



*children*



an Open Access Journal by MDPI

## Neonatal Clinical Pharmacology

Guest Editors:

**Prof. Dr. Karel Allegaert**

**Dr. Nadir Yalcin**

**Dr. Robert B. Flint**

**Dr. Sinno H.P. Simons**

Deadline for manuscript  
submissions:

**closed (1 April 2024)**

### Message from the Guest Editors

Pharmacotherapy is a very powerful intervention to improve outcome, and this is also true in neonates. The prescription of a given drug should result in a safe and effective intervention to treat or prevent a specific disease or risk in an individual patient or population while avoiding disproportional side-effects. Clinical pharmacology supports these aims in predicting drug-related (side)-effects driven by pharmacokinetics (PK) and pharmacodynamics (PD). The dynamic changes related to maturation and growth in newborns result in a unique setting with extensive variability. Non-maturational changes (such as disease characteristics, drug–drug interactions, pharmacogenetics, and lactation-related exposure) further add to this variability.

This is a growing and active field of clinical research, with several reports on PK, PD, pharmacovigilance and -safety, and pharmaco-epidemiology having been published. This clinical field is further supported by novelties in the methods that are currently available (low-volume sample analysis, population PK analysis, physiology-based PK).



[mdpi.com/si/137183](https://mdpi.com/si/137183)

# Special Issue