# Real-World Ovarian Cancer Mortality Outcomes in a Brazilian Reference Women Healthcare Public Hospital

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# Background



In Brazil, ovarian cancer (OC) mortality data are limited and restricted, despite the disease being the main cause of gynecological neoplasm deaths<sup>1</sup> because of its non-specific symptoms and the absence of specific and effective screening tests.<sup>2,3</sup> It is estimated that approximately 67% of OC cases in Brazil are diagnosed at advanced stages,<sup>4</sup> a factor linked to poorer prognosis and shorter survival times.

# Aim



The objective of this study was to examine the mortality data of patients with OC treated between 2010 and 2021 at a prominent women's healthcare public hospital in São Paulo, Brazil. Mortality rates were calculated across different tumor characteristics.

#### Methods

- This was a retrospective descriptive 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:





- ICD-10 C56, C57, and C48.2; 48.1
- First medical consultation or registration between 2010 and 2021



- 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 OC



 Unadjusted cumulative mortality rate calculation; in each tumor characteristic subgroup (histology, tumor staging, tumor, and relapse site) and treatment modality:

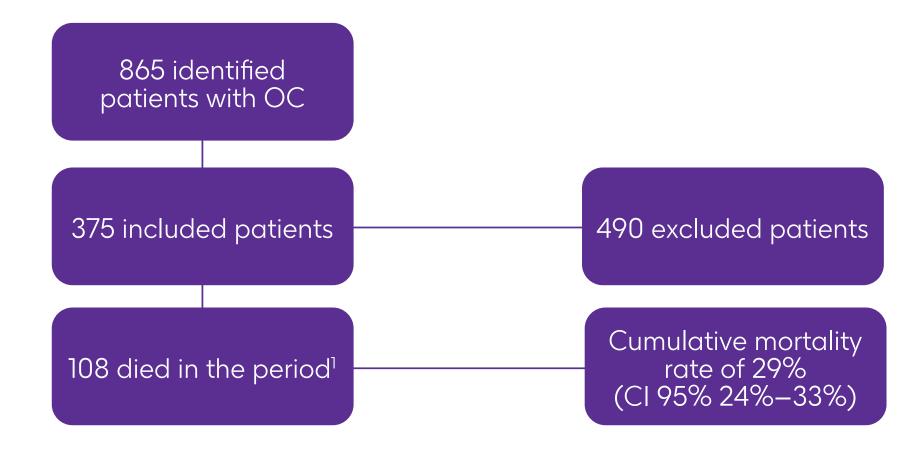
> #deaths within tumor characteristic subgroup total patients with the studied characteristic

# Results

## General cumulative mortality rate

 Based on the dataset analyzed, a total of 375 patients were included, and out of those, 108 deaths were recorded during the analysis period from 2010 to 2021.

### Figure 2: Included patients and general cumulative mortality rate



<sup>1</sup>Not all information for the 108 patients was available in the EMR and therefore was not included in the database. Missing information for studied tumor characteristics was not considered into the mortality rate calculation and is described as "unknown" in each section.

#### Table 1: Mean age at death

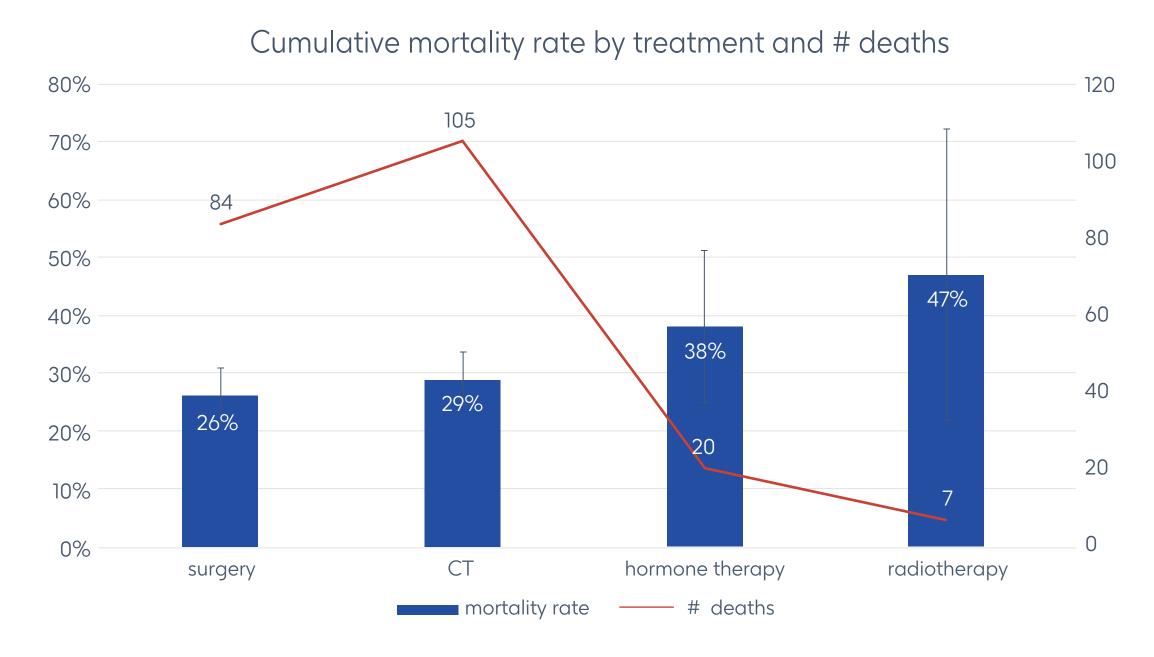
Age	Years (mean, SD)
At death	64 (12)

