# Recommendations of the EU - Japan Business Round Table To the Leaders of the EU and Japan

## Working Party 2
## Life Sciences and Biotechnologies, Healthcare and Well-being

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# List of Abbreviations

| Abbreviation | Meaning |
|---|---|
| ABS | Access and Benefit-Sharing |
| AMED | Japan Agency for Medical Research and Development |
| AMR | Antimicrobial Resistance |
| BRT | EU-Japan Business Round Table |
| CDMO | Contract Development and Manufacturing Organization |
| CGP | Cancer Genome Profiling |
| CN | Carbon Neutrality |
| COP | Conference of the Parties |
| CRO | Contract Research Organization |
| DSI | Digital Sequence Information on Genetic Resources |
| EHDS | European Health Data Space |
| EU | European Union |
| GHG | Greenhouse Gas |
| GMO | Genetically Modified Organism |
| GMP | Good Manufacturing Practice |
| GSP | Good Simulation Practice |
| GxP | Good [x] Practice, where x can be various letters |
| HTA | Health Technology Assessment |
| IMDRF | International Medical Device Regulators Forum |
| ISO | International Organization for Standardization |
| MHLW | Ministry of Health, Labour and Welfare |
| MLM | Multilateral Mechanism |
| MRA | Mutual Recognition Agreement |
| NITE | National Institute of Technology and Evaluation |
| QMS | Quality Management System |
| R&D | Research & Development |
| RNA | Ribonucleic Acid |
| RWD | Real World Data |
| SME | Small-to-Mid-sized Enterprises |
| TRIPS | Agreements on Trade Related Aspect of Intellectual Property Rights |
| US | United States |
| WTO | World Trade Organization |
| WP | Working Party |

# Executive Summary

## Advancing a Sustainable Future Through the Bioeconomy

Europe and Japan share common challenges such as declining competitiveness, healthcare issues, climate change, and food security. Advances in life sciences and biotechnology can help address these challenges and promote sustainable economic growth towards a bioeconomy society.

## What is the Bioeconomy?

Bioeconomy encompasses a broad range of activities—from utilizing biological resources (biomass), bioprocesses, and biotechnology—to producing goods, services, and energy in a sustainable, renewable, and recyclable manner.

## Working Party 2's Commitment

Working Party 2 (WP-2) has been actively promoting the transition from a fossil fuel-based economy to a more sustainable, bio-based economic model. This shift aims to address critical issues like climate change, resource scarcity, and environmental degradation, while also enhancing EU-Japan economic security and industrial competitiveness.

WP2 is focused on enhancing innovation in healthcare and biotechnology by:

- Improving efficient healthcare practices.
- Promoting sustainable agriculture and food production.
- Developing bio-based high-performance materials.

## Highlighted Recommendations

### WP-2/#06*/EJ Utilization of Digital Sequence Information (DSI) on Genetic Resources should be carefully discussed.

- Establish clear and practical legislation that creates an easy-to-implement system for DSI utilization, balancing benefits and burdens across industries while ensuring legal certainty and consistency.
- Facilitate discussions with various industries to develop business incentives that promote industrial use of DSI, encouraging innovation and active participation in biodiversity conservation efforts.

### WP-2/#11*/J Active support should be provided to achieve carbon neutrality at an early stage, such as securing biomass raw materials and establishing evaluation and certification systems, to strengthen material production through the utilization of biomass.

- Implement industrial support measures in Japan to secure domestic biomass raw materials, such as utilizing non-edible biomass and forest resources, and remove tariffs on biomass inputs used for products to promote utilization.
- Establish methods for evaluating the environmental value of biomass-derived products and create a certification system, allowing comparison with fossil fuel-derived products and considering greenhouse gas (GHG) reductions.

### WP-2/#16/EJ Harmonize regulations on Good Simulation Practice (GSP) for medical products

- Establish harmonized regulations on Good Simulation Practice (GSP) for medical products in collaboration with Japanese stakeholders and policymakers, aligning with international GxP guidelines to ensure consistency and efficacy.
- Recognize and promote in silico methodologies as valid alternatives to traditional experiments, reducing the need for animal and human testing while enhancing efficiency and patient relevance in medical product development.

### WP-2/#17/EJ Re-establish industry leadership in BioSciences

- Implement comprehensive policies and targeted investments in the EU and Japan to strengthen the biosciences ecosystem, setting clear numerical targets for increases in R&D funding, startup formation, clinical trials, new therapy approvals, industry growth, employment, and exports.
- Foster EU-Japan collaboration by establishing shared biomanufacturing facilities for startups, incentivizing the use of allied CRO/CDMO facilities, and creating a working group to explore joint R&D, regulatory harmonization, and trade facilitation in biosciences and biotechnology.

### Updates from the Last Year

The EU and Japanese governments have implemented numerous initiatives in recent years to realize the bioeconomy in the fields of life sciences, biotechnology, healthcare, and well-being. Therefore, all recommendations have been reviewed based on the progress of these initiatives.

### New Recommendations Added:

- Securing biomass raw materials and developing evaluation and certification systems in the field of bio-materials.
- Global harmonization of in silico simulation practice in the field of life sciences.
- EU-Japan collaboration to strengthen international capabilities in the life sciences field.

