

Tentative Outline
Special Issue for Current Drug Metabolism

Guest Editors: Profs. Xin He & Changxiao Liu

The Role of ADME/PK in Early Stage of Discovery, Design and Development of New Drugs

Aims & Scope:

Drug toxicity and safety issues are associated with the absorption, distribution, metabolism, excretion (ADME) features of therapeutic drugs; and associated with the sex, age, gene polymorphism of patients. Exposure of drug to the body by pharmacokinetic (PK) studies on absorption, distribution, metabolism and excretion must be investigated at an early stage of development and can contribute to the selection of a compound for development. Exposure of drug is related with toxicity and safety. The toxicity and safety experienced major improvements by the introduction of new methods and technologies on ADME/E/T. We suggest a hot topic: The role of ADME/PK focuses on update a recent impact of ADME/PK and related mechanism in early stage of discovery, design and development of new drugs.

Key words: Pharmacokinetics, ADME, physicochemical properties, drug transporters, drug metabolism enzymes, gene polymorphism, drug-drug interaction.

Subtopics:

Toxicity and safety pharmacokinetics in strategy, new methods and technologies

Role of drug metabolism enzymes (including phase I and phase II) and/or drug transporters as targets in early stage of discovery, design and development of new drugs

Molecular characterization and role of drug metabolism enzymes and drug transporters in drug disposition with drug toxicity and safety

Polymorphisms of drug metabolism enzymes and drug transporters in drug-drug interaction and clinical therapeutics

In the hot topic issue, we will organize authors interested in above 4 subjects to carry out 12 manuscripts including 4 mini-reviews and 8 full-length reviews.

Schedule:

Final manuscripts due: December 2014