

---

## **The Putative Impact of the SARS-CoV-2 induced Covid 19 on Cancer Patients**

**Chateen I. Ali Pambuk<sup>1</sup>, Fatma Mustafa Muhammad<sup>2</sup>**

<sup>1,2</sup>College of Dentistry / University of Tikrit

<sup>1</sup>ORCID ID: <https://orcid.org/0000-0002-9893-8085>

---

### **ABSTRACT**

The term cancer is given to the condition that is represented by the emergence of a group of diseases or health problems as a result of the abnormal growth of some cells of the body, so that these cells divide in a way that the body cannot control, and it is possible for these cells to spread to reach healthy cells, causing damage and destroying them, and the cells Cancer continues to grow and spread, it may spread in one of two ways; Either by direct spread or metastasis, which is the transfer of cancer cells through blood vessels or lymphatic vessels, and may form tumors in the new areas that it has reached. To date, there is limited evidence that any cancer treatment may increase your odds of contracting COVID-19 more than anyone else exposed to the virus. But there is some evidence that if cancer patients become infected with Covid-19, they may be more seriously affected, likely because cancer and cancer treatment can contribute to a weakening of the immune system, which may reduce the ability to fight infection. The aim of this descriptive minireview, generally, is to shed light on The Putative Impact of the SARS-CoV-2 induced Covid 19 on Cancer Patients.

**KEYWORDS:** SARS-CoV-2 , Covid 19 ,Cancer Patients, lung cancer

---

### **ARTICLE DETAILS**

**Published On:**  
**31 August 2021**

**Available on:**  
<https://ijmscr.org>

---

### **INTRODUCTION**

It appears that patients with other diseases, such as high blood pressure, cardiovascular disease, lung disease, chronic kidney disease, obesity and diabetes, including types of cancer, are more likely than others to have serious complications if they contract Covid-19. These other illnesses, through medication or lifestyle changes, at the time of COVID-19 infection are less likely to make patients with other well-controlled illnesses at risk of serious complications from COVID-19.

The term cancer refers to the condition that is represented by the emergence of a group of diseases or health problems as a result of the abnormal growth of some cells of the body, so that these cells divide in a way that the body cannot control, and it is possible for these cells to spread to reach healthy cells, causing damage and destroying them, and the cells Cancer continues to grow and spread, it may spread in one of two ways; Either by direct spread or metastasis, which is the transfer of cancer cells through blood vessels or lymphatic

vessels, and may form tumors in the new areas that it has reached.

### **LONG-TERM EFFECTS OF COVID-19**

But it is clear, in light of our experience with the disease, that some patients are exposed to complications that affect several systems in the body, including complications that affect the brain and nerves, kidney failure, heart attack or heart failure and clots. These serious complications can have long-term consequences, but understanding the long-term effects requires long-term follow-up of patients

To date, there is limited evidence that any cancer treatment may increase your odds of contracting COVID-19 more than anyone else exposed to the virus. But there is some evidence that if cancer patients become infected with Covid-19, they may be more seriously affected, likely because cancer and cancer treatment can contribute to a weakening of the immune system, which may reduce the ability to fight infection. New evidence has begun to indicate that lung

## The Putative Impact of the SARS-CoV-2 induced Covid 19 on Cancer Patients

cancer patients who received chemotherapy in the three months prior to their diagnosis of COVID-19 are more likely to die of infection. A summary of this evidence is found in another blog post Net.Cancer. Patients who receive cancer treatment interact with the health care system more than the average person, so increased exposure to these institutions may increase their risk of infection, but this information Unconfirmed at the moment. Patients are advised to consult their cancer care team regarding the possibility of canceling, postponing or replacing some non-essential clinic visits with a telephone or video conference. However, it should be noted that the decision to cancel a cancer treatment session due to concerns about the possibility of contracting COVID-19 is a serious decision and should be discussed with your oncologist.

### COVID 19 AND LUNG CANCER

Recent scientific research has proven that infection with the Corona virus may increase the risk of cancer. Experts revealed that this virus should be classified primarily as a vascular disease. Also, infection with the Corona virus can increase the risk of lung cancer.

In this study, the researchers focused on the role of circRNAs and its relationship to the Middle East respiratory syndrome coronavirus (MERS) and to severe acute respiratory syndrome coronavirus type 1 and 2 (SARS-COV 1/ SARS-COV 2.)

