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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

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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**

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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**

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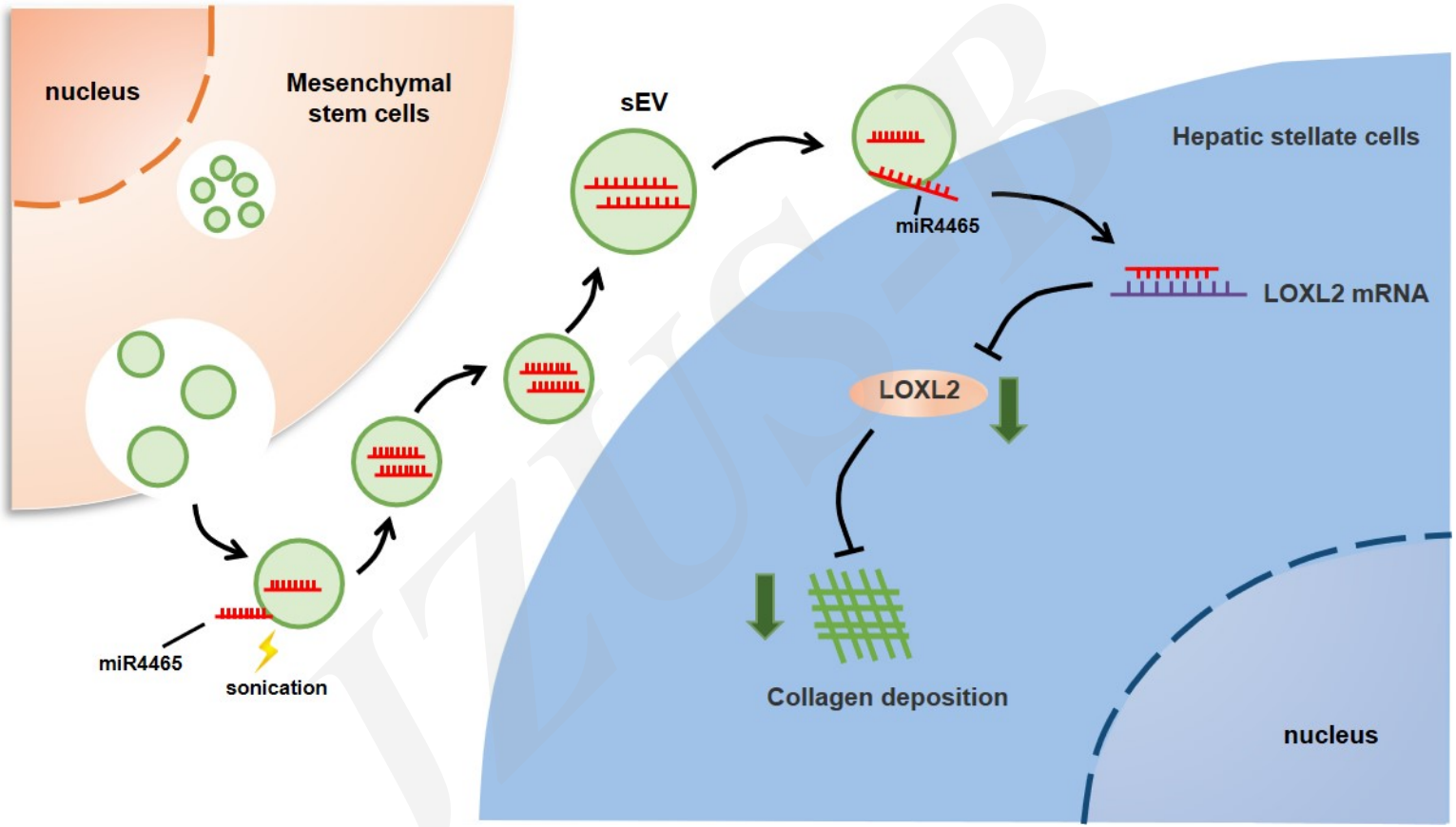
Figure 4

Innovation points