Special Issue

Dosing Strategies for Protecting the Vulnerable

Message from the Guest Editors

Many diseases have a disproportional impact on vulnerable patients, including but not limited to the very young and very old, obese patients, critically ill patients, and pregnant women. Paradoxically, their vulnerabilities are also the basis for excluding them from clinical trials. Many drugs are therefore not licensed for use in these patients but, rather, off-label use is often justified by the high unmet medical need. The selection of an appropriate dosing strategy for these patients is one of the main challenges.

Pharmacokinetic/pharmacodynamic (PK/PD) modelling and simulation can be used to characterise the relationship between drug dosing, drug exposure, biomeasures, biomarkers, and clinical outcomes. Furthermore, these models can be applied to identify optimised dosing strategies for vulnerable patients. Although the added value of using PK/PD models is being recognised in various disease areas, an extensive knowledge gap remains. For this Special Issue, we welcome the submission of original research articles and reviews on modelling and simulation strategies for identifying dosing strategies to protect vulnerable patients.

Guest Editors

Dr. Erwin Dreesen

Department of Pharmaceutical and Pharmacological Sciences, University of Leuven, 3000 Leuven, Belgium

Dr. Pieter Van Brantegem

Department of Bioengineering and Therapeutic Sciences, University of California, San Francisco, CA, USA

Deadline for manuscript submissions

closed (20 February 2023)



Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed



mdpi.com/si/118743

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

mdpi.com/journal/ pharmaceutics





Pharmaceutics

an Open Access Journal by MDPI

Impact Factor 5.5 CiteScore 10.0 Indexed in PubMed





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 pharmaceutics and biopharmaceutics. 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 Department of Pharmaceutics, Ernest Mario School of Pharmacy, Rutgers University, Piscataway, NJ 08854, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / 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 14.9 days after submission; acceptance to publication is undertaken in 3.3 days (median values for papers published in this journal in the first half of 2025).