ADMEWORKS
DrugDrug Interaction Simulator

FUJITSU

# DDI Simulator Ver.1

ADMEWORKS/DDI Simulator is a software application for assessing the risk of potential drug-drug interactions, allowing the user to perform both quantitative simulations of Competitive and Mechanism-based inhibitions. The system was developed based on the results of the Human Animal Bridging (HAB) project, a nonprofit research organization in Japan.

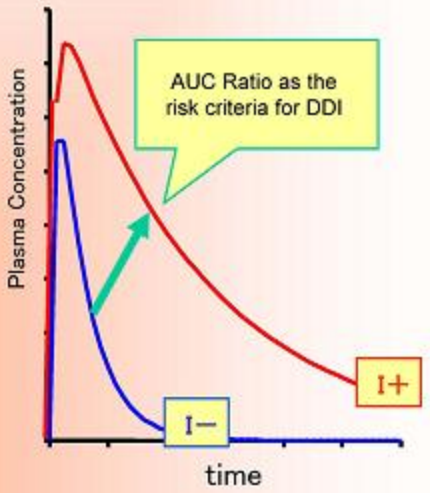
## Applications

Pre-clinical Phase:

Make an early assessment of a candidate compound's risk for drug-drug interactions in humans using pharmacokinetic data available from *in vitro* or animal studies.

Clinical Phase:

Clarify the need for drug-drug interaction studies in human based on preliminary human *in vivo* simulations using pharmacokinetic data available from Phase I studies.




## Main Features

### *Human In Vivo Quantitative Simulations*

Evaluate quantitatively the extent of DDI based on simulated AUC ratio calculated from the plasma concentration curve of the victim drug (substrate), with and without the perpetrator drug (inhibitor).

### *Simulation of Mechanism-based Inhibitions*

Supports irreversible or mechanism-based inhibition, in addition to competitive inhibition simulations.

### *Pharmacokinetic parameters database*

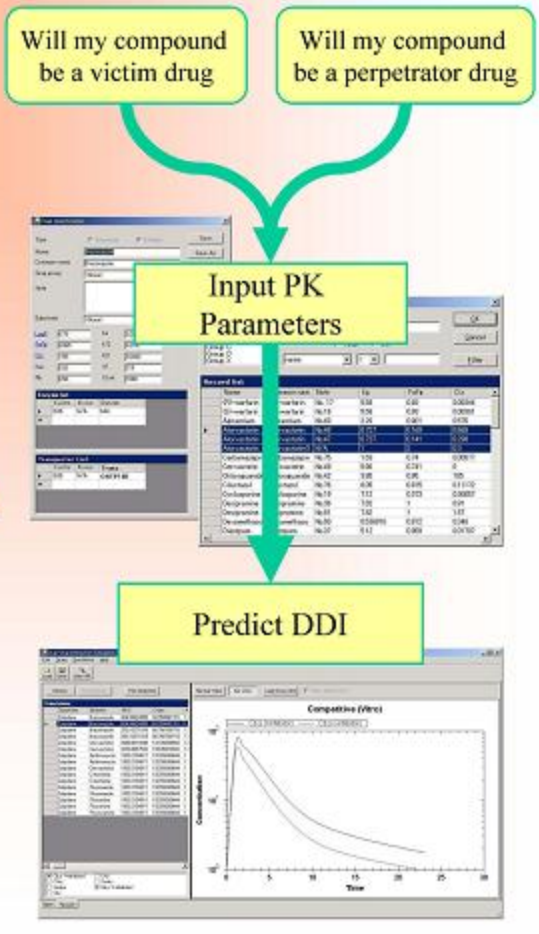
Contains the pharmacokinetic parameters required to perform simulations on several marketed drugs.

### *DDI Database (available inVer.2)*

Compare simulated results from actual drug-drug interactions reported in the literature.

### *Transporter-mediated Inhibitions (available inVer.2)*

Assess potential risk of drug-drug interactions resulting from the mediation of major drug transporters.




The software was developed under the strict supervision of Professor Yuichi Sugiyama of Tokyo University

◆For Inquiries

SCUBE Scientific Software Solutions (P) Ltd.
613, Hemkunt Chambers,
89 Nehru Place,
New Delhi - 110019
Ph: 011-41618828/29
Info@scubeindia.com