These recommendations aim to enhance cooperation between Japan and the EU and improve the innovation ecosystems in both regions. In particular, concrete measures towards sustainable economic growth and the realization of a bioeconomy society are emphasized.

# Introduction

Europe and Japan face many similar challenges, such as relative decline in global competitiveness, low economic growth, healthcare challenges, climate change, environmental pollution, and food security. Additionally, geopolitical issues give a significant impact on many parts of society. Further advancement of life sciences and biotechnology can solve these societal issues and, at the same time, serves as a driving force for sustainable economic growth, strongly promoting the realization of a sustainable circular society (bioeconomy society).

Working Party (WP) 2 focuses on the following areas:

- Life Science & Healthcare (pharmaceuticals, medical devices)
- Biotechnology (agriculture, food, biomaterials, industry promotion)

The recommendations of WP-2 have the clear aim to improve the innovation capabilities of both the EU and Japan through concrete action plans in healthcare and biotechnology fields. The focus is on measures that will enhance efficient healthcare practices, sustainable agriculture, food production and supply, and bio-derived high-performance materials, eventually contributing to the establishment of a bioeconomy society.

The EU-Japan Business Round Table (BRT) welcomes the goals of realizing sustainable economic growth through supporting competitiveness and innovation in response to social challenges, as provided in the EU's strategic agenda for 2024-2029 and Japan's Basic Policy on Economic and Fiscal Management and Reform for 2024. While the EU and Japan share common challenges to regain the attractiveness for investment in innovation, the BRT expects that comprehensive and sustainable measures will be taken in both the EU and Japan to retain their roles to lead innovation. The BRT hopes that the recommendations in this report will help remove barriers to innovation, enhance their innovation ecosystems, drive economic growth, and, at the same time, develop solutions to strengthen the relationship between EU and Japan.

An asterisk (*) identifies “priority” recommendations.

# Recommendations from both European and Japanese industries

## Life Science & Healthcare

### WP-2 / # 01 / EJ to EJ

**Environments to enhance development of treatments and vaccines for infectious diseases should be improved.**

The BRT calls on the EU and Japanese Authorities to:

- protect and respect intellectual property rights of vaccines, diagnostics, and therapeutics, and
- continuously promote the research and development for infectious diseases, especially for antimicrobial resistance (AMR) by reinforcing incentives.

The BRT believes that:

- respect of intellectual property rights is fundamental to stimulating research and development and ensuring supply. Waiving intellectual property rights on any vaccines and therapeutics would undermine the ability to innovate and respond to ongoing and future global health threats,
- the number of drug-resistant bacteria is increasing, and if this situation continues, it is predicted that the annual number of deaths worldwide by 2050 due to drug-resistant bacterial infections will rise to approximately 10 million,
- the European Commission's adoption of stepping up EU actions to combat AMR is expected to lead to effective measures, which should incentivize antimicrobial development and provide predictability in access,
- the Basic Policy on Economic and Fiscal Management and Reform for 2024 in Japan mentions promoting incentives for the antimicrobial development, and support projects for securing antimicrobials have begun in Japan,
- it is necessary to secure resources for solving AMR problems. Support for the development of new anti-infectives, including support for small-to-mid-sized enterprises (SMEs) which play a critical role in developing innovative new medicines, is vital. Further enhancing public support is a way forward to help hedge the risk of the research and development for emerging AMR and other infectious diseases, and
- extension of the waiver of intellectual property rights (TRIPS Waiver) for COVID-19 vaccines to therapeutics and diagnostics was discussed at the World Trade Organization (WTO). As the decision was postponed at the 13th WTO Ministerial Conference (MC13) 2024, the BRT appreciates the value of intellectual property rights is well understood.

**WP-2 / # 02 / EJ to EJ**

**Mutual recognition of Medical Devices should be improved.**

The BRT calls on the EU and Japanese Authorities to:

- streamline approval processes: promote mutual recognition of medical devices between the EU and Japan and reduce duplicative reviews,
- harmonize requirements for data and documentation: harmonize requirements for clinical trial data, technical documents, and application forms as much as possible between the EU and Japan,
- harmonize quality management systems: advance adoption of international standards such as ISO 13485 and harmonize requirements for quality management system, and optimize QMS audit, and
- coordinate post-market surveillance: harmonize safety information sharing and post-market surveillance requirements between the EU and Japan to facilitate product management in both regions.

The BRT believes that:

- if mutual recognition of medical devices progresses between the EU and Japan, the two regions could be regarded as a single market. This would not only enable the medical device industry to develop products more rapidly through streamlined development, approval processes and optimization of QMS audit, but also facilitate cost reductions in development and further global expansion beyond the two regions. This would promote the development of medical devices in both the EU and Japan, enabling the provision of better services, enhancing the global competitiveness of the medical device industries in the EU and Japan, and leading to their further growth.

## Biotechnology (Agriculture)

**WP-2 / # 03* / EJ to EJ**

**New technologies, including biopesticides that aim to promote sustainable agriculture and livestock industries, should be further promoted to achieve a paradoxical agenda of feeding expanding population without starving the planet**.

