Special Issue

In Vitro Toxicology: Screening Tools for Risk Assessment

Message from the Guest Editors

In vitro bioassays play a key role in assessing the hazard and risk of substances and complex environmental or anthropic mixtures, allowing for faster screening of substances than when using tests conducted in vivo. Thanks to the strong technological development, many advances have been made in recent years in the field of biological assays applied to risk assessment, with the generation of increasingly complex models close to the tissues and organs to be studied and allowing the discovery of more precocious, precise, and specific responses. In parallel, the recognition of in vitro methods as reliable and effective screening tools has promoted the establishment of high-throughput screening programs for prioritization of chemicals based on in vitro bioactivity profiling, such as the ToxCast program. The huge amount of data generated by these programs has then allowed the integration of in vitro models with computational and machine learning techniques to generate integrated approaches to testing and assessment to address the limited testing efforts toward chemicals potentially representing the greatest hazard to human health and the environment.

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About the Journal

Message from the Editor-in-Chief

Toxics (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

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