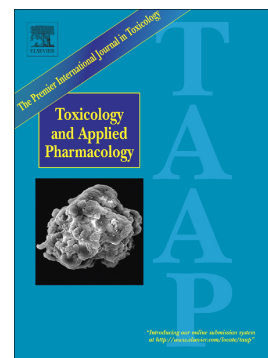


Accepted Manuscript

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PII: S0041-008X(18)30051-6
DOI: doi:[10.1016/j.taap.2018.02.006](https://doi.org/10.1016/j.taap.2018.02.006)
Reference: YTAAP 14165
To appear in: *Toxicology and Applied Pharmacology*
Received date: 17 May 2017
Revised date: 31 January 2018
Accepted date: 13 February 2018

Please cite this article as: Maureen E. Pittman, Stephen W. Edwards, Cataia Ives, Holly M. Mortensen , AOP-DB: A database resource for the exploration of Adverse Outcome Pathways through integrated association networks. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Ytaap(2018), doi:[10.1016/j.taap.2018.02.006](https://doi.org/10.1016/j.taap.2018.02.006)

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Abstract

The Adverse Outcome Pathway (AOP) framework describes the progression of a toxicity pathway from molecular perturbation to population-level outcome in a series of measurable, mechanistic responses. The controlled, computer-readable vocabulary that defines an AOP has the ability to, automatically and on a large scale, integrate AOP knowledge with publically available sources of biological high-throughput data and its derived associations. To support the discovery and development of putative (existing) and potential AOPs, we introduce the AOP-DB, an exploratory database resource that aggregates association relationships between genes and their related chemicals, diseases, pathways, species orthology information, ontologies, and gene interactions. These associations are mined from publically available annotation databases and are integrated

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