

Special Issue

New Drug Delivery across the Blood–Brain Barrier

Message from the Guest Editor

Drug delivery into the central nervous system (CNS) is modulated by blood–brain interfaces. The blood–brain barrier (BBB), the blood–cerebrospinal fluid barrier (BCSFB), and the blood–arachnoid barrier (BAB) are key interfaces regulating the exchange of substances between the blood, the CSF, and the brain parenchyma. Drug delivery to the CNS can thus be limited due to unfavorable physicochemical properties, efficient active brain to blood carrier-mediated efflux, and/or poor active blood to brain carrier-mediated influx. Several strategies are currently developed to increase CNS drug delivery of small and large molecular weight drugs, including direct administration into the brain parenchyma, methods disrupting BBB integrity, development of specific chemicals or antisense oligonucleotides inhibiting efflux transporter activity, rational drug design decreasing substrate recognition by efflux transporters and/or increasing transport by influx transporters or carrier-mediated transcytosis receptors, and development of nanomedicines and biologics from microbiological origin targeting the BBB and delivering drugs into the brain parenchyma.

Guest Editor

Prof. Dr. Xavier Declèves

Faculté de pharmacie, Université de Paris, UMR-S 1144, 4, Avenue de l'Observatoire, 75006 Paris, France

Deadline for manuscript submissions

closed (31 August 2020)



Pharmaceutics

an Open Access Journal
by MDPI

Impact Factor 5.5
CiteScore 10.0
Indexed in PubMed



mdpi.com/si/40502

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).