The environmental burden from operating agriculture and livestock industries has been increasing. There is an urgent need to achieve sustainable development of agriculture and livestock industries as well as environmental protection. To reduce the environmental impact through agricultural production, both the EU and Japan have developed sustainable food production policies, a reduction in the use and risk of chemical pesticides and an expansion of the land use for organic farming. Innovation that enables the replacement of hazardous chemical pesticides with safer pesticides is a key driver to achieving such goals.

In the livestock sector, greenhouse gases (GHGs) are emitted through various processes such as digestive process of livestock such as cattle and manure treatment, as well as feed production and processing/transportation of livestock products. Therefore, disseminating multifaceted GHG reduction methods that are compatible with improving economic efficiency in livestock production is necessary.

While many means are being researched and developed to achieve sustainable agriculture/livestock systems and environmental protection, BRT places a greater focus on the development effective and safe technologies, including biopesticides, biostimulants, RNA interferences, and methods to improve agricultural productivity. In the livestock field, BRT considers technology to suppress methane emission from cattle's digestive systems and development/use of feed optimized for nutrient balance like amino acids to enable efficient breeding as important.

The BRT calls on the EU and Japanese Authorities to:

- establish definitions, rules, and guidelines for biopesticides to promote their development and use. Introduce a simple and efficient registration system enabling evaluation and approval based on a minimum data package, similar to the registration system introduced by the US EPA,
- develop scientifically consistent data requirements and risk assessment processes for products based on new technologies, like RNA interferences,
- formulate a policy to encourage growers to adopt safer and more sustainable solutions in their farming practices,
- collaborate with many stakeholders to promote emerging technologies for sustainable and precision food production to lower the environmental load associated with agricultural production,
- call for promoting efficient feed utilization and improving recycling/treatment methods for livestock excreta to achieve both GHG emission reduction and strengthening competitiveness of the livestock industry, and
- develop guidelines to visualize and quantify the GHG reduction impact in the livestock supply chain and promote economic valuation of the reduction amount.

BRT believes that:

- as there is no single solution that fits all, integrated solutions are needed to achieve sustainable food production and environment impact reduction with limited resources,
- promotion of biopesticides, biostimulants, and RNA interferences is key to achieving environmental goals without impeding agricultural productivity,
- enhancement and harmonization of registration systems for biopesticides in the EU and Japan should support the achievement of their sustainable food production policies and reduction of the use and risk of chemical pesticides,
- incentives to growers are necessary to promote new technologies for environmental impact reduction (EIR) to enable growers to benefit from EIR initiatives,
- optimizing the nutrient balance like amino acids in feed can reduce production costs while reducing GHG emissions from various processes such as digestive processes, manure treatment, feed production/transportation, etc., and

- in order to accelerate GHG emission reduction efforts in the livestock industry, it is necessary to visualize and quantify the GHG reduction impact across various processes in the value chain and to implement incentive mechanisms such as creditization.

**WP-2 / # 04 / EJ to EJ**

**Legal clarity for and appropriate regulation for agricultural innovation, including genetically modifiedcrops and genome-edited crops, should be established.**

The BRT calls on the EU and Japanese Authorities to:

- regulate agricultural technologies, including crop protection, genetically modified (GM) and genome-edited (GE) crops in a science-based and proportionate manner,
- advance and adhere to global harmonization of genetically modified organisms' risk assessments, and support the Global Low Level Presence Initiative,
- provide legal clarity on the status of techniques such as genome editing and corresponding labelling requirements (e.g., for genome edited derived food), and
- work with industry and other stakeholders to increase trust in the regulatory science and gain greater societal acceptance.

The BRT believes that:

- A fact-based platform for dialogue and sharing of information as well as a risk-proportionate, predictable, science-based treatment of new technologies is required.
- Taking a science-based and proportionate regulatory approach to agricultural technologies will aid in gaining societal acceptance and help weed out misinformation, and
- Ongoing regulations regarding data requirements for emerging technologies are not fully updated resulting in duplication of studies.

## Biotechnology (Food Tech)

**WP-2 / # 05/ EJ to EJ**

**Emerging food technologies should be promoted to ensure food security while minimizing the environmental impact.**

The BRT calls on the EU and Japanese Authorities to:

- promote emerging food technologies to secure food supply while reducing the environmental burden, and
- establish and harmonize regulations that are necessary to advance food techs, and
- promote consumer awareness, research and development, and human resource development for the penetration of food techs.

