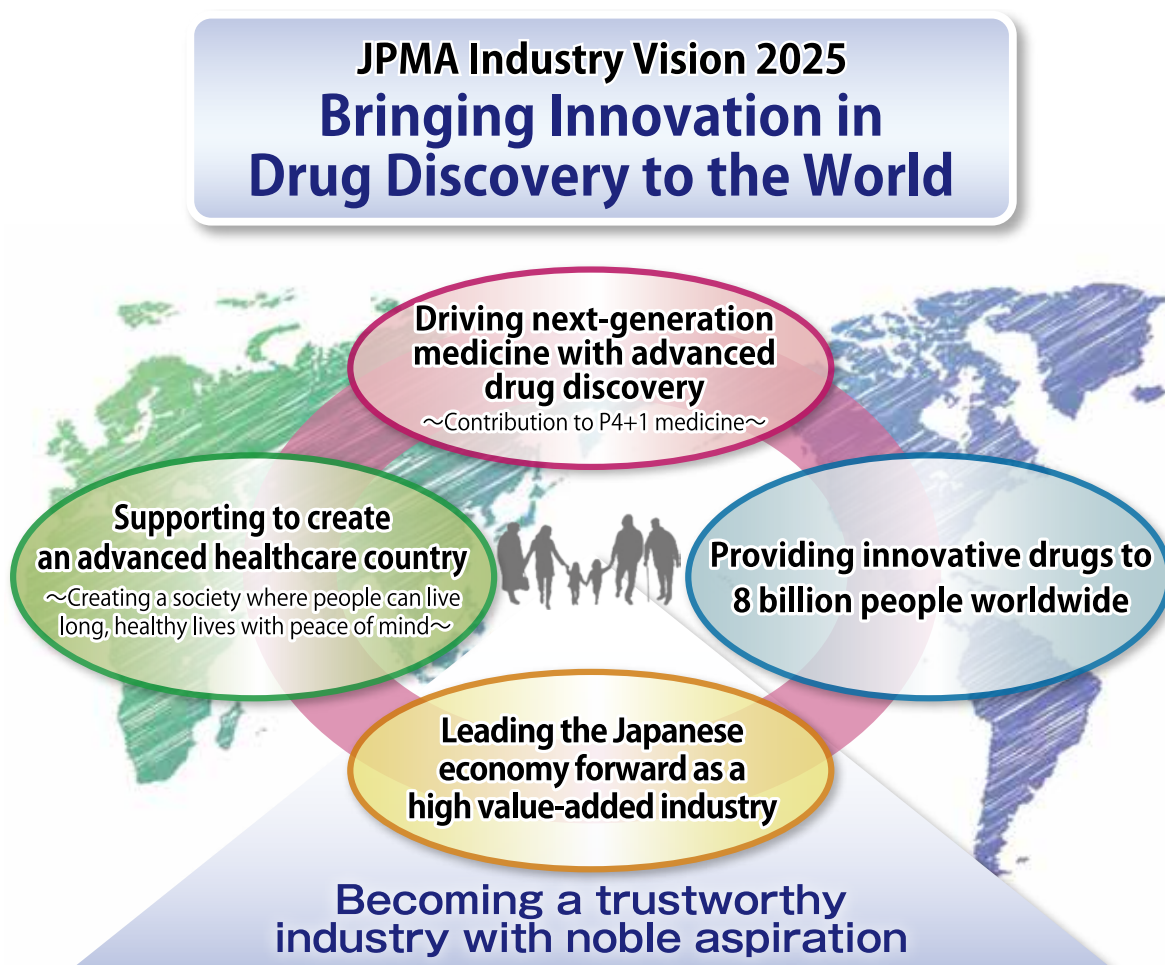


2. JPMA Industry Vision 2025

Against the background of the changing environment surrounding the pharmaceutical industry and the future predictions^{*1}, we prepared JPMA Industry Vision 2025 “Bringing Innovation in Drug Discovery to the World” as the vision that JPMA and its member companies should be aiming for during the next decade until 2025.

(Fig.) JPMA Industry Vision 2025



To give shape to this vision, we classified the challenges to be addressed into five categories and established a vision ten years from now for each category.

