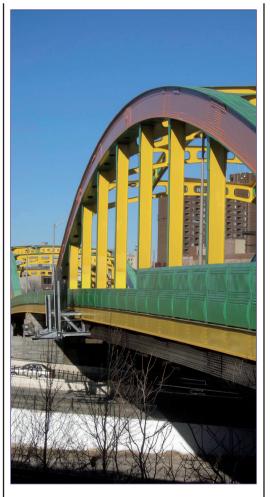




ALTERNATIVES TO ANIMAL EXPERIMENTATION

t⁴ report: D. A. Basketter, H. Clewell, I. Kimber, A. Rossi, B. Blaguboer, R. Burrier, M. Daneshian, C. Eskes, A. Goldberg, N. Hasiwa, S. Hoffmann, J. Jaworska, T. B. Knudsen, R. Landsiedel, M. Leist, P. Locke, G. Maxwell, J. McKim, E. A. McVey, G. Ouédraogo, G. Patlewicz, O. Pelkonen, E. Roggen, C. Rovida, I. Ruhdel, M. Schwarz, A. Schepky, G. Schoeters, N. Skinner, K. Trentz, M. Turner, P. Vanparys, J. Yager, J. Zurlo, and T. Hartung: A roadmap for the development of alternative (non-animal) methods for systemic toxicity testing



Comment:

Andrew Knight: Assessing the necessity of chimpanzee experimentation

Conference report Corners News Calendar of events

transatlantic think tank for toxicology

t⁴ – transatlantic think tank for toxicology: the concept

t⁴ was created with the following aims:

- to analyze current tools and programs and model/forecast the likely outcome with regard to safety and economic burden (cost/benefit analyses)
- to compare different approaches on an international scale (especially transatlantic) and support harmonization
- to further the concept of an evidencebased toxicology (EBT) following the role model of evidence-based medicine
- to develop and assess the conceptual needs to enable the change of approaches (predictive toxicology, integrated testing, systems toxicology, organotypic, and stem cell cultures)
- to create and maintain information platforms (AltWeb, ALTEX, TestSmart workshops, etc.) to further the paradigm change in toxicology

t⁴ – transatlantic think tank for toxicology: the members

Alan Goldberg, Center for Alternatives to Animal Testing (CAAT), Johns Hopkins University, Baltimore, USA; Thomas Hartung, Doerenkamp-Zbinden Chair for Evidence-based Toxicology, CAAT, Johns Hopkins University, Baltimore, USA, and CAAT-Europe, University of Konstanz, Germany; Marcel Leist, Doerenkamp-Zbinden Chair for in vitro Toxicology and Biomedicine and CAAT-Europe, University of Konstanz, Germany; Bas Blaauboer, Doerenkamp-Zbinden Chair on Alternatives to Animal Testing in Toxicological Risk Assessment, IRAS, Utrecht University, The Netherlands

All reviews and reports may be downloaded from the ALTEX website (www. altex-edition.org) and AltWeb (www. altweb.jhsph.edu). Further in depth reviews of all toxicologically-relevant topics are encouraged. The reviews are commissioned by any t⁴ member. Interested authors are advised to contact a relevant t⁴ member directly with a review proposal. Publication is subject to a twostep peer review process. Reviews will be published and made available to the public free of charge. Authors are eligible for an honorarium.

t⁴ reports

- Basketter, D. A., Clewell, H., Kimber, I., et al. (2012). A roadmap for the development of alternative (non-animal) methods for systemic toxicity testing. *ALTEX* 29, 5-93.
- Boekelheide, K. and Andersen, M. E. (2010). A mechanistic redefinition of adverse effects a key step in the toxicity testing paradigm shift. *ALTEX* 27, 243-252.
- Dietrich, D. R. (2010). Courage for simplification and imperfection in the 21st century assessment of "Endocrine disruption". *ALTEX* 27, 264-278.
- Hartung, T. (2010a). Evidence-based toxicology – the toolbox of validation for the 21st century? *ALTEX* 27, 253-263.
- Hartung, T. (2010b). Comparative analysis of the revised Directive 2010/63/EU for the protection of laboratory animals with its predecessor 86/609/EEC – a t⁴ report. *ALTEX* 27, 285-303.
- Hartung, T., Blaauboer, B. J., Bosgra, S., et al. (2011). An expert consortium review of the EC-commissioned report "Alternative (Non-Animal) Methods for Cosmetics Testing: Current Status and Future Prospects – 2010". *ALTEX* 28, 183-209.
- Jaworska, J. and Hoffmann, S. (2010). Integrated Testing Strategy (ITS) – Opportunities to better use existing data and guide future testing in toxicology. *AL*-*TEX* 27, 231-242.

- Kuegler, P. B., Zimmer, B., Waldmann, T., et al. (2010). Markers of murine embryonic and neural stem cells, neurons and astrocytes: reference points for developmental neurotoxicity testing. *ALTEX 27*, 17-42.
- Leist, M., Bremer, S., Brundin, P., et al. (2008). The biological and ethical basis of the use of human embryonic stem cells for in vitro test systems or cell therapy. *ALTEX* 25, 163-190.
- Rovida, C. and Hartung, T. (2009). Reevaluation of animal numbers and costs for in vivo tests to accomplish REACH legislation requirements for chemicals a report by the transatlantic think tank for toxicology (t⁴). *ALTEX 26*, 187-208.
- Rovida, C., Longo, F., and Rabbit, R. R. (2011). How are reproductive toxicity and developmental toxicity addressed in REACH dossiers? *ALTEX* 28, 273-294.

t⁴ workshop reports

- Daneshian, M., Akbarsha, A. M., Blaauboer, B., et al. (2011). A framework program for the teaching of alternative methods (replacement, reduction, refinement) to animal experimentation. *AL-TEX* 28, 341-352.
- Hasiwa, N., Bailey, J., Clausing, P., et al. (2011). Critical evaluation of the use of dogs in biomedical research and testing in Europe. *ALTEX* 28, 326-340.
- Silbergeld, E. K., Contreras, E. Q., Hartung, T., et al. (2011). Nanotoxicology: "The end of the beginning" – Signs on the roadmap to a strategy for assuring the safe application and use of nanomaterials – t⁴ workshop report. *ALTEX 28*, 236-241.
- Zurlo, J., Bayne, K. A., Brown, D. C., et al. (2011). Critical evaluation of the use of dogs in biomedical research and testing. *ALTEX* 28, 355-359.

Attending the Society of Toxicology Annual Meeting in San Francisco, California on March 11-15, 2012?



Sunday, March 11, 1-4pm Marriott Marquis 55 Fourth Street San Francisco, CA 94103 Salon 1-3

You are invited to participate in the Open Forum on 21st Century Toxicology and Evidencebased Toxicology

This SOT satellite meeting is open to all SOT attendees and is an opportunity for participants to provide informal updates on the work they are doing to advance the new toxicology. Participants may augment their brief presentations (5 minutes) with Powerpoint slides.

Refreshments will be provided.

The Open Forum is co-hosted by the Center for Alternatives to Animal Testing (CAAT), the Human Toxicology Project Consortium, and the Evidence-based Toxicology Collaboration (EBTC).

To register and receive updates on this free event, contact Marilyn Principe (mprincip@jhsph.edu).







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