European Union Reference Laboratory for Alternatives to Animal Testing

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EPAA Meeting
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The European Union Reference Laboratory for Alternatives to Animal Testing

Key responsibilities*

- Guide development of methods
- Conduct validation studies
- Facilitate regulatory acceptance
- Promote use by end-users

*Directive 2010/63/EU on the protection of animals used for scientific purposes
International Cooperation in 3Rs

• Validation of alternative methods
• Integrated Testing Strategies
• Research and Development
International Cooperation in 3Rs

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ICATM
International Cooperation on Alternative Test Methods

• Founded in 2009 by JaCVAM (Japan), NICEATM-ICCVAM (USA), EURL ECVAM (EU), Health Canada, and KoCVAM (Republic of Korea). Recent interest from BraCVAM (Brazil).

• Working together at every step of the validation process (evaluation of submissions, design and execution of studies, peer review, recommendations, and development of guidance and guidelines).

• Met together 12 times over past 3 years.
ICATM
International Cooperation on Alternative Test Methods

• Recent acceptance of 3 new OECD Test Guidelines and 1 Guidance Document, 2 draft test guidelines going through OECD process.

• Peer review of 4 validation studies underway and 1 test method recommendation in preparation.

• Total of 16 validation studies in progress.

• Agreement to develop a common web-based information system for ICATM activities.

• Plans for closer cooperation in strategy formulation.
International Cooperation in 3Rs

- Validation of alternative methods
- Integrated Testing Strategies
- Research and Development
EURL ECVAM Strategy for Full Replacement for Skin Sensitisation Hazard Identification

Roadmap for delivering solutions with industry and stakeholder partnership

Milestones

Deliverables
ITS project based on OECD Adverse Outcome Pathway for Skin Sensitisation

Chemical Structure & Properties

Molecular Initiating Event

Cellular Response

Organ Response

Organism Response

Key Event 1
Covalent interaction with skin proteins

Metabolism Penetration

Electrophilic substance

Key Event 2
Keratinocytes responses

Key Event 3
Dendritic Cells (DCs)
- Induction of inflammatory cytokines and surface molecules
- Mobilisation of DCs

Key Event 4
T-cell proliferation
- Histocompatibility complexes presentation by DCs
- Activation of T cells
- Proliferation of activated T-cells

Adverse Outcome
- Inflammation upon challenge with allergen

EURL ECVAM led project within the OECD Hazard Assessment Task Force
International Cooperation in 3Rs

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• Research and Development
Collaboration Agreement between IHCP/ECVAM and NIH National Centre for Advancing Translational Sciences
Towards the replacement of repeated dose systemic toxicity testing on animals

6 projects, 1 coord action, 70 institutions, 5 years, 50 MEuro, public-private partnership

Safety Assessment Ultimately Replacing Animal Testing

www.seurat-1.eu

Workshop Spring 2012

"SEURAT-1 meets Tox21"
Joint Research Centre
The European Commission’s in-house science service

Thank You!

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