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1188 – Influence of race on metastatic disease and breast cancer prognosis: a 27-year retrospective historical cohort

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Introduction: This study evaluated the survival rate of women with breast cancer in Goiânia over a 27-year period, comparing race and disease extent.

Methods: A retrospective, population-based cohort study of women with breast cancer in Goiânia. Factors associated with disease extent were analyzed using logistic regression, and overall survival was estimated using the Kaplan–Meier method, comparing groups according to race and disease stage using the Log-rank test.

Results: In the multiple logistic regression, the analysis of the race/color variable did not show an independent association with metastatic presentation at diagnosis, since black patients did not present a higher adjusted chance of metastatic disease compared to white patients (OR=1.33; 95%CI 0.74–2.41; p=0.340). In contrast, only tumor grade III maintained an independent association with a higher chance of metastasis at diagnosis (OR=2.00; 95%CI 1.68–5.05; p=0.010). In the survival analysis, although there was an overall difference between the groups defined by Race/Extent (Log-rank, p<0.001), inspection of the Kaplan–Meier curves showed that this separation was predominantly determined by the extent of the disease at diagnosis. When analyzing race within each disease stage, no consistent differences in survival were observed between Black and White patients. Among women with early-stage breast cancer, median survival was similar between White/Early (136 months) and Black/Early (133 months), and among those with de novo metastatic disease, the medians were 55 months in White/Metastatic and 63 months in Black/Metastatic.

Conclusion: The results indicate that race, in isolation, was not associated with the presence of metastasis at diagnosis nor with worse survival within the same stage of the disease. Survival was mainly influenced by the presence of metastasis at diagnosis, with the stage of the disease being more determinant than race, which reinforces the importance of early diagnosis.

Ethics: 1.629.547 and 1.596.198.

Keywords: breast cancer; women's health; survival analysis; Epidemiology; race; survival.