# Approaches to Sound and Efficient Pharmaceutical Regulation in Japan: Current Attempts in and Around the Regulatory Bodies

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**Current situations of clinical research and development of new drugs in Japan**

In the past decades, the pharmaceutical regulatory standards in Japan have always headed toward those in the US and Europe by gradually incorporating western regulatory components into the domestic statutes. The Pharmaceutical Affairs Law, the bedrock of Japanese regulations, has been amended year after year, and some of those amendments were even accelerated by the activities of the ICH. The most important change in the context of pharmaceutical R&D was the introduction of ICH-GCP guidelines in 1997.

As a result of national commitment to international harmonization, domestic clinical development has been seriously influenced. The number of domestic trials for Japanese NDA submissions has drastically declined since the midst of 1990s, and western trial results replaced domestic clinical evidence. This trade imbalance (ie, influx of US/EU clinical data) makes the optimists in both private and public sectors in Japan feel uncomfortable, but now they find it difficult to take effective measures for that.

**Regulatory measures for R&D promotion**

The R&D division of Ministry of Health, Labour and Welfare (MHLW) has been providing subsidies for facilities and human resources for several sponsor-investigator trials. Those subsidies are in part aimed at resolving issues of new drug lag (ie, delay in access of promising drugs approved in western countries but not in Japan) and unlabelled use of drugs. However, the amount of subsidies is too small to affect the overall R&D performance.

To settle the issues of unlabelled drug use, the MHLW approved several new regimens of more than 30 cancer drugs in 2005 based on already available evidence. Those approvals were given in expedited procedures. A committee to reduce new drug lag has also been in operation since Jan 2005, selecting unapproved drugs with urgent healthcare needs and prompting the sponsors to conduct clinical trials in Japan. These efforts are important and effective in targeting niche unmet medical needs, but will not sufficiently work to enhance R&D activities at a national level.

It is important to notice that the approaches to domestic R&D promotion taken by the MHLW are mostly focused on the suppliers of clinical trials (eg, hospitals, investigators, R&D division of firms)

and not at all on the demanders (eg, governments in and out of Japan, submission division of firms). Any long-run solution to this issue apparently requires demand-side approach, but that has been downplayed in Japan.

**Professional training in industry, regulators, and academia**

There are many official programs and courses of clinical pharmacology and related fields in most medical schools or schools of public health to provide scientific and medical training and award academic degrees. Several academic programs are also in their budding stage to offer training courses for pharmaceutical regulation that is sometimes called 'regulatory science courses.'

The number of medical professionals working for drug companies has steadily increased. The demand for pharmaceutical professionals with appropriate training is always steady in the private sector. To the contrary, the demand for those professionals in the public sector has been extremely limited in Japan. The total number of officials with the reviewing agency (PMDA) is only 319 (as of April 2006), and the expected turnover rate (ie, the rate of new employment) would not be high due to the Japanese tradition of lifetime employment in public sectors and restriction to join drug companies after quitting PMDA.

Professional training in Japan (and possibly in Asian countries) thus may take different style and objectives to adapt to such local characteristics of needs for training and education.

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Dr. Shunsuke Ono graduated from the University of Tokyo in 1989 and joined the Ministry of Health and Welfare. He was involved in the new drug approval in the Ministry and in the Pharmaceuticals and Medical Devices Evaluation Center (PMDEC). After the PMDEC and two other agencies merged into the Pharmaceuticals and Medical Devices Agency, he took the responsibility to oversee the consultation services as Priority Review Director. He participated in the domestic implementation of ICH-GCP guideline in 1997 and also in the drafting and implementation of ICH-E10 guideline and the Common Technical Document as a EWG member from the Ministry.

In addition to his professional career in the governmental sector, he was an associate professor at Kanazawa University between 2002 and 2005, and now he is with the University of Tokyo. His research topics include pharmaceutical regulation, public policy, and pharmacoeconomics.