



Clinicopathologic Features and Prognostic Factors in Male Breast Cancer

A Single Centre Experience



İzzet Doğan¹, Esra Aydın¹, Naziye Ak¹, Kamuran İbiş², Özge Şükrüoğlu³, Seda Kılıç Erciyas³, Hülya Yazıcı³, Adnan Aydinler¹, Pinar Saip¹

¹Istanbul University Institute of Oncology, Department of Medical Oncology

²Istanbul University Institute of Oncology, Department of Radiation Oncology

³Istanbul University Institute of Oncology, Department of Cancer Genetics

Objectives: To evaluate clinicopathologic features and prognostic factors in male breast cancer (MBC).

Methods: The data of 80 patients were retrospectively reviewed. The clinicopathological features, receptor status (ER, PR, and Her2), BRCA mutation status, tumor stage, and treatment data were recorded. Kaplan Meier method and Cox regression analysis were used for overall survival (OS) analysis.

Results: The median follow-up period was 47 months (range: 2.2-214.6 months). The median age at diagnosis was 61 years (range: 25-86 years). BRCA mutations were detected in 31% of the patients (Table-1). The most common histological type of tumor was invasive ductal carcinoma (84%). The ratio of estrogen and progesterone receptor positivity was 93.6% and 74.4%, respectively. Her2 overexpression was present in 16.9%. Locoregional recurrence and distant metastases were observed in 1 (1.4%), and 21 (28.4%) patients, respectively. The median OS was 120.9 ± 25.8 months (70.3-171.5) (Figure-1). The five years OS was 74.9 ± 6%. BRCA mutation status did not affect OS in univariate analysis (p=0.501). Smoking (p=0.037) and CA15-3 levels (p=0.033) at diagnosis were significantly associated with OS in univariate analysis; however, it was not confirmed by multivariate analysis (Table-2).

Conclusion: In this study, we showed to BRCA mutations, smoking, regular alcohol consumption, body mass index (BMI), and family history of breast cancer were not affect on the OS.

Table 1. Characteristics of the patients

	Number of Patients (%)
Age at diagnosis, years	N:80
≤ 50	13 (16.3)
50-65	38 (47.5)
≥ 65	29 (36.2)
BRCA mutation status	N:42
No mutation	29 (69)
BRCA mutation-positive	13 (31)
BRCA1 mutation	4 (9.5)
BRCA2 mutation	8 (19)
BRCA1 and 2 mutation	1(2.5)
Family history of breast cancer	N:65
Yes	19 (29.2)
No	46 (70.8)
Body Mass Index (BMI) kg/m ²	N:50
<25	12 (24)
25-30	25 (50)
≥30	13 (26)
Smoking status	N:64
Current	39 (60.9)
Never	25 (39.1)
Regular alcohol consumption	N:60
Yes	16 (26.7)
No	44 (73.3)
Stage at diagnosis	N:75
Stage 1	20 (26.6)
Stage 2	26 (34.7)
Stage 3	23 (30.7)
Stage 4	6 (8)
pT status	N:68
pT1-pT2	53 (78)
pT3-pT4	15 (22)
pN status	N:69
Node negative	31 (44.9)
Node positive	38 (55.1)
pN1	22 (31.9)
pN2	8 (11.6)
pN3	8 (11.6)
Grade	N:63
1	2 (3.2)
2	26 (41.3)
3	35 (55.5)

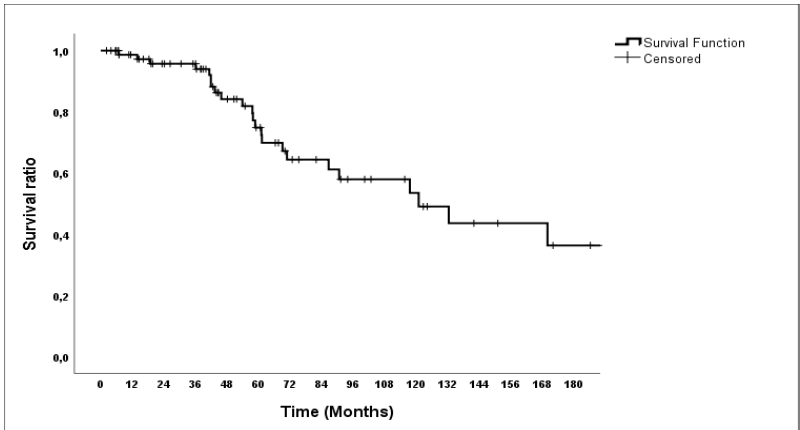


Table 2. Univariate and multivariate analysis for overall survival

	Univariate analysis	Multivariate analysis	
	P-value	P-value	HR (95% CI)
Age (<65 vs. ≥65)	0.199		
BRCA mutation status (yes vs. no)	0.501		
Family history of breast cancer (yes vs. no)	0.557		
Smoking status (never vs. current)	0.037	0.098	2.89 (0.82-10.18)
Regular alcohol consumption (yes vs. no)	0.963		
Body Mass Index (BMI) kg/m ² (obese vs. non-obese)	0.643		
CA15-3 levels at diagnosis (high vs. normal)	0.033		
Stage at diagnosis (stage 1-2-3 vs. stage 4)	0.002	0.004	11.13 (2.14-57.89)