

International trends in alternatives to animal experiments

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Japan is not a central participant in the world in implementing the 3Rs of animal experiments, namely Reduction (reduce animal experiments), Refinement (relief of pain in laboratory animals), and Replacement (replacement of laboratory animals). In part due to Japan's geographic distance from Europe and the U.S., Japanese researchers have been swayed by political forces and have not kept pace with developments in animal experimentation practices. Although Japan has an extensive information network, the information that needs to be distributed must be updated to meet international practices in nonclinical research.

The Japanese government and researchers have an advantage of high quality technology as well as a commitment to performing validation studies for the developed of test methods. However, they do not have a strategy for adapting to the needs of the world and for becoming world leaders by utilizing this advantage. In light of recent discussions on revising the animal welfare law in Japan, we should confirm the trends in practicing the 3Rs in Europe and the U.S. We must also evaluate our current situation objectively. Japanese strategy will be developed in this field once an understanding of the information from other regions is achieved.

In this paper, I present information on the 3Rs of animal experiments by describing EU trends, trends in the U.S., and cooperation of international cooperation agencies in this area. After that, I report on international efforts to present alternatives to animal experiments and international organizations for the replacement.