4th Korea-Japan Joint Symposium on Medical Products

The 4th Korea-Japan Joint Symposium on Medical Products was held on Tuesday, July 16, 2019 at the COEX conference room in Seoul, Korea. In the past this symposium had been held between the private sectors of the two nations 13 times previously, with the aim of mutual understanding of the environment surrounding the pharmaceutical industries of Korea and Japan, but became a joint government-private sector event three years ago. This year's symposium is the fourth to be held in this format. At this year's symposium, the two sides shared their respective initiatives regarding the pharmaceutical regulatory environment in Korea and Japan in both pharmaceutical and medical device domains. They also presented measures for the improvement of clinical development systems and the promotion of research into regenerative medical products in both countries, and on reforms of the drug pricing systems within the two countries' universal health insurance systems. This article focuses primarily on the presentations given by the Korean delegates.

Group photograph of attendees

Similarly to previous symposiums, the forum consisted of an overall session in the morning and industry-specific sessions in the afternoon. The morning overall session was attended by representatives of the Ministry of Health, Labour and Welfare (MHLW), Pharmaceuticals and Medical Devices Agency (PMDA), member companies of the JPMA and the Japan Federation of Medical Devices Associations (JFMDA) and attendees who answered a public call for attendees, for a total of 42 participants from Japan. With approximately 150 Korean attendees, the total number of participants was about 200. The 11 delegates from the Japanese government included Naoyuki Yasuda, Director, Office of International Regulatory Affairs, Pharmaceutical Safety and Environmental Health Bureau, MHLW and Dr. Takao Yamori, Executive Director of PMDA. The Korean government was represented by Kim Young Ok, Director General of Pharmaceutical Safety Bureau, Ministry of Food and Drug Safety (MFDS) and four others. From Japanese industry, there were 12 delegates from the JPMA, led by Akira Kawahara, Senior Managing Director, and including Akihiro Nagaoka, Chair of the Asia Sub-committee, International Affairs Committee and other senior members of the International Affairs Committee, while the JFMDA also had 12 attendees, including Chairperson, Shiho Tanaka. On the Korean industry side, there were 10 attendees from the Korea Pharmaceutical and Bio-Pharma Manufacturers Association (KPBMA), including Vice Chairman Won-Ill Gal, while Korea Medical Devices Industry Association (KMDIA) was represented by Chairman Kyung Kook Lee led the 9-member delegation from that organization. There many high-level leaders from the various organizations and there was lively discussion about the various topics presented, which were both timely and interesting.

At the symposium's overall session, updates were given on current pharmaceutical and medical device regulation in both countries. At the afternoon sessions, presentations were given on improvements in the clinical trial systems of both countries, promotion of research into regenerative medicine, and the latest trends in drug pricing systems.

■Keynote Speech

Latest Trend of Pharmaceutical and Medical Device Regulation in Korea

Ministry of Food and Drug Safety (MFDS) Director **KIM Myeng-Ho**

This presentation was an explanation of the latest topics concerning pharmaceutical and medical device regulation in Korea.

(1) Inclusion in EU white list

Four years after submitting its application in January 2015, Korea was added to the EU white list in May 2019, becoming the seventh country to be included after Switzerland, Australia, Japan, United States, Israel, and Brazil. With this designation, Korean manufacturers will no longer need to submit written confirmation from local regulators when exporting to the EU, so exports to the EU market are expected to increase. In addition, with the inclusion on the white list, Korean API manufacturing standards have been deemed to be equivalent to the EU GMP standards. This is expected to benefit manufacturers seeking to move into the markets of other regions as well.

(2) Composition and operation of Innovative Conversion Products Support Organization

To support the development of innovative conversion products and strengthen coordination with authorization policies, a dedicated organization for the handling of authorization reviews was launched on March 4, 2019. The aim is to speed up the authorization process by creating one-stop service desk for authorizations and conducting uniform examination of applications. This will create the foundation for manufacturers to obtain speedy authorization and commercialization of their product if the product is classified as an innovative conversion product by the organization's technical policy team. The organization has frameworks for speedy review, including a preliminary review scheme, supplementary requirement deadline specification scheme, production of standard supplementary request forms, supplementary information coordination request procedure, and the production of self-inspection checklists for applicants.

