, certain amounts presented in Japanese yen have been translated to U.S. dollars solely for the convenience of the reader. Except where otherwise noted, these convenience translations have been made at an exchange rate of 1 USD = 149.90 JPY, the Noon Buying Rate certified by the Federal Reserve Bank of New York on March 31, 2025. The rate and methodologies used for these convenience translations differ from the currency exchange rates and translation methodologies under the International Financial Reporting Standards (IFRS) used for the preparation of Takeda's consolidated financial statements. These translations should not be construed as a representation that the relevant Japanese yen amounts could be converted into U.S. dollars at this or any other rate.

## Reporting frameworks and disclosures

This report is published contemporaneously with our annual financial regulatory disclosures, specifically:

- Our Annual Securities Report, filed with Japan's Financial Services Agency
- Our Form 20-F, filed with the U.S. Securities and Exchange Commission

Financial statements included in these regulatory filings are prepared in accordance with the IFRS, as issued by the International Accounting Standards Board (IASB).

In addition, Takeda publishes separate sustainability disclosures on its website, relating to the company's ESG priorities and practices. These sustainability disclosures are based on various voluntary reporting frameworks and standards, including:

- Integrated Reporting <IR> Framework
- The Sustainability Accounting Standards Board (SASB) (specifically, SASB's Biotechnology & Pharmaceuticals Sustainability Accounting Standard)
- The Biopharma Investor ESG Communications Guidance
- Stakeholder Capitalism Metrics, developed by the World Economic Forum (WEF) and its International Business Council
- The principles of the UN Global Compact (UNGC)
- The Task Force on Climate-related Financial Disclosures (TCFD)

Please refer to our Sustainability Disclosures website for FY2024 sustainable performance data relating to Patient, People, Planet and Governance. A complete list of metrics used by Takeda may be found in the following documents:

- 2025 ESG Databook
- 2025 SASB Index report
- 2024 WEF Index report
- UNGC Index report

For further disclosures, please also see Takeda's:

- Position papers
- Patient Group disclosures
- European Federation of Pharmaceutical Industries and Associations (EFPIA) Disclosure Code Report

# External evaluations

| | Score or rating | Note |
|---|---|---|
| **CDP Climate** | A | Achieved CDP 'A' list for climate in 2024 assessment |
| **FTSE4Good** | 4.3 | Achieved an ESG score of 4.3 out of 5 and inclusion in the FTSE4Good Index Series in 2024 |
| **ISS ESG Corporate Rating** | B- | Recognized as having "Very High" transparency |
| **MSCI ESG Rating** | A | Achieved an MSCI "A" ESG rating in 2024 |
| **Sustainalytics ESG Risk Rating** | Medium risk | Ranked 23rd among 419 pharmaceutical companies |

The chart above shows Takeda's latest scores and rankings against leading ESG rating agencies. Please note rating agencies do not necessarily conduct assessments annually; scores relate to the latest assessments completed by each rating agency.

# Legal disclaimers

## Important notice

For the purposes of this notice, “report” means this document, any oral presentation, any question-and-answer session and any written or oral material discussed or distributed by Takeda Pharmaceutical Company Limited (“Takeda”) regarding this report.

This report (including any oral briefing and any question-and-answer in connection with it) is not intended to, and does not constitute, represent or form part of any offer, invitation or solicitation of any offer to purchase, otherwise acquire, subscribe for, exchange, sell or otherwise dispose of any securities or the solicitation of any vote or approval in any jurisdiction.

No shares or other securities are being offered to the public by means of this report. No offering of securities shall be made in the United States, except pursuant to registration under the U.S. Securities Act of 1933, as amended, or an exemption therefrom.

This report is being given (together with any further information which may be provided to the recipient) on the condition that it is for use by the recipient for information purposes only (and not for the evaluation of any investment, acquisition, disposal or any other transaction). Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

The companies in which Takeda directly and indirectly owns investments are separate entities. In this report, “Takeda” is sometimes used for convenience where references are made to Takeda and its subsidiaries in general. Likewise, the words “we”, “us” and “our” are also used to refer to subsidiaries in general or to those who work for them. These expressions are also used where no useful purpose is served by identifying the particular company or companies. The product names appearing in this document are trademarks or registered trademarks owned by Takeda, or their respective owners.

