

CORRECTION

Correction: Immunohistochemical expression and predictive value of PAX3 and FOXO1 proteins in high-grade serous ovarian carcinomaDejan Tirić^{1,2,*}, Dragan Soldo^{1,2}, Vajdana Tomić^{1,2,3}, Nikolina Penava^{1,2}, Kristina Katić⁴, Marija Milković Periša⁵¹Department of Obstetrics and Gynecology, University Clinical Hospital Mostar, 88000 Mostar, Bosnia and Herzegovina²Faculty of Medicine, University Mostar, 88000 Mostar, Bosnia and Herzegovina³Faculty of Health Studies, University Mostar, 88000 Mostar, Bosnia and Herzegovina⁴Department of Obstetrics and Gynecology, University Hospital Centre Zagreb, 10000 Zagreb, Croatia⁵School of Medicine, University of Zagreb, 10000 Zagreb, Croatia***Correspondence**

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In the original publication [1], references [3], [19], [20], and [34] have been replaced (or corrected) to improve precision and relevance. The correct references are as follows:

Reference 3

[3] Menon U, Gentry-Maharaj A, Burnell M, Singh N, Ryan A, Karpinskyj C, *et al.* Ovarian cancer population screening and mortality after long-term follow-up in the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS): a randomised controlled trial. *The Lancet*. 2021; 397: 2182–2193.

Reference 19

[19] Zhang N, Qiu J, Zheng T, Zhang X, Hua K, Zhang Y. Goserelin promotes the apoptosis of epithelial ovarian cancer cells by upregulating forkhead box O1 through the PI3K/AKT signaling pathway. *Oncology Reports*. 2018; 39: 1034–1042. Erratum in: *Oncology Reports*. 2025; 54: 77.

Reference 20

[20] Chirshhev E, Hojo N, Bertucci A, Sanderman L, Nguyen A, Wang H, *et al.* Epithelial/mesenchymal heterogeneity of high-grade serous ovarian carcinoma samples correlates with miRNA let-7 levels and predicts tumor growth and metastasis. *Molecular Oncology*. 2020; 14: 2796–2813.

Reference 34

[34] Ma L, Sun Y, Li D, Li H, Jin X, Ren D. Overexpressed ITGA2 contributes to paclitaxel resistance by ovarian cancer cells through the activation of the AKT/FoxO1 pathway. *Aging*. 2020; 12: 5336–5351. Erratum in: *Aging*. 2021; 13: 24914.

To ensure strict scientific accuracy and direct correspondence with the supporting literature, we therefore propose the following revisions:

The Revised paragraph (Reference 19):

“Dysregulation of FOXO1 in ovarian cancer has been linked to PI3K/AKT pathway activity, where AKT-mediated phos-

phorylation leads to functional inactivation of FOXO1 and impaired apoptotic regulation. Experimental evidence has demonstrated that modulation of the PI3K/AKT–FOXO1 axis significantly affects apoptosis in epithelial ovarian cancer. Furthermore, FOXO1 has been shown to regulate SMC4 transcription and METTL14-mediated m6A modification, and a clinical correlation between FOXO1, METTL14 and SMC4 expression has been identified in ovarian cancer [18, 19].”

The Revised paragraph (Reference 20):

“Mutations in PAX genes have been implicated in a wide range of human diseases, from hypothyroidism and diabetes to various cancers. Of particular interest is the oncogenic potential attributed to PAX fusions, exemplified by the PAX3-FOXO1 fusion protein (PAX3::FOXO1). This fusion protein exhibits a markedly enhanced transcriptional activity compared to PAX3 alone, underscoring its significant influence in oncogenesis. PAX3-FOXO1 has been extensively studied in rhabdomyosarcoma and other malignancies, where it regulates genes involved in cellular proliferation, migration, and survival [13]. Given the established role of epithelial–mesenchymal transition (EMT) in high-grade serous ovarian carcinoma progression and metastasis, the potential involvement of PAX3-related pathways in similar biological processes warrants further investigation [13, 20].”

These adjustments are technical in nature and are strictly limited to clarification of citation alignment and wording precision. They do not alter the study design, data, results, interpretation, or the overall scientific conclusions of the work.

REFERENCES

- [1] Tirić D, Soldo D, Tomić V, Penava N, Katić K, Milković Periša M. Immunohistochemical expression and predictive value of PAX3 and FOXO1 proteins in high-grade serous ovarian carcinoma. *European Journal of Gynaecological Oncology*. 2025; 46: 74–83.