

Special Issue

Sickle Cell Disease: From Pathogenesis to Therapies

Message from the Guest Editors

A renaissance in the development of new therapies for sickle cell disease (SCD) is emerging. Many of these therapies have emanated from novel approaches to our understanding of sickle red blood cell biology and new insights into the genesis of sickle cell vaso-occlusive events. A growing number of clinical trials are developing new targets outside the sickle red blood cell with the hopes of mitigating the devastating cascade of physiologic events resulting in end-organ damage. Various new pathophysiologic mechanisms are being recognized, improving our understanding of sickle cell vasculopathy. They include increased inflammation, vascular adhesion, coagulopathy, and nitric oxide dysfunction. Novel and improved therapies remain to be discovered.

For this Special Issue, we invite papers on the following topics:

- 1) Role of the endothelium and adhesion in the vasculopathy of sickle cell disease: Implications for disease monitoring and novel therapeutics;
- 2) Impaired Nitric oxide function and implications for novel therapeutics;
- 3) Role of coagulopathy and platelet activation in the pathogenesis of SCD vasculopathy: Implications for disease monitoring and novel therapeutics.

Guest Editors

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

Editor-in-Chief

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