The BRT believes that:

- reducing the environmental burden and achieving a sustainable food supply is an urgent issue and requires the development of new technologies and investment in new fields as the global food demand is estimated to increase to 1.7 times the 2010 level by 2050 while the environmental burden by agriculture, forestry, and fisheries is on the increase,
- food techs, such as plant- or insect-based foods, genome-edited foods, cultured meat and foods utilizing microorganisms, such as precision fermentation, are expected to provide alternative ways to meet the increasing demand for proteins, lipids, carbohydrates,etc.,
- approvals for new food products are currently granted earlier in countries outside Europe and Japan, such as Singapore and the US, resulting in delays in rulemaking, market development, and investment for food techs. It is necessary to gain the trust and interest of investors and entrepreneurs by clarifying the process to launch such products, establishing rules and regulations concerning safety,
- international harmonization and standardization of regulations in the food tech field are necessary to activate imports and exports and promote technology transfer,
- open innovation should be promoted through collaboration between established businesses and startups to apply innovative technologies from various fields to food techs, and
- it is vital to foster an understanding of new food products and acceptance among consumers, existing industry and agricultural producers, to promote use of alternatives through incentives, credits, etc., and to strengthen research on new technologies (food techs) and human resource development at universities.

## Biotechnology (Industry Promotion)

### WP-2 / # 06* / EJ to EJ

**Utilization of DSI (Digital Sequence Information on Genetic Resources) should be carefully discussed.**

A decision document* on the Multilateral Mechanism on Benefit-Sharing (MLM) for the Use of DSI was adopted at the 16th Conference of the Parties (COP16) to the Convention on Biological Diversity held in Colombia (Cali) from October 21 to November 1, 2024. Further promotion of biodiversity conservation activities is expected through this initiative. On the other hand, while DSI is indispensable for solving social issues including biodiversity conservation, it is necessary to consider the possibility that industrial use of DSI and corporate activities may be discouraged and consequently, biodiversity conservation may be hampered. In order to develop this initiative sustainably, encouraging DSI utilization by industry should be a key to be addressed in the next step.

The BRT calls on the EU and Japanese Authorities to:

- share the benefits arising from DSI use fairly and equitably. In the decision document, the scope of DSI treated by the MLM was defined to be publicly available DSI which is not covered by other ABS-related treaties or national laws,
- decide to be “DSI only in the public domain” this time, the definition of “publicly available” is yet to be established. In addition, the very definition of the term “digital sequence information such as DNA/RNA sequences, amino acid sequences, etc.” itself, is still

undetermined, leaving some ambiguity. This point needs to be resolved before the Fund becomes operational,

- make a consensus on the necessity to prevent double payments and eliminate the duplication of obligations; however, the precise mechanisms for achieving this remain to be determined. These issues must be addressed prior to the Fund becoming operational,
- assure/ensure that the industrial sectors, sizes of companies, and contribution rates provided for references must be evaluated in a concrete plan in accordance with actual usage of DSI to achieve a balance between benefits and burdens. Annex Paragraph 3 defined the target as companies above a certain size in industrial sectors that directly or indirectly benefit from the use of genetic resources in commercial activities are required to contribute to the International Fund based on their profits or revenue and industrial sectors are illustrated in Enclosure I,
- create a system whereby benefit-sharing is connected to a business incentives, as any companies in the supply chain of products developed with using DSI may be considered within the scope of coverage, which may act as a disincentive to the use of DSI and related products and services throughout the industry, since the term “direct or indirect use of DSI” is not defined, and, in particular, criteria for indirect benefits remain unclear,
- make the system workable with a simple procedure, because, although Annex Paragraph 5 states “The provisions do not apply to entities active in the sectors listed in enclosure I that do not directly or indirectly use digital sequence information on genetic resources.”, it is tremendously difficult to prove “not indirectly benefiting” from DSI due to unclear definition of the use and benefit as stated earlier,
- conduct a careful review of the listing in the sector and provide a convincing explanation that dispels reputational rumors when making changes in the list, as it is highly probable that companies suffer from litigation by indigenous peoples, local communities, NGOs, etc., and reputational concerns even if they are successful in proving, given that they are grouped as a sector,
- implement measures to avoid the risks of double taxation when both the existing Nagoya Protocol-based Access & Benefit Scheme/ABS and the DSI benefit-sharing mechanism are applied, because, while Annex Paragraph 27 states “The provisions of the mechanism will not affect the rights and obligations of any Party deriving from any existing international agreement,” the rest of the definitions contains ambiguities,
- facilitate discussions with various industries on business incentives that will promote industrial use of DSI, as the growth of DSI-related industries is essential for the sustainable development of Cali Fund and the expansion of activities for biodiversity conservation, and
- establish legislation that facilitates the development of a clear and easily implementable system, ensuring consistency across nations, because the COP16 decision lacks legal binding authority; the implementation of the DSI benefit-sharing mechanism is contingent upon individual countries. Furthermore, the final decision document does not delineate the timeline for the Kali Fund's implementation, and several ambiguous aspects may lead to confusion among operators.

＊CBD/COP/DEC/16/2 https://www.cbd.int/doc/decisions/cop-16/cop-16-dec-02-en.pdf

<u>The BRT believes that:</u>

- Conservation and sustainable use of biodiversity are a challenge that should be addressed by the international community as a whole. On the other hand, given that DSI and its use are an essential technology for solving the social issues, the sustainable expansion of industrial use of DSI and corporate activities plays a crucial role in achieving biodiversity goals.

- Therefore, it is important for the governments of both Japan and the EU to execute leadership in this area and lead international discussions in preparation for COP17 to the Convention on Biological Diversity.

