Special Issue

Molecular Pathogenesis and Cellular-Based Therapies for Thrombocytopenia

Message from the Guest Editors

Thrombocytopenia is a life-threatening hemostatic disorder with multiple etiologies linked to genetic, environmental or drug-associated factors. In thrombocytopenic patients, low platelet counts are associated with critical bleeding or thromboembolism and predict risk for morbidity and mortality. Significant advances in characterizing cellular and molecular mechanisms involved in the development and refractoriness to treatment in auto- and allothrombocytopenia have been achieved. Furthermore, relevant technical advances in cell production and storage have been achieved, and innovative cell therapies have been developed, including the generation of bioengineered platelets. These new developments may constitute an alternative strategy to the transfusion of donor platelets for the management of thrombocytopenic patients. This Special Issue brings together original research and reviews elucidating molecular mechanisms involved in the pathophysiology of thrombocytopenia, molecular and cellular events of thrombosis, hemostasis maintenance and immune response regulation, as well as newly developed drug-, cell- and gene-based therapeutic strategies for the treatment of thrombocytopenia.

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Deadline for manuscript submissions

closed (30 November 2021)



International Journal of Molecular Sciences

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Message from the Editor-in-Chief

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