Development of an *in silico* platform to assess developmental and reproductive toxicity (DART)

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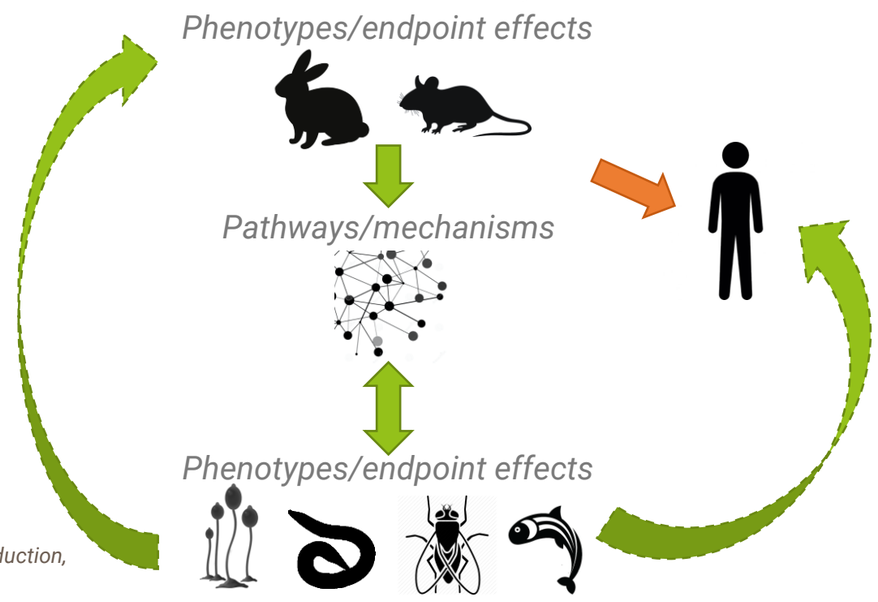
To reduce the amount of animal testing in the assessment of DART, we have designed a user-friendly web-based platform - "DARTpaths" - that discloses scientific knowledge. This enables us to predict evolutionary-conserved adverse outcome pathways. Moreover, it advises relevant biological tests as alternatives to mammalian testing.

