Questions and answers from the CRACK IT Challenge 45 CrossDART launch webinar

Questions related to eligibility and the application process are covered in the Two Phase Challenges Guide for Participants.

1. **Are there any restrictions on the cell types that can be used to develop the *in vitro* assays (e.g. embryonic stem cells)?**

Human and non-human primate (NHP) embryonic stem cells are **not in scope**. Please view the CrossDART Challenge brief for information on approaches that are not in scope.

2. **Are you looking for an integrated approach with several assays including *in silico* and non-mammalian models or is the focus on *in vitro* models?**

The aim of this Challenge is to deliver *in vitro* assay(s) across different species that provide early or surrogate indicators of teratogenicity of drug candidates. The *in vitro* assay(s) should cover human and ultimately at least two preclinical species using in embryo-fetal development (EFD) studies (rat and rabbit must be included; NHP is desirable). Assays are expected to be *in vitro*, but *in silico* models that complement the *in vitro* assays are in scope.

3. **Are you looking for models which predicts the teratogenicity in the development of a single organ (e.g. gonads, brain, heart)?**

The assays developed should cover as many mechanisms of embryo development as possible or as needed. It is encouraged that applicants discuss their proposed approach with the Challenge Sponsors.

If you would like to be introduced to the Sponsors to discuss your proposed approach before the submission deadline, please contact the CRACK IT team at crackitenquiries@nc3rs.org.uk

4. **Is *in vivo* data available for the comparison of *in vitro* data to traditional EFD *in vivo* models or will *ex vivo/in vivo* data need to be generated?**

Historical *in vivo* data (publicly available and Sponsor data) is likely to be available for comparison and this should be considered fully before planning any *in vivo* studies. Marketed compounds should also be considered where the full package of rodent and non-rodent EFD studies is available.

5. Is the Sponsor in-kind *in vivo* data in original PDF reports or has this already been extracted/curated?

This will be specific to each Sponsor organisation, but some may be in pdf report format.