ToxCast and the Use of Human Relevant *In Vitro* Exposures: Incorporating High-Throughput Exposure Predictions with Chemical Toxicity Testing Data to Provide More Human Relevant Risk-Based Assessments

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The path for incorporating new approach methods and technologies into quantitative chemical risk assessment poses a diverse set of scientific challenges. These challenges include sufficient coverage of toxicological mechanisms to meaningfully interpret negative test results, development of increasingly relevant test systems, computational modeling to integrate experimental data, putting results in a dose and exposure context, characterizing uncertainty, and efficient validation of the test systems and computational models. The presentation will cover progress at the U.S. EPA in systematically addressing each of these challenges and delivering more human-relevant risk-based assessments. *This abstract does not necessarily reflect U.S. EPA policy.*