

Stem cells for relevant efficient extended and normalized toxicology

In the development of products for use by humans it is vital to identify compounds with toxic properties at an early stage of their development, to avoid spending time and resource on unsuitable and potentially unsafe candidate products. Human pluripotent stem cell lines offer a unique opportunity to develop a wide variety of human cell-based test systems because they may be expanded indefinitely and triggered to differentiate into any cell type.

The SCR&Tox project

SCR&Tox aims at making use of these two attributes to provide *in vitro* assays for predicting toxicity of pharmaceutical compounds and cosmetic ingredients. The consortium has been designed to address all issues related with biological and technological resources to meet that goal.

SCR&Tox will be tightly associated to other consortia of the SEURAT research cluster, sharing biological, technological and methodological resources. Proof of concept of the proposed pluripotent stem cell-based assays for toxicology will be provided on the basis of toxicity pathways and test compounds identified by other consortia.

SEURAT research cluster

The SEURAT-1 cluster ("Towards the replacement of *in vivo* repeated dose system toxicity") is the first five-years step of a long-term European research initiative for achieving "Safety Evaluation Ultimately Replacing Animal Testing". In a first phase of this initiative, the [European Commission's FP7 HEALTH programme](#) and [Cosmetics Europe](#) support a cluster of six research projects representing the building blocks of a common strategy. The first step of this long-term strategy is called **SEURAT-1**

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