- There are concerns that the Cali Fund decision alone will lead to the suppression of the use of DSI and related products and services, thereby hindering the development of industry. Emphasizing the desirability of free and unrestricted access to DSI in the development of science, a mechanism should be created to provide business incentives for industry to contribute to biodiversity conservation with consideration to ensuring that academia and corporate activities are not impeded. To this end, the EU and Japanese governments should actively exchange views with various industrial sectors and clarify incentives for benefit-sharing, thereby proposing a mechanism that encourages active participation from industry and makes its contribution to biodiversity conservation a developmental process.

Furthermore, it is essential to clarify the definitions of terms such as "definition and scope of DSI," "use of DSI," and "when benefit sharing occurs." It is also important to identify a solution that meets the criteria, such as efficiency, realism, practicality, cost-effectiveness, legal certainty, clarity, support for research and innovation, and open access to data. In pursuit of this objective, the governments of Japan and Europe should make every effort to hold necessary and sufficient discussions that will facilitate the success of COP17.

## Life Science & Healthcare

### WP-2 / # 07/ EJ to J

**Reform of the pharmaceutical pricing system should provide a stable, predictable environment that rewards innovation.**

The BRT calls on Japanese Authorities to:

- support the pharmaceutical industry to innovate in and accelerate new drug development and bring new drugs rapidly to meet the needs of patients in Japan without any delay from other countries and to eliminate “drug lag” and “drug loss”,
- vitalize the drug discovery and development capabilities in Japan in line with the MHLW’s Pharmaceutical Industry Vision by improving the current pricing system to strengthen the reward for innovation and maintain an incentive for companies,
- optimize the reimbursement and payment systems for emerging technologies, including cell and gene therapies, so that patients and society can reap the transformative benefits of innovations,
- determine a drug price that properly reflects evaluation which includes a wide range of elements such as clinical efficacy to patients and doctors and patient-reported outcomes, and is carried out under a transparent and highly predictable process,
- limit the scope of off-cycle price revisions. Since drug expenditure has been well controlled by the current pricing system, the scope of off-cycle price revisions must be limited to exceptional cases with huge discounts,
- protect drug prices of innovative patented products and not subject to off-cycle pricecuts,
- avoid frequent revisions of the pharmaceutical pricing system and secure sufficient lead time before the enforcement of any pricing rule changes to ensure long-term business predictability and facilitate investment decisions,

- expand the scope of pricing policy reforms beyond annual drug costs, as drug costs are only one part of the overall and long-term healthcare costs,
- secure rewards for innovation while ensuring the long-term sustainability of the healthcare system. Review of all healthcare costs and funding sources, including medical expenses, medical procedures, length of hospital stays, and patient out-of-pocket expenses, should be conducted,
- apply coverage under public insurance to groundbreaking innovations whose value has been officially recognized as a rule, whether through a generic or flexible pharmaceutical evaluation process, and
- Increase opportunities and time for constructive and meaningful dialogues between the authorities and industry to allow the industry to provide input and ensure transparency of policy decisions.

The BRT believes that:

- the drug pricing system reform in 2024, which focused on evaluating innovation to eliminate the drug lag/loss, has received a positive response from the pharmaceutical industry to a certain extent. However, as a system reform, it is not sufficient as shown below:
  - the repeated revisions to the pharmaceutical pricing system introduced in 2018 with as short as three-month notice, created significant issues with business predictability for the Japanese market resulting in delayed access to the latest treatments for patients in Japan. Market predictability is essential as the development of innovative drugs requires long-term, substantial investment,
  - unless technological innovation is properly evaluated, it becomes increasingly challenging for the industry to continuously create innovative drugs to fulfill unmet medical needs. This will not be beneficial for the patients nor for society,
  - a paradigm shift in the reimbursement and payment systems is needed for transformative cell and gene therapies with the potential to cure diseases, which is not contemplated in the current systems,
  - among key developed markets in the world, Japan is the only country with pricing rules that provide mandatory annual price reductions for new drugs during the patent period, and
  - annual drug costs are only a part of the overall, long-term healthcare expenditure; fundamental reforms should not be limited to managing drug costs alone.

**WP-2 / #08* / EJ to J**

**Patient Access to innovative Medical Devicesshould be improved.**

**The health insurance system for cancer genome profiling (CGP) testing should be improved to ensure early access for patients to indicated testing.**

The BRT calls on the Japanese Authorities to:

- enable patients to conduct CGP testing and receive their results at optimal timings and types of samples using the public insurance system.

The BRT believes that:

- Tissue-based CGP testing and blood-based CGP testing which comprehensively detect cancer-related genes have been covered by national health insurance and reimbursed as a medical device since June 2019 and August 2021 respectively, but there is a restriction that they are reimbursed only if CGP testing is performed either by tissue or blood at the end of the standard of care when patients already get drug resistance or are in worse general status. An environment is socially demanded where each patient can get access to CGP testing at early and optimal timings and types of samples. Enhanced accessibility to CGP testing is expected to improve access to safer and more effective treatments tailored to individual patient needs, and treatment approaches developed based on genetic information will ultimately lead to improvement of clinical outcomes.

