Cite this as: Yanjin WANG, Yifei CHEN, Fuji YANG, Xiaolong YU, Ying CHU, Jing ZHOU, Yongmin YAN, Jianbo XI. MiR-4465-modified mesenchymal stem cell-derived small extracellular vesicles inhibit liver fibrosis development via targeting LOXL2 expression[J]. Journal of Zhejiang University Science B, 2024, 25(7): 594-604. http://doi.org/10.1631/jzus.B2300305

MiR-4465-modified mesenchymal stem cell-derived small extracellular vesicles inhibit liver fibrosis development via targeting LOXL2 expression

Key words: MSC, small extracellular vesicle, miR-4465, HSC, liver fibrosis

Research Summary

This research mainly focused on the role of MiR4465-modified MSC-sEV (MSC-sEV^{miR4465}) in liver fibrosis development in the following aspects:

- **Effect of miR4465 on LOXL2 downregulation**
- **Role of miR4465 in collagen deposition and HSC activation**
- **The potential therapeutic strategy of MSC-sEV^{miR4465} in liver fibrosis**

Innovation points

- **MiR4465 inhibited collagen deposition in LX-2 via downregulating LOXL2 expression**

- **MSC-sEV^{miR4465} inhibited LOXL2 expression and collagen synthesis in LX-2 and CCl4-induced fibrotic livers**

- **MSC-sEV^{miR4465} inhibited the migration and invasion of HepG2 in vitro**

Figure 4

Innovation points