

Special Issue

Optimizing Drug Safety and Efficacy: Pharmacokinetic Modeling

Message from the Guest Editors

Pharmacokinetics is the study of what the body does to a drug after administration, and is critical for understanding how much of the drug a patient will be exposed to and for how long. This information is important for maintaining doses that are both safe and efficacious based on a particular drug's profile. Furthermore, special considerations need to be made for drug pharmacokinetic evaluations for patients with varying intrinsic and extrinsic properties, such as enzyme expression differences, renal or hepatic deficiencies, drug–drug interactions, and age-based changes, among others. To address this important aspect of drug development and utility, many modeling methods are available for evaluating the processes involved in drug pharmacokinetics and how to optimize drug safety and efficacy based on physiologic and pharmacokinetic principles.

This Special Issue will cover various pharmacokinetic modeling methods and applications utilized for the evaluation of drug safety and efficacy, specifically focusing on how pharmacokinetic modeling can be used to ensure optimal drug safety and efficacy among various clinical scenarios.

Guest Editors

Dr. Brian Cicali

Center for Pharmacometrics and Systems Pharmacology, Department of Pharmaceutics, College of Pharmacy, University of Florida, Orlando, FL 32827, USA

Dr. Francine Johansson Azeredo

Center for Pharmacometrics and Systems Pharmacology, Department of Pharmaceutics, College of Pharmacy, University of Florida, Orlando, FL 32827, USA

Deadline for manuscript submissions

closed (30 June 2024)



Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/182639

Pharmaceutics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
pharmaceutics@mdpi.com

[mdpi.com/journal/
pharmaceutics](https://mdpi.com/journal/pharmaceutics)





Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 10.0
Indexed in PubMed



[mdpi.com/journal/
pharmaceutics](https://mdpi.com/journal/pharmaceutics)



About the Journal

Message from the Editor-in-Chief

Pharmaceutics (ISSN 1999-4923) is an online open access journal on the science and technology of pharmaceuticals and biopharmaceuticals. The scientific community, the wider community and the general public have unlimited and free access to the content as soon as a paper is published; this open access to your research ensures your findings are shared with the widest possible audience. Please consider publishing your impressive work in this high quality journal. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Patrick J. Sinko

Ernest Mario School of Pharmacy, Rutgers, The State University of New Jersey, William Levine Hall, Room 225C, 160 Frelinghuysen Road, Piscataway, NJ 08854-8020, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.7 days after submission; acceptance to publication is undertaken in 3.5 days (median values for papers published in this journal in the second half of 2025).