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**Evaluation report on the Revised OECD Test Guideline for
Eye irritation/Corrosion (TG 405)**

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Abstract

In 2012, the OECD Guideline for the Testing of Chemicals for Acute Eye Irritation/Corrosion (TG 405) was revised to address animal welfare concerns related to topical anesthetics, systemic analgesics, and humane endpoints.

The JaCVAM (Japanese Center for the Validation of Alternative Methods) Editorial Committee feels that Japan should also adopt this revised guideline, but concludes that the following points should be borne in mind when applying it.

1. The topical anesthetics indicated in the guideline are not commercially available in Japan. Instead, other anesthetic eye drops available in Japan which do not contain preservatives should be used. Topical anesthetic solutions should be prepared from bulk drugs under aseptic conditions and the guidance of a veterinarian or pharmacist.
2. Reference is made in the guideline to “laboratory animal veterinarian,” a term which is defined in Europe and the Americas but not in Japan. Therefore, a veterinarian or other individual who is as knowledgeable as a laboratory animal veterinarian in the physiology, illnesses, and symptoms of laboratory animals should perform clinical examinations to evaluate humane endpoints.
3. Reference is made in the guideline to a sequential testing strategy, and it is recommended that *in vivo* testing of rabbits (OECD TG 405) should not be performed in cases where all available data relevant to the potential eye corrosivity/irritation as well as data from skin irritation tests and *in vitro* or *ex vivo* eye irritation tests have been evaluated and are sufficient to determine the strong eye corrosivity/irritation of a substance. It is the opinion of the JaCVAM Editorial Committee that this Acute Eye Irritation/Corrosion Test should be performed only after giving due consideration to the sequential testing strategy provided in the guideline.