

# **Glycobiology of an extracellular matrix glycoprotein, vitronectin, during skin regeneration and repair**

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We discovered that the survival of rat hepatic stellate cells (rHSC) were suppressed on vitronectin (VN) which had been synthesized in the early stage of liver regeneration after partial hepatectomy<sup>1</sup>). The changes in glycosylation of VN, especially decreased sialylation plays a modulatory role for rHSC spreading. In this study, we aimed at elucidating whether VN regulates the dermal fibroblast adhesion and motility during the tissue-remodeling. Primary culture of the mouse dermal fibroblast (MDF) was isolated and analyzed for adhesion and spreading on glycosylation-modified VNs. It was found that decreased sialylation of VN not only attenuated the cell adhesion and spreading but changed the cellular signaling of dermal fibroblasts, MDF and Swiss 3T3.