Vision 1: “Driving next-generation medicine with advanced drug discovery
–Contribution to P4+1 medicine –”

Vision 2: “Providing innovative drugs to 8 billion people worldwide”

Vision 3: “Leading the Japanese economy forward as a high value-added industry”

Vision 4: “Supporting to create an advanced healthcare country – Creating a society where people can live long, healthy lives with peace of mind –”

Vision 5: “Becoming a trustworthy industry with noble aspiration”

To meet the expectations of the pharmaceutical industry, JPMA and its member companies will pursue advanced drug discovery and drive next-generation medicine by achieving drug discovery innovation (Vision 1). We will then make these products available to patients and their families as well as ordinary citizens around the world, including Japan (Vision 2).

As a result of the realization of the visions, the pharmaceutical industry will lead the Japanese economy as a high value-added industry and increase its presence as an industry that deserves to play a leading role in Japan's future (Vision 3). At the same time, we intend to provide support to help Japan become the advanced healthcare country it is aiming to be (Vision 4).

In this process, we will constantly aim high and spare no effort to win the trust of our stakeholders as well as respond to their trust and live up to their expectations (Vision 5).

The aspiration of JPMA Industry Vision 2025 in terms of "Bringing Innovation in Drug Discovery to the World" is that we will generate a virtuous cycle that will contribute to drug discovery by achieving these challenges, and that JPMA and its member companies will channel all their comprehensive strengths into drug discovery innovation.

Vision 1: "Driving next-generation medicine with advanced drug discovery

– Contribution to P4+1 medicine –"

Through the advancement and promotion of science and technology, it is expected that medical care ten years from now will make it possible to predict therapeutic efficacy and safety on the basis of individual and epidemiological data, and greater importance will be placed on pre-symptomatic treatment in a case with higher risk factors as well as preventive medicine including vaccinations. These healthcare concepts are being proposed as P4 medicine.

It is believed that P4 medicine will make dramatic progress during the next decade, so it will be of great importance to generate numerous world-leading innovative drugs that contribute to P4 medicine both for the benefit of the medical care sector and for Japan's survival in the global competition.

(Reference) P4 medicine is a concept in advanced medicine developed in the US. P4 stands for predictive, preventive, personalized and participatory medicine. Its aim is to provide preventive medical intervention by using predictions based on personalized genetic information and biomarkers, and to promote patient understanding of information and participation in medicine*2.

On the other hand, we believe that the advancement and integration of existing technologies is also important for bringing about innovations that improve the quality and efficiency of medical care, and that it is necessary to step up ongoing efforts in technical fields where we have a competitive edge. We refer to this idea as “progressive medicine,” and have established the unique concept of “P4+1 medicine,” which includes “progressive medicine” as +1 in addition to P4 medicine. P4+1 medicine is medical care where each patient can be provided with the optimal drugs at the appropriate time through early diagnosis and prediction upon obtaining the patient’s understanding. This is the next-generation medicine that we envision.

JPMA hopes to achieve innovation in drug discovery that contributes to both “P4 medicine” and “progressive medicine” by making full use of our country’s strengths, including the possibility of accumulating comprehensive and high quality big data from our universal health insurance system, and we have therefore adopted “Driving next-generation medicine with advanced drug discovery - Contribution to P4+1 medicine -” as our vision.

Vision 2: “Providing innovative drugs to 8 billion people worldwide”

Pharmaceuticals have a universal value, regardless of national borders. Against a backdrop of changing demographics, increasing social and economic globalization, and improved global health standards, demand for innovative drugs will have increased all over the world by 2025, and the pharmaceutical industry has an obligation to meet these expectations. Most Japanese companies that have operated globally are large businesses with a tendency to focus on advanced countries. We examined how innovative drugs generated through drug-discovery innovation could be made available in ways that match the conditions in each country, and what actions must be taken for this purpose.

