Beginning of pre-validation tests

Two methods entered pre-validation in March 2021

The ***LCMS steroidogenesis profiling*** method is pre-validated with **RI.SE** as lead lab, **Anses**, **Basf** and **VRIJE** University as naïve labs. This method studies the effects of xenobiotics on hormones synthesis, using human adrenal cells. The method is an enhancement of the OECD Test Guideline 456. The first inter-laboratory meeting happened early April, in order to prepare the transferability phase. The labs have launched the cell cultures and have been informed of the substances to be tested during this first phase.

The second method to enter pre-validation is called ***hPlacentox***. The **C-TAC/ Chemistry- Analytical and Cellular Toxicology lab**, associated to the National Centre for Scientific Research is the test developer. The method uses human placental cells to evaluate the effects of the mother' exposition during pregnancy. **Anses** and **Eurofins** act as testing labs. RI.SE brings a technical support. The first interlaboratory meeting took place early April in order to prepare the transferability phase. The substances to be tested during the transferability will be announced to the labs soon, after they have been selected by the VMG.

Beginning of preparatory phases for the pre-validation of a new method

The next method entering pre-validation this year is a **GR TA** (**Glucocortcoid Receptor TransActivation**), developed by ***Inserm U1194- Montpellier University- Institut régional du Cancer***. This method studies the effects of substances on the activation of the human glucocorticoid receptor. Exchanges between PEPPER and the test developer started in Mai, to collect historical data and finalise the drafting of the Standard Operating Procedure. PEPPER is looking for the future testing labs, based on the technical requirements of the method.

One method is being consolidated

The third method **ZOT (Zebrafish Obesogen)** initially selected, has been developed by the **Rare Diseases: Genetic and Metabolism** laboratory, to evaluate the obesogenic effects of substances via the measurement of the size of adipocytes in zebrafish. The pre-validation has been put on hold until technical points raised by the VMG, and which could block the validation by the OECD are dealt with. PEPPER will continue to support the test developer and to be involved for such methods (zebrafish applied to toxicology of vertebrates) to be better exploited.

Steps and actors of pre-validation

A **test developer** (or a lead lab) and **at least two testing labs** are required for a pre-validation.

The first phase is a phase of **transferability**, to verify that, when following the procedures, a **naïve lab is able to implement the method and obtain results similar to those obtained by the test develope**r. This should be done by applying the method to a small set of substances which selection is based on historical data from the developer, by PEPPER with the support of a **Validation Management Group** composed of experts in the field.

During the second phase, the labs will test a **higher number of blind-coded substances**, also defined with the VMG, allowing, in particular, to define the applicability domain of the method.

The objective of PEPPER is to submit **Standard Project Submission Forms** (SPSF) in November 2021 to have the methods included on the OCDE work plan.