



Journal of Clinical Oncology and Cancer Therapy

Journal homepage: [www.sciforce.org](http://www.sciforce.org)

## How has Covid-19 Impacted Cancer Research?

Suryakiran Navath

*Department of Chemistry and Biochemistry, University of Arizona, Tucson, AZ 85721, United States*

### ARTICLE INFO

Article history:  
Received 20210610  
Received in revised form 20210620  
Accepted 20210630  
Available online 20210710

### ABSTRACT

Want to find out the effects of Covid-19 on cancer research? Click here to learn more.

**2021 Sciforce Publications. All rights reserved.**

### Keywords:

Covid-19;  
cancer research;

\*Corresponding author. e-mail: [suryakiran.navath@gmail.com](mailto:suryakiran.navath@gmail.com)

### Introduction

In The onset of Covid-19 has disrupted every aspect of our lives. Unfortunately, those who were already suffering from cancer now have to deal with a new threat. Depending on the severity of their condition, some cancer patients are especially vulnerable to the virus.

That's because the medication they're on may inhibit how effective their immune system is. Additionally, the virus presents a challenge to the domain of cancer research, causing the already limited researchers to adapt quickly to the changing world climate.

### Challenges Faced by Cancer Research

Not just patients, but researchers too are at risk of contracting the virus. The policies enacted for the general public also apply to them and their workplace when conducting research. Hence, many research labs around the world have had to limit the number of lab technicians, causing research to slow down or halt completely.

Similarly, clinical trials cannot be performed at the same rate. This presents a challenge to test new therapies while making sure cancer patients' already compromised health does not get affected. Fewer patients at a time can be tested as most of them fear the effect of the therapy while the pandemic persists. Additionally, fewer patients can be admitted to the trail to satisfy social distancing.

Cancer research institutions depend on the funding from governments and philanthropic organizations. Considering most of the funding is expected to go towards finding a cure for Covid-19, many cancer research institutions will have to look elsewhere for funding.



**Figure 1.**

An image showing a person laying on a bed with an IV attached to their arm

### What Steps have Research Institutions Taken?

Cancer research has many regulatory requirements associated with owing to the accuracy of results required. During the pandemic, some research institutions saw a relaxation in these requirements making many believe that it may become a norm when conducting future studies.

For trials to remain operational researchers adapted to the strenuous circumstance by enacting few policies. Using multichannel communication modes, doctors were able to monitor the health of their patients without them needing to visit facilities.

Using electronic verification tools help document their trial. And, shipping medication rather than having patients, or their representatives, collect them help mitigate the spread of the virus. These protocols highlighted cost effective methods to continue studies and facilitate patients even during the pandemic.

### **A Glimmer of Hope**

According to the Dana-Farber Cancer institute there is a bright side to Covid-19, particularly in the form of the mRNA vaccine. The vaccine contains mRNA, the middleman in the protein making machinery of a cell. When our cells take up the vaccine they create proteins on their surface similar to the viruses. Our immune system recognizes it as foreign and initiates an immune response by forming antibodies. These antibodies attack the virus when it infects a vaccinated host.

Similarly, this technique can be used to treat cancerous tumors as well. They vaccine can target cancer cells making them produce proteins that trigger our immune system, which responds by attacking the cancerous cells and eliminating it from our bodies. Though more research is required to judge the effectiveness and delivery mechanism of the vaccine, it shows promise as a non-invasive technique to fight the disease.