

Special Issue

Sickle Cell Disease: Recent Advances in Pathophysiology and Therapy

Message from the Guest Editor

It has been more than a century since James Herrick, a Professor of Medicine in Chicago, for the first time, described abnormally sickle-shaped erythrocytes in a blood smear from a student of Caribbean ancestry. Since then, our understanding of sickle cell disease (SCD) improved immensely. Over the past decade in particular, major global efforts have been mounted to address the convergence of multiple pathological phenomena, such as hemoglobin S polymerization-dependent erythrocyte hemolysis and sickling, vasoocclusion-dependent ischemia-reperfusion injury, endothelial dysfunction-dependent vasculopathy, and sterile inflammation, to promote multi-organ acute and chronic complications in SCD. These studies inspired the development of several therapies that are either already approved or currently in clinical trials. I invite papers on the following topics:

- Acute and chronic organ complications in SCD: pathophysiology, current and future therapies;
- Sterile inflammation in SCD: pathophysiology, current and future therapies;
- Emerging role of extracellular vesicles in the pathophysiology, diagnosis and treatment of SCD.

Guest Editor

Dr. Tomasz Brzóska

Pittsburgh Heart, Lung and Blood Vascular Medicine Institute, Division of Hematology/Oncology, School of Medicine, University of Pittsburgh, Pittsburgh, PA 15261, USA

Deadline for manuscript submissions

closed (31 August 2023)



Biomedicines

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CiteScore 5.2
Indexed in PubMed



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Biomedicines
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomedicines@mdpi.com

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Message from the Editor-in-Chief

Biomedicines (ISSN 2227-9059) is an open access journal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to *Biomedicines*, be it original research, review articles, or developing Special Issues of current key topics.

Editor-in-Chief

Prof. Dr. Felipe Fregni

1. Neuromodulation Center and Center for Clinical Research Learning, Spaulding Rehabilitation Hospital and Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, USA

2. Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA 02115, USA

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