

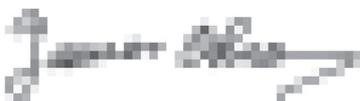
JaCVAM statement on ARE-Nrf2 Luciferase Test Method assay for skin sensitisation testing

At a meeting held on 23 April 2015 at the National Institute of Health Sciences (NIHS) in Tokyo, Japan, the Japanese Center for the Validation of Alternative Methods (JaCVAM) Regulatory Acceptance Board unanimously endorsed the following statement:

Proposal: When using the ARE-Nrf2 Luciferase Test Method in a regulatory context, it is reasonable for substances that give positive results to be classified as a strong sensitiser, i.e., a Category 1 substance under the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). It is also necessary, however, to bear in mind that this assay occasionally yields false positive results for certain substances. Conversely, it is quite possible that the ARE-Nrf2 Luciferase Test Method will yield false negative results for some chemicals, which means that it would be unreasonable to use it as a standalone test for assessing skin sensitisation potency. We therefore conclude that the use of the ARE-Nrf2 Luciferase Test Method in a regulatory context requires a thorough understanding of the assay's strengths and weaknesses as a prerequisite to its application within an integrated approach to testing and assessment (IATA) that will also take into account information from other sources.

This statement was prepared following a review of OECD TG 442D "*In Vitro* Skin Sensitisation: ARE-Nrf2 Luciferase Test Method" as well as a JRC Scientific and Policy report "EURL ECVAM Recommendation on the KeratinoSensTM assay for skin sensitisation testing". The JaCVAM Regulatory Acceptance Board acknowledges that the results of this review as well as of a study of materials prepared by the JaCVAM Editorial Committee indicate that this assay is useful in a regulatory context.

Based on the above, we propose that regulatory agencies performing safety assessment of skin sensitisation potency consider using the ARE-Nrf2 Luciferase Test Method as an alternative to testing with laboratory animals.



Yasuo Ohno
Chairperson
JaCVAM Regulatory Acceptance Board



Akiyoshi Nishikawa
Chairperson
JaCVAM Steering Committee

20 August 2015

The JaCVAM Regulatory Acceptance Board was established by the JaCVAM Steering Committee, and is composed of nominees from the industry and academia.

This statement was endorsed by the following members of the JaCVAM Regulatory Acceptance Board:

Mr. Yasuo Ohno (nominee by JaCVAM Steering Committee) : Chairperson
Mr. Naofumi Iizuka (Pharmaceuticals and Medical Devices Agency)
Mr. Yoshiaki Ikarashi (National Institute of Health Sciences: NIHS)
Mr. Kazuhiro Kaneko (Japan Chemical Industry Association)
Mr. Eiji Maki (Japanese Society of Immunotoxicology)
Mr. Takeshi Morita (Japanese Environmental Mutagen Society)
Mr. Akiyoshi Nishikawa (NIHS)
Mr. Kazutoshi Shinoda (Pharmaceuticals and Medical Devices Agency)
Ms. Mariko Sugiyama (Japan Cosmetic Industry Association)
Ms. Koko Tanigawa (Japanese Society for Alternatives to Animal Experiments)
Mr. Takashi Yamada (National Institute of Technology and Evaluation)
Mr. Hiroo Yokozeki (Japanese Society for Dermatoallergology and Contact Dermatitis)
Ms. Midori Yoshida (NIHS)
Mr. Takemi Yoshida (Japanese Society of Toxicology)
Mr. Isao Yoshimura (nominee by Chairperson)
Mr. Kazuto Watanabe (Japan Pharmaceutical Manufacturers Association)

Term: From 1st April 2014 to 31st March 2016

This statement was endorsed by the following members of the JaCVAM steering Committee after receiving the report from JaCVAM Regulatory Acceptance Board:

Mr. Akiyoshi Nishikawa (BSRC, NIHS): Chairperson
Mr. Toru Kawanishi (NIHS)
Mr. Mitsuru Hida (Ministry of Health, Labour and Welfare)
Mr. Akihiko Hirose (Division of Risk Assessment, BSRC, NIHS)
Mr. Masamitsu Honma (Division of Genetics and Mutagenesis, BSRC, NIHS)
Mr. Jun Kanno (Division of Cellular and Molecular Toxicology, BSRC, NIHS)
Mr. Kenji Kuramochi (Ministry of Health, Labour and Welfare)
Mr. Takatoshi Nakamura (Pharmaceutical & Medical Devices Agency)
Ms. Kumiko Ogawa (Division of Pathology, BSRC, NIHS)
Ms. Yuko Sekino (Division of Pharmacology, BSRC, NIHS)
Mr. Kazutoshi Shinoda (Pharmaceuticals and Medical Devices Agency)
Mr. Atsuya Takagi (Animal Management Section of the Division of Cellular and Molecular Toxicology, BSRC, NIHS)
Mr. Masaaki Tsukano (Ministry of Health, Labour and Welfare)
Mr. Nobuo Uemura (Ministry of Health, Labour and Welfare)
Mr. Hajime Kojima (Section for the Evaluation of Novel Methods, Division of Risk Assessment, BSRC, NIHS): Secretary