

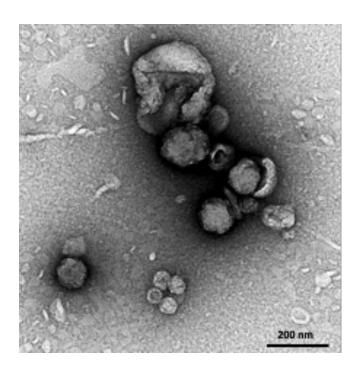
## I SEMINARI DEL DIPARTIMENTO DI MEDICINA MOLECOLARE E TRASLAZIONALE

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Tissue-derived extracellular vesicles: optimization of the isolation protocol and their use as cancer biomarkers

Mercoledí 1 Febbraio 2023 Ore 15:00, aula consiliare



Extracellular vesicles (EVs) are heterogenous lipid membrane structures released by all cells and able to transfer their cargo into cells. They have been isolated from body fluids but studies focusing directly on tissue-derived EVs are limited. However, to identify relevant EV-based cancer biomarkers, tissue-derived EVs are much preferred over those derived from cell lines.

In this presentation a protocol to isolate up to six different EV subpopulations directly from human melanoma metastatic tissues will be described. Moreover, we will investigate the potential use of melanoma-derived EVs as disease biomarkers. We will explore the presence of tissue-derived EVs in the plasma of patients affected by melanoma, breast cancer and ovarian cancer. Then, we will determine whether DNA enclosed in melanoma-derived EVs could potentially be a more precise source of cancer-specific DNA compared to cell free DNA.

Seminario organizzato nell'ambito delle attività didattiche del Dottorato di Ricerca in *Precision Medicine* Ospite: Prof. Paolo Bergese