

Supplementary material

Bioinspired Electrospun Nanofibrous Dressings Loaded with Mentha-Derived Exosome-like Vesicles for Antibacterial and Immunomodulatory Burn Healing

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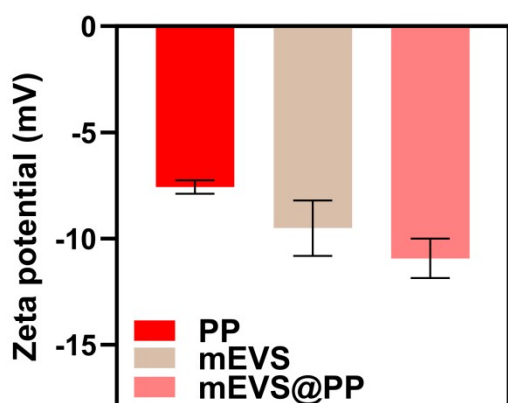


Figure S1. Zeta of PP、mEVs and mEVs@PP.

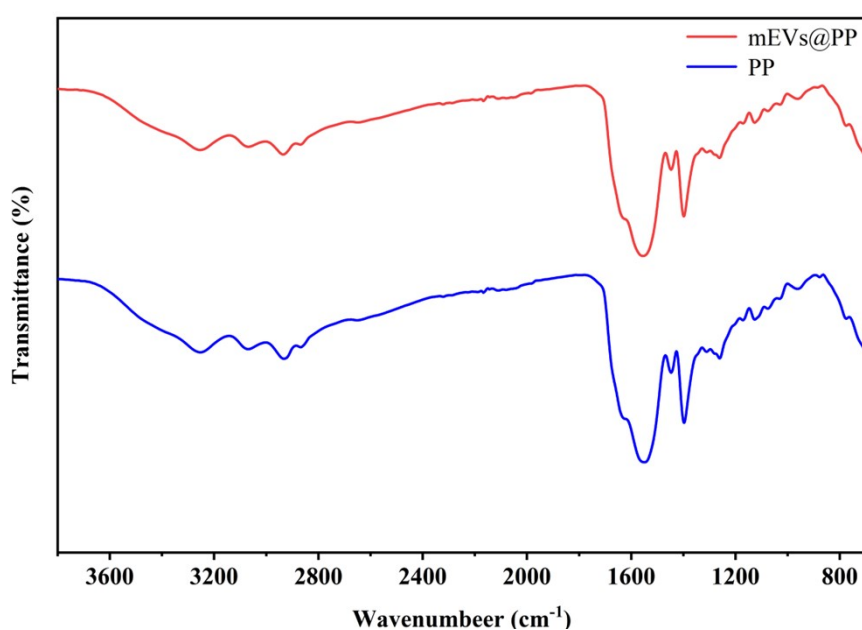


Figure S2. FTIR spectra of PP、mEVs@PP. PP electrospun fibers (blue curve) and mEVs@PP composite scaffolds (red curve) exhibited strong characteristic absorption peaks at 1549.59 cm^{-1} and 1397.23 cm^{-1} , corresponding to the I band of amide C=O stretching vibrations and the II band of amide N-H bending and C-N stretching vibrations in the polyamino acid backbone, respectively.

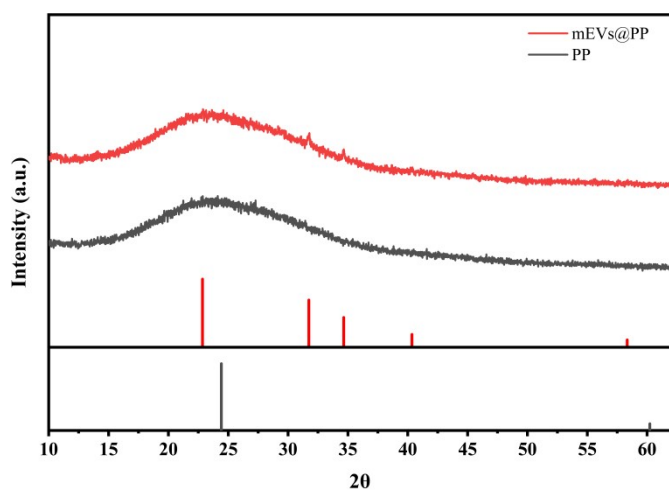


Figure S3. XRD of PP、mEVs@PP.

