Supplementary information

Radiation-induced Galectin-1 by endothelial cells: A promising molecular target for preferential drug delivery to the tumor vasculature

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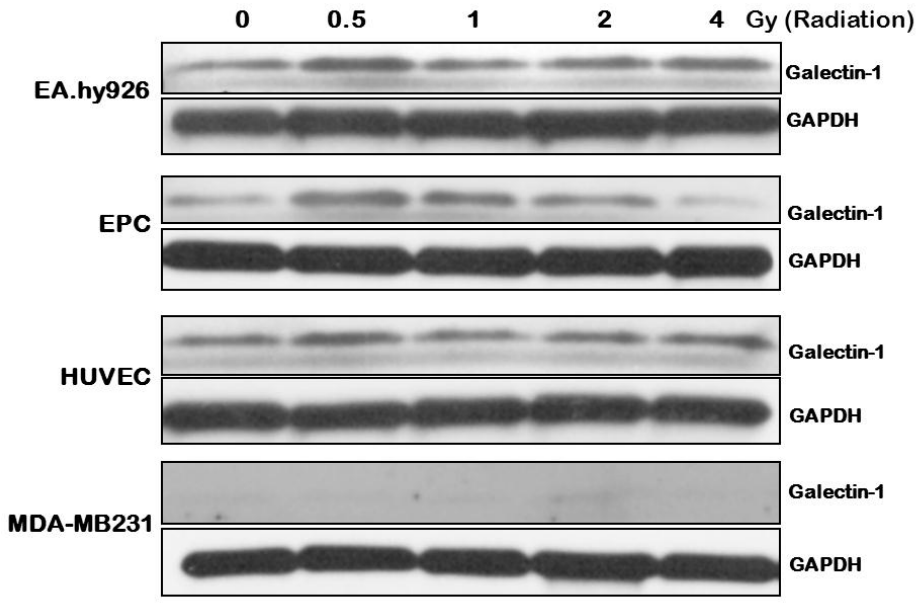
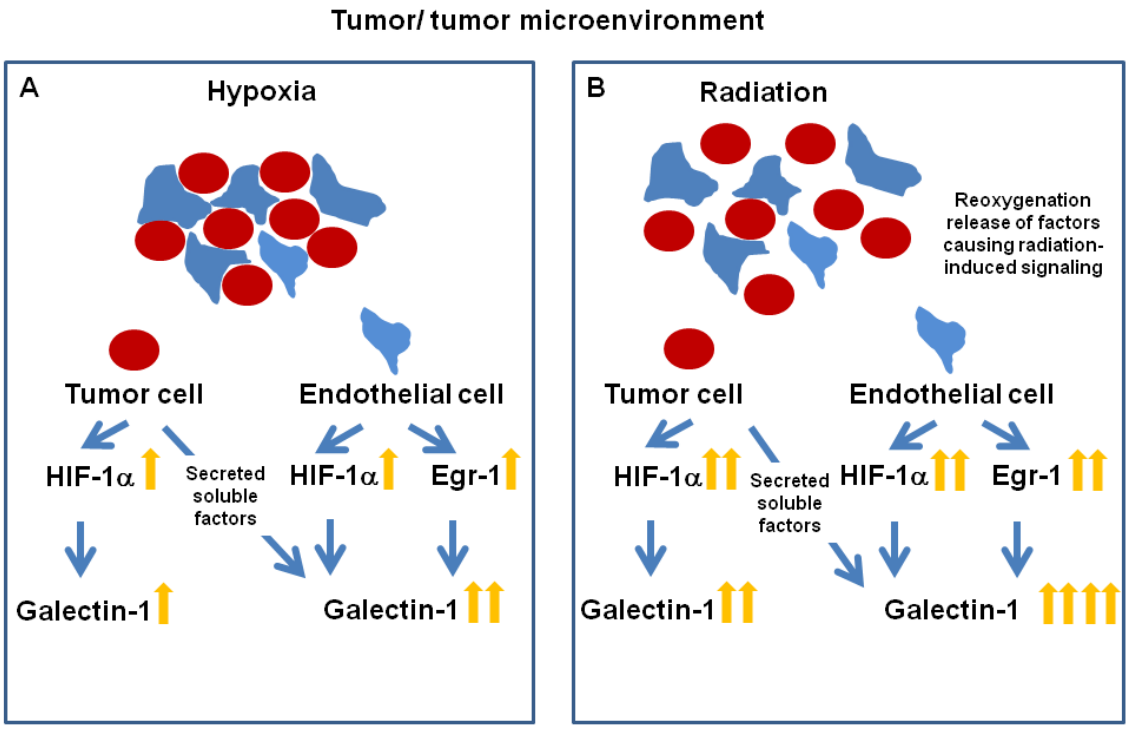
Journal of Molecular Medicine 2012

Supplemental Figure 1



Supplemental Figure 1: Radiation exposure induces the cell-surface expression of Galectin-1 in endothelial cells. Expression profile of Galectin-1 after increasing dose 0.5-4 Gy of radiation exposure in the membranous fractions of various endothelial cell types [EA.hy926, Endothelial Progenitor cells (EPC) and HUVEC] and the human breast cancer cell line (MDA-MB231). The blots were reprobed of GAPDH to assess equal loading.

Supplemental Figure 2



Supplemental Figure 2: Schematic of regulation of galectin-1 in tumor/ tumor microenvironment. (A) Under the hypoxic conditions in the tumor, galectin-1 increase is regulated by elevated levels of HIF-1α in the tumor cells and factors secreted by the tumor cells and the endothelial cell specific transcription factor Egr-1 in the endothelial cells. **(B)** Radiation exposure of the tumors causes release of stress factors that trigger the production of HIF-1α and Egr-1 which in turn result in a further increase in galectin-1.