(3) Mutual Cooperation in GMP Inspections by Swiss and Korean Regulators

Swiss and Korean regulators began working to promote cooperation in 2016, an MOU on GMP was agreed to (tentative signing) in June 2018, with the aim of formal conclusion of the MOU in 2019. The agreement covers all pharmaceuticals for human use from APIs to finished products. As well as achieving efficient use of GMP inspection resources and raising international recognition of Korea's GMP system, this move is expected to improve access by Korean citizens to the pharmaceuticals they need by shortening the time needed to bring superior drugs to the domestic market.

(4) Advancement of regulatory control of bio-pharmaceuticals

To better reflect the properties of advanced bio-pharmaceuticals in a way that reflects advanced regenerative medical technologies, Korea is pursuing the establishment of legislation that covers advanced regenerative medicine and advanced bio-pharmaceuticals that will be separate from the existing Pharmaceutical Affairs Act. The aim of the planned legislation is to achieve speedy authorization procedures and stronger safety management.

■Pharmaceutical Regulatory Session Part I. (1) Improvement of Clinical Trial System

Regulatory Improvement of Clinical Trials in Korea

MFDS Director **KIM Jeong-Mi**

This presentation covered changes in Korea's clinical trial system, the current state of approval and management of clinical trials in Korea, system promotion issues in Korea in recent years, and future clinical trial policy promotion plans.

(1) Changes in Korea's clinical trial system

Changes include a testing agency designation scheme, the separation of investigational new drug (IND) applications and new drug applications (NDA) (introduction of clinical trial plan approval system), the establishment of standards for the manufacture and quality control of drugs for use in clinical trials, and, more recently, the introduction of compulsory education and training for clinical trial staff.

(2) Current state of clinical trial approval and management in Korea

The speaker explained the current state of management of clinical trials under the IND system. Almost all systems for the implementation of clinical trials conform to international standards. After the introduction of the IND system, the number of clinical trials increased five-fold between 2004 and 2018, but the growth in

the number of trials has showed signs of slowing in recent years. The breakdown of clinical trials is approximately 30% domestic clinical trials and approximately 40% international joint trials, with clinical research accounting for the remainder. By medicinal benefit, trials for cancer drugs accounted for an overwhelming percentage of trials conducted in Korea.

(3) Recent system promotion issues in Korea

A system for the disclosure of clinical trial information was introduced. Until now, they had been unable to provide patients adequately with the information they wanted, so under this new system, consideration is given to how the information would be disclosed and, with the consent of the companies involved, the information will be made public. Also, in consideration of what to do about the protection of trial subjects, various policies have been established, including the reinforcement of safety evaluation responsibility and mandatory recording, the reinforcement of mandatory damages compensation (mandatory insurance cover), and making it possible to give consent electronically.

(4) Future directions for promotion of clinical trial policy in Korea

Growth in the number of clinical trials has slowed in recent years, but Korea hopes to increase its global share of clinical trials while elevating subject safety and treatment opportunities. To that end, it is considering a five-year comprehensive plan for the development of clinical trials (January-June 2019). It will take a little while longer to finalize the details of the plan. It is expected to include the establishment of safety management frameworks for clinical trial participants, the expansion of treatment opportunities for sufferers of rare intractable diseases, the provision to patients of information about drugs that are not being trialed in Korea (there are many patient requests for the use of drugs and medical devices that are approved overseas but have not yet been approved in Korea), an accelerated review scheme, and improvements to the approval systems.

■**Pharmaceutical Regulatory Session Part I. (2) Improvement of Clinical Trial System**

Clinical Trials Today and Future in Korea

Korea National Enterprise for Clinical Trials (KoNECT) **CHEE Dong-Hyun**

(1) Status of KoNECT activities and clinical trials in Korea

KoNECT was established to strengthen Korea's international competitiveness in clinical trials. It conducts education and training concerning seven occupations. It has more than 50 education and training courses and participants who complete the course are presented with certificates of accreditation. It also cooperates with the JPMA and other external organizations. KoNECT Version 2.0 activities have been underway since 2014. Since then, Seoul has continuously ranked in the top three for the number of clinical trials. The reason for this is the many clinical trials for cancer drugs. Seoul's hospitals are large in scale, giving them an advantage in conducting trials. The Institutional Review Board (IRB) has good approval systems, allowing for prompt launches.

The Smart CT Support System and data-driven approach makes it possible for hospitals to conduct safe clinical trials more quickly. An alarm will sound if a patient participating in a clinical trial presents to the emergency department, allowing for early reporting. There is also a system for automatic screening of people who meet the selective removal criteria.

(2) KoNECT's Global Collaboration approach

KoNECT is able to provide data on Korea's hospitals and has a panel of diverse nationals (Korean, Japanese, Chinese, and Western) at Ph1 facilities. It has built a variety of networks for speeding up clinical trials in Asia. One example is the Asia Gastric Cancer Investigator Network. It also provides assistance to companies that have not ventured into Korea.

(3) Future activities

Korea's Ministry of Health and Welfare compiled a five-year plan for the development of the pharmaceutical industry in December 2018, a third of which deals with clinical trials. Until now, the Smart Support System has centered on Seoul, but the MoHW intends to expand it nationwide in future. It hopes to engage in Big Data-related initiatives (FEEDER-NET) and multi-regional clinical trials (MRCT) with Japan and Korea collaborating.

■Pharmaceutical Industry Session Part II. Business Trend of Regenerative Medicine

Product Development status and Industry Promotion on Regenerative Medicine in Korea

Professor, Inha University College of Medicine **CHOI Bryan**

(1) Status of regenerative medicine business in Korea

In Korea, 16 stem cell and regenerative medicine-related products have been approved to date, and Korea could be described as leading the world in the development of this field. There were 27 clinical trials underway in 2017, almost all of which were for stem cell therapies. The disease domains ranged from cancer to musculoskeletal, immune, and skin diseases. Recently, trials are proceeding not only in Korea, but also in the West, with the aim of obtaining approvals in the future.

(2) Organizations related to regenerative medicine

The Strategic Center for Regenerative Medicine (SCRM) was established in Korea in 2011. The center serves as a think tank for regenerative medicine. It communicates information about the use of regenerative cells, provides advice, networking, and commercialization support to companies, and also assists in the formulation and legislation of roadmaps together with MFDS.

The Council for Advanced Regenerative Medicine (CARM) is the industry organization for regenerative medicine in Korea, established with the assistance of the MoHW in 2016. As of June 2019, it had 61 members, including 34 pharmaceutical companies and eight technology companies. It is organized into a steering committee and three sub-committees (investment, government regulations, and international collaboration). From the viewpoint of business risk, this was an area that large pharmaceutical companies had not ventured into previously, but the business model is changing, and majors such as Hanmi Pharmaceutical and Daewoong Pharmaceutical have recently entered the regenerative medicine business.

(3) Development of laws and regulations and reimbursement system

In terms of increasing the benefits to both the regenerative medicine industry and patients, Korea will need to develop advanced responses like Japan's and to develop further laws and regulations.

Of the 16 regenerative cell therapy drugs that have been approved, only four of them can be reimbursed with public health insurance. Of the products that are not subject to public health insurance reimbursement, 90% are covered by private-sector insurance. Approaches to medical treatment remuneration will be an issue for further consideration going forward.

(4) Government assistance for regenerative medicine

The Korean government continues to increase its investment in regenerative medicine, but it could not be described as adequate compared to Japan and the United States. The government has built a framework for related facilities (R&D hubs, manufacturing hubs, clinical trial hubs) and has designated 10 facilities as Research Promotion Hospitals that will be able to conduct research into themes related to the regenerative medicine field.

