

# Prevalence, Clinical Features, and Consequences of the COVID-19 Pandemic in 100 Cancer Patients Operated at Omid Cancer Center - A Report from Northeast Iran

Ehsan Soltani\*, Azadeh Jabbari Nooghabi\*\*, Mehdi Jabbari Nooghabi\*\*, Ehsan Hassanzadeh Haddad\*, Ali Javidi Dashtbayaz\*

\*Surgical Oncology Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

\*\*Department of Statistics, Ferdowsi University of Mashhad, Mashhad, Iran

Please cite this article as: Soltani E, Jabbari Nooghabi A, Jabbari Nooghabi M, Hassanzadeh Haddad E, Javidi Dashtbayaz A. Prevalence, clinical features, and consequences of the COVID-19 pandemic in 100 cancer patients operated at Omid Cancer Center - A report from northeast Iran. Middle East J Cancer. 2024;15(2\_Supplement).

## Abstract

**Background:** The coronavirus disease of 2019 (COVID-19) pandemic has underscored the clinical challenges in managing patients with comorbidities. Specifically, cancer patients infected by COVID-19 exhibit a significantly higher risk of developing severe complications due to their immunocompromised state, which results from both malignancy and anticancer therapies.

**Method:** This retrospective study, conducted from March to October 2020, evaluated postoperative morbidity and mortality among 100 cancer patients at the Omid Cancer Center in Mashhad, Iran.

**Results:** The median age of the patients was  $53.13 \pm 14.57$  years; 38 (38%) were aged 60 years or older, and 47 (47%) were male (with a mean age of  $58.64 \pm 11.52$  years). The most common malignancies were gastrointestinal (38%), breast (28%), and head and neck cancers (13%). 36 (36%) patients had received neoadjuvant anticancer therapy within 4-6 weeks before surgery. In total, 18 deaths (18%) occurred postoperatively. Among these, 2 (11.1%) patients died from COVID-19 complications during hospitalization, 1 (10%) died within the first 24 hours after discharge, and 1 (10%) died four months post-discharge due to COVID-19. Overall, only 4% of the cancer patients succumbed to the consequences of COVID-19, while 14% died due to complications associated with the cancer itself. Multiple clinical prognostic variables such as increasing age, sex, type of cancer, and treatment status (neoadjuvant or adjuvant anticancer therapy) were not linked to increased all-cause mortality.

**Conclusion:** The COVID-19 pandemic has led to decreased screening, diagnosis, and delays in standard cancer treatment, potentially increasing mortality and morbidity. Although cancer diagnosis and treatment should not be postponed during pandemics, infected patients require enhanced preventive care and potentially more aggressive measures.

**Keywords:** Cancer, Pandemic, COVID-19

### \*Corresponding Author:

Azadeh Jabbari Nooghabi, MD  
Surgical Oncology Research  
Center, Mashhad University  
of Medical Sciences,  
Mashhad, Iran  
Email: jabbarinaz@yahoo.com  
jabbaria@mums.ac.ir

