

Conference Abstracts

Impact of Marital Status on Breast Cancer–Specific Survival: A SEER-Based Analysis

Nayanika Tummala, MD^{1a}, Madho Mal, MD², Twinkle Sonia, MBBS³, Shiwani Keswani, MBBS⁴, Inshal Jawed, MBBS⁵, Chatla sai suthaertha, MBBS⁶, Rakshit Singh Saini, MBBS⁷, Ira Gupta, MBBS⁷

¹ New York Medical College, ² Marshall University school of medicine, Huntington, WV, Huntington, WV, US, ³ Jinnah Sindh Medical University, Jinnah Sindh Medical University, Karachi, Karachi, Sindh, Pakistan, ⁴ Mayo Clinic AZ, ⁵ Dow University of Health Sciences, Dow University of Health Sciences, Karachi, Karachi, Sindh, Pakistan, ⁶ Bicol Christian College of Medicine, Legazpi, Philippines, Philippines, Legazpi, Philippines, ⁷ Government Medical College, Amritsar, Amritsar, Punjab, India

Corresponding author

^a Nayanika Tummala, MD, New York Medical College, Email: nayantummala@gmail.com

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Background

Marital status is a known social determinant of health and may influence cancer outcomes through psychosocial, financial, and treatment-support mechanisms. However, its impact on breast cancer–specific mortality among patients with metastatic bone involvement remains incompletely understood. This study evaluated the association between marital status and breast cancer–specific survival using a nationally representative cohort.

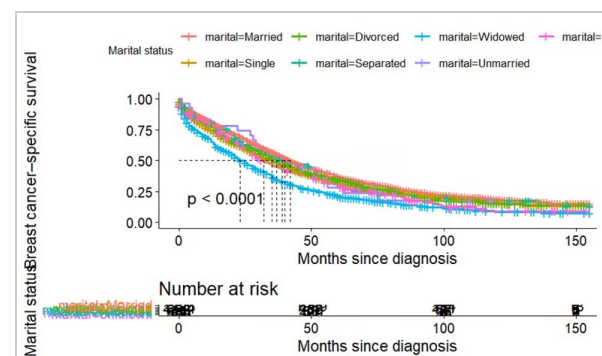
Methods

We extracted data from the Surveillance, Epidemiology, and End Results (SEER) database for breast cancer patients with bone metastases diagnosed between 2010 and 2018. Survival analysis was conducted using Kaplan–Meier curves stratified by marital status (Married, Single, Divorced, Widowed, Separated, Unmarried/Domestic Partner). Differences were compared using the log-rank test. Multivariable Cox proportional hazards regression was performed adjusting for age, race, tumor grade, surgery, chemotherapy, and radiation therapy.

Results

A total of 6,046 eligible patients were included. Marital status was significantly associated with

breast cancer–specific survival (log-rank $p < 0.0001$). Married patients had the highest survival probability, whereas widowed patients demonstrated the poorest outcomes throughout follow-up. Compared with married individuals, widowed patients showed the greatest increase in breast cancer mortality. Single, divorced, and separated patients exhibited intermediate survival curves. After multivariate adjustment, marital status remained an independent prognostic factor.



Conclusions

Marital status is a strong predictor of breast cancer–specific survival in patients with bone metastases. Married individuals have a survival advantage, while widowed patients represent a particularly vulnerable group with significantly worse outcomes. These findings highlight the importance of psychosocial support, caregiver

assistance, and targeted interventions for socially isolated patients in metastatic breast cancer care.