News from EURL ECVAM no.1/2017

07 July 2017

European drive to validate in vitro methods for the detection of thyroid disruptors:

The JRC's EURL ECVAM has launched a validation study to assess in vitro methods for the detection of chemicals which disrupt thyroid function.

Advancing scientific research and education with peer-reviewed video on human stem cells differentiation:

JRC scientists have published a written protocol, accompanied by a video demonstration for the differentiation of human pluripotent stem cells into neurons and glia.

Human stem cell models for neurotoxicity screening:

JRC scientists have shown human induced pluripotent stem cell (hiPSC) to be a promising in vitro model for neurotoxicity testing. These stem cell-based systems offer an innovative human-relevant alternative to traditional animal tests that can improve the efficacy of drug discovery and support safety assessment.

Two new guidelines for the reduction of animal tests for quality control of veterinary vaccines:

JRC scientists supported the development of two guidelines released by the International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products (VICH) on the harmonisation of criteria to waive target animal batch safety tests for inactivated and live veterinary vaccines. Their implementation (from May 2018 onwards) is a major step towards international harmonisation and will reduce the number of animals used for batch release testing. The JRC's EU Reference Laboratory for Alternatives to Animal Testing (EURL ECVAM) has been working on behalf of EMA with VICH experts on the development of these guidelines.

JRC Summer School on Alternative Approaches for Risk Assessment:

From 16 to 19 May, the JRC hosted in Ispra (Italy) 101 postgraduate students and early-career scientists from 29 countries worldwide for the JRC Summer School on Alternative Approaches for Risk Assessment.

Reducing animal testing while improving the safety assessment of chemicals for skin allergies:

The JRC's European Union Reference Laboratory for alternatives to animal testing (EURL ECVAM) has published its recommendation on the use of non-animal approaches for skin sensitisation (allergy) testing. This document builds on the progress made in the area since the publication of the EURL ECVAM strategy in 2013 and provides EURL ECVAM views on the latest two methods for skin sensitisation, the LuSens and the U-SENS™, peer-reviewed by the EURL ECVAM Scientific Advisory Committee (ESAC) and on Defined Approaches which are based on the integration of different kinds of non-animal data.

JRC hosts a meeting to strengthen its collaboration with the European Food Safety Authority (EFSA):

On 5th April JRC-Ispra hosted a delegation from EFSA to discuss specific topics of common interest in the area of risk assessment related to chemicals.

<u>Understanding nanomaterial toxicity by leveraging mechanistic information on chemicals:</u>

JRC scientists carried out a study illustrating how the mechanisms of nanomaterial toxicity can be better understood by exploiting the broader body of mechanistic information on chemicals in general.

The pathway from liver injury to liver fibrosis:

JRC scientists have used an Adverse Outcome Pathway approach to explain how some chemicals can potentially cause liver fibrosis in humans in order to support the development of non-animal approaches to chemical safety assessment.

More highlights >

Other news

EPAA launches the Refinement Prize 2017:

The European Partnership for Alternative Approaches to Animal Testing (EPAA) has launched its call for submissions for the Refinement Prize 2017. Taking over from the previous 3Rs Laboratory Technician prize, the Refinement prize aims at promoting the work of laboratory technicians, animal caretakers and technologists who implement Refinement of animal testing methods in their daily work.

The EPAA members proudly sponsor a 6000€ prize that will be granted to the best applicant. Together with the 3Rs Science prize, these EPAA initiatives put emphasis on innovative methods. Deadline for submissions: 8 September 2017.

Contact hypersensitivity: Integrated Approaches to Testing and Assessment

Expert survey on identification of gaps in available test methods for evaluation of endocrine disruptors

EURL ECVAM Recommendation on the use of non-animal approaches for skin sensitisation testing

From the exposome to mechanistic understanding of chemical-induced adverse effects

More publications >