Scientists say they need to do more research to find out the effect of circulating RNA in cases of coronavirus infection. Notably, circular RNA viral genom can increase the risk of cancer. It has been identified and recognized by scientists in viruses associated with cancer diseases. It is also a biomarker of lung cancer, as it reduces certain cell lines in lung tissue that can indicate cancer.

Where a recent scientific study revealed that one out of every three people with lung cancer has died since the beginning of the outbreak of the new Corona epidemic. As the health care provided to these patients has been greatly affected since the emergence of the virus. Some deaths related to this type of cancer may have been misdiagnosed as having occurred. As a result of infection with the emerging coronavirus, given that coughing is one of the main symptoms of both diseases. The researchers also indicated that the diagnosis of lung cancer cases decreased by up to 75% during the “Corona” closure, and that patients had faced potentially fatal delays in diagnosis and surgery since last March, noting that the delay in diagnosis, treatment and tests for cancer during the closure. It could lead to 1,372 preventable deaths in the next five years in the UK alone.

In a scientific study conducted by researchers on people with cancer, their infection with Covid 19 coincided and over a period of months, 226 (28%) patients died. Although the risk of death was significantly related to age, male sex and comorbidities, no interaction was found between anticancer

treatments within 4 weeks prior to testing positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and COVID- 19 Morbidity or mortality

Although the inconclusive data, Cancer patients and cancer survivors may be at greater risk of health complications if they contract COVID-19. This is not surprising because this group often suffers from weak immunity. Scientists are beginning to monitor evidence that patients with malignant blood diseases, including leukemia, lymphoma and multiple myeloma, may be more susceptible to infections and complications than patients with other types of cancer. There is also evidence that patients with advanced cancer when diagnosed with COVID-19. Others may be more susceptible. The risk of death or serious health complications of cancer patients in whom the disease is in remission.

### REFERENCES

- I. Centers for Disease Control and Prevention (CDC). Evidence used to update the list of underlying medical conditions that increase a person’s risk of severe illness from COVID-19. Updated October 6, 2020. Accessed August 14, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/evidence-table.html>
- II. Richards, M. et al. The impact of the COVID-19 pandemic on cancer care. *Nat. Cancer* **1**, 565–567 (2020).
- III. Wang Q, Berger NA, Xu R. Analyses of Risk, Racial Disparity, and Outcomes Among US Patients With Cancer and COVID-19 Infection. *JAMA Oncol.* 2021;7(2):220–227. doi:10.1001/jamaoncol.2020.6178
- IV. American Cancer Society. Why people with cancer are more likely to get infections. Published March 2020. Accessed August 14, 2020. <https://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/low-blood-counts/infections/why-people-with-cancer-are-at-risk.html>
- V. Yang K, Sheng Y, Huang C, et al. Clinical characteristics, outcomes, and risk factors for mortality in patients with cancer and COVID-19 in Hubei, China: a multicentre, retrospective, cohort study. *Lancet Oncol.* 2020;21(7):904-913. doi:10.1016/S1470-2045(20)30310-7
- VI. Kuderer NM, Choueiri TK, Shah DP, et al; COVID-19 and Cancer Consortium. Clinical impact of COVID-19 on patients with cancer (CCC19): a cohort study. *Lancet.* 2020;395(10241):1907-1918. doi:10.1016/S0140-6736(20)31187-9
- VII. Rivera DR, Peters S, Panagiotou OA, et al; COVID-19 and Cancer Consortium. Utilization of COVID-19 treatments and clinical outcomes among patients with cancer: a COVID-19 and Cancer

## The Putative Impact of the SARS-CoV-2 induced Covid 19 on Cancer Patients

- Consortium (CCC19) cohort study. *Cancer Discov.* 2020;CD-20-CD-0941.PubMedGoogle Scholar
- VIII. Robilotti EV, Babady NE, Mead PA, et al. Determinants of COVID-19 disease severity in patients with cancer. *Nat Med.* 2020; 26(8):1218-1223. doi:10.1038/s41591-020-0979-0
- IX. National Cancer Institute (NCI). Common cancer types. Updated September 25, 2020. Accessed June 28, 2020. <https://www.cancer.gov/types/common-cancers>