Real-World Endometrial Cancer Mortality Outcomes at Brazilian Reference Women Healthcare Public Hospital

André Mattar¹; Graziela Bernardino²; Larissa Rodrigues²; Marcella Allemar²; Roney César Signorini Filho¹; Pedro Navarro¹; Renata Arakelian¹; Gustavo Piotto¹; Michelle Samora de Almeida¹; Luiz Henrique Gebrim³; Straus Tanaka²

¹Centro de Referência da Saúde da Mulher – Hospital da Mulher, São Paulo, Brazil; ²GSK, Rio de Janeiro, Brazil; ³Hospital Beneficência Portuguesa, São Paulo, Brazil.





Background



Endometrial cancer (EC) is mostly diagnosed in an earlier phase; however, patients can present a poor prognosis when the disease recurs or in the advanced/metastatic disease with a median progression free survival shorter than 12 months.^{1,3}

In addition, there are studies that present correlation between recurrence in EC and reduction in overall survival (OS).^{2,3}

Aim



Due to the lack of local information, the aim of this study was to investigate the mortality data of patients with EC during the period of 2010 to 2021 in a Brazilian reference women healthcare public hospital located in São Paulo (SP) to provide clarity on mortality data in EC across different tumor characteristics.

Methods

- This was a retrospective database study using data from a reference public hospital. Database was structured from the hospital's electronic medical records (EMR)
- Patients were selected based on:



18 years or older

- ICD-10 C54.1 (malignant neoplasm) of endometrium)
- hospital between 2010 and 2021
- First medical consultation in the



- Patients with inconsistency data (e.g. order of events inconsistent with Figure 1).
- Misfiling of EMR
- Missing treatment information

Figure 1: Standard of care clinical pattern for EC:



 The cumulative mortality rate was calculated considering each tumor's characteristics (histology, staging, tumor location, and tumor relapse) as follows:

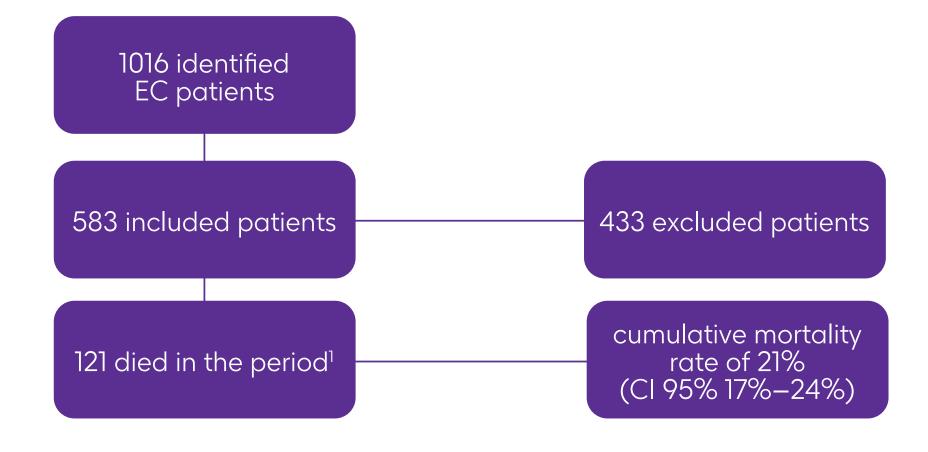
> #deaths by tumor characteristic #patients by tumor characteristic

Results

Cumulative mortality rate in the database

• From 583 cases of EC registered in the database, 121 patients died in the study period. This accounts for a cumulative mortality rate of 21%

Figure 2: Included patients and general cumulative mortality rate



¹Not all information for the 121 patients was available in the EMR and therefore was not included in the database. Missing information for studied tumor characteristics was not considered in the cumulative mortality rate calculation and is described as "unknown" in each section.

