A New Network of In Silico Models - LIFE CONCERT REACH Project

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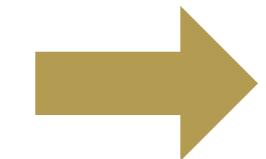
CONCERT REACH – EU project with the following main goals:

- Establishing an integrated network of systems offering non-testing methods (NTM) for REACH: more than 300 in silico models will be linked
- In silico models accompanied with appropriate documentation structure (QMRF and QPRF)
- Integration of an easy to use read across tool
- Automated weight-of-evidence evaluation tool
- Evaluation of stakeholders' needs (targeted workshops)

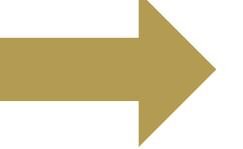
Important milestones so far:

- Integration of VEGA with OECD QSAR Toolbox
- 40 new models developed
- Improved rules for ToxRead (automated read-across)
- Weight of evidence: first case study of automated WoE carcinogenicity evaluation of botanicals (collaboration on going with EFSA)
- Workshops organized: for EU regulators (Oct 2021) and for chemical industries (Dec 2021)

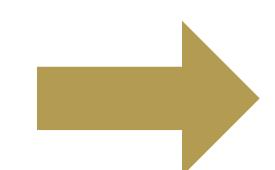
Experimental data gathering



Model development and/or validation



Integration (QSAR & read-across)



One network integrating > 300 models

Industry stakeholder feedback:

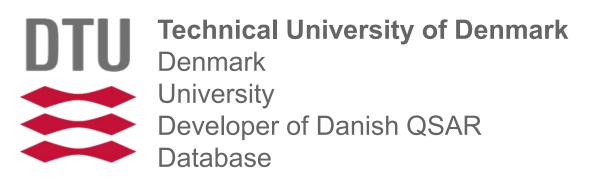
- 1) Need of clearer guidance
- List of recommended models,
- Guidance in selection of the most appropriate models for the substance to be predicted
- Illustrative examples
- Successful cases of in silico-generated results accepted by ECHA
- 2) Practical demonstrations / trainings

What's coming next:

- A web-based gateway guiding the user through the network of in silico tools available in the project
- Further integration of new models / endpoints into VEGA and ToxRead
- Integration of VEGA in Danish (Q)SAR database
- VERA: a new tool for automated read-across and grouping based on multiple similarity metrics
- A new tool for weight-of-evidence evaluation (tested in collaboration with EFSA)



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Developer of VEGA, toxRead, toxDelta







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