

**International Workshop on Alternatives to the Murine Histamine  
Sensitization Test (HIST) for Acellular Pertussis Vaccines:  
Progress and Challenges in the Replacement of HIST**

**Hotel Hilton  
Prague, Czech Republic  
August 24, 2014**

**Organized by:**

NICEATM National Toxicology Program Interagency Center for the Evaluation of Alternative  
Toxicological Methods  
NC3Rs National Centre for the Replacement, Refinement and Reduction of Animals in  
Research  
ICCVAM Interagency Coordinating Committee on the Validation of Alternative Methods  
EURL ECVAM European Union Reference Laboratory for Alternatives to Animal Testing  
Health Canada  
EDQM European Directorate for the Quality of Medicines and HealthCare

**Sponsored by:**

NC3Rs National Centre for the Replacement, Refinement and Reduction of Animals in  
Research

### **Workshop Objectives**

1. Discuss the implementation of *in vitro* assays as replacements for the murine histamine sensitization test (HIST) for acellular pertussis (aP) vaccines on the basis of the consistency approach (i.e., the efficient functioning of a Quality System since the product licensing, involving process and testing validation. This approach ensures that the licensed manufacturing produces batches that are consistent with those that fulfilled the criteria of quality, safety and efficacy defined for the batches included in the marketing authorization):
  - a. For licensed/registered products: Discuss the importance of Relevance of an *in vitro* assay to replace the HIST from the product profile of an aP vaccine – The high-level element that, along with Reliability, is required to validate a method.
  - b. For new products: Discuss the requirements leading to the inclusion of one or more *in vitro* assays as replacements for the HIST in the product profile for licensing/registration.
2. Discuss the necessary framework for regulatory acceptance of a harmonized approach that uses *in vitro* assays instead of the HIST.
3. Discuss recent international efforts towards the development of *in vitro* assays to replace the HIST.

## Draft Agenda

— Day 1 —

Sunday, August 24, 2014

- 9:30-9:45 Welcoming Remarks, Announcements, and Introductions**  
*Juan Arciniega, DSc, Center for Biologics Evaluation and Research (CBER), U.S. FDA*  
*Katie Lidster, PhD, National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs), United Kingdom*  
*Warren Casey, PhD, National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM), NIH, USA*
- 9:45-10:05 Prague, Pertussis, and Vaccines**  
*Roman Prymula, PhD, Czech Vaccinology Society, Czech Republic*  
*Peter Sebo, PhD, Czech Academy of Science, Institute of Microbiology, Czech Republic*
- 10:05-10:25 The Road to Prague 2014**  
*Richard Isbrucker, PhD, Health Canada*
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- 10:25-11:45 Session 1**  
**The Murine Histamine Sensitization Test (HIST)**  
Co-chairs:  
*Leslie Wagner, Center for Biologics Evaluation and Research (CBER), U.S. FDA*  
*Blaise Descampe, DVM, GlaxoSmithKline, Belgium*
- 10:25-10:45 Introduction**
- 10:45-11:45 Roundtable Discussion**
- 11:45-12:45 Lunch**
- 12:45-1:15 Animal Use for the HIST and the Impact of *In Vitro* Alternatives**  
*Coenraad Hendriksen, PhD, IntraVacc, Netherlands*  
*Marieke Hoonakker, IntraVacc, Netherlands*
- 1:15-1:30 Discussion**
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- 1:30-3:10 Session 2**  
***In Vitro* Assays as Replacements for HIST: Challenges to Regulatory Acceptance**  
Co-chairs:  
*Sue Nelson, PhD, Sanofi Pasteur, Canada*  
*Richard Isbrucker, PhD, Health Canada*
- 1:30-1:40 Introduction**
- 1:40-3:10 Roundtable Discussion**
- 3:10-3:25 Break**
- 3:25-4:15 Final Discussion, Conclusions and Recommendations**

*Juan Arciniega, DSc, Center for Biologics Evaluation and Research (CBER),  
U.S. FDA*

*Warren Casey, PhD, National Toxicology Program Interagency Center for the  
Evaluation of Alternative Toxicological Methods (NICEATM), NIH, USA*

**4:15**

**End of Meeting**