

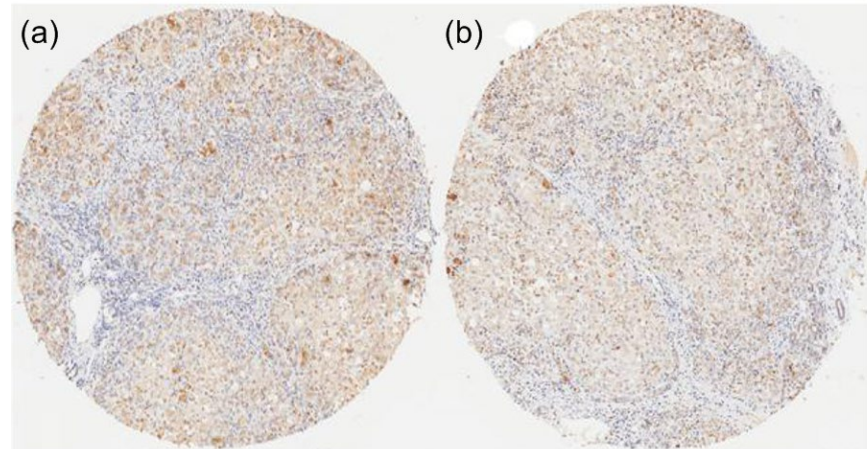
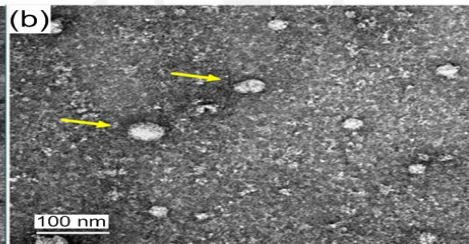
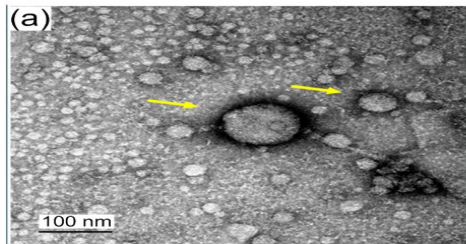
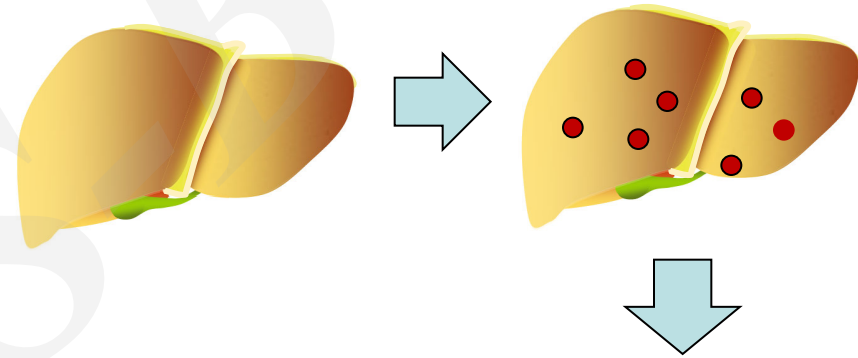
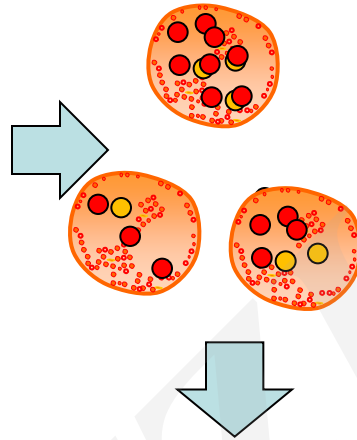
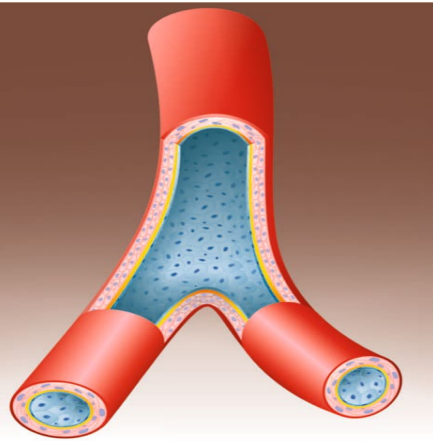
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# **Exosome-derived galectin-9 may be a novel predictor of rejection and prognosis after liver transplantation**

