NICEATM

ICCVAM

National Toxicology Program
Interagency Center for the Evaluation of
Alternative Toxicological Methods

Interagency Coordinating Committee on the Validation of Alternative Methods



ICCVAM and NICEATM: The First Ten Years

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ICCVAM Ten-Year Anniversary Symposium February 5, 2008 U.S. Consumer Product Safety Commission Bethesda, MD









Acknowledgements: The First Ten Years

- ICCVAM members
- ICCVAM Test Method Working Groups
- NICEATM staff and support contract
- Workshop participants
- Advisory Committee members
- Expert Panel and Peer Review Panel members
- Stakeholder Participants: Industry, government, academe, animal protection and public interest groups, public citizens
- Test method developers
- ECVAM
- JaCVAM



Pre-ICCVAM History: 1993-1997

1993 NIH Reauthorization Act (P.L. 103-43)

- 1994 ad hoc ICCVAM established in response to NIEHS directives:
 - Develop criteria for validation and regulatory acceptance of test methods
 - Develop a process to achieve regulatory acceptance of scientifically validated methods
- 1995 International Workshop: Validation and Regulatory Acceptance of Toxicological Test Methods
- 1997 Final report of the *ad hoc* ICCVAM ICCVAM established
 - Replaced ad hoc ICCVAM
 - Implemented NIEHS directives: P.L. 103-43



The ad hoc ICCVAM: 15 Agencies

Regulatory Agencies

- Consumer Product Safety
 Commission
- Department of Agriculture
- Department of the Interior
- Department of Transportation
- Environmental Protection Agency
- Food and Drug Administration
- Occupational Safety and Health Administration



Research Agencies

- Agency for Toxic Substances and Disease Registry
- National Institute for Occupational Safety and Health
- National Cancer Institute
- National Institute of Environmental Health Sciences
- National Library of Medicine
- National Institutes of Health
- Department of Defense
- Department of Energy



Workshop on Validation and Regulatory Acceptance of Toxicological Test Methods



Validation and Regulatory Acceptance of Toxicological Test Methods

A Report of the ad hoc Interagency Coordinating Committee

- December, 1995
- Open public meeting
- Scientists and stakeholders from international community
- Recommendations
 - Criteria for validation and regulatory acceptance
 - Process to achieve regulatory acceptance



History of ICCVAM: 1997-2007

1997 ICCVAM established to implement process to achieve regulatory acceptance of scientifically valid alternative test methods

1998 NICEATM established

Federal Advisory Committee on Alternative Toxicological Methods established

First ICCVAM test method evaluation and independent peer review meeting (LLNA)

1999 First ICCVAM recommendations to agencies

Regulatory acceptance announced

2000 ICCVAM Authorization Act of 2000: P.L. 106-545

Established "permanent" ICCVAM under NICEATM

2000-07 Workshops, peer review meetings, validation studies, scientific symposia

2008 Release and implementation of NICEAETM-ICCVAM Five-Year Plan





ICCVAM's Mission¹

- To facilitate development, validation and regulatory acceptance of new and revised regulatory test methods that
 - Reduce, refine, and replace the use of animals in testing
 - Maintain and promote scientific quality and the protection of human health, animal health, and the environment



¹Adopted by ICCVAM February 2004

All of ICCVAM's activities are grounded in the U.S. Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training

http://grants.nih.gov/grants/olaw/references/phspol.htm#USGovPrinciples



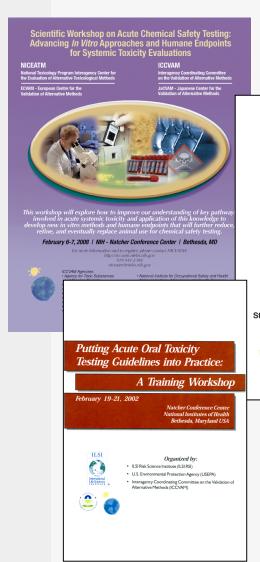
Alternative Methods for Allergic Contact Dermatitis: The LLNA

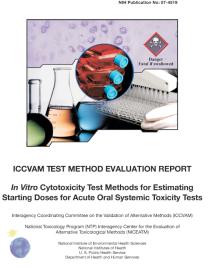


- Murine Local Lymph Node Assay-1998
 - Avoids pain and distress
 - Valid substitute for traditional guinea pig tests
- A reduction and refinement success
- 2008-- ICCVAM Evaluation
 - Non-radioactive methods



