

Tentative Outline

Title: Absorption, disposition and pharmacokinetic properties of novel therapeutic modalities

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Scope of the Thematic Issue:

Nowadays, traditional small molecules and novel therapeutic modalities such as antibodies, proteins, gene products, and Nano-drugs are being investigated by pharmaceutical industry and/or applied broadly in hospitals and clinics. Meanwhile, herbal supplements and herbal medicines, easily accessible to people, are being explored by modern scientific techniques and novel findings are helpful to better understand their unique pharmacologic mechanisms and pharmacokinetic properties. Different from traditional small molecular entity drugs, these novel modalities might exhibit unique traits causing potential alterations from a pharmacokinetic scientist's perspective. The scope of the special issue of *Current Drug Metabolism* is to include reviews on advancements in deciphering mechanisms that govern the absorption, distribution, metabolism, excretion, and toxicity (ADME/Tox) of these novel therapeutic agents using *in vitro*, *in silico*, and *in vivo* studies.

Keywords:

Pharmacokinetics, drug disposition, Drug-Metabolizing enzymes, transporters, macromolecules, Nano-drugs, herbal medicines.

Sub-topics:

1. The ADME/Tox and pharmacokinetics of macromolecular drugs.
2. The ADME/Tox and pharmacokinetics of nano-drugs.
3. Cellular pharmacokinetics of nano-drugs and macromolecular drugs.
4. The role of transporters in drug's transportation.

5. Tissue distribution and physical barriers, such as blood-brain barrier, placental barrier, blood-testis barrier, and prostate barrier.
6. The ADME/Tox and pharmacokinetics in dialysis patients.
7. The ADME/Tox and pharmacokinetics in critically ill patients.
8. Novel study strategies and novel findings for herbal medicines.

Schedule:

Manuscript submission deadline: 31 March 2020

Peer Review Due: 30 April 2020

Revision Due: 30 May 2020

Notification of acceptance by the Guest Editors: 30 June 2020

Final manuscripts due: 30 July 2020

Final date of Submission of Special issue: 30 July 2020