Special Issue

Molecular Toxicology of New Drugs: New Insights

Message from the Guest Editor

The number of molecules with pharmacological activities is growing and involves both small organic molecules and macromolecules. It also includes novel psychoactive substances such as synthetic cannabinoids, synthetic opioids, or cathinone, for which only few data are available regarding the pharmacotoxicological profiles. Regardless of whether these compounds are used for a recreational or therapeutic purposes, a complete toxicity assessment is needed, both at the systemic and the molecular levels.

This Special Issue is dedicated to the broad array of molecular mechanisms triggered by new drugs with a special focus on molecular biology in both in vitro and in vivo studies. The use of omics approaches will provide new insights into the cellular and organ-specific pathways following new drug administration. Studies on the pharmacokinetics and pharmacodynamics will also be considered, as well as the investigation of their effect on endogenous metabolites. Studies combining recent analytical approaches, such as molecular network, and biological experiments to decipher the toxicity of new drugs and their related metabolites will be included in the scope.

Guest Editor

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Deadline for manuscript submissions

closed (28 February 2024)



International Journal of Molecular Sciences

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Message from the Editor-in-Chief

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