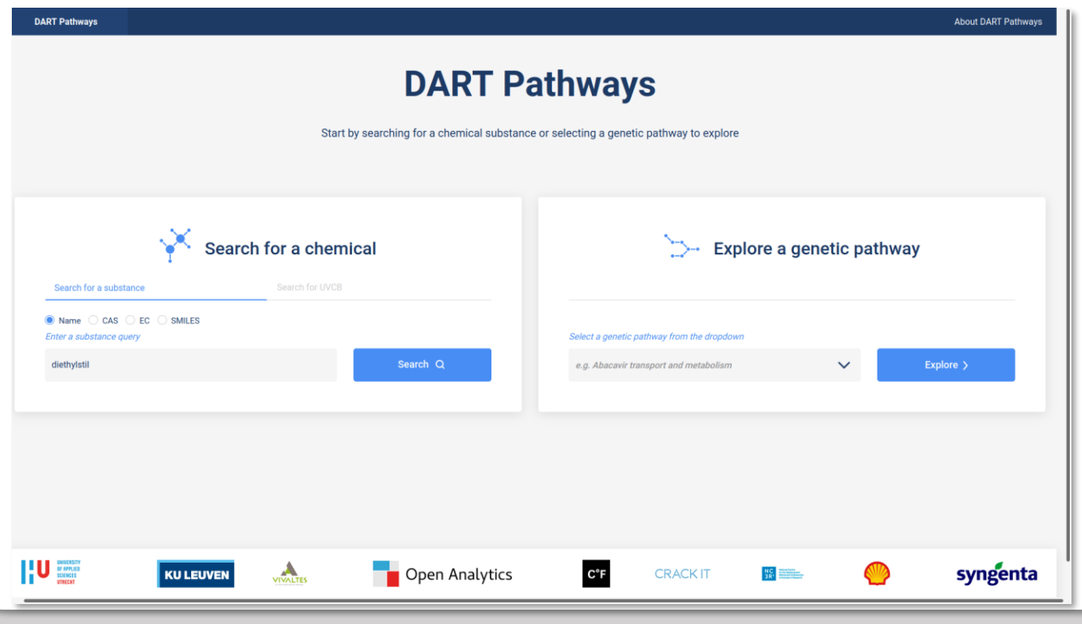
Map mammalian test data to 3R* methods

And improve human toxicity prediction

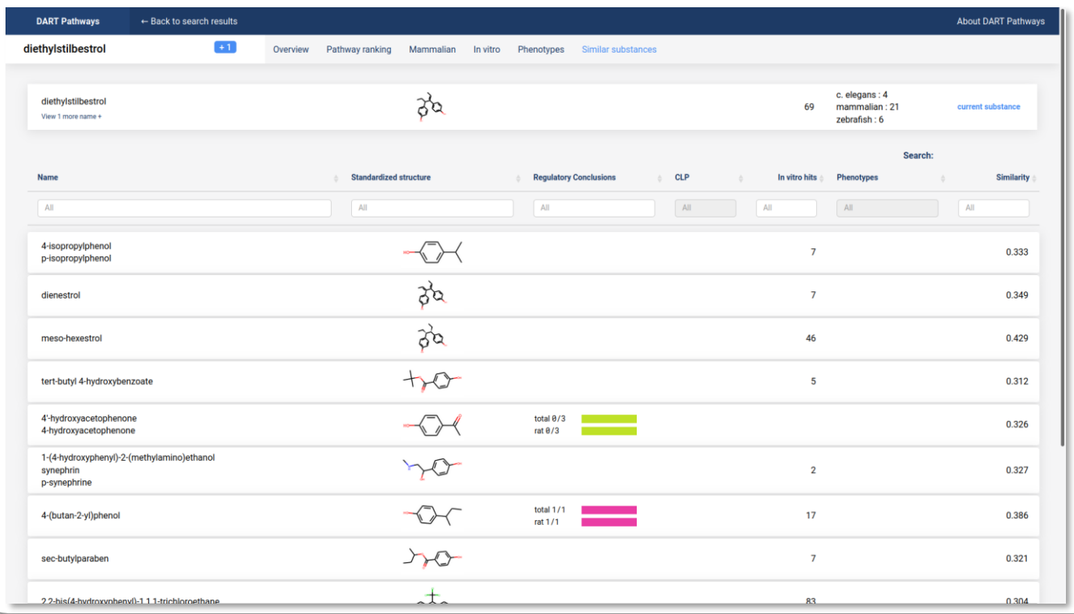


Select a chemical or pathway of interest

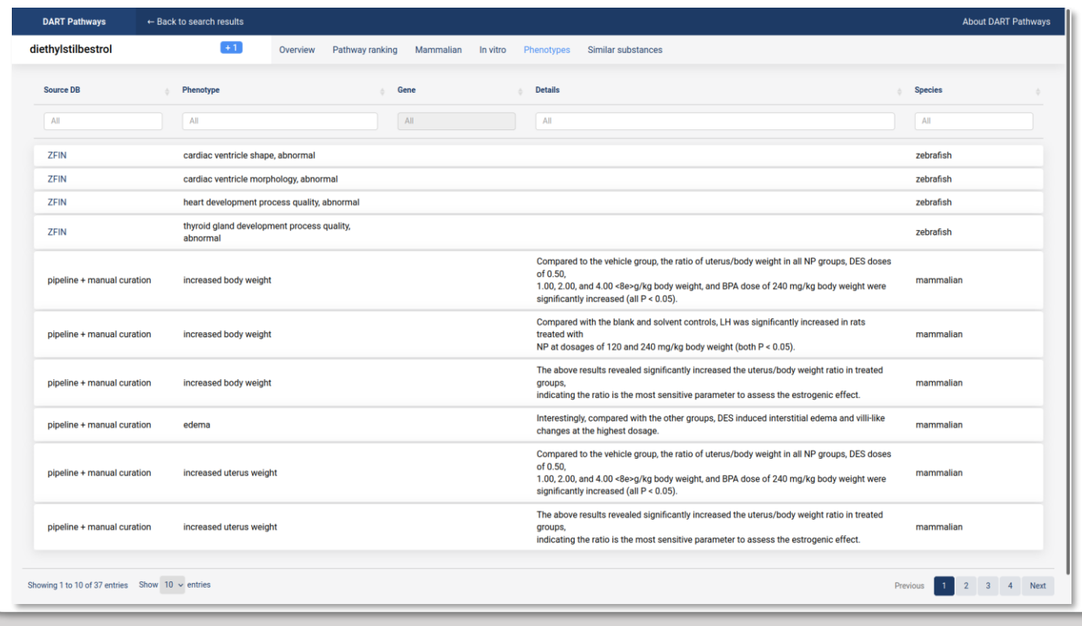
To start data analytics



Explore similar chemicals and test results

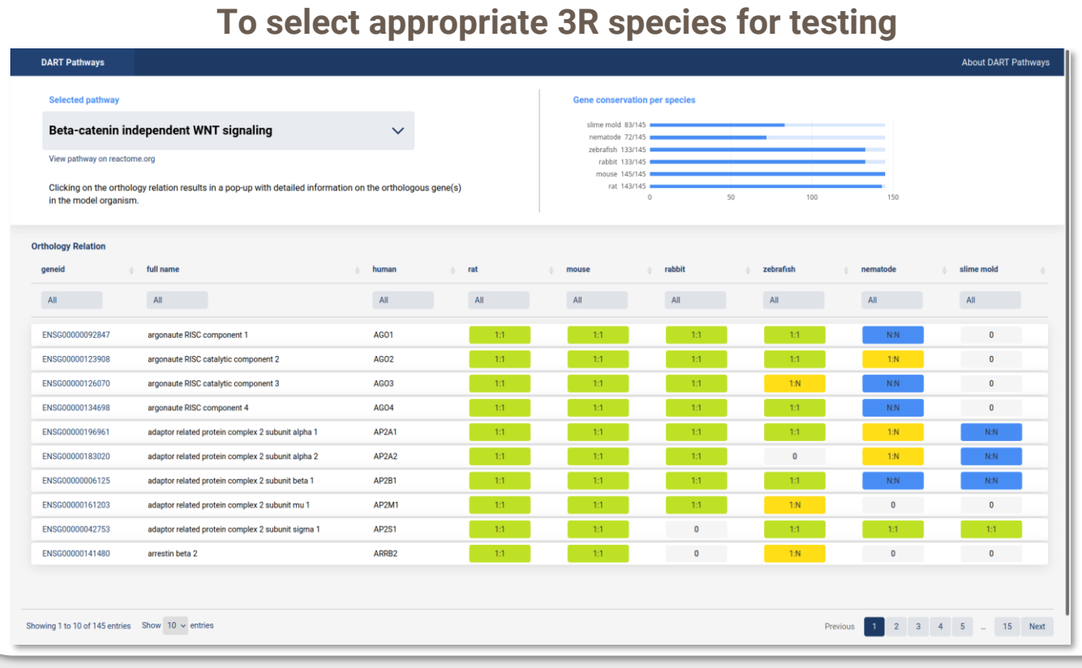


Inspect phenotypes and test results



Explore species conservation

To select appropriate 3R species for testing



Predict human adverse outcome pathways

Based on integration of *in vitro* and *in vivo* data

Want to try out the DARTpaths platform? – Contact Vivaltes at: dartpaths@vivaltes.com

Partners: VIVALTES *in vivo alternative testing* · HOGESCHOOL UTRECHT · KU LEUVEN · Open Analytics · C°F

Sponsors: NC 3Rs National Centre for the Replacement Refinement & Reduction of Animals in Research · CRACK IT · Shell · syngenta

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