Special Issue

Omics Approaches to Study Extracellular Vesicles for Diagnosis and Treatment of Cancer 2.0

Message from the Guest Editor

Within the last decade, extracellular vesicles (EVs) have been recognized as a new mechanism of intercellular communication through the delivery of bioactive molecules such as proteins, metabolites, lipids, and nucleic acids, including messenger RNAs (mRNAs) and microRNAs (miRNAs). Their essential role in cancer biology has been highlighted in several recent studies. Cancer cell-derived EVs promote tumor progression by modulating the immune response, reprogramming the tumor microenvironment, and stimulating metastasis. Profiling the contents of EVs may further elucidate their role in cancer progression, early detection, and identification of therapeutic targets. New advancements in omics-based techniques such as genomics, transcriptomics, proteomics, and metabolomics, have contributed to a deeper understanding of molecular mechanisms through which EVs influence cancer biology. Therefore, the purpose of this Special Issue is to publish omics-based approaches studying extracellular vesicles to advance diagnosis and treatment of cancer on a molecular level.

Guest Editor

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