

Pharmacokinetics Modelling for H.I.V. Treatment Strategies

The project focuses on modeling the dynamics associated with the uptake of medication during treatment of H.I.V. infection. The primary focus will be on oral uptake (as compared to intravenous injection and inhalation). The project will have two phases. The first will be a critical review of current articles in the open literature. The second phase will focus on developing an accurate model of the pharmacodynamics employing Matlab. A working knowledge of programming will be a partial objective of the second phase. Upon the successful completion of the model, the simulation results will be analyzed and compared to available experimental results in the literature. The ultimate focus of the project is the development of an accurate pharmacokinetics model that can be employed to improve the current treatment strategies.