

Special Issue

Future Perspectives of Cell-Based Research in Toxicology and Drug Discovery

Message from the Guest Editor

A better selection of lead candidates for preclinical drug development, as well as toxicological studies or existing and new compounds, has become a non-negotiable necessity in recent years. Cell-based in vitro toxicology is the most promising method for overcoming the criticised use of animals in toxicological studies. By the simple addition of cell-based assay identification of specific molecular targets of the tested compounds' unwanted actions or even the identification of novel cell targets, extending the proposed therapeutic approach would be possible. The cell culture techniques and media available on the market today allow for almost all cell types, of both animal and human origin, to be effectively grown using both 2D and 3D techniques. Moreover, the possible utilisation of human cells in research could benefit risk assessments for human situations and overcome potential cross-species differences. In this context, we encourage the submission of manuscripts, both original research papers and review papers, presenting novel findings of compound action on the molecular cell level while considering future perspectives in toxicology and drug discovery.

Guest Editor

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Deadline for manuscript submissions

closed (30 November 2023)



International Journal of Molecular Sciences

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Impact Factor 4.9
CiteScore 8.1
Indexed in PubMed



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