

## Pancreatic Cancer and COVID-19: Treatment and Challenges during pandemic

Adeeb Shehzad

Department of Biomedical Sciences, School of Mechanