



## Extracellular Vesicles: A New Mechanism of Intercellular Communication for Immune Regulation in Cancer, Autoimmune Diseases, and Infectious Diseases

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### Message from the Guest Editor

Extracellular vesicles (EVs), released by eukaryotes, archaea, and bacteria, are universal and evolutionally conserved mechanisms for intercellular communication. EVs carry various active biomolecules, such as DNA, RNA, proteins, and lipids, and deliver them to adjacent and distant cells in the body. Previous studies have demonstrated intercellular communication between the immune system and interacting cells via EVs. Recent studies have further developed engineered EVs to modulate the immune system. EVs can be found in the blood as well. Therefore, the assessment of circulating EVs is an active area of research for identifying reliable biomarkers of disease progression and therapy response. Imaging techniques to monitor the efficiency of immunomodulatory or therapeutic EVs are also being developed. Despite the exciting potential of EVs as clinical therapeutics, however, additional work is needed to fully characterize their biodistribution and pharmacokinetics, as well as reproducible EV production.





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## Message from the Editor-in-Chief

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