#### Table 2: Mean time from diagnosis to death

Patient population	Years (mean, SD)
Overall study population	1.70 (1.35)
Among patients with stage I-II disease	2.04 (1.57)
Among patients with stage III-IV disease	1.52 (1.10)
Among patients with stage III-IV and serous OC	1.90 (0.98)
Among patients with stage III-IV and endometrioid OC	2.77 <sup>1</sup>

1. There is 1 patient identified as stage III-IV and endometrioid histology preventing any standard deviation (SD) calculation.

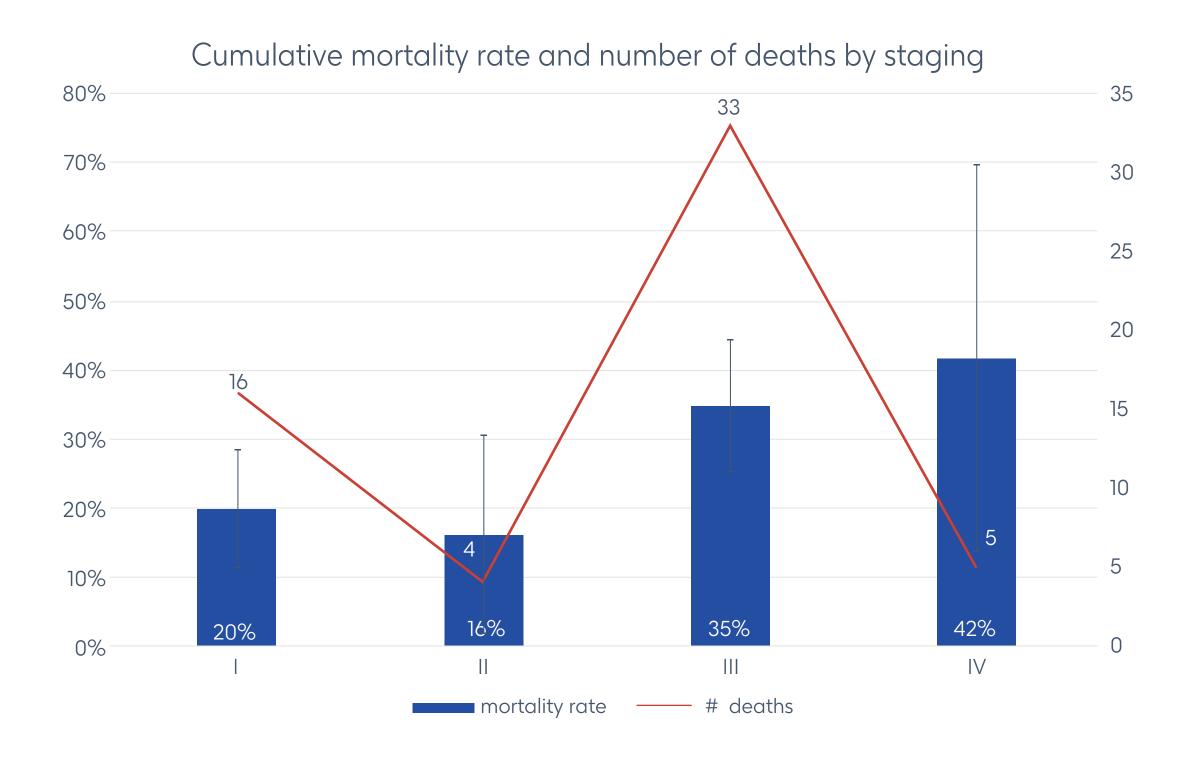
#### Figure 2: Mortality by treatment modality



 Patients that undergo surgery presented a lower mortality rate.

