patients underwent surgical staging including sentinel lymph node biopsy or systematic lymphadenectomy. Patients with FIGO stage IV were excluded. Molecular analysis included immunohistochemistry for p53 and MMR proteins, microsatellite instability assay, and Next Generation Sequencing for POLE exonuclease domain and TP53. ECs were classified into 4 molecular classes (POLEmut, MMR deficiency [MMRd], p53 abnormality [p53abn], and non-specific molecular profile [NSMP]). Associations between molecular classes and lymph nodes metastasis were evaluated with univariate and multivariate analysis.

**Results** In total, 317 patients meeting inclusion criteria were included. Molecular classification showed 150 (47.3%) NSMP, 101 (31.9%) MMRd, 38 (12%) p53abn, and 28 (8.8%) POLEmut. Among them, 64 (20.2%) had lymph nodes metastasis, including 29 (45.3%) NSMP, 26 (40.6%) MMRd, 8 (12.5%) p53abn, and 1 (1.6%) POLEmut. In the univariate analysis high grade (p = 0.03), myometrial invasion (p < 0.0001), cervical stromal invasion (p = 0.0004), cervical stromal invasion (p < 0.0001), lymph vascular space invasion (LVSI) (p < 0.0001), positive peritoneal cytology (p = 0.02), and uterine serosal involvement (p = 0.03) were predictors of lymph nodes metastasis, while POLEmut (vs. other risk classes) was a protective factor (p = 0.02). In the multivariate analysis, myometrial invasion (p < 0.0007), LVSI (p < 0.0001), and peritoneal cytology (p = 0.02) were independent predictors of lymph nodes metastasis, while POLEmut class showed a protective role (p = 0.03).

**Conclusion** POLEmut class is associated with a low rate of lymph node involvement and has an independent protective role on lymph nodal metastasis. If confirmed by future studies, these results could be potentially used to tailor surgical staging.

---

**Abstract**

**Predictors of lymph nodes metastasis**

<table>
<thead>
<tr>
<th></th>
<th>NSMP</th>
<th>NSMP</th>
<th>p-value</th>
<th>Adjusted OR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>18-30</td>
<td>30-40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td>18.5 (20.5-27.4)</td>
<td>18.5 (20.5-27.4)</td>
<td></td>
<td>0.19</td>
<td>1.01 (0.89-1.07)</td>
</tr>
</tbody>
</table>

**Conclusion**

Factors affecting survival outcomes of patients with clear cell endometrial carcinoma

Vasiliis Pergialiotsis, Theano Christodoulou, Ioannis Prokopakis, Dimitrios Haidopoulos, Alexandros Rodolakis, Nikolaos Thomakos. First department of obstetrics and gynecology, National and Kapodistrian University of Athens, Athens, Greece

10.1136/ijgc-2022-ESGO.226

**Introduction/Background** Clear cell endometrial carcinoma comprises an aggressive subtype of endometrial cancer that is associated with poor survival outcomes compared to endometrioid carcinoma. It is encountered in less than 5% of cases with endometrial cancer. Biologically, it is associated with an increased propensity for lymphovascular invasion and intraperitoneal spread. The purpose of the present study is to identify patient and tumor characteristics that correlate with survival outcomes.

**Methodology** We conducted a retrospective chart review of endometrial cancer patients to evaluate survival outcomes and factors affecting survival in those with clear cell histological subtype. Stage of the disease, tumor maximal diameter, staging characteristics patient phenotype, smoking status and type of adjuvant therapy were considered as potential parameters that affected survival.

**Results** Sixty patients were identified with a median follow-up duration of 37 months (8–72). Early stage disease (stage I and II) was observed in 32 patients. Of those 26 patients experienced disease recurrence and 16 died during the follow-up period. Patients recurred within 15.5 months from initial treatment (95% CI 9.7–21.3 months). Death occurred within a median follow-up of 31.2 months (95% CI 16.1–54.7 months). Disease stage (p < 0.001), patient age (p = 0.023) and use of adjuvant chemotherapy (p were independently associated with progression free survival, whereas only stage of the disease (p = 0.008) was independently associated with overall survival rates.

**Conclusion** Clear cell carcinoma is an aggressive form of cancer that is associated with increased relapse rates and a short interval to recurrence. Stage of the disease appears to be the most important determinant of progression free and overall survival rates. Cases treated with adjuvant chemotherapy appear to have improved chances of avoiding recurrences, however, its use does not seem to increase overall survival rates.

---

**References**

1. Vimalanand S Prabhu, 2Sneha S Kelkar, 3Jingchuan Zhang, 2Yoscar M Ogando, 4Nicola Milles, 3Christian Marth, 1Merck and Co., Inc., Rahway, NJ; 2OPEN Health, Bethesda, MD; 3Eisai Inc., Nutley, NJ; 4M3 Clinical Data Services, Abingdon, UK; 5Medical University Innsbruck, Innsbruck, Austria

10.1136/ijgc-2022-ESGO.227

**Introduction/Background** Growing interest in the use of novel therapies in earlier setting is changing the treatment approach in patients with recurrent or advanced endometrial cancer (aEC). However, real-world treatment patterns and outcomes

---

**Abstract**

**Factors affecting survival outcomes of patients with clear cell endometrial carcinoma**

**Conclusion** POLEmut class is associated with a low rate of lymph node involvement and has an independent protective role on lymph nodal metastasis. If confirmed by future studies, these results could be potentially used to tailor surgical staging.