Young women with breast cancer (YWBC), defined by consensus as aged ≤40 years at diagnosis, are characterized by unique sociodemographic and clinical features. However, it is unclear if this definition is appropriate compared to other "young" age thresholds (e.g., ≤35 and ≤50 years).

METHODS

Medical records of women aged ≤50 at BC diagnosis from 2010-2020 in a center in Monterrey, Mexico were reviewed. Clinicopathological features according to age group were compared with $\chi^2$ tests. The Kaplan-Meier method and Cox models were used to calculate recurrence-free survival (RFS) after excluding patients with stages 0 and IV.

RESULTS

A total of 848 patients with a median follow-up of 35 months (95% CI 32-38) were included. Younger patients had a higher incidence of node-positive and triple-negative disease ($p<0.02$) (Table 1). Notably, patients aged ≤35 years were not significantly different from those aged 36-40 except for an increased prevalence of a high tumor grade (58% vs 44%; $p=0.047$). Unadjusted RFS at 2.5 years were 82% (95% CI 71-89), 83% (95% CI 75-89), 87% (95% CI 81-91), and 85% (95% CI 79-90) for patients ≤35, 36-40, 41-45, and 46-50 years, respectively. In a univariate analysis, age (continuous) was not associated with RFS (HR 0.99, 95% CI 0.96-1.02). In a multivariate analysis adjusted for tumor size, nodal status, grade, and HR/HER2 status, none of the age groups showed a significantly different RFS ($p>0.05$). Only nodal invasion (HR 2.02, $p=0.017$), hormone-receptor (HR 0.44, $p=0.001$), and HER2 (HR 0.53, $p=0.046$) status were independent predictors of RFS.

CONCLUSIONS

In this study, young age at diagnosis was not associated with early OS or RFS. Therefore, the definition of YWBC should take into account other clinical, demographic, psychological, and behavioral features that characterize this population. Efforts to homogenize the definition of young age across research groups should be pursued.

Table 1. Patients’ clinicopathological features N (%). Missing values not shown.