

Symposium 6

Stem cells and toxicity testing (co-sponsored with the Royal Society of Chemistry)

In the past few years significant advances have been made in the development of new methodologies for assessment of drug safety, most notably the rapid advent and proliferation of human tissue based and human induced-pluripotent stem (hiPS) cell-derived models. These new methodologies and technologies are placing the drug safety arena at the precipice of change in relation to new, robust and translational approaches for drug safety screening. Evidence is already accumulating to support adoption of these models and their potential to replace conventional screening approaches. In many cases, qualification of these models for predictability of clinical toxicities has been shown. The aim of this session is to explore this growing field with an emphasis on the evolution in preclinical drug screening of an approach that is less dependent on animals and focused on demonstrating translational relevance and improved prediction of human drug safety.

Title	Speaker	Institution
Advances in stem cell technologies: impact on toxicology	Dr Jason Gill	University of Durham
Screening models to improve decision making in drug development: Validation or Qualification	Dr Mark Holbrook	VAST Pharma Solutions
Drug-induced neurotoxicity: a chip off the block	Dr Karlijn Wilschut	University of Utrecht
A human ES cell-based platform for determining selective neurotoxicity	Dr Lia Panman	MRC Toxicology Unit