# Article information:

Engineered Bacterial Outer Membrane Vesicles as Controllable Two‐Way Adaptors to Activate Macrophage Phagocytosis for Improved Tumor Immunotherapy - Feng - 2022 - Advanced Materials - Wiley Online Library  
<https://onlinelibrary.wiley.com/doi/10.1002/adma.202206200>

# Article summary:

1. Immunotherapy has become a revolutionary paradigm for tumor treatment, but the immunosuppressive tumor microenvironment (TME) hinders its outcomes.

2. Engineered bacterial outer membrane vesicles (OMVs) were constructed as a controllable two-way adaptor to activate macrophage phagocytosis in the TME via multiple pathways.

3. The OMV-CD47nb-mediated phagocytosis of tumor cells by TAMs induced the release of tumor antigens, which were further processed and presented by antigen-presenting cells (APCs) to the draining lymph nodes, subsequently evoking T cell-mediated antitumor immunity.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article is generally reliable and trustworthy, as it provides detailed information about the research conducted and presents evidence to support its claims. The authors provide a comprehensive overview of the current limitations of immunotherapy in solid tumors, and explain how their engineered OMVs can be used to overcome these limitations. They also provide evidence from experiments conducted in vitro that demonstrate how their OMV-CD47nb can activate macrophage phagocytosis via multiple pathways in the TME.

The article does not appear to have any major biases or one-sided reporting, as it presents both sides of the argument equally and objectively. It does not make any unsupported claims or present any missing points of consideration or evidence for its claims made. Furthermore, it does not contain any promotional content or partiality towards either side of the argument.

The only potential issue with this article is that it does not discuss possible risks associated with using engineered OMVs for tumor immunotherapy, such as potential toxicity due to high doses of OMVs or adverse effects on other organs due to systemic delivery of OMVs. However, this is likely due to space constraints rather than an intentional omission by the authors, so this should not detract from the overall trustworthiness and reliability of this article.

# Topics for further research:

* Risks of engineered OMV immunotherapy
* Systemic delivery of OMVs
* Toxicity of OMVs
* Adverse effects of OMVs
* Immunotherapy for solid tumors
* Macrophage phagocytosis pathways in TME

# Report location:

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