HEPARIN INHIBITS P388D1 CELLS ADHERENCE AND METASTASIS TO PERIPHERAL LYMPH NODES IN VITRO AND IN VIVO

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ABSTRACT

Heparin is known to attenuate tumor metastasis mainly by inhibiting the interaction between L-selectin and its ligand. However, the mechanism of heparin on lymphoma is unclear. This report demonstrates that both L-selectin/h IgG chimeric protein and heparin treatment can significantly inhibit the adhesion of P388D1 cells onto lymphatic sinusoids and marginal sinusoids in vitro, that heparin can attenuate P388D1 cell homing to lymph nodes in vivo at 12 hours, and that heparin significantly reduced P388D1 cells metastasis to lymph nodes 18 days after injection. These results indicate that heparin may act as a ligand for L-selectin on the P388D1 macrophage-like lymphoma cell line to attenuate tumor growth and metastasis.