## Forward-looking statements

This report and any materials distributed in connection with this report may contain forward-looking statements, beliefs or opinions regarding Takeda’s future business, future position and results of operations, including estimates, forecasts, targets and plans for Takeda. Without limitation, forward-looking statements often include words such as “targets”, “plans”, “believes”, “hopes”, “continues”, “expects”, “aims”, “intends”, “ensures”, “will”, “may”, “should”, “would”, “could”, “anticipates”, “estimates”, “projects”, “forecasts”, “outlook”, or similar expressions or the negative thereof. These forward-looking statements are based on assumptions about many important factors, including the following, which could cause actual results to differ materially from those expressed or implied by the forward-looking statements:

- The economic circumstances surrounding Takeda’s global business, including general economic conditions in Japan and the United States and with respect to international trade relations
- Competitive pressures and developments
- Changes to applicable laws and regulations, including tax, tariff and other trade-related rules
- Challenges inherent in new product development, including uncertainty of clinical success and decisions of regulatory authorities and the timing thereof
- Uncertainty of commercial success for new and existing products
- Manufacturing difficulties or delays
- Fluctuations in interest and currency exchange rates
- Claims or concerns regarding the safety or efficacy of marketed products or product candidates
- The impact of health crises, like the novel coronavirus pandemic
- The success of our environmental sustainability efforts, in enabling us to reduce our greenhouse gas emissions or meet our other environmental goals
- The extent to which our efforts to increase efficiency, productivity or cost-savings, such as the integration of digital technologies, including artificial intelligence in our business or other initiatives to restructure our operations will lead to the expected benefits
- And other factors identified in Takeda’s most recent Annual Report on Form 20-F and Takeda’s other reports filed with the U.S. Securities and Exchange Commission, available on Takeda’s website at https://www.takeda.com/investors/sec-filings-and-security-reports/ or at www.sec.gov

Takeda does not undertake to update any of the forward-looking statements contained in this report or any other forward-looking statements it may make, except as required by law or stock exchange rule. Past performance is not an indicator of future results and the results or statements of Takeda in this presentation may not be indicative of, and are not an estimate, forecast, guarantee or projection of, Takeda's future results.

## Financial information and certain non-IFRS financial measures

Takeda's financial statements are prepared in accordance with International Financial Reporting Standards (IFRS). This report and materials distributed in connection with this report include certain financial measures not presented in accordance with IFRS, such as Core Revenue, Core Operating Profit, Core Net Profit, Core EPS, Constant Exchange Rate (CER) change, Net Debt, EBITDA, Adjusted EBITDA, Free Cash Flow and Adjusted Free Cash Flow. Takeda's management evaluates results and makes operating and investment decisions using both IFRS and non-IFRS measures included in this report. These non-IFRS measures exclude certain income, cost and cash flow items which are included in, or are calculated differently from, the most closely comparable measures presented in accordance with IFRS. Takeda's non-IFRS measures are not prepared in accordance with IFRS and such non-IFRS measures should be considered a supplement to, and not a substitute for, measures prepared in accordance with IFRS (which we sometimes refer to as "reported" measures). Investors are encouraged to review the definitions and reconciliations of non-IFRS financial measures to their most directly comparable IFRS measures, which are in the financial appendix appearing at the end of our FY2024 Earnings Announcement presentation. Beginning in the first quarter of FY2024, Takeda (i) changed its methodology for CER adjustments to results of subsidiaries in hyperinflation countries to present those results in a manner consistent with IAS 29, Financial Reporting in Hyperinflation Economies, (ii) renamed Free Cash Flow as previously calculated as "Adjusted Free Cash Flow" (with "Free Cash Flow" now reported as Operating Cash Flow less Property, Plant and Equipment), and (iii) renamed Net Debt as previously calculated as "Adjusted Net Debt" (with "Net Debt" to be reported as the book value of bonds and loans less cash and cash equivalents). For more information about the changes, including how the new methodology would have impacted Takeda's FY2023 results, as well as other important information about Takeda's non-IFRS measures, including the limitations on the usefulness thereof, refer to the financial appendix of our FY2024 Earnings Announcement presentation.

