

Special Issue on
**Endothelium-Derived Factors and Vascular Dysfunction
in Hypertension**

CALL FOR PAPERS

The endothelium plays a primary role in the regulation of vascular function. By endocrine, autocrine, and paracrine mechanisms, the endothelium releases a variety of vasoactive factors including not only classical vasodilators, e.g., nitric oxide and vasoconstrictors, e.g., endothelin-1, but also novel factors, e.g., uridine adenosine tetraphosphate. These factors act through activation of their respective receptors on vascular wall or through activation of signaling pathways resulting in either vasodilator/inflammatory or vasoconstrictor influences. Conversely, an imbalance of the release of endothelium-derived factors may contribute to the pathophysiology of cardiovascular diseases including hypertension. Experimental and clinical evidence of an association between hypertension and endothelial dysfunction is convincing, but a wide gap remains to be bridged with respect to understanding the pathophysiological connections between these two entities. Hypertension is a state of excessive oxidative stress, local/systemic inflammation, and immune reactivity, and our understanding of the role of endothelium-derived factors and interactions with these alterations in vascular homeostasis remains incomplete.

In this special issue, we aim to update current knowledge of endothelium-derived factors and their impact on vascular function and hypertension and explore their potential applications in the treatment and diagnosis. We encourage both basic and clinical investigators to contribute with original research articles with particular focus on identification and characterization of novel endothelium-derived factors, elucidation of disease mechanisms, and pharmacological intervention for vascular dysfunction in hypertension. We also welcome review articles that describe the current state of vascular dysfunction in hypertension.

Potential topics include but are not limited to the following:

- ▶ Molecular mechanisms underlying vascular dysfunction and hypertension
- ▶ Endothelium-derived factors and pulmonary hypertension
- ▶ Measurement of endothelium-derived factors as biomarkers
- ▶ Effect of exercise on vascular dysfunction and hypertension
- ▶ Effect of dietary interventions on vascular dysfunction and hypertension

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/ijhy/edfv/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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