

# TREATMENT DELAY AFTER HISTOLOGICAL DIAGNOSIS OF BREAST CANCER AND ITS CAUSATIVE FACTORS IN A TERTIARY CARE HOSPITAL IN PAKISTAN

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## Background and Objectives

Breast cancer is the second most commonly diagnosed cancer in the world with high mortality in low HDI countries<sup>1</sup>. LMICs are known to face longer delays in cancer diagnosis and treatment<sup>2</sup>. Such delays lead to poorer outcomes and psychological distress<sup>4</sup>. However, there is limited evidence regarding the magnitude of treatment delay and its contributing factors in Pakistan.

### Primary objective

- To determine the median interval between histological diagnosis and initiation of definitive treatment in breast cancer patients.

### Secondary objective

- To determine the proportion of patients experiencing treatment delay beyond 30 days
- To identify factors associated with delayed initiation of treatment

## Methods

- Study Design : Cross-sectional, observational study.
- Setting: Oncology Department in JPMC Karachi.
- Sample size: 195 patients

### ✓ Inclusion criteria

Females, 18 years or above  
Proven histopathology report of breast cancer  
Patients with no prior treatment

### × Exclusion criteria

Patients presenting with recurrence of breast cancer

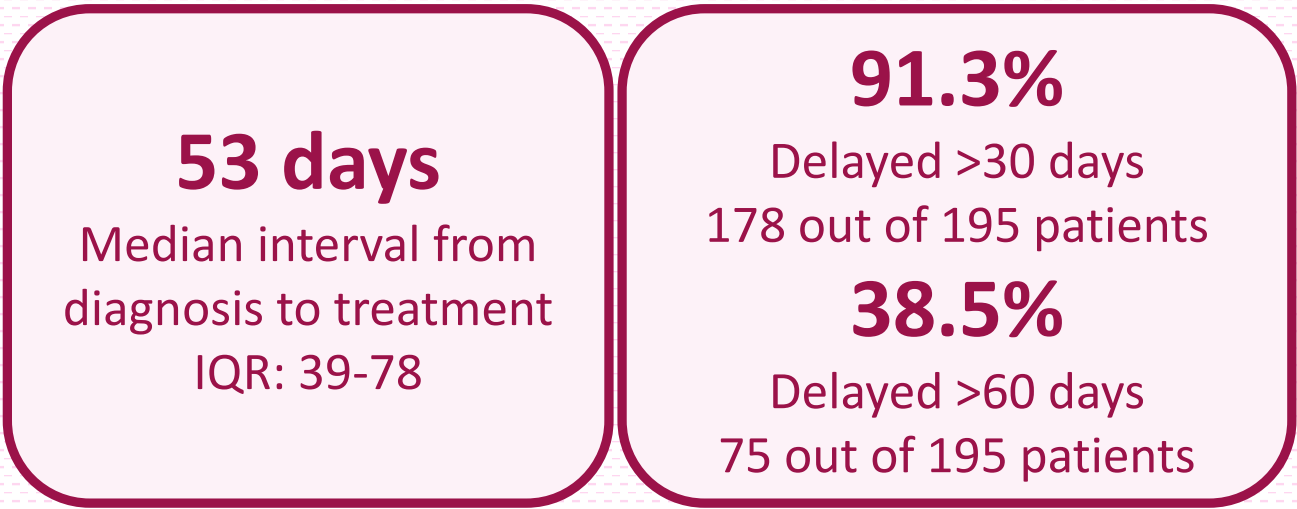
## Patient demographics

|                    |           |             |       |
|--------------------|-----------|-------------|-------|
| Age                | 46.9±10.2 | Married     | 91.3% |
| No schooling       | 43.1%     | Income <50K | 53.3% |
| Urban              | 79.5%     | Symptomatic | 99.0% |
| Chemotherapy first |           |             | 76.9% |

## References

- Sung H, et al. CA Cancer J Clin. 2026;76(4):e70090.
- Petrova D, et al. PLoS Med. 2022;19:e1004110.
- Ungvari Z, et al. GeroScience. 2026;48:1173–1187.
- He S, et al. Front Public Health. 2022;10:808873.