Table 1: Age

| Age | Years (mean) |
|--------------|--------------|
| At diagnosis | 64 (8.90) |

Table 2: Distribution by ethnicity

| Ethnicity | Distribution of patients |
|------------|--------------------------|
| White | 60.3% |
| Brown | 24.0% |
| Black | 9.1% |
| Asian | 3.3% |
| Unreported | 3.3% |

Table 3: **Time from diagnosis to death**

| Age | Years (mean) |
|--|--------------|
| Overall study population | 1.61 (1.39) |
| Among patients with stage I-II disease | 2.29 (1.67) |
| Among patients with stage III disease | 1.68 (0.97) |
| Among all relapsed patients | 1.84 (1.34) |

Stage III and relapsed patients presented similar time from diagnosis to death compared to overall population.

Presenting author: Straus Tanaka; straus.y.tanaka@gsk.com

Figure 3: Mortality by tumor stage

 Database did not capture stage IV death cases and stage III was the most prevalent staging in death cases (45%)

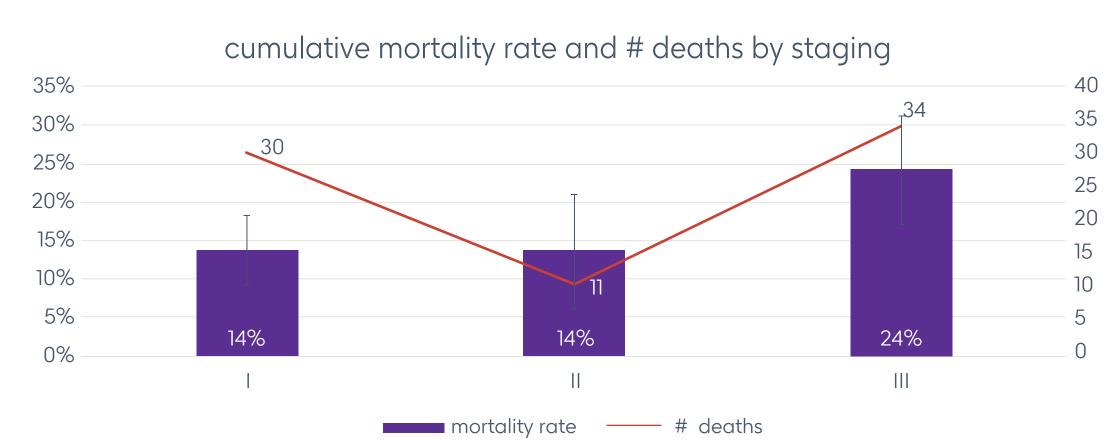
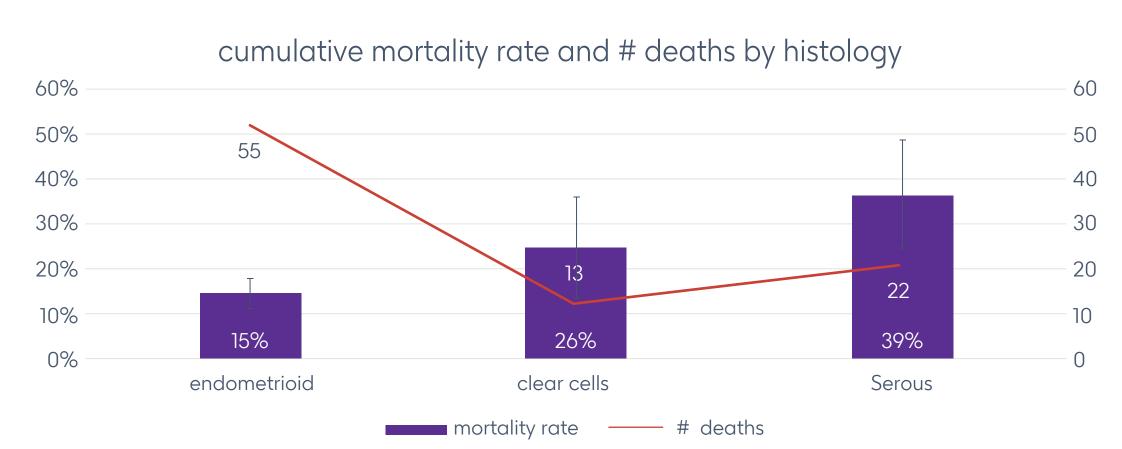


Figure 4: Mortality by histology

 Endometrioid presented the lowest cumulative mortality rate (15.3%); however, it is the most prevalent histology class (53.9%)