■Pharmaceutical Industry Session Part III. Trend of Drug Pricing System

Update of Drug Pricing System in Korea

Deputy Director, Division of Pharmaceutical Benefits, MoHW **SONG Young-Jin**

Directions for promotion of health insurance pharmaceutical policy – Focus on 1st Comprehensive Plan of Health Insurance

As the method for determining drug prices within the health insurance scheme, as a general rule, a positive list is employed. This involves the selective granting of health insurance benefits to pharmaceuticals, taking cost effectiveness into account. In the past, a negative method has been used, in which it was compulsory for drug companies to apply within 30 days of receiving approval from MFDS for the use of a drug. However, due to the sharp increase in the percentage of health insurance expenditure taken up by pharmaceutical spending, it has been changed to the current positive-list approach. The process of setting of insured drug prices takes 210 days from application by the drug company to price negotiations between the drug company and the Health Insurance Review and Assessment Service (HIRA), Pharmaceutical Benefits Evaluation Committee, and National Health Insurance Service (NHIS), and onto publication of the drug price by the MoHW.

As a follow-up to the granting of health insurance benefits, taking the link between usage volumes and drug prices into account, if the actual amount that the drug company claims from the NHIS exceeds the projected amount that was originally agreed (negotiated), the price will be adjusted (up to 10% discount).

Further, as an advance drug price reduction due to the expansion of benefit scope, if the scope of use expands due to changes in the MFDS approval or health insurance coverage scope, the price will be adjusted (up to 5% discount).

The National Healthcare Insurance Act was revised (effective August 2016) so that the Director of the MoHW will formulate a Comprehensive Plan for Health Insurance every five years for the sound operation of the healthcare insurance system. With the conclusion of the 3rd Medium-Term Plan for Strengthening the Security of Health Insurance (2014-2018), they will extend the scope of the plan to the entire system and formulate a 5-year plan for 2019-2023.

As a basic policy for the strengthening of pharmaceutical security, they will strengthen security while maintaining the positive list system for pharmaceuticals. They will also expand the health insurance coverage of pharmaceuticals with high social and clinical demand and pursue the reorganization of the system to support that expansion. In particular, they will aim for the early inclusion on the list of drugs for the treatment of rare diseases. In 2019, they plan to consider the risk sharing system, taking into comprehensive account factors such as the impact on public finance, patient accessibility, and greater transparency in drug pricing.

As part of fiscal management, they will formulate a comprehensive plan for the development and strengthening of the benefit structure through re-assessment. Specifically, they will consider the introduction of a comprehensive drug price re-assessment system that will include the clinical efficacy of drugs, impact on public finance, and contractual matters. They will also formulate measures for the comprehensive re-assessment of drugs that are currently covered by health insurance benefits and consider re-assessment measures based on consultation with experts and the establishment and operation of a deliberative council.

For the proper management of drug prices, in 2019, they will formulate measures for the improvement of systems, with the aim of assessment related to the usage volumes of drugs. This will include a program that will pay incentives for reductions in the costs of prescriptions and the preparation of drugs as a means of encouraging rational use of pharmaceuticals, and the designation of Green-prescription clinics. They will also consider measures for the reorganization of the pricing system for generic drugs in coordination with the approval system (MFDS).

Scene from the venue

Conclusion

At the 2019 Korea-Japan Symposium, the fourth held as a joint government-private sector forum, lively discussion took place in each session on a wide range of topics, from recent policy trends to new initiatives in the pharmaceutical and medical devices industries. It was a highly productive symposium, in which industry and government representatives were able to actively exchange views from their respective positions. We hope that the symposium will provide the momentum for both countries to learn from initiatives in which the other country is ahead, while the pharmaceutical and medical devices industries grow and prosper further through collaboration and cooperation between government and private sector in both countries. We also hope that they will be able to deliver innovative drugs to the people of both nations as soon as possible.

(Taeho Kim, Wakako Okeya, Daisuke Kobayashi, Asia Committee, International Affairs Committee, JPMA)