

## Special Issue

# Extracellular Vesicles as Drug Delivery Systems

### Message from the Guest Editor

There is growing interest for extracellular vesicles (EVs) as tools for drug delivery. EVs are membrane vesicles released in cell medium and retrieved in every fluid of the body, representing a mean not only for the disposal of unwanted material, but also for cell communication. The discovery that EVs carry nucleic acids, mostly ncRNA but also mRNA, has demonstrated that they can be considered a mean of horizontal gene transfer. EVs are relatively stable in circulating body fluids as compared to synthetic lipid nanoparticles, and they can overcome natural barriers. These features have opened new perspectives for the use of EVs as drug delivery vehicles, including gene delivery. EVs from different sources have been loaded with drugs and nucleic acids. However, there are safety issues to solve and methodological problems to fix about EV isolation from different sources, separation from contaminants, and loading with drugs. In addition, molecular mechanisms underlying their targeting ability and circulation stability are far from being elucidated. The aim of this Issue of *Pharmaceutics* is to collect research and review articles dealing with the use of EVs for drug delivery.

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 November 2021)



## Pharmaceutics

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