

7.Characteristics of Erythrocyte-Derived Microvesicles and Its Relation with Atherosclerosis

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文章简介

动脉粥样硬化是一种常见的血管疾病。红细胞作为最丰富的血细胞类型，在动脉粥样硬化的发生发展中起着非常重要的作用，已有文献报道，红细胞来源的微泡（ErMV）可通过促凝、介导炎症以及诱导细胞粘附来促进动脉粥样硬化形成。**该综述总结了 ErMV 的形成、降解相关机制，并讨论了 ErMV 在动脉粥样硬化中的可能作用机制以及其在心血管疾病中的潜在临床应用价值，为动脉粥样硬化疾病的诊断和预后提供了新的研究思路。**

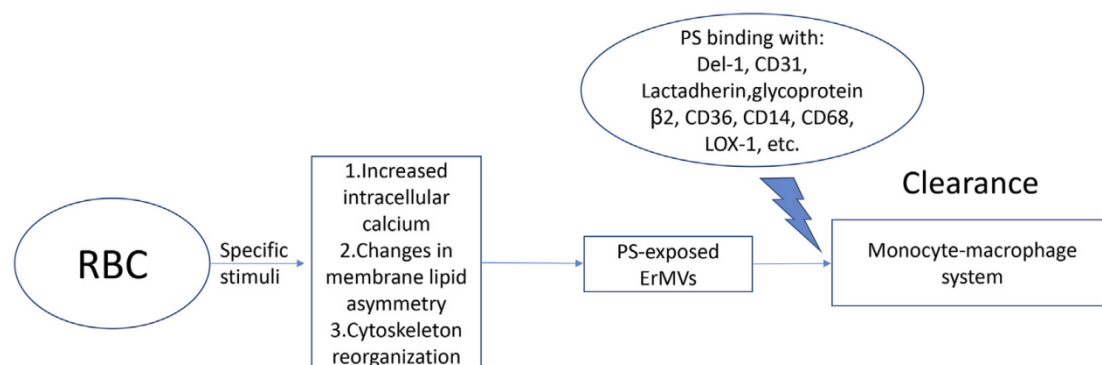


Fig. Erythrocyte-derived microvesicles formation and degradation. When erythrocytes encounter specific stimuli, such as shear stress, complement attack, agonist (or proapoptotic) stimulation, or damage, they are prone to form microvesicles (MVs) as an escape from apoptosis. This process requires increased intracellular calcium, changes in membrane lipid asymmetry, and cytoskeleton reorganization. The clearance of circulating erythrocyte-derived microvesicles (ErMVs) occur mainly through interactions with specific receptors and related molecules, in the monocyte-macrophage system, including liver Kupffer cells, lungs, and bone marrow.