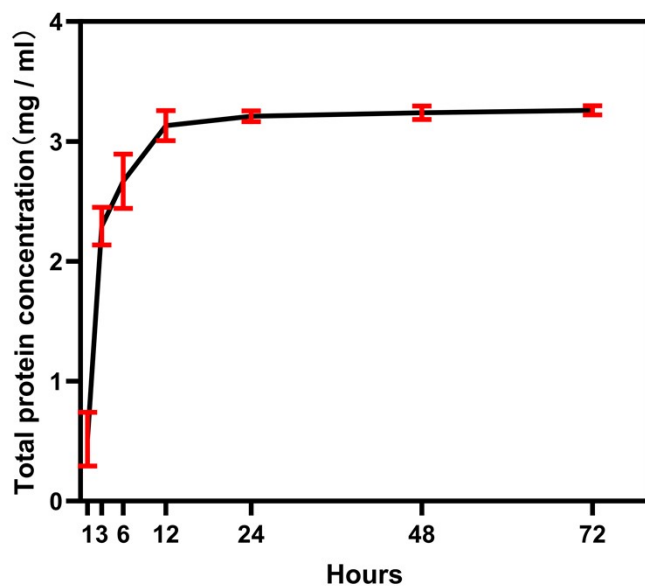


Figure S4. The exosome release rate of mEVs@PP. 1 g of mEVs@PP electrospun fibers were dissolved in 5 ml PBS and cultured in a shaker at 37° C and 100 rpm. Protein content in the supernatants was detected at 1, 3, 6, 12,24,48, and 72 hours using the BCA method.

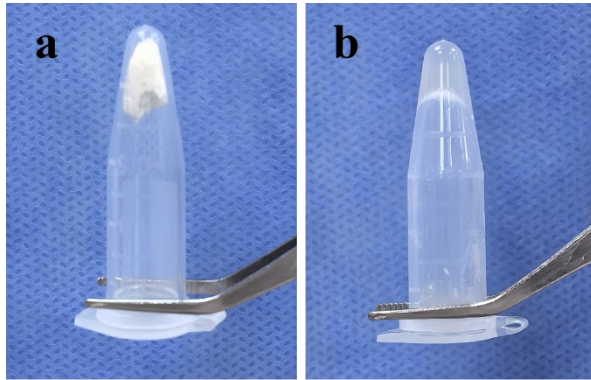


Figure S5. Schematic diagram of water absorption swelling capacity and strong adsorption capability of mEVs@PP electrospun. a) Dry mEVs; b) Adhesive extracellular matrix formed after water saturation.

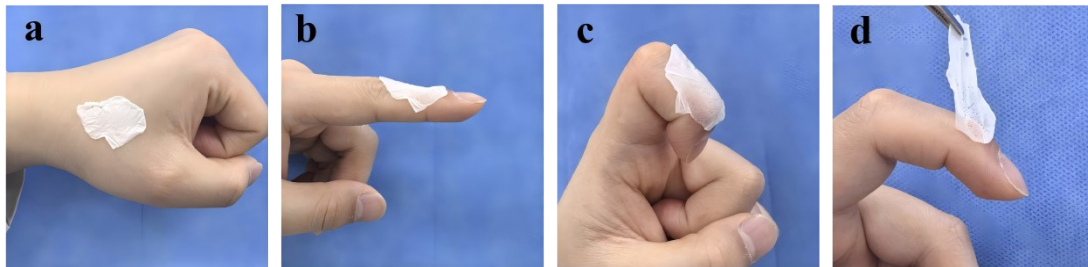


Figure S6. Macroscopic observation of mEVs@PP electrospun on human skin.