

THE POWER OF INTEGRATION

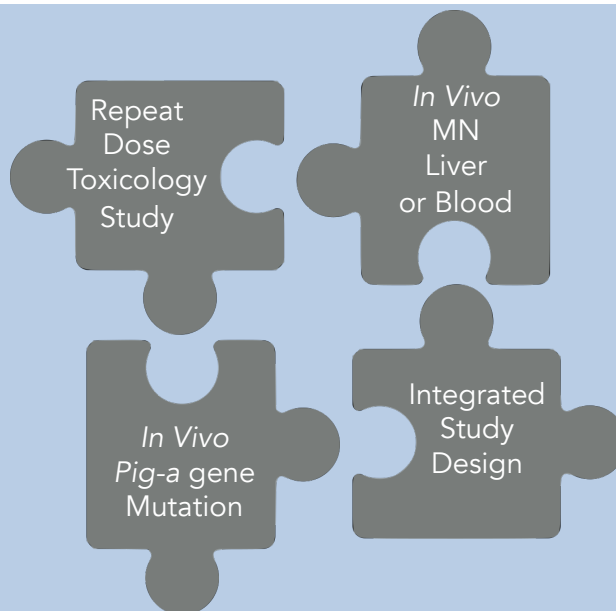
Better Decisions. 3Rs Friendly.

The Concept of Integrated Studies

The design of standard toxicology studies, such as the 28 Day repeat-dose study, facilitates the inclusion of additional endpoints. By integrating chromosome damage and gene mutation, investigators can address genotoxicity without the additional costs and resources required for dedicated studies.

Let us help solve your 3Rs puzzle

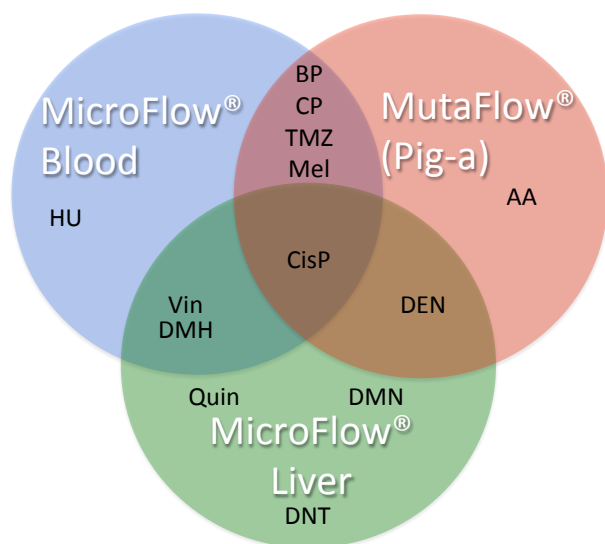
Multiple regulatory agencies and Test Guidelines support or recommend the use of integrated studies. Ask how we can help you integrate genotox into your next study.



Benefits

- Addresses 3Rs concerns by supporting reducing and refining the use of animals
- Improves interpretation of genotox results by taking advantages of additional information
- Kits and services available to address major genotoxic modes of action

Litron's Suite of Complementary Methods – Integration Ready



Not all chemicals will be active across assays

The diagram to the left shows chemicals that were positive in blood MN, gene mutation (*Pig-a*) or liver MN. Depending on the specific chemistry of the test article, a chemical may only be detected as a genotoxicant in a single assay. Thus, a combination of methods examining different tissues and modes of genotoxicity will provide the best evidence to support both positive and negative calls.

AA = Aristolochic Acid
HU = Hydroxyurea
BP = Benzo[a]pyrene
CP = Cyclophosphamide
TMZ = Temozolomide
CisP = Cisplatin
Vin = Vinblastine

DEN = Diethylnitrosamine
DMN = Dimethylnitrosamine
Quin = Quinoline
DNT = 2,6-Dinitrotoluene
DMH = 1,2-Dimethylhydrazine
MEL = Melphalan