**WP-2 / # 9 / EJ to J**

**Health Technology Assessment (HTA) should be carefully applied.**

**HTA for Pharmaceuticals should not becomea barrier to patient access.**

The BRT calls on the Japanese Authorities to:

- take disease severity, unmet needs, and ethical and social considerations in the true evaluation of pharmaceutical value as additional elements. This approach should be continuously improved to establish a balanced HTA system for costs and innovation in Japan,
- evaluate the significant additional value brought by new drugs comprehensively and transparently through a process involving multiple stakeholders, including patients,
- refrain from using HTA to determine reimbursement eligibility.

The BRT believes that:

- in Japan, the HTA system is positioned as a supplement to the current drug pricing system, and the price adjustment range through HTA is currently applied to the premium for utility of drug prices,
- expanding the scope to the drug price itself without revising the evaluation method, or using the HTA system to determine reimbursement, could become a barrier to patient access to new drugs and potentially exacerbate the drug lag/loss,
- the BRT fully agrees with the government's decision not to use HTA for determining reimbursement eligibility, and
- there are concerns about future revisions to the HTA system, such as expanding the price adjustment range. This would negate the value of pharmaceuticals, and the HTA system must remain "complementary to the drug pricing system" as originally intended.

**HTA system tailored to the characteristics of medical devices should be considered and established.**

The BRT calls on the Japanese Authorities to:

- thoroughly consider analysis processes and evaluation methods of HTA for medical devices tailored to their characteristics, without hindering the creation of innovative products,
- accumulate sufficient information on evaluated medical devices, as only a few cases of medical devices have been evaluated since 2019,
- ensure flexible communication with public analysis teams and industry involvement in the review process, since a proper understanding of the highly individual characteristics of medical devices is necessary for analysis, and
- be aware that medical devices have a shorter improvement cycle than pharmaceuticals.

The BRT believes that:

- it is important that HTA systems do not hinder the creation of innovative products, delay the listing for medical insurance reimbursement, or impose an excessive burden on the industry (e.g., development of databases or adding human resources). Most importantly, patient access to cutting-edge medical technologies must be ensured promptly.

**WP-2 / # 10 / EJ to J**

**Establishing a foundation for utilizing medical information and improving legal systems to provide high-quality should be achieved for provision of efficient healthcare and creation of medical Innovation such as innovative new drug.**

The BRT calls on the Japanese Authorities to:

- promote development of regulations and legal systems related to the primary and secondary utilization of real-world data (RWD) while referring to advanced initiatives in the EU and other countries, as well as the development of infrastructure for collecting, integrating, and analyzing RWD based on the needs of users.

The BRT believes that:

- accumulation of various accurate real-world data (RWD) and the multi-layered integration of such data will provide accurate scientific evidence, enabling more effective promotion of medical innovation and early provision of efficient, high-quality medical and nursing care services,
- the United States, Europe, and China have been making efforts to promote the utilization of RWD. Particularly in the EU, the European Health Data Space policy is working to establish a mechanism that enables the primary and secondary utilization of medical data across borders within Europe,
- the Japanese government is advancing a medical digital transformation to achieve its goals by 2030, aiming to promote medical innovation and continue providing effective and efficient medical and nursing care services. As a part of this, the Next-Generation Medical Base Act has been amended to enable the handling of pseudonymized medical information and the secondary use of RWD

has been progressed. However, it has not yet become a platform for accumulating life-course data for the entire population, and only a portion of genomic data and image data can be used, requiring further improvement, and

- for the improvement, the BRT expects the prompt development of infrastructure and legal systems, referring to initiatives such as the EHDS. The BRT considers ensuring data standardization and interoperability, ensuring data quality, and establishing a safe and secure environment for data storage as urgent issues to be addressed.

## Biotechnology (Biomaterials)

### WP-2 / # 11 / EJ to J

**Active support should be provided in order to achieve carbon neutrality at an early stage, such as securing biomass raw materials and establishing evaluation and certification systems, to strengthen material production through the utilization of biomass.**

The BRT calls on the Japanese Authorities to:

- implement various industrial support measures to secure domestic biomass raw materials, which are facing global competition for acquisition. In Japan, comprehensive approach to accumulate and utilize non-edible biomass resources such as forest resources is needed. While imported alcohol and sugar as a raw material for biomass products is subject to tariffs and adjustments like food-grade alcohol and sugar, the two should be distinguished, and charges on the former should be abolished to promote biomass utilization,
- establish methods for evaluating the environmental value of biomass-derived products and an international certification system for such products. In doing so, an evaluation method that can compare the environmental impact of biomass-derived products with conventional fossil fuel-derived products and/or livestock-derived products should be developed. It is desirable that the evaluation and certification system considers the GHG reduction effect across the entire supply chain, and
- promote measures to stimulate consumer demand for biomass-derived products, which tend to be more expensive than fossil fuel products, or to mandate its introduction. To this end, a certification system based on the degree of environmental impact assessment should be established.

