Special Issue

Sickle Cell Disease: Pathogenesis, Diagnosis and Treatment

Message from the Guest Editors

We are in an exciting era for sickle cell disease, with new drugs and gene therapies in the pipeline. With these opportunities come new questions: how do we select the best drug therapy and compare the efficacy of different gene therapy strategies? Along with these questions, there remains the question of if gene therapy is curative and even how to define a cure. There are new devices, molecular tests, and sequencing strategies to help us answer these questions. In this Special Issue, we aim to describe the state of the science and review current applications for these new technologies. Articles describing ways to vet the safety and efficacy of gene therapy for SCD are welcome, as are articles describing omics studies or omics-based strategies that identify novel therapeutic pathways or elucidate sickle cell disease pathophysiology. Our major focus is on experimental cytology. We are also pleased to invite you to submit articles addressing new ways to assess red cell health and strategies that use existing or emerging biomarkers to identify acute complications or best second-line agents.

Guest Editors

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Deadline for manuscript submissions

closed (10 July 2025)



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About the Journal

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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