

Cells' "exosomes" may improve the delivery of anticancer drugs to tumors

APRIL 20, 2022 - A new study published in *Cancer Medicine* indicates that exosomes, or small bubbles that transport molecules from one cell to another, can be effective vehicles for delivering cancer treatments to tumors.

In the study, researchers used exosomes produced by cells called adipose-derived mesenchymal stem cells (ADSCs) to deliver an RNA-based anti-cancer treatment (miR-138-5p) to bladder cancer tumors in mice.

"The present results reveal that ADSC-derived exosomes are an effective delivery vehicle for small molecule drugs in vivo, and exosome-delivered miR-138-5p is a promising therapeutic agent for bladder cancer treatment," the authors wrote.

Full Citation: "Evaluating adipose-derived stem cell exosomes as miRNA drug delivery systems for the treatment of bladder cancer." Tianyao Liu, Tianhang Li, Yufeng Zheng, Xinyan Xu, Rui Sun, Shoubin Zhan, Xu Guo, Zihan Zhao, Wenjie Zhu, Baofu Feng, Fayun Wei, Ning Jiang, Jin Wang, Xi Chen, Feng Fang, Hongqian Guo, Rong Yang. Cancer Medicine; Published Online: April 20, 2022 (DOI: 10.1002/cam4.4745).

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