



# Bench-to-bedside review: Circulating microparticles - a new player in sepsis?

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Titre	Bench-to-bedside review: Circulating microparticles - a new player in sepsis?
Type de publication	Article de revue
Auteur	Meziani, Ferhat [1], Delabranche, Xavier [2], Asfar, Pierre [3], Toti, Florence [4]
Editeur	BioMed Central
Type	Article scientifique dans une revue à comité de lecture
Année	2010
Langue	Anglais
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Volume	14
Titre de la revue	Critical Care
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Mots-clés	Emergency Medicine [5], Intensive / Critical Care Medicine [6]
Résumé en anglais	<p>In sepsis, inflammation and thrombosis are both the cause and the result of interactions between circulating (for example, leukocytes and platelets), endothelial and smooth muscle cells. Microparticles are proinflammatory and procoagulant fragments originating from plasma membrane generated after cellular activation and released in body fluids. In the vessel, they constitute a pool of bioactive effectors pulled from diverse cellular origins and may act as intercellular messengers. Microparticles expose phosphatidylserine, a procoagulant phospholipid made accessible after membrane remodelling, and tissue factor, the initiator of blood coagulation at the endothelial and leukocyte surface. They constitute a secretion pathway for IL-1<math>\beta</math> and up-regulate the proinflammatory response of target cells. Microparticles circulate at low levels in healthy individuals, but undergo phenotypic and quantitative changes that could play a pathophysiological role in inflammatory diseases. Microparticles may participate in the pathogenesis of sepsis through multiple ways. They are able to regulate vascular tone and are potent vascular proinflammatory and procoagulant mediators. Microparticles' abilities are of increasing interest in deciphering the mechanisms underlying the multiple organ dysfunction of septic shock.</p>
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua3567">http://okina.univ-angers.fr/publications/ua3567</a> [7]
DOI	10.1186/cc9231 [8]
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## Liens

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