Abstract

The Pharmacokinetic/Pharmacodynamic (PK/PD) modeling associated simulation could as well be used as an applied science tool to seek effective end results. The latest medication ensuring and enhancing safety, affordable cost and quicker results are greatly anticipated. The PK/PD modeling might be used from the run through all clinical phases of drug development. The best use of PK/PD modeling and simulation sometimes may result with unsuccessful compounds and study failures and at times a few studies might require registration. In order to demonstrate the potentiality of the PK/PD modeling in drug development, it has to be embraced by the business men and the restrictive agencies, and in addition to it, people have to be educated upon the subject. The Mechanism-based Pharmacokinetic-Pharmacodynamic (PK/PD) modeling is a popular computational method used for simulating the drug treatment of infectious diseases. It possesses the potential to reinforce our understanding of drug treatment outcomes, drug readying methods, and dosing regimens. A computational developed tool though expensive can address issues such as weak patient compliance and drug resisting power. The methodologies used in the previous PK/PD models limits the user approach as it needs computer literacy to operate the tool. An attempt is made
New Vistas in Drug Design Analysis: Computational Approach to Pharmacokinetics and Pharmacodynamics Tool Development

to create a user friendly tool, the PK/PD which could be operated at ease by anyone and everyone.

References

- Phillip J. Bergen, Jian Li and Roger L, Dosing of colistin, Department of Pharmacology and Toxicology, Tucson, AZ 85721, USA (2011).

**Index Terms**

Computer Science | Applied Sciences

**Keywords**

Pharmacokinetics | Pharmacodynamics | drug treatment | software tool