The BRT believes that:

- in order to move away from fossil fuels and achieve carbon neutrality (CN), strengthening the production of materials such as plastics using biomass as a raw material has been adopted as a national policy in various countries, including Japan. However, there are many issues to be addressed for product proliferation, and Japan and the EU need to work together on this,
- in order to achieve the government's goal of introducing 2 million tons of biomass plastics domestically by 2030, as stated in the Plastic Resource Circulation Strategy in 2019, active support should be provided to secure biomass raw materials. In Japan, the accumulation and utilization of non-edible biomass resources such as forest resources are insufficient, and a comprehensive

approach is needed for the industrial use of biomass. Sugar can be a major raw material for fermentation, and alcohol is gaining attention as a raw material for basic chemicals as an alternative to naphtha. Therefore, to promote biomass utilization, sugar and alcohol as a raw material for biomass-derived products should be clearly distinguished from food-grade sugar, and measures such as exempting it from tariffs and adjustments should be implemented as a national effort, and

- to expand the market for biomass-derived products, the environmental value of such products should be evaluated in a way that allows comparison with fossil fuel-derived and livestock- derived products, and a certification system based on this value should be established. For CN, in addition to raw material procurement, it is desirable to evaluate the entire supply chain, including product manufacturing, product use, and disposal.

## Biotechnology (Industry Promotion)

### WP-2 / # 12 / EJ to J

**The Drug Discovery Ecosystem to Enhance the International Competitiveness of the Pharmaceutical Industry, an Important Growth Industry that Leverages Japan's Scientific and Technological Capabilities should be established and consolidated.**

The BRT calls on the Japanese Authorities to:

- take the lead in establishing a system centered on building a drug discovery ecosystem, toward strengthening Japan's drug discovery capabilities, which is a major challenge in enhancing the competitiveness of the domestic pharmaceutical industry, and
- accelerate and expand the drug discovery venture ecosystem promotion project by the Japan Agency for Medical Research and Development (AMED), while also promoting measures to attract outstanding talent and risk money, the key to establishing this system is the creation and growth support of promising drug discovery startups.

The BRT believes that:

- the capabilities to create innovative drugs that protect the health of the people (drug discovery capabilities) are extremely important from the perspective of Japan's health and economic security,
- Japan's drug discovery capabilities, which were once world-class, have gradually declined in recent years. The reasons include a delay in transitioning to biopharmaceutical drug discovery as the global trend shifted towards biopharmaceuticals, a delay in establishing the necessary ecosystem for biopharmaceutical drug discovery, and a shortage of personnel needed to catch up with the delay,
- in the more advanced United States and Europe, the establishment of ecosystems, including startup support, and human resource development are being promoted as national policies, making the strengthening of drug discovery capabilities an international competition,

- in light of this situation, the Japanese Government has established the "Council of the Concept for Early Prevalence of the Novel Drugs to Patients by Improving Drug Discovery Capabilities," and has formulated policies based on the opinions of experts from academia and a private sector, and
- moving forward, as concrete measures are formulated and efforts are made toward establishing the drug discovery ecosystem, outstanding talents and considerable funding will likely be required. The government is expected to advance reforms that go beyond minor adjustments to the current measures, involving domestic and foreign private organizations. Beyond that lies the realization of a "place for drug discovery" where talents and funds can globally converge and contribute to people around the world, which is the goal of Japan.

## Biotechnology (Agriculture)

### WP-2 / # 13 / EJ to J

**New technologies, including biopesticides and biostimulants, should be further promoted to achieve both environment protection and sustainable agriculture.**

The BRT calls on the Japanese Authorities to:

- encourage a reduction in the use of antibiotics in agriculture production to reduce the risk to the well-being of humans, and
- promote the development of new technologies to reduce the use of soil fumigants which would represent about 50% of chemical inputs.

The BRT believes that:

- key technologies include newer and safer chemicals with higher selectivity or farming practice, such as crop rotation or improved soil health with improved soil diagnosis.

### WP-2 / # 14 / EJ to J

**Reviewing period for biotechnology products should be shortened.**

The BRT calls on the Japanese Authorities to:

- further shorten reviewing period through harmonization in data requirement for biotechnology products as well as dossier on human & environment safety, and through acceptance of summaries in English,
- take advantage of the evaluation results from foreign countries in order to reduce the resource burden on the Japanese authorities, and
- expand the scope of biotechnology products for which local confined field testing may be excluded to other crops and traits based on accumulated evidence and scientific justification by leveraging confined field-testing data from foreign countries.

The BRT believes that:

- along with the unstable international situation and rising food prices, concerns are growing over stable food supply in Japan. Delivering novel and safe seeds is vital for addressing such concerns by increasing food production, saving labour and energy in agriculture, and reducing environmental impact,
- while R&D-intensive companies are continuously and heavily investing in new technologies, the innovation will not contribute to food production without their governmental approval. Hence, early market access to novel genetically modified crops is crucially important,
- delayed market access to novel genetically modified crops will cause technology gaps, resulting in unnecessary disadvantages for farmers due to limited access to innovative products,
- further progress in shortening the reviewing period would bring Japan much closer to international best practice standards, while the BRT acknowledges the shortened time to market for the new active substance of crop protection products, and
- harmonizing international data requirements will enable the industry to avoid duplicated investment for market access in the respective area. Currently, only China and Japan request local confined field testing for GMO crops for import use, while other import countries like the EU, Korea, Taiwan, etc. leverage the field data collected in cultivation countries for safety assessment.

