

## Special Issue

# Potassium Channels as Novel Therapeutic Targets

### Message from the Guest Editors

K<sup>+</sup> channels constitute the largest and most diverse family of ion channels, with almost 80 different genes encoding the principal pore-forming subunits. Recent progress in structural biology, molecular pharmacology, and electrophysiology/in vivo experiments led to a good understanding of the physiological role of many K<sup>+</sup> channel members and their therapeutic potential. Pharmacological strategies for targeting these channels include venom peptides, antibodies, and small molecules. Modulation can occur in the form of blockers that inhibit the channels or in the form of openers that activate these channels. With their often tissue-defined distribution, they offer tremendous opportunities for the development of new drugs to treat, for example, cardiovascular disorders, neurological diseases, cancer, as well as autoimmune and metabolic diseases. In this Special Issue, we aim to bring together research from experts in the field that highlight therapeutic agents and strategies, and which identify future directions that will lead to novel discoveries and therapies for K<sup>+</sup>-channel-associated diseases.

### Guest Editors

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### Deadline for manuscript submissions

closed (26 February 2025)



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