



## Therapeutic Aspects of Gasotransmitters in Cardiovascular and Renal Disease 2.0

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### Message from the Guest Editors

Dear Colleagues,

Gasotransmitters (NO, CO and H<sub>2</sub>S) are protective in various conditions because of their vasodilatory, anti-inflammatory, antioxidant, and antifibrotic characteristics. They exert their effects via signal transduction via guanylate cyclase and cGMP in many tissues. Another protective pathway involves signaling via the Nrf2/keap1 pathway. Moreover, all three gasotransmitters inhibit mitochondrial respiration and reduce ROS production.

Well-known pharmacological strategies involving NO include NO donors for pulmonary hypertension and phosphodiesterase inhibitors for erectile dysfunction. This Special Issue focuses on Therapeutic Aspects of Gasotransmitters in Cardiovascular and Renal Disease. Different donor compounds have a wide range of kinetics. Various compounds target signaling pathways. Tolerance is well-recognized for NO donors but has barely been addressed for CO. Data on thiosulfate tolerance have recently been reported. The interdependency of cardiac, renal, and vascular function, as well as their involvement in systemic conditions, such as diabetes and pre-eclampsia, encourage an integrative systems approach. Original studies and reviews are all welcome.





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