



## Application of Translational Mathematical Modeling in Drug Development

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### Message from the Guest Editors

Dear Colleagues,

Despite great advances in biomedical science and technology, the success rates in drug development remain low with a declining trend. Translational, model-based drug development can improve the rigor and efficiency of drug development by employing pharmacokinetic and pharmacodynamic principles to describe and predict drug behavior. Modelling and simulations presents a powerful approach to integrate information from different stages of drug development and support decision making. In turn, this enables the design of more informative studies, saving cost and time, and ultimately enhance the success rates of drug development.

This Special Issue is intended to cover a broad range of topics in translational mathematical modelling applied to drug development. This includes, but is not limited to, pharmacokinetic/pharmacodynamic (PK/PD) models, physiologically-based pharmacokinetic (PBPK) models, population models, in vitro-in vivo correlations (IVIVC), and systems pharmacology approaches. We seek to highlight recent advances and innovations in this area and invite the researchers to contribute their original research work or review articles.

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