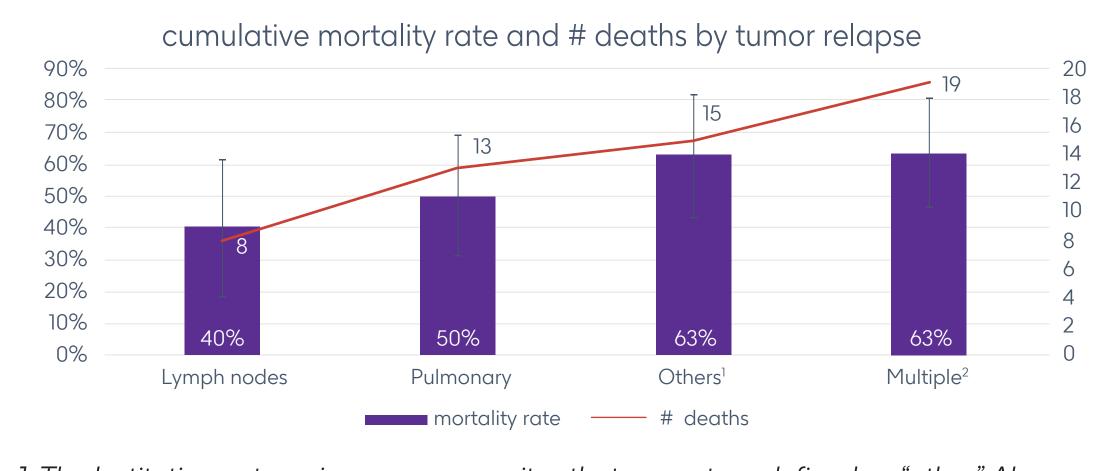


Unknown 7.8%

Mucinous, papillary and adenocarcinoma histology presented low incidence and death cases, preventing any calculation of the cumulative mortality rate with statistical significance (CI 95%).

Figure 5: Mortality by tumor relapse site

 Cumulative mortality rate was calculated across the following sites:



1. The Institution categorizes recurrence sites that are not predefined as "other." Also included in this category relapse sites with #deaths <10% (hepatic, abdomen, bone, and cerebral). 2. Multiple include relapses identified in 3 or more sites. Unknown 55%

Mortality by tumor location

 Tumors that evolved beyond the endometrium had higher cumulative mortality rate

Table 4: Cumulative mortality rate and number of deaths by tumor location at initial diagnosis:

| Tumor location | cumulative mortality rate (Cl 95%) | # deaths |
|---|------------------------------------|----------|
| Limited endometrium or up to half myometrium | 19.4% (15.6-23.2) | 81 |
| > half myometrium or up to cervical glands | 19.5% (12.2-26.8) | 22 |
| Serosal invasion and/or appendages ¹ | 25.9% (9.4-42.5) | 7 |
| Beyond uterus but confined to pelvis ¹ | 33.3% (4.1-62.6) | 1 |
| Involves cervical stroma without extending beyond the uterus ¹ | 40.0% (0.8-79.2) | 4 |

1. These tumor locations have very small population size and should be interpreted with care (e.g. wide CI 95% variation).

Tumor located as "invasion of the bladder and/or intestinal mucosa" and "vaginal metastases or parametrial involvement" presented low incidence and death cases, preventing any calculation of the cumulative mortality rate with statistical significance (CI 95%).

Conclusion

- Patients who relapse and those diagnosed at stage III or with further disease spread exhibited a poorer prognosis, reinforcing the importance of early diagnosis and the need to improve treatment options for advanced-stage patients and to delay recurrence. Those findings are aligned with international data
- Data should be interpreted with care due to limited events, database restrictions, and disease complexity

Abbreviations

EC: endometrial cancer; EMR: electronic medical records; ICD: International Classification of Diseases; OS: overall survival; SP: São Paulo.

References

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Gustavo Piotto, and Michelle Samora de Almeida are investigators at Centro de Referência da Saúde da Mulher – Hospital da Mulher. Luiz Henrique Gebrim is an investigator at Hospital Beneficência Portuguesa.

Graziela Bernardino, Marcella Allemar, and Straus Tanaka are GSK employees and hold shares. Larissa Rodrigues

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Disclosures