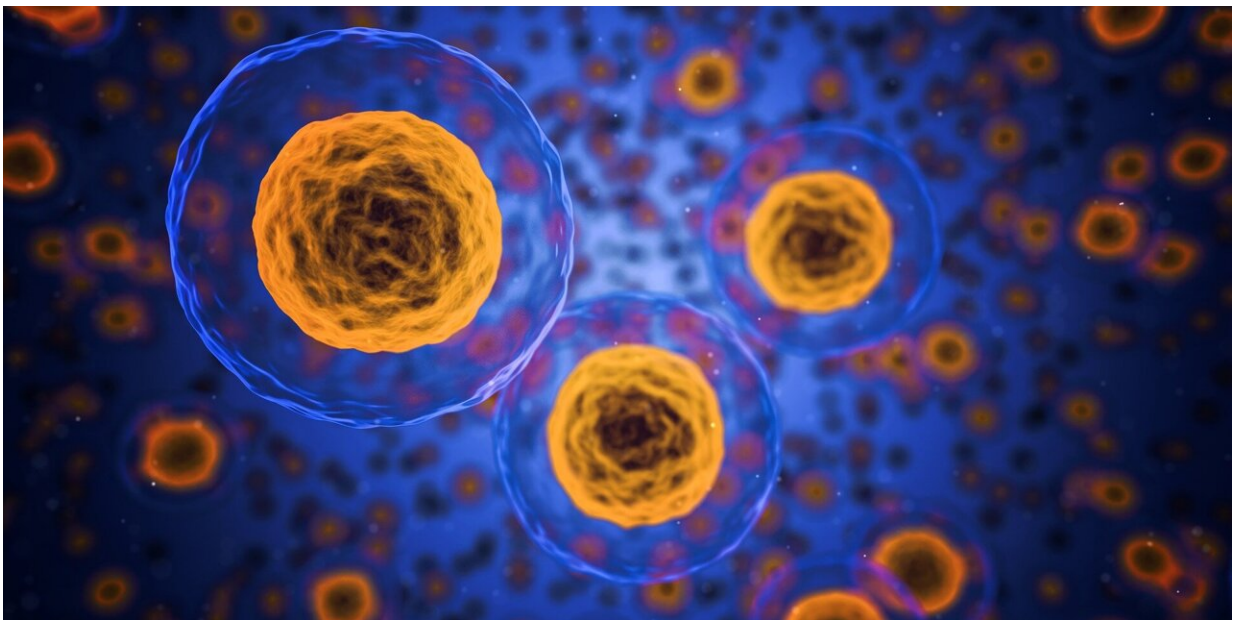


# Extracellular vesicles from mesenchymal stem cells: A potential therapy for acute pancreatitis-induced cardiac injury?

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Acute pancreatitis (AP) often leads to a high incidence of cardiac injury, posing significant challenges in the treatment of severe AP and contributing to increased mortality rates. Mesenchymal stem cells (MSCs) release bioactive molecules that participate in various inflammatory diseases. Similarly, extracellular vesicles (EVs) secreted by MSCs have garnered extensive attention due to their comparable anti-

inflammatory effects to MSCs and their potential to avoid risks associated with cell transplantation.

Recently, the therapeutic potential of MSCs-EVs in various inflammatory diseases, including sepsis and AP, has gained increasing recognition. Although preclinical research on the utilization of MSCs-EVs in AP-induced cardiac injury is limited, several studies have demonstrated the positive effects of MSCs-EVs in regulating inflammation and immunity in sepsis-induced cardiac injury and cardiovascular diseases. Furthermore, clinical studies have been conducted on the therapeutic application of MSCs-EVs for some other diseases, wherein the contents of these EVs could be deliberately modified through prior modulation of MSCs.

Consequently, a team of researchers hypothesizes that MSCs-EVs hold promise as a potential therapy for AP-induced cardiac injury. Their paper, published recently in the *World Journal of Stem Cells*, aims to discuss this topic. However, additional research is essential to comprehensively elucidate the underlying mechanisms of MSCs-EVs in treating AP-induced cardiac injury, as well as to ascertain their safety and efficacy.

**More information:** Long-Fei Pan et al, Could extracellular vesicles derived from mesenchymal stem cells be a potential therapy for acute pancreatitis-induced cardiac injury?, *World Journal of Stem Cells* (2023). [DOI: 10.4252/wjsc.v15.i7.654](https://doi.org/10.4252/wjsc.v15.i7.654)

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