## Peak revenue potential and PTRS estimates

References in this report to peak revenue ranges are estimates that have not been adjusted for probability of technical and regulatory success (PTRS) and should not be considered a forecast or target. These peak revenue ranges represent Takeda's assessments of various possible future commercial scenarios that may or may not occur. References in this report to PTRS are to internal estimates of Takeda regarding the likelihood of obtaining regulatory approval for a particular product in a particular indication. These estimates reflect the subjective judgment of responsible Takeda personnel and have been approved by Takeda's Portfolio Review Committee for use in internal planning.

## Medical information

This report contains information about products that may not be available in all countries, or may be available under different trademarks, for different indications, in different dosages, or in different strengths. Nothing contained herein should be considered a solicitation, promotion or advertisement for any prescription drugs including the ones under development.

# Financial definition and explanation of non-IFRS measures

## Core Financial Measures

Takeda's Core Financial Measures, particularly Core Revenue, Core Operating Profit, Core Net Profit for the Year attributable to owners of the Company and Core EPS, exclude revenue from divestments, amortization and impairment losses on intangible assets associated with products (including in-process R&D) and other impacts unrelated to the underlying trends and business performance of Takeda's core operations, such as non-recurring items, purchase accounting effects and transaction-related costs. **Core Revenue** represents revenue adjusted to exclude revenue items unrelated to the underlying trends and business performance of Takeda's core operations (primarily revenue or related adjustments associated with divestments and liquidations). **Core Operating Profit** represents operating profit adjusted to exclude other operating expenses and income, amortization and impairment losses on intangible assets associated with products (including in-process R&D) and non-cash items or items unrelated to the underlying trends and business performance of Takeda's core operations. **Core EPS** represents net profit for the year attributable to owners of the Company, adjusted to exclude the impact of items excluded in the calculation of Core Operating Profit and other non-operating items (e.g., amongst other items, fair value adjustments and the imputed financial charge related to contingent consideration) that are unusual, non-recurring in nature or unrelated to the underlying trends and business performance of Takeda's ongoing operations and the tax effect of each of the adjustments, divided by the average outstanding shares (excluding treasury shares) of the reporting periods presented. Takeda presents its Core Financial Measures because Takeda believes that these measures are useful to understanding its business without the effect of items that Takeda considers to be unrelated to the underlying trends and business performance of its core operations, including items (i) which may vary significantly from year-to-year or may not occur in each year or (ii) whose recognition Takeda believes is largely uncorrelated to trends in the underlying performance of our core business. Takeda believes that similar measures are frequently used by other companies in its industry, and that providing these measures helps investors evaluate Takeda's performance against not only its performance in prior years but on a similar basis as its competitors. Takeda also presents Core Financial Measures because these measures are used by Takeda for budgetary planning and compensation purposes (i.e., certain targets for the purposes of Takeda's Short-Term Incentive and Long-Term Incentive compensation programs, including incentive compensation of the CEO and CFO, are set in relation to the results of Takeda's Core Financial Measures).

## Constant Exchange Rate (CER) Change

**Constant Exchange Rate Change** eliminates the effect of foreign exchange rates from year-over-year comparisons by translating financial results in accordance with IFRS or Core (non-IFRS) financial measures for the current period using corresponding exchange rates in the same period of the previous fiscal year. Takeda presents CER change because we believe that this measure is useful to investors to better understand the effect of exchange rates on our business and to understand how our results of operations might have changed from year to year without the effect of fluctuations in exchange rates. These are the primary ways in which our management uses these measures to evaluate our results of operations. We also believe that this is a useful measure for investors as similar performance measures are frequently used by securities analysts, investors and other interested parties in the evaluation of the results of operations of other companies in our industry (many of whom similarly present measures that adjust for the effect of exchange rates). The usefulness of this presentation has significant limitations including but not limited to, that while CER change is calculated using the same exchange rates used to calculate financial results as presented under IFRS for the previous fiscal year, this does not necessarily mean that the transactions entered into during the relevant fiscal year could have been entered into or would have been recorded at the same exchange rates. Moreover, other companies in our industry using similarly titled measures may define and calculate those measures differently than we do and therefore such measures may not be directly comparable. Accordingly, CER change should not be considered in isolation and is not, and should not be viewed as, a substitute for change in financial results as prepared and presented in accordance with IFRS.

