DESCRIPTION

Toxicology in Vitro publishes original research papers, reviews and workshop reports focusing on the application and use of in vitro and in silico systems for toxicological evaluations (collectively described as New Approach Methodologies (NAM)). This includes the utilisation or the development of NAMs for assessing the potential adverse effects of chemicals for human safety assessment. In vitro techniques include primary cells, tissue slices, cell lines and stem cells (adult, embryonic and induced Pluripotent cells) or subcellular preparations thereof. Our journal strongly supports the Reduction, Refinement and Replacement (3R) of animals in toxicology evaluations.

This is a wide topic and thus we have certain preferences including:

Development of in vitro techniques and their application to research and regulatory use (i.e. 3R principle. Mechanistic underpinning of data. Ability to translate outcome to human safety assessment. We strongly encourage: The use of normal (non-transformed) human cells (where appropriate). Reporting the Short Tandem Repeat (STR) profile of the cells used (especially when cells have been provided as a gift or generated in house). Free access to raw (or primary) data. Appropriate model characterisation. The use (or reduction) of animal free components, including serum. [Especially when the system was already developed under such conditions, such as the HK-2 cell line]. Attention to detailed methodology and appropriate statistics. [Readers need to know how you did the experiment, how many times, how many replicates etc?] Reporting the source of the compounded tested, catalogue no. and lot no. Where the chemical has been purified or synthesised a full analytical report is expected. Quantification of compounds in exposure medium and/or cells over time (biokinetics).

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AUDIENCE

Academic, governmental and industrial laboratories using in vitro techniques.

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INTRODUCTION

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