Oxidative Medicine and Cellular Longevity

Hindawi

Special Issue on

Diabesity and Dysfunctional Nitric Oxide (•NO) Signaling in the Vasculature: Mechanisms and Therapeutic Targets

CALL FOR PAPERS

The current epidemic of obesity, metabolic dysfunction, and diabetes has resulted in a rapidly expanding population of patients in need of treatment for cardiovascular disease. A seminal contributing factor driving obesity-mediated vascular pathology is mitigation of the canonical •NO signaling pathway resulting in endothelial dysfunction. This process, driven by the interplay between elevated rates of reactive species production and •NO signaling, is manifested in numerous vascular beds resulting in deleterious clinical outcomes including, but not limited to, peripheral vascular disease, retinopathy, hypertension, and chronic kidney disease. Therefore, studies designed to define the mechanisms underpinning these processes and thus identify potential treatment strategies are crucial in addressing this imminent healthcare crisis.

We invite authors to submit original research articles as well as review articles that will contribute to our understanding of the cellular mechanisms regulated by the convergence of redox and •NO signaling. We are particularly interested in articles covering the identification of therapeutic targets that could be exploited for clinical application.

Potential topics include but are not limited to the following:

- Dysfunctional •NO signaling in PAD, CKD, hypertension, and so on
- Mechanisms mediating eNOS dysfunction in the inflamed vascular milieu
- Alternative enzymatic sources of vascular •NO
- Alternative nonenzymatic sources of vascular •NO
- The role of elevated oxidant generation in obese/diabetic vessels
- Sources of oxidants and impact on vessel function in obese/diabetic vessels
- Impact of exercise on vascular dysfunction in obese/diabetic patients
- Targetable mediators of altered •NO signaling
- Obesity/diabetes-associated prooxidants (e.g., uric acid and glucose)

Authors can submit their manuscripts through the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/omcl/ddnos/.

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