



Sickle Cell Disease: Recent Advances in Pathophysiology and Therapy

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Deadline for manuscript
submissions:
closed (31 August 2023)

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.





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Message from the Editor-in-Chief

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