## Free Cash Flow and Adjusted Free Cash Flow

Takeda defines **Free Cash Flow** as cash flows from operating activities less acquisition of property, plant and equipment (PP&E). Takeda defines **Adjusted Free Cash Flow** as cash flows from operating activities, subtracting payments for acquisition of PP&E, intangible assets, investments (excluding debt investments classified as Level 1 in the fair value hierarchy), shares in associates and businesses, net of cash and cash equivalents acquired and other transactional payments deemed related or similar in substance thereto as well as adding proceeds from sales of PP&E, sales and redemption of investments (excluding debt investments classified as Level 1 in the fair value hierarchy), sales of shares in associates and sales of businesses, net of cash and cash equivalents divested and further adjusting for the movement of any other cash that is not available to Takeda's immediate or general business use. Takeda presents Free Cash Flow and Adjusted Free Cash Flow because Takeda believes that these measures are useful to investors as similar measures of liquidity are frequently used by securities analysts, investors and other interested parties in the evaluation of companies in our industry. Adjusted Free Cash Flow is also used by our management to evaluate our liquidity and our cash flows, particularly as they relate to our ability to meet our liquidity requirements and to support our capital allocation policies. Takeda also believes that Free Cash Flow and Adjusted Free Cash Flow are helpful to investors in understanding how our strategic acquisitions and divestitures of businesses contribute to our cash flows and liquidity. The usefulness of Free Cash Flow and Adjusted Free Cash Flow to investors has significant limitations including, but not limited to, (i) they may not be comparable to similarly titled measures used by other companies, including those in our industry, (ii) they do not reflect the effect of our current and future contractual and other commitments requiring the use or allocation of capital and (iii) the addition of proceeds from sales and redemption of investments and the proceeds from sales of business, net of cash and cash equivalents divested, do not represent cash received from our core ongoing operations. Free Cash Flow and Adjusted Free Cash Flow should not be considered in isolation and are not, and should not be viewed as, substitutes for cash flows from operating activities or any other measure of liquidity presented in accordance with IFRS. The most directly comparable measure under IFRS for Free Cash Flow and Adjusted Free Cash Flow is net cash from operating activities.

## EBITDA and Adjusted EBITDA

Takeda defines **EBITDA** as consolidated net profit before income tax expenses, depreciation and amortization and net interest expense. Takeda defines **Adjusted EBITDA** as EBITDA further adjusted to exclude impairment losses, other operating income and expenses (excluding depreciation, amortization and other miscellaneous non-cash expenses), finance income and expenses (excluding net interest expense), our share of loss (profit) of investments accounted for using the equity method and other items that management believes are unrelated to our core operations such as purchase accounting effects and transaction-related costs. Takeda presents EBITDA and Adjusted EBITDA because Takeda believes that these measures are useful to investors as they are frequently used by securities analysts, investors and other interested parties in the evaluation of companies in our industry. Primarily, Adjusted EBITDA is used by Takeda for the purposes of monitoring its financial leverage. Takeda further believes that Adjusted EBITDA is helpful to investors in identifying trends in its business that could otherwise be obscured by certain items unrelated to ongoing operations because they are highly variable, difficult to predict, may substantially impact our results of operations and may limit the ability to evaluate our performance from one period to another on a consistent basis. The usefulness of EBITDA and Adjusted EBITDA to investors has significant limitations including, but not limited to, (i) they may not be comparable to similarly titled measures used by other companies, including those in the pharmaceutical industry, (ii) they exclude financial information and events, such as the effects of an acquisition, or amortization of intangible assets, that some may consider important in evaluating Takeda's performance, value or prospects for the future, (iii) they exclude items or types of items that may continue to occur from period to period in the future and (iv) they may not include all items which investors may consider important to an understanding of our results of operations, or may not exclude all items which investors may not consider important for such understanding. EBITDA and Adjusted EBITDA should not be considered in isolation and are not, and should not be viewed as, substitutes for operating income, net profit for the year or any other measure of performance presented in accordance with IFRS. The most closely comparable measure presented in accordance with IFRS is net profit for the year.

