

Publication

A comprehensive framework for physiologically based pharmacokinetic modelling in Matlab.

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)**ID** 4499453**Author(s)** Stader, Felix; Penny, Melissa A.; Siccardi, Marco; Marzolini, Catia**Author(s) at UniBasel** [Marzolini, Catia](#) ; [Stader, Felix](#) ; [Penny, Melissa](#) ;**Year** 2019**Title** A comprehensive framework for physiologically based pharmacokinetic modelling in Matlab.**Journal** CPT: Pharmacometrics & Systems Pharmacology**Volume** 8**Number** 7**Pages / Article-Number** 444-459

Physiologically based pharmacokinetic (PBPK) models are useful tools to predict clinical scenarios for special populations for whom there are high hurdles to conduct clinical trials such as children or the elderly. However, coding of a PBPK model in a mathematical programming language can be challenging. This tutorial illustrates how to build a whole-body PBPK model in Matlab; to answer specific pharmacological questions involving drug disposition, and magnitudes of drug-drug interactions in different patient populations.

Publisher Wiley**ISSN/ISBN** 2163-8306**edoc-URL** <https://edoc.unibas.ch/69629/>**Full Text on edoc** Available;**Digital Object Identifier DOI** 10.1002/psp4.12399**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/30779335>**ISI-Number** WOS:000477019400004**Document type (ISI)** Article