

Peer Review

Review of: "Mixture Toxicity: Evidence from Experimental Studies on Concurrent Chemical Exposures"

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This review presents an extremely relevant and well-structured synthesis of the current evidence on the toxicological effects of concurrent chemical exposures. The writing is clear and precise, and the content is organized in a way that makes a highly complex topic accessible, making this paper a valuable resource for researchers, regulators, and environmental health professionals. Congratulations to the author.

As a constructive suggestion, the manuscript could be further enriched by briefly addressing the importance and inherent challenges of applying instrumental analytical methodologies to quantify mixtures of compounds. Techniques such as LC-MS/MS, GC-MS, ICP-MS, or advanced spectroscopic approaches are essential for generating reliable concentration data in environmental and biological matrices. However, they face significant challenges, including detection limits, matrix interferences, analyte stability, and the need for interlaboratory standardization. Including a short discussion on this topic would further strengthen the bridge between experimental evaluation and the practical implementation of monitoring and regulatory policies.

My kind wishes, Marilia Souza.

Declarations

Potential competing interests: No potential competing interests to declare.