

## Development of a Curated Database of *In Vivo* Estrogenic Activity

P Ceger<sup>1</sup>, N Kleinstreuer<sup>1</sup>, X Chang<sup>1</sup>, B Jones<sup>1</sup>, J Hamm<sup>1</sup>, L Rinckel<sup>1</sup>, D Rotroff<sup>2</sup>, W Casey<sup>3</sup>

<sup>1</sup>ILS, RTP, NC, USA; <sup>2</sup>North Carolina State University, Raleigh, NC, USA;

<sup>3</sup>NICEATM/DNTP/NIEHS/NIH/HHS, RTP, NC, USA

Currently mandated testing for potential estrogenic activity will involve thousands of chemicals, cost millions of dollars, and take decades to complete using current validated tests. High throughput screening and computational toxicology tools may streamline this process by the quick and cost-effective identification of endocrine active chemicals (EACs). Access to a comprehensive database of high-quality *in vivo* EAC toxicology data is critical for validating *in vitro* and *in silico* models of estrogenic activity and supporting the prioritization of chemicals for further testing. Accordingly, we reviewed the current scientific literature, identified high-quality *in vivo* EAC data, and compiled the data into a single database. The initial review focused on 52 reference chemicals selected by the EPA and NTP. Selected studies included data for these 52 chemicals for a number of different estrogenic endpoints (uterotrophic, pubertal, multigenerational, etc.). Data were extracted and compiled using a standardized ontology. An R script is under development to evaluate the quality of the data in an efficient and standardized manner by modified Klimisch criteria. Data that were classified as reliable were added to the database, which will be publicly available on the NTP website (<http://ntp.niehs.nih.gov/go/40658>).

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