



## **Samenvatting proefschrift**

**J. Wang**

‘Extracellular Vesicles: Key Mediators of Intercellular Communication between Liver Cells’

**Promotiedatum: 26 juni 2025**

**Rijksuniversiteit Groningen**

### **Promotores:**

Prof. dr. A.J. Moshage

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This thesis focuses on cellular crosstalk during the progression of metabolic dysfunction-associated steatotic liver disease (MASLD), formerly known as NAFLD.

My PhD thesis, conducted within the Department of Gastroenterology and Hepatology at the University Medical Center Groningen, explores intercellular communication within the liver microenvironment, with particular emphasis on extracellular vesicle (EV)-mediated signaling between liver sinusoidal endothelial cells (LSECs), hepatic stellate cells (HSCs), hepatocytes, and Kupffer cells. Through the development of in vitro co-culture models and functional assays, I have underscored the critical roles of specific cell-derived EVs in mediating intercellular communication within the liver microenvironment, particularly in the progression and potential treatment of MASLD.

The hepatological nature of the thesis is reflected in its core aim: to uncover novel mechanistic insights into early fibrogenic signaling during MASLD progression, potentially contributing to future therapeutic targeting.

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