JPMA is becoming increasingly aware of the environmental differences surrounding pharmaceuticals depending on the country, such as the economic situation, the healthcare system, and sociocultural aspects. We have therefore decided to provide the innovative drugs that we have created to people literally all over the world, in order to live up to the expectations of patients around the globe who desire treatment, which led us to adopt “Providing innovative drugs to 8 billion people worldwide” as our vision. In the addendum, we also explain our mission and contribution with regard to global health. In 2025, when the vision will be achieved, the world population is predicted to be approximately 8 billion people. In light of this situation, we have encapsulated our aspiration to deliver innovative drugs to all corners of the world in the phrase “to 8 billion people worldwide.”

Vision 3: “Leading the Japanese economy forward as a high value-added industry”

For Japan, with its limited resources and shrinking population, it is important to build a nation that is based on science and technology and intellectual property. During this process, the pharmaceutical industry is expected to be an even stronger driving force behind the Japanese economy as a prime example of a high value-added industry. Moreover, by further increasing our presence as a high value-added industry and making important contributions to our country and society, we are likely to become an attractive industry that can draw in talent, technology and funds and create a virtuous growth cycle.

JPMA member companies should improve productivity by streamlining research and development, collaborating with different industries, and improving management efficiency; they should create the innovative drugs described in Vision 1 and achieve the further global expansion explained in Vision 2, thereby turning the pharmaceutical industry into a high value-added industry that contributes to Japan’s economic growth and plays an important role in next-generation Japan. To this end, JPMA adopted the phrase “Leading the Japanese economy forward as a high value-added industry” as our vision. In the addendum, we explain our point of view with regard to corporate scale and reorganization.

Vision 4: “Supporting to create an advanced healthcare country

– Creating a society where people can live long, healthy lives with peace of mind –”

The average life expectancy in countries around the world continues to rise. The world’s attention is particularly drawn to the future of Japan, which has the longest life expectancy. An advanced healthcare country is “a country that caters to various styles of life, work and life design, and enables everyone to continue to live active and successful lives in security and with peace of mind.”^{*3} In other words, an advanced healthcare country is considered to be not simply a society in which people’s healthy life span is extended, but also a society with greater active social involvement by people who have benefited from it. It is also a community where people can make satisfactory choices regarding medicine, nursing care and the like, thus enabling them to live high quality lives.

To support an advanced healthcare country, it is vital to sustain the social security system. To this end, it is expected that proactive initiatives should be implemented with social security positioned as an investment in the people of Japan rather than as a cost, and these concepts and initiatives will set an example for the rest of the world to follow.

Consequently, JPMA hopes to contribute to the realization of an advanced healthcare country from the standpoint of the pharmaceutical industry, and adopted the

phrase “Supporting to create an advanced healthcare country – Creating a society where people can live long, healthy lives with peace of mind –” as the vision.

Vision 5: “Becoming a trustworthy industry with noble aspiration”

It is expected that in 2025, greater emphasis will be placed on Corporate Social Responsibility (CSR) and the concept will be incorporated into management and business. Pharmaceutical companies will be required to develop a governance framework for conducting sound, transparent business activities and to fulfill their responsibilities as life-related companies including the quality assurance and stable supply of pharmaceuticals. JPMA member companies and their individual employees will be required to increase their awareness of and commitment to transparency, ethics and compliance in a series of their activities, including the creation of innovative drugs, the marketing of these pharmaceuticals on a global scale, and their contribution to society, the economy and social security.

Through such efforts, JPMA aims to turn Japan’s pharmaceutical industry into an industry that is highly appraised and trusted by all its stakeholders, and whose initiatives and codes of practice are respected both domestically and internationally. We also aim to increase the number of people placing their hopes on, aspiring to a career in, or otherwise wishing to participate in drug discovery. JPMA thus adopted the phrase “Becoming a trustworthy industry with noble aspiration” as the vision.

[Notes]

*1 See “10. Reference.”

*2 Office of Pharmaceutical Industry Research. Industry Report No. 5 “Current Situation and Issues Surrounding the Pharmaceutical Industry – Delivering Better Pharmaceuticals to the World – Part 1: Innovation and New Drug Discovery” (December 2014)

*3 Ministry of Health, Labour and Welfare (MHLW). “Japan Vision: Health Care 2035 Report” (June 2015)