

Special Issue on
Advances in Metabolic Profiling and Pharmacokinetics of Herbal Medicinal Products

CALL FOR PAPERS

The history of herb application for treating various ailments could date back several centuries. As all medicines, herbal medicinal products (HMPs) are expected to be safe and effective. Nevertheless, evidence-based verification of the efficacy of HMPs is still lacking. Understanding the metabolic process of HMPs is considered to be an important issue to link data from pharmacological assays and clinical effects. The metabolic study of HMPs includes bioavailability to assess to what degree and how fast compounds are absorbed after drug administration, elucidation of metabolic pathways, elimination routes, and their kinetics, as well as the interactions of HMPs with synthetically derived drug products. Due to the complexity of herbs and their preparation, the ADME characteristics of the bioactive or toxic HMPs are still not fully understood. The difficulty lies primarily in the selection of biomarkers for detection, quantification of trace constituent, drug-drug interactions putatively, and discovery of active constituents based on metabolic results.

For a long time, mass spectrometry (MS) is the preferred analytical technique for investigating the metabolic profiling and pharmacokinetics of HMPs, but, for particular uses and challenge constituent, advanced approaches are still urgently needed. In recent years, many new approaches have been introduced for HMPs metabolism study, including magnetic resonance spectroscopy (MRS), electrochemistry coupled to mass spectrometry, new liquid chromatographic methods like turbulent flow bioanalysis, new models like zebrafish larvae and in silico ADME (absorption, distribution, metabolism, and excretion) models, and various new strategies or data processing methods. Knowledge and use of these technologies will provide better understanding of the pharmacokinetics and bioavailability of HMPs and help in designing rational dosage regimens.

The aim of this special issue is to show relevant advances in metabolic profiling and pharmacokinetics of HMPs using novel technique or strategy. Submission of high original novel manuscripts focusing on modification of conventional method and the description of new approaches for the study and measurement of challenging HMPs is highly encouraged. Reviews describing the state-of-the-art on any advanced relevant technique are especially welcome.

Potential topics include but are not limited to the following:

- ▶ Pharmacokinetics studies for challenging HMPs
- ▶ Novel approaches, models, strategies, or insights about pharmacokinetics studies of HMPs
- ▶ Metabolic profiling based active constituents screening from herbal medicines
- ▶ In silico ADME studies for herbal medicinal products
- ▶ Herbal-drug interactions
- ▶ Data processing for metabolite identification of HMPs

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ecam/ampp/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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