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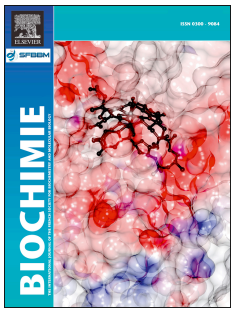

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Selectin-independent adhesion during ovarian cancer metastasis

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ABSTRACT

Purpose: Ovarian cancer (OvCa) progression mainly takes place by intraperitoneal spread. Adhesion of tumor cells to the mesothelial cells which form the inner surface of the peritoneum is a crucial step in this process. Cancer cells use in principle different molecules of the leukocyte adhesion cascade to facilitate adhesion. This cascade is initiated by selectin-ligand interactions followed by integrin - extracellular matrix protein interactions. Here we address the question whether all tumor cells predominantly employ selectin-dependent leukocyte-like adhesion cascade (SDAC) or whether they use integrin mediated adhesion for OvCa progression as well.

Methods: A comparative transcriptomic analysis of the human OvCa cell lines OVCAR8 and SKOV3 was performed. Intraperitoneal xenograft model of OVCAR8 cells was used to determine whether there is a correlation between SDAC gene expression and the metastatic

Abbreviations: OvCa: ovarian cancer; c-Fos: a transcription factor of the activating protein-1 (AP-1) family; OVCAR8-c-Fos: OVCAR8 cells overexpressing c-Fos; SKOV3-c-Fos: SKOV3 cells overexpressing c-Fos; SDAC: selectin-dependent leukocyte-like adhesion cascade.