



Mechanism-Based Pharmacokinetic and Pharmacodynamic Modeling

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Message from the Guest Editor

Dear Colleagues,

Mechanistic pharmacokinetic and pharmacodynamic modeling is a methodology utilized at all stages of drug discovery and development. Mechanism-based pharmacokinetic/pharmacodynamic (PK/PD) models provide insights into the mechanisms of drug effects, pathophysiology of diseases and interrelations among drugs and various signaling molecules and biomarkers. PK/PD modeling allows for the quantitative assessment of drug effects in vivo and performing simulations in order to select the most appropriate dosing regimen that maximizes efficacy while minimizing the toxicity of medications. This approach may be also useful in the selection of first-in-human doses based on the results of preclinical studies.

This Special Issue is dedicated to original research and review articles. Pharmaceutical scientists are cordially invited to share the results of their investigations covering the full spectrum of PK/PD modeling and simulation, including PBPK models of drugs in preclinical species and humans, disease progression modeling, PBPK/PD modeling and PBPK/QSP approaches.

Dr. Artur Świerczek
Guest Editor





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Message from the Editor-in-Chief

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