

## Bioavailability and Bioequivalence studies for chinese medicines: Challenge and opportunity

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Chinese Medicine is a unique medical system with over two thousand years and still remains as one of the main medical systems in China, and as a complementary and alternative medicine in many other countries. As drugs used in Chinese medicine are Chinese medicines which cover a single plant, animal part and mineral as well as blend of these materials together (composite formulae, Fufang in Chinese). Obviously, no matter single material or blended materials, any form of Chinese medicines has multiple ingredients. Thus, it is hard to do Chinese medicines research in bioequivalence and bioavailability. This is because bioequivalence and bioavailability studies can only compare the systemic situation of a test drug product to that of a reference drug product. Facing multiple components of Chinese medicines, what can we and how can we do bioequivalence and bioavailability studies? Metabolomics is a powerful new technology that assesses holistic metabolic profiles in easily accessible biofluids and facilitates biomarker discovery to distinguish between diseased and non-diseased tissues. This will help to resolve the problem of multiple components of Chinese medicines in bioavailability study. At the same time, other OMICS technologies will help to resolve problem of multiple components of Chinese medicines in bioequivalence study. We believe that introducing new research strategy and technologies into Chinese medicines will bring new insight and creativity to the globalization of Chinese medicine.

### Biography

Yibin Feng is currently an Associate Professor, Assistant Director in the School of Chinese Medicine, The University of Hong Kong, Hong Kong. He obtained the Bachelor degree in Chinese medicine from China and completed his Ph.D. and postdoctoral studies in molecular medicine from Hokkaido University School of Medicine, Japan. Being an expert in the study of pharmacology and toxicology of Chinese medicines, his research interest is focused on clinical trial and experimental study for cancer, diabetes, hepatic, and renal diseases by using recently developed techniques in OMICS, pharmacology, and immunology. He has published over 100 publications in these areas.

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