Alternative Methods for Acute Oral Toxicity Testing





- Revised Up-and-Down Procedure, 2001
 - Reduces animal use by 70%
- In vitro methods recommended to further reduce animal use up to 50% per test
- February 6-7, 2008 Workshop:
 - Advancing In Vitro
 Approaches and Humane
 Endpoints for Systemic
 Toxicity Evaluations



ICCVAM Evaluation of *In Vitro* Methods for Skin Corrosivity



Corrositex, 1999

Epiderm, Episkin, Rat skin TER, 2002

Performance Standards, 2004



Alternative Methods for Ocular Safety Testing







ICCVAM TEST METHOD EVALUATION REPORT

In Vitro Ocular Toxicity Test Methods for Identifying Severe Irritants and Corrosives

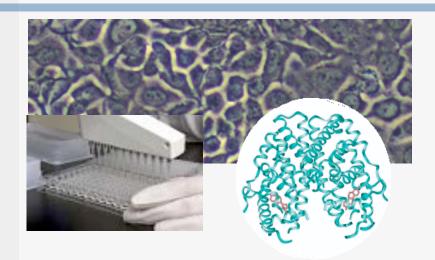
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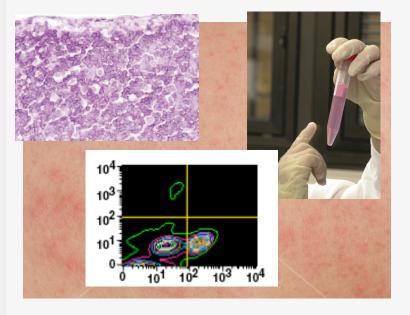
ICCVAM Scientific Symposia

- Mechanisms of Chemically-Induced Ocular Injury and Recovery
- Minimizing Pain and Distress
- Recommendations for R&D, validation, and data collection
- In Vitro test methods for identifying severe and irreversible eye damage
 - Forwarded to agencies, 2007



Addressing Other Agency Test Method Priorities





- In Vitro Methods for EPA's Endocrine Disruptor Screening Program - EPA
 - Guidance for validation
 - International validation study underway: NICEATM-ICCVAM, ECVAM and JaCVAM
 - Performance Standards



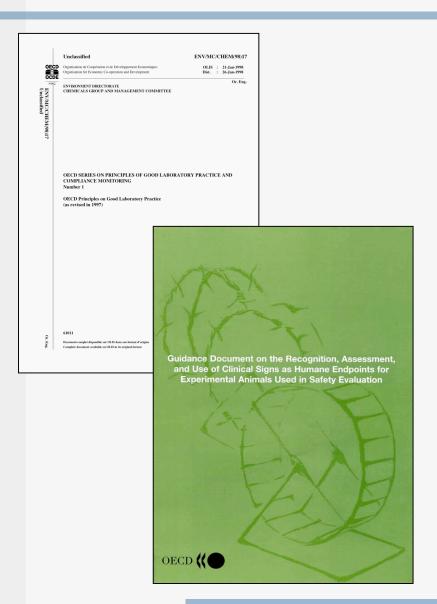
Other Nominations for Workshops and Test Method Evaluations



- Workshop on Alternatives for Botulinum Toxin Testing - HSUS
- Evaluation of 5 *In vitro*Pyrogenicity Methods ECVAM
- Evaluation of FETAX -- EPA



International Guidance for Alternative Test Methods: ICCVAM Contributions



- OECD Guidance Document on Humane Endpoints, 2000
- OECD Guidance Document on Validation and Acceptance, 2005
- OECD Guidance on Application of Good Laboratory Practices to *In* Vitro Test Methods, 2005



ICCVAM: The First Ten Years

- Over 185 test methods evaluated since 1997
- Alternative methods recommended for the four most common product safety tests
 - Regulatory acceptance as national and international test guidelines
- Recommended R&D, translation, and validation activities to advance alternative methods for many testing areas
- Performance standards to expedite validation studies and regulatory acceptance
- International guidance documents
- International partnerships: ECVAM & JaCVAM





Thank you for your attention!



ICCVAM-NICEATM: Advancing Public Health and Animal Welfare

