



Update from VICH about transition to non-animal based veterinary batch release testing: focus on potency

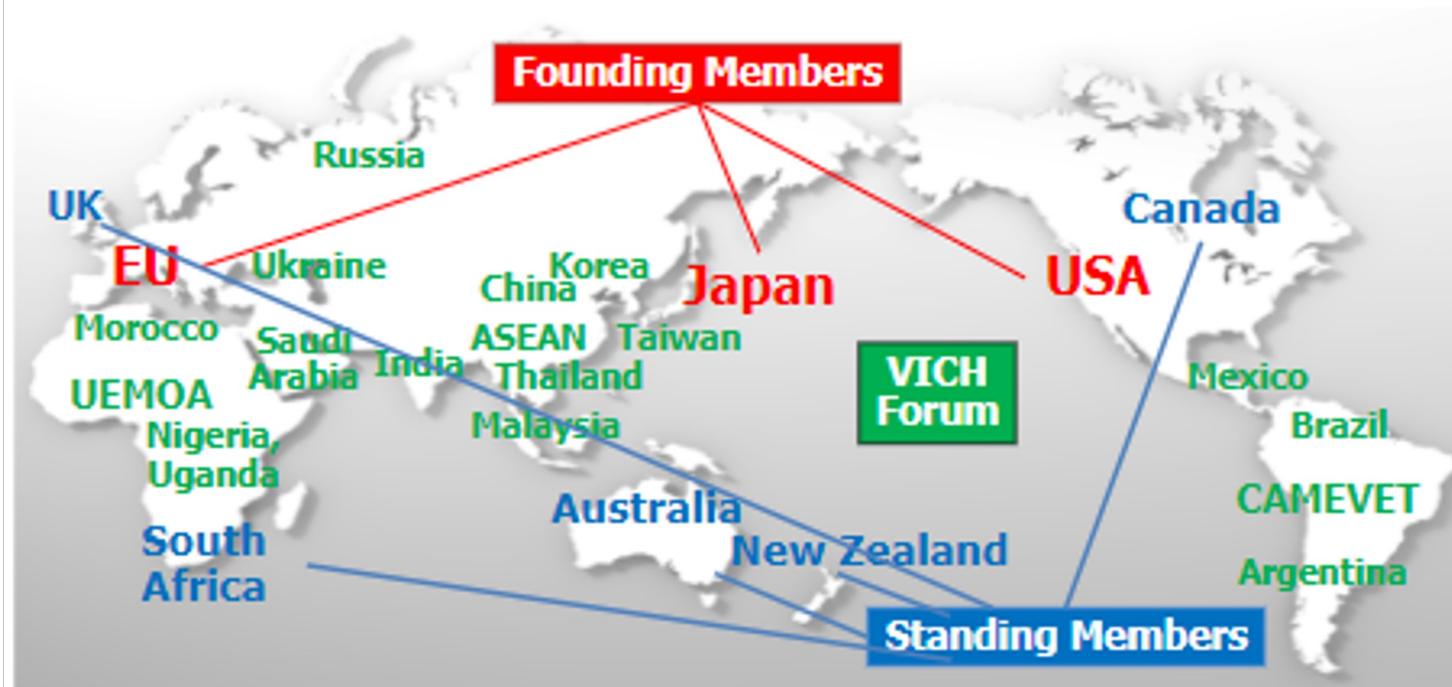
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WHAT IS VICH?



International Cooperation
on Harmonisation of Technical Requirements
for Registration of Veterinary Medicinal Products (VMPs)



WOAH : Associate Member, HealthforAnimals : Secretariat



- To harmonise **technical** requirements for data necessary for registration
- To develop and implement VICH Guidelines
 - Study and testing methodology
 - Quality, safety and efficacy (including bioequivalence)
 - Post-marketing safety monitoring
 - Pharmacovigilance



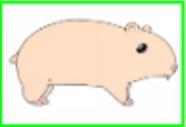
- Provide guidance to establish regulatory systems and regulations for marketing authorisations
- Make final decision which studies are necessary to obtain a marketing authorisation
- Assess data or provide guidance on the assessment approach
- Grant marketing authorisations
- Establish safety standards

These are typically the roles of national competent authorities and governments!

Batch potency test is a requirement for batch release of veterinary vaccines to ensure the batch provides the adequate level of protection

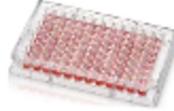
Hamster for
Leptospira

In Vivo
"In life", meaning the study takes place in a living organism.



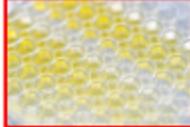
Mice serology
for Rabies

Ex Vivo
"In life" + "In Glass"



ELISA for
Leptospira

In Vitro
"In glass", meaning the study takes place in a test tube.



PROs

- **Ethical reasons**
- **Removal of animal variability**
- **Shorter testing period**

CHALLENGES

- **During development:**
 - time,**
 - technologies (identification of specific reagents, reference/standard)**
 - correlation to existing methods,**
 - set up of specifications**
- **For implementation:**
 - test should be transferable in GMP environment**
- **Regulatory constraints in:**
 - recognition,**
 - acceptance,**
 - implementation in the global regulatory setting**

Non exhaustive examples!

- European Pharmacopeia 5.2.14. "Substitution of *in-vivo* method(s) by *in-vitro* method(s) for the quality control of vaccines"
- 9CFR § 113.8 "*In vitro* tests for serial release"
- USDA VS Memorandum No.800.112 "Guideline for *in-vitro* assay validation"
- Indian Pharmacopeia 2.7.20 "Substitution of *in vivo* methods by *in vitro* methods for the quality controls of vaccines"
- Seibutsugaku-teki Seizai-Kijun "National Standards for veterinary biologicals"

Need to go further!

- **VICH Concept paper on principles for technical guidance for the transition to *in vitro* methods for batch potency tests in veterinary immunologicals adopted January 2024**

**Review the information in European Pharmacopeia chapter 5.2.14 (Substitution of *in vivo* method(s) by *in vitro* method(s) for the quality control of vaccines)
Review other global guidance as well as the ICH work in this area**

Build a similar guideline to be assessed by the Biologicals Expert Working Group

- **Batch potency test subgroup established (1st visio meeting May 2024)**



- **Representatives of regulatory bodies**
 - **Europe**
 - **USA**
 - **Japan**
 - **Australia**
 - **Canada**
 - **Switzerland**
- **Representatives of Animal Health industries**
 - **AnimalhealthEurope**
 - **Animal Health Institute**
 - **JVPA (Research Institute for Animal Science in Biochemistry and Toxicology)**
 - **Animal and Plant Health New Zealand**

- **Provide set of harmonized technical recommendations for the transition to *in vitro* methods for batch potency tests**
- **In particular when a direct correlation between *in vivo* and *in vitro* assays is not possible (measurements units not comparable,....).**
- **Scope: Vaccines**
- **Out of scope:**
 - live vaccines where the batch potency test is performed by titration (*in vitro* method) as recognized in a majority of countries worldwide**
 - any product that currently uses an *in vitro* potency test already**

- **No contra-indication with local requirements**
- **No details on validations of the methods (already provided in other guidelines)**
- **Importance of antigen content and link to biological functionality**
- **Multiple assays in spite of an unique one could be necessary**
- **Tests to assess the adjuvants might be considered**
- **Sub potent batches should be discriminated**

- **No specific timelines for this process**
- **Rounds of comments involving all the organisations and the members**
- **Visio meetings every 4-6 months**



THANK YOU FOR YOUR ATTENTION



www.vichsec.org