multivariate analysis on the ESGO/ESMO/ESTRO risk classification and results were statistically significant for both DFS (p=0.003) and OS (p=0.0001).

Conclusion Almost all the considered prognostic factors influenced the presence of recurrence, but the stage is the most important factor while LVSI correlates with distance metastasis. The definition of the risk factors must be considered to develop targeted therapeutic pathways.

Disclosures The authors declare that the research was conducted in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

METFORMIN AS A PREVENTIVE AND THERAPEUTIC MODALITY IN ENDOMETRIAL CANCER: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROL TRIALS

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Introduction/Background Endometrial cancer (EC) is the most commonly diagnosed gynecological malignancy in the developed countries. Obesity, diabetes mellitus and infertility are some of the contributory factors. Some patients with EC wish to preserve their fertility or others have several comorbidities that contraindicate surgery. These groups of patients could benefit from a conservative treatment strategy such as the use of metformin. This agent is an option in women with increased EC risk as well as in those with atypical endometrial hyperplasia.

Methodology We evaluated the protective effects of metformin in EC patients, its preventive role in breast cancer and obese patients and its effectiveness, safety and efficacy in addition to progesterone monotherapy in treatment of fertility sparing candidates. We reviewed the literature and then conducted a meta-analysis of the relevant parameters. A total of 6 studies was included in the meta-analysis.

Results Comparing the pre-surgical treatment with metformin versus placebo, meta-analysis of mean difference in Ki-67 after treatment among two groups, revealed no difference (MD -7.10, 95% CI -23.31 to 9.11, p=0.39). Meta-analysis of fertility sparing EC management with a combination of megestrol acetate (MA) and metformin (500 mg three times a day) in comparison with monotherapy with 160 mg daily MA revealed no difference in either complete response or partial response rates (166 patients OR 2.94, 95% CI 0.85 to 10.15, p=0.09 and 166 patients OR 0.76, 95% CI 0.34 to 1.66, p=0.49, respectively). Regarding breast cancer survivors under tamoxifen, metformin was related with significantly reduced median endometrial thickness after 52 weeks of evaluation when compared to women in placebo group (2.3 mm vs 3.0 mm, p=0.05).

Conclusion Metformin neither was found to have a preventative role against the development of endometrial cancer nor a beneficial one in addition to the progesterone monotherapy for EC fertility sparing candidates. However, metformin was found to be protective in breast cancer survivors under tamoxifen.

Disclosures Nothing to disclose.