## Results



### Reasons for Delay (n = 178)

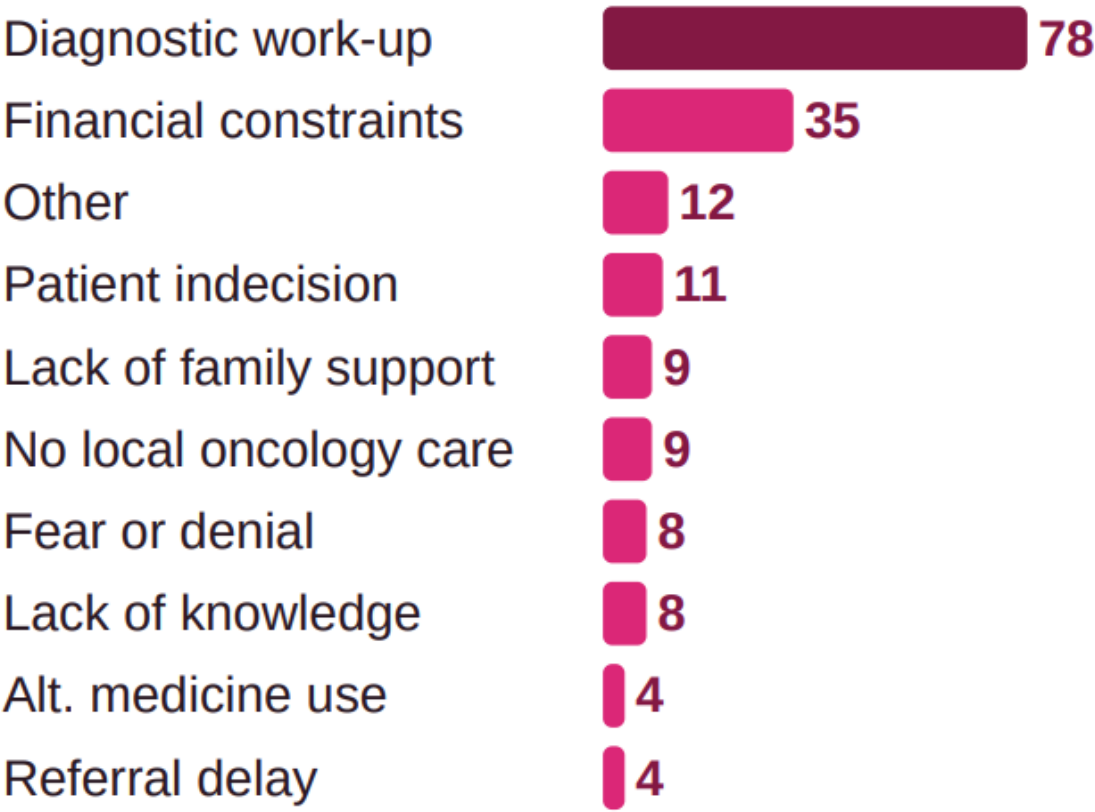


Figure 1. Primary reason for delay (patients).

### Factors vs Delay >30 Days

| Factor        | p     | Factor            | p     |
|---------------|-------|-------------------|-------|
| Age group     | 0.634 | Marital status    | 1.000 |
| Education     | 0.237 | Monthly income    | 0.116 |
| Residence     | 0.351 | Mode of diagnosis | 1.000 |
| Disease stage | 0.547 |                   |       |

No factor was significant (all p > 0.05).

## Conclusions

A substantial proportion of breast cancer patients experienced delays in initiating treatment. The study highlighted system capacity for diagnostic workup and financial constraints as leading barriers to timely treatment. This shows that efforts need to be made to streamline cancer care by providing more accessible care to rural areas and cheaper, government funded hospitals and labs, along with increasing patient education to improve outcomes in an LMIC like Pakistan.