

<https://doi.org/10.29289/25945394V36S11006>

1006 – Prognostic factors associated with survival in breast cancer patients

Débora Nascimento Dias Neves, Juarez Antonio de Sousa, Matheus Gabriel Gontijo Silva, Carlos Eduardo Neves de Sá, Eduardo Souto Silva, Lucélia Gonçalves Vieira, Cynthia Arantes Vieira Tojeiro, Cayan Xavier de Paula

¹Universidade Federal de Goiás, Hospital das Clínicas, Empresa Brasileira de Serviços Hospitalares – Goiânia (GO), Brazil.

²Universidade Federal de Goiás – Goiânia (GO), Brazil.

Introduction/Rationale: Breast cancer is the most common malignancy among women in Brazil and one of the leading causes of cancer-related mortality (Ministry of Health, Estimate 2023: Cancer Incidence in Brazil). Identifying prognostic factors is essential for risk stratification and therapeutic planning.

Methods: A retrospective observational study was conducted using data from 272 breast cancer patients treated at the Hospital das Clínicas of the Federal University of Goiás (HC/Universidade Federal de Goiás), obtained from medical records. The studied outcome was breast cancer-specific mortality, tracked up to December 2025, with remaining cases considered censored. Follow-up time was defined as the interval between diagnosis and death or censoring. Survival was estimated using the Kaplan-Meier method. Univariate and multivariate Cox regression models were fitted to evaluate prognostic factors, and a parametric Weibull model was used as a complementary analysis. The study was approved by the Research Ethics Committee of HC/Universidade Federal de Goiás approval no. 6.833.075 and CAAE nº 78349624.5.0000.5078.

Results: A total of 18 deaths (6.6%) and 254 censored observations (93.4%) were observed. The 3-year survival probability was 94.0%. The presence of distant metastasis was strongly associated with an increased risk of death in the univariate analysis (HR=14.89; $p<0.001$), as was lobular histological type (HR=8.24; $p=0.008$). In the multivariate model, metastasis remained the main independent prognostic factor (HR=13.15; $p<0.001$), while lobular histology showed borderline significance (HR=6.00; $p=0.052$). The Weibull model indicated an increasing hazard over time, suggesting risk progression during follow-up.

Conclusion: The presence of distant metastasis was the main prognostic factor associated with the risk of death, while lobular histological type exhibited a tendency toward a worse prognosis. These findings may contribute to the prognostic assessment of breast cancer patients.

Ethics: Research Ethics Committee Approval (CAAE 78349624.5.0000.5078).

Keywords: breast neoplasms; survival analysis; Kaplan-Meier estimate; proportional hazards models.