#### Figure 3: Mortality by disease stage

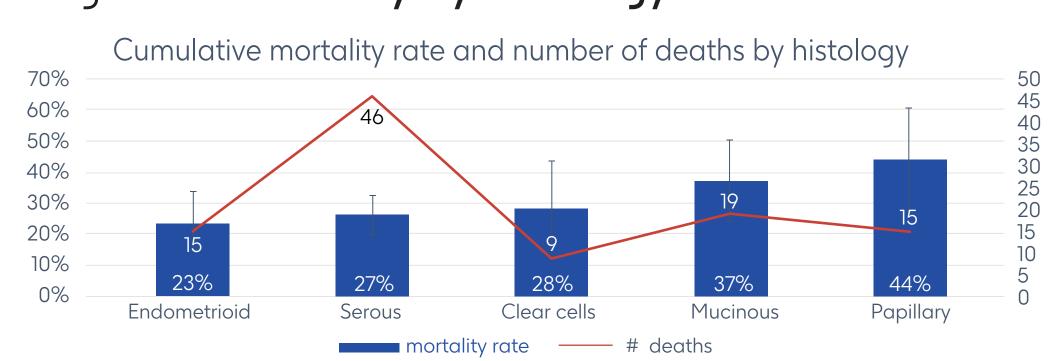
 Patients with stage III and IV account for 65.5% of all deaths with an overall cumulative mortality rate of 35.5%



Among deaths from advanced stage (III and IV):

- Tumor differentiation degree: G1 (well-differentiated) 36.8% and G3 (undifferentiated) 42.1%
- Relapse: 15.8%, and for the most part in multiple sites (55.2%)
- Predominant histology serous: 56.8%

### Figure 4: Mortality by histology

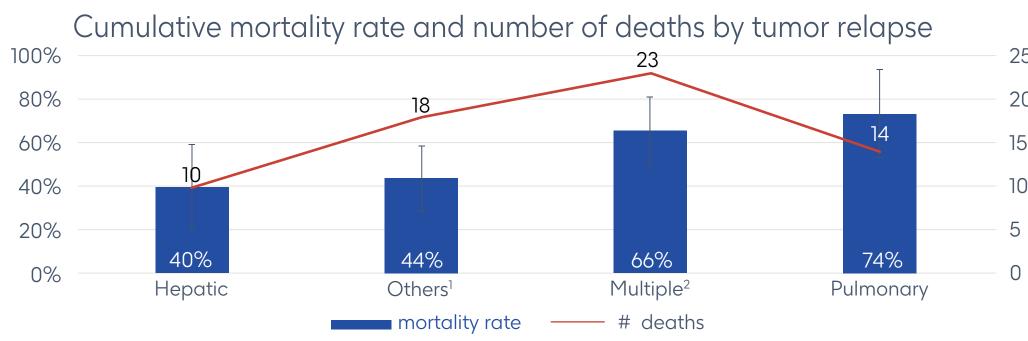


Sex cord and germ tumors presented low incidence and death cases, preventing any calculation of the mortality rate with statistical significance (CI 95%).

 By histology, mortality rate and number of deaths were highest among patients with papillary and serous OC, respectively.

#### Figure 5: Mortality by tumor relapse site

Cumulative mortality rates varied by tumor relapse site:



Unknown 39.8%

1. The Institution categorizes recurrence sites that are not predefined as "other." Also included in this category relapse sites with #deaths <5% (lymph nodes, abdomen, bone, and cerebral). 2. Multiple include relapses identified in 3 sites or more.

# Conclusion

- Patients with OC in advanced stages (III/IV) presented a poor prognosis with a time from diagnosis to death of 1.52 years and a cumulative mortality rate of 35.5%. In addition, patients who underwent surgery had a lower mortality rate. These findings highlight the urgency to improve early diagnosis methods, which could enable more patients to undergo surgery, as well as the need for improved treatment options for those in later stages of the disease.
- 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.

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#### Disclosures

Graziela Bernardino, Marcella Allemar, and Straus Tanaka are GSK employees and hold shares. Larissa Rodrigues is a complementary worker at GSK. André Mattar, Roney César Signorini Filho, Pedro Navarro, Renata Arakelian, 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.

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