

## Pharmacokinetic driven drug discovery and development strategies

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Pharmacokinetics is an evolving branch of science that deals with what body does to drug. It has been recognized as a major reason for attrition in drug discovery. With the changing chemical nature of drugs, its disposition varies significantly. The pharmacokinetic data become the key driving force for selection of drug candidate and ultimately contributing to its clinical success or failure. The difference in in-vitro biologically active compounds to in-vivo ineffective NCE is often due to poor pharmacokinetic properties. It is important to understand the pharmacokinetic data and design efficacy enhancing strategies for successful translation of lead to drug. The presentation will discuss some of the case studies of the new leads/drugs pharmacokinetic profile in our lab and how pharmacokinetic guided strategies have reduced the drug attrition, enhance the drug efficacy and ultimately its clinical applicability.

### Biography

Dr. Rabi Sankar Bhatta graduated in Pharmacy and post graduate in pharmaceutics from Nagpur University, India and PhD from Jawahar Lal Nehru University. He has ten years of experience in various academic and pharmaceutical industrial. Currently he is working as Scientist, Pharmacokinetic and Metabolism Div., in CSIR-Central Drug Research Institute and involve in new drug discovery research. His research interest includes bioanalysis, metabolite characterization, CYP profiling, pharmacokinetics and formulation development of NCEs. He is actively involved in lead identification, preclinical and clinical development. He is co-inventor of web-based dereplication tool ([www.tmsdatabase.org](http://www.tmsdatabase.org)) for identification of plant secondary metabolite. He has guided thesis of PhD, post-graduates students and has several publication in reputed journals.

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