**WP-2 / # 15/ EJ to E**

**Measures should be established to secure a stable supply of agricultural chemicals to importing countries.**

The BRT calls on the EU Authorities to:

- Not to immediately stop production and exportation of the pesticidal active substances banned in the EU as they are critically important for stable food production in the countries that import them from the EU.

The BRT believes that:

- pesticides are essential materials for the stable and sustainable production of affordable foods,
- the EU policy not to produce and export the pesticidal active substances banned in the EU under the Chemicals Strategy for Sustainability in the EU New Green Deal will affect the stable and sustainable production of affordable foods globally, while the BRT respects the EU decision,
- because of their intrinsic hazardous properties of pesticidal active substances, the quality and use of pesticides are highly regulated, and they are only used after intensive risk assessments in respective countries. Any addition or change in the sourcing of pesticidal active substances is strictly controlled and requires demonstration of the equivalence, and thereby stable production and supply of high-quality active substances is critically important, and
- Pesticides are highly regulated in the destination countries and the use of such pesticides in the destination countries is different from that in the EU and thereby the outcomes of the pesticide use are different.

# Recommendations from European industries

## In silico methodologies

**WP-2 / # 16 / E to EJ**

**Perspective on "Good Computational Modelling & Simulation Practice for medical products" and the need for a harmonized regulation over "Good Simulation Practice" similar to other GxP guidelines.**

The BRT calls on the Japanese Authorities to:

- Computational Modelling and Simulation in silico methodology is already under scrutiny by the members of the International Medical Device Regulators Forum (IMDRF) to be hosted in Japan in 2025.
- Such new GSP and further Health Technology Assessments standardization is a challenging task that should involve identified Japanese stakeholders and policy makers, as a continuation of Japanese National Institute of Technology and Evaluation (NITE) commission works (Issues in and Ideas for facilitating application of in silico method, July 2016)

The BRT believes that:

In silico methodologies are a valid alternative regarding some in vitro and ex vivo experiments, and potentially some in vivo animal and even human experimentations:

- Reduce some experiments (faster bench tests, fewer animals sacrificed, more relevance for patients' population enrolled),
- Refine some experiments (reduce the suffering of animals, reduce risks for humans, improve the ability of pre-clinical studies to predict the clinical outcome, generalize the experimental finding, etc.), and
- Replace some experiments (potentially replace the experiment entirely).

## Biotechnology (Industry Promotion)

**WP-2 / # 17 / E to EJ**

**Re-establishing industry leadership in BioSciences**

The BRT calls on the EU and Japanese Authorities to:

- Conduct a full analysis of changes to the relative global positions of the EU and Japanese economies in advanced biotechnology, including drug discovery, novel modalities such as mRNA, cell and gene therapy, etc.
- Commit to legislation or comprehensive new policies to drive ecosystem development through targeted investments, setting clear numerical targets for increases in R&D funding, startup formation, clinical trials, new therapy approvals, industry growth, employment and exports.
- Consider establishing, in conjunction with industry, pilot shared facilities for biomanufacturing that startups can utilize for early stage pre-clinical and clinical production.

- Incentivize the use of CRO and CDMO facilities located within allies to encourage startups funded with national research grants to conduct their manufacturing and research activities in friendly geographies.
- Establish an EU-Japan working group on biosciences and biotechnology to explore fields of collaboration including joint R&D, regulatory harmonization, trade facilitation, and other fields.

The BRT believes that:

- Japan has promoted biosciences through the 2024 Integrated Innovation Strategy, and the EU through the Biotech and Biomanufacturing Initiative. In addition, Japan provided 227.4 billion yen for 17 vaccine manufacturing projects in 2022. The BRT recognizes and applauds these efforts. However, other economies including the United States, South Korea, the People's Republic of China, have established strong national initiatives to promote biotechnology, and the EU and Japan need to act more forcefully to ensure industry leadership.
- The EU and Japan are leading scientific powers with many of the top research universities in the world for biosciences and biotechnology.
- The EU and Japan are the 2nd (EU) and 4th (JP) largest pharmaceutical markets in the world.
- The global share of clinical trials conducted in the EU and Japan has declined relative to other geographies, slowing the pace of innovation and relocating important clinical activity overseas.
- The EU and Japan share common goals in developing secure and reliable access to the raw materials and finished products required for the manufacturing of critical medicines and vaccines.

# Recommendations from Japanese industries

## Animal Health

**WP-2 / # 18 / J to EJ**

**Mutual recognition of GMP for Animal Health products should be ensured.**

The BRT calls on the EU and Japanese Authorities to:

- agree on the mutual recognition of European and Japanese marketing authorizations for veterinary products, starting with mutual recognition of GMP certification of veterinary medicines, and
- include veterinary products within the scope of the MRA (Mutual Recognition Agreement).

The BRT believes that:

- Mutual recognition of GMP certification for veterinary products between the EU and Japan will provide for faster access to new useful products.