Special Issue

Platelets at the Intersection of Atherosclerosis Processes

Message from the Guest Editor

Atherosclerosis begins with injury to the endothelium caused by factors such as high blood pressure, diabetes, smoking, and high levels of LDL cholesterol. Platelets react by attaching to the injured endothelium. releasing chemokines and adhesion molecules which activate immune cells and intensify inflammation. This interaction attracts immune cells to form plaques, especially in areas of shear stress, where proteins like platelet-endothelial cell adhesion molecule-1 (PECAM-1) strengthen the adhesion between platelets and endothelial cells. Additionally, platelets contribute to inflammation by forming aggregates with leukocytes and increasing vascular permeability. Platelets serve as key players in the complex interplay of factors that drives atherosclerosis, making them a critical target for therapeutic strategies aimed at reducing cardiovascular risk.

Guest Editor

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Deadline for manuscript submissions

20 November 2025



International Journal of Molecular Sciences

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.0 Indexed in PubMed



mdpi.com/si/224015

International Journal of Molecular Sciences Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 ijms@mdpi.com

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Editor-in-Chief

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