

## CLINICAL SIGNIFICANCE OF CD44 EXPRESSION IN SEROUS OVARIAN CANCER

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Ovarian cancer is a devastating disease causing more than 180.000 deaths a year, with often insidious course, delayed clinical diagnosis, and limited response to therapy. The CD44 cell surface glycoprotein is involved in metastatic spread and progression in various types of cancer, including ovarian serous cancer. This study aimed to investigate the profile of CD44 immunohistochemical expression in ovarian serous cancer, and to determine its potential significance in prognosis of the disease. A total of 124 primary serous ovarian cancers were analyzed for the expression of CD44 by immunohistochemical method and assessed for possible relation with clinical and pathological parameters, as well as with patients' survival. High CD44 expression was observed in 67.7% of the investigated tumors. A positive family history of malignancies was associated with low expression CD44 in cancer cells ( $p = 0.004$ ). Low expression of CD44 was more frequent in FIGO stage IV tumors than in other stages, as well as in high grade cancer compared to low grade, however these differences were not statistically significant. Mean survival was significantly longer in patients with high CD44 expression compared to those with absent or low expression ( $p = 0.009$ ). The fatal outcome during the follow-up period occurred in 65% of patients with low CD44 expression, and in 42.86% of patients with high CD44 expression, with statistically significant difference between the groups ( $p = 0.035$ ). In conclusion, the adverse clinical course of serous ovarian cancer was associated with the absence or low expression of CD44.

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