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Gaseous Transmitters and Cardiovascular System

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Deadline for manuscript
submissions:

closed (31 August 2022)

Message from the Guest Editors

In the last two decades, a large body of experimental evidence has demonstrated that gaseous transmitters, which have signaled the end of the traditional concept of intercellular signalization, might play a crucial role in cardiovascular system regulation. Unlike classical messengers, they are not readily stored in vesicular structures, are re-synthesized as needed, and affect cellular metabolism in a more immediate fashion. Hydrogen sulfide (H₂S) and carbon monoxide (CO), next to nitric oxide (NO), are the most recently studied endogenous gaseous mediators, and their role in the regulation of cardiovascular system physiology and pathophysiology has been emphasized.

This Special Issue is focused on the role of NO, H₂S, and CO in the regulation of the cardiovascular system under both normal and pathological conditions. This Special Issue welcomes original research articles and reviews on all aspects of the molecular mechanisms and functional action of gaseous transmitters as well as those on the effectiveness of their donors in experimental or clinical studies.



mdpi.com/si/43860

Special Issue



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