

Component Specifications:

DataProcessor:

This component will take experimental data from the user saved in a csv or excel file and convert it to a pandas dataframe. It will perform any necessary cleanup of the data prior to analysis.

BuildModel:

This component will create base equations based on user input on the relevant pharmacokinetic model, such as a 1 or 2 component model. It will then fit the PK models to experimental data and output relevant PK parameters, such as half life, clearance, AUC, etc. Once the model is fit, it can be used to generate simulated PK curves given different starting drug doses to help scientists with experimental or clinical dose planning.

VisualizeModel

This component will create a plot of the experimental data or of the model for easy visualization. When the user starts to change starting drug doses for experimental or clinical dose planning, this component should output an updated plot.