Advance in pharmacokinetics of bioactive polyphenols

Aims & Scope:

Natural polyphenols especially flavonoids are the most abundant antioxidants in human diet and have attracted great interests since the 1990s due to growing evidences of their beneficial effect on human health. Polyphenols with different structures contain at least one aromatic ring with one or more hydroxyl groups in addition to other substituent. Biological properties of polyphenols depend on their bioavailability. There are several factors such as intestinal absorption characteristics, interaction with plasma proteins, and metabolic pathways, affecting the transport dynamics of the polyphenols. Moreover, the chemical structure of polyphenols determines their rate and extent of intestinal absorption and the nature of the metabolites circulating in the plasma. This special issue will focus on the pharmacokinetics of bioactive polyphenols, especially the absorption, distribution, metabolism of bioactive polyphenols.

Key words:
Polyphenol, pharmacokinetics, absorption, distribution, metabolism, bioavailability

Subtopics:
- Structure-pharmacokinetics of polyphenols
- Development of identification of polyphenols metabolites
- Phase I and phase II metabolism of polyphenols
- Advance in methods studying the pharmacokinetics of polyphenols
- Relationship between the chemical structures of and their absorption, distribution and metabolism
- Different pharmacokinetic behavior of polyphenols in health and in disease
- Advance in plasma protein-polyphenol interaction

Schedule:

Manuscript submission deadline: August 2013

Peer Review Due: September 2013

Revision Due: September 2013

Notification of acceptance by the Guest Editor: September 2013

Final manuscripts due: October 2013