**Key words:** Liver transplantation; Acute cellular rejection; Exosome; Galectin-9

# Research Summary

**This review mainly focused on** predicting and monitoring acute rejection by non-invasive methods **in the following aspects:**



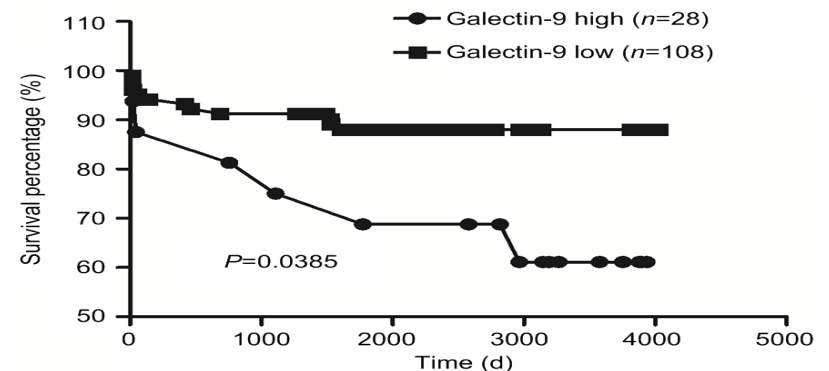
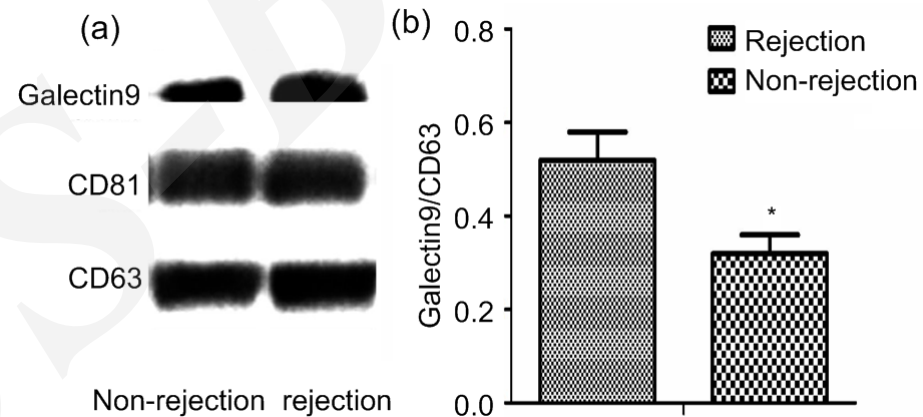
- Exosomes
- Resected liver tissue sample

# Innovation points

- **Predicting and monitoring acute rejection** by novel non-invasive methods

- **Exosome-derived galectin-9** may be a novel biomarker for predicting and monitoring liver ACR

- **Intrinsic galectin-9 expression in the resected livers** may be a marker of recipient immune status and associated with ACR/survival



# ***Innovation points***

**A series of comprehensive figures/tables were generated to summarize our work.**

**Table 1 | Clinical characteristics of rejection and nonrejection patients used for exosome and galectin-9 expression analyses**

**Figure 1 | Identification of exosome with electron microscopy**

**Table 2 | Demographics and clinical characteristics of patients for galectin-9 expression analysis in validation study**

**Figure 2 | Galectin-9 expression in serum exosomes**

**Figure 3 | Galectin-9 expression in resected livers**

**Figure 4 | Survival of the high and low galectin-9 expression groups**

**Table 3 | Characteristics of transplant recipients in the high and low galectin-9 expression groups**

**Table 4 | Multivariate analysis of overall survival in all transplant recipients**