## Adjusted Net Debt/Adjusted EBITDA Ratio

Takeda defines **Net Debt** as the book value of bonds and loans on consolidated statements of financial position adjusted only for cash and cash equivalents and **Adjusted Net Debt** first by calculating the sum of the current and non-current portions of bonds and loans as shown on our consolidated statement of financial position, which is then adjusted to reflect (i) the use of prior 12-month average exchange rates for non-JPY debt outstanding at the beginning of the period and the use of relevant spot rates for new non-JPY debt incurred and existing non-JPY debt redeemed during the reporting period, which reflects the methodology our management uses to monitor our leverage, and (ii) the "equity credit" applied to Takeda's "hybrid" subordinated indebtedness by S&P Global Rating Japan in recognition of the equity-like features of those instruments pursuant to such agency's ratings methodology. To calculate Adjusted Net Debt, Takeda deducts from this figure cash and cash equivalents, excluding cash temporarily held by Takeda on behalf of third parties related to vaccine operations and to the trade receivables sales program, and debt investments classified as Level 1 in the fair value hierarchy being recorded as Other Financial Assets. Takeda presents Net Debt and Adjusted Net Debt because Takeda believes that these measures are useful to investors in that our management uses them to monitor and evaluate our indebtedness, net of cash and cash equivalents and, in conjunction with Adjusted EBITDA, to monitor our financial leverage (for the avoidance of doubt, Adjusted Net Debt and the ratio of Adjusted Net Debt to Adjusted EBITDA are not intended to be indicators of Takeda's liquidity). Takeda also believes that similar measures of indebtedness are frequently used by securities analysts, investors and other interested parties in the evaluation of companies in our industry. Particularly following the acquisition of Shire, investors, analysts and, in particular, ratings agencies, have closely monitored Takeda's leverage, as represented by the ratio of its Adjusted Net Debt to Adjusted EBITDA. In light of the weight given by ratings agencies in particular to this ratio, Takeda believes that such information is useful to investors to help understand not only Takeda's financial leverage, but also how ratings agencies evaluate the level of financial leverage in evaluating Takeda's quality of credit. Accordingly, as described below, Takeda includes an adjustment to its Adjusted Net Debt to reflect the "equity credit" afforded to certain of its subordinated indebtedness by ratings agencies (such indebtedness does not qualify for treatment as equity under IFRS). The usefulness of Adjusted Net Debt to investors has significant limitations including, but not limited to, (i) it may not be comparable to similarly titled measures used by other companies, including those in the pharmaceutical industry, (ii) it does not reflect the amounts of interest payments to be paid on Takeda's indebtedness, (iii) it does not reflect any restrictions on Takeda's ability to prepay or redeem any of our indebtedness, (iv) it does not reflect any fees, costs or other expenses that Takeda may incur in converting cash equivalents to cash, in converting cash from one currency into another or in moving cash within our consolidated group, (v) it applies to gross debt an adjustment for average foreign exchange rates which, although consistent with Takeda's financing agreements, does not reflect the actual rates at which Takeda would be able to convert one currency into another and (vi) it reflects an equity credit despite the fact that Takeda's subordinated bonds are not eligible for equity treatment under IFRS, although Takeda believes this adjustment to be reasonable and useful to investors. Adjusted Net Debt should not be considered in isolation and is not, and should not be viewed as, a substitute for bonds and loans or any other measure of indebtedness presented in accordance with IFRS. The most directly comparable measure under IFRS for Net Debt is bonds and loans.

# Abbreviations used in this report

| | |
|---|---|
| AATD-LD | Alpha-1 Antitrypsin Deficiency Associated Liver Disease |
| ADHD | Attention deficit hyperactivity disorder |
| AI | Artificial intelligence |
| ALK | Anaplastic lymphoma kinase |
| AVI | Automated visual inspection |
| CEO | Chief Executive Officer |
| CER | Constant exchange rate |
| CFO | Chief Financial Officer |
| CMV | Cytomegalovirus |
| CSR | Corporate social responsibility |
| cTTP | Congenital thrombotic thrombocytopenic purpura |
| DD&T | Digital, data and technology |
| EFPIA | European Federation of Pharmaceutical Industries and Associations |
| ESG | Environmental, social and governance |
| FDA | Food & Drug Administration |
| FY | Fiscal year |
| GenAI | Generative artificial intelligence |
| GI | Gastrointestinal |
| HAE | Hereditary angioedema |
| IASB | International Accounting Standards Board |
| IBD | Inflammatory bowel disease |
| ICC | Innovation Capability Center |
| IFRS | International Financial Reporting Standards |
| IPU | Integrated Practice Unit |
| LMICs | Low- and Middle-Income countries |
| NGO | Non-governmental organization |
| NTD | Neglected tropical disease |
| OB/GYN | Obstetrics/gynecology |
| OECD | Organisation for Economic Co-operation and Development |
| PAHO | Pan American Health Organization |
| PAP | Patient assistance program |
| PDT | Plasma-Derived Therapies |
| PTRB | Patient-Trust-Reputation-Business |
| R&D | Research and development |
| SASB | Sustainability Accounting Standards Board |
| SBTi | Science Based Targets initiative |
| SEC | Securities Exchange Commission |
| TCFD | Task Force on Climate-related Financial Disclosures |
| UNGC | UN Global Compact |
| WEF | World Economic Forum |
| WFH | World Federation of Hemophilia |
| WHO | World Health Organization |

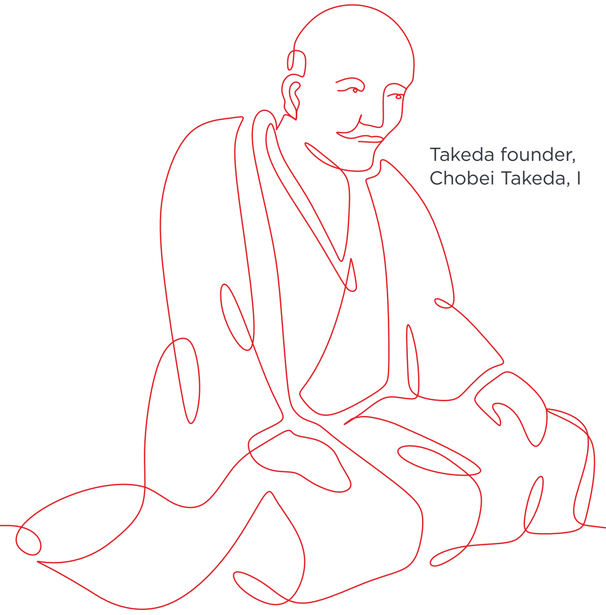
# Endnotes

1 Based on Takeda's own data
2 Source: An introduction to circular design
3 Source: World Bank (Government health spending trends through 2023) and OECD health spending per capita
4 In September 2024, Takeda employees voted to fund five new partner programs:
- Population Service International (expanding pharmacy-based immunization in Ethiopia, Kenya and Nigeria)
- Bulungula Incubator (integrating community health care in Xhorha Mouth administration area into South Africa's national health system)
- Reach Out Cameroon (increasing access to care and support for women and girls in remote communities affected by conflict in Cameroon, the Democratic Republic of Congo and Nigeria)
- VillageReach (improving transport of patient samples for testing and diagnosis to accelerate emergency response to disease outbreaks in the Democratic Republic of Congo, Guinea, Malawi, Tanzania and Uganda)

In addition, a second-term program was approved for Seed Global Health, see page 35. For more information on Takeda's Global CSR Program, please refer to our website.
5 Obstetrician and gynecologist
6 Source: World Health Organization (Global dengue surveillance, figures for 2024)
7 Sources: Al-Bawardy B, et al. Front Pharmacol, Dulai PS, et al. Aliment Pharmacol Ther., Alric H, et al. Inflamm Bowel Dis., Alsoud D, et al. Clin Gastroenterol Hepatol, Dulai PS, et al. Am J Gastroenterol
8 CIDP – Chronic Inflammatory Demyelinating Polyneuropathy
9 Alpha-1 Antitrypsin Deficiency Associated Liver Disease (AATD-LD)
10 Convenience translations have been made at an exchange rate of 1 USD = 149.90 JPY.
11 CER (constant exchange rate) change eliminates the effect of foreign exchange rates from year-over-year comparisons by translating reported or core results for the current period using corresponding exchange rates in the same period of the previous fiscal year. Starting from the quarter ended June 30, 2024, we ceased adjustments for CER change for the results of operations of subsidiaries in countries experiencing hyperinflation and for which IAS 29, Financial Reporting in Hyperinflation Economies, is applied, because of the increased impacts of hyperinflation in the calculation of CER change using corresponding exchange rates in the same period of the previous fiscal year, effectively keeping CER change for these subsidiaries unchanged from those reported with IAS 29.
12 Further information regarding certain of Takeda's non-IFRS measures is posted on Takeda's investor relations website.
13 Core results adjust our reported results calculated and presented pursuant to IFRS to exclude the effect of items unrelated to Takeda's core operations, such as, to the extent applicable for each line item, non-recurring items, purchase accounting effects and transaction-related costs, as well as amortization and impairment of intangible assets and other operating income and expenses and the tax effect of each of the adjustments.
14 We define Adjusted Free Cash Flow as cash flows from operating activities, subtracting payments for acquisition of property, plant and equipment (PP&E), intangible assets, investments (excluding debt investments classified as Level 1 in the fair value hierarchy), shares in associates, and businesses, net of cash and cash equivalents acquired, and other transactional payments deemed related or similar in substance thereto, as well as adding proceeds from sales of PP&E, sales and redemption of investments (excluding debt investments classified as Level 1 in the fair value hierarchy), sales of shares in associates, and sales of businesses, net of cash and cash equivalents divested, and further adjusting for the movement of any other cash that is not available to Takeda's immediate or general business use. Free cash flow is a non-IFRS financial measure.
15 Takeda's forecast for FY2025 (disclosed in May 2025) does not reflect the potential impact of tariffs being introduced on pharmaceutical products by the U.S. administration, nor the potential impact of tariffs introduced by other countries in response to U.S. tariffs. We continue to monitor the situation, including potential mitigation strategies, and will update our forecasts if and when a probable impact can be estimated.
16 Major products expected to face generic/biosimilar competition between FY2024-FY2029 represent ~10% of FY2024 revenue: Gattex U.S. (Patent expired; timing of potential generic entry unknown), Trintellix U.S. (Patent expires Dec '26), Iclusig U.S. (Patent expires Jan '27), VectibixP (generic launch anticipated FY2026), Vyvanse® EU (Patent expires FY2024-FY2029 depending on country), Livtencity U.S. (regulatory protection expires Nov '28), Ninare U.S. (Patent expires Nov '29).

# A modern take on Takeda's rich heritage

Throughout this report, we've included a series of simple line drawings, showing researchers, patients and health care professionals. These illustrations provide a modern take on traditional Japanese woodblock and copperplate prints, such as the one below, which shows a scene from the medicine district in 19th century Osaka. Our drawings tap into both our own rich heritage as a company that's been in existence now for more than 240 years and our modern commitment to research and innovation to develop new, life-transforming medicines for patients around the world.



Takeda founder, Chobei Takeda, I


Illustration taken from the *Shonin kaimono hitori annai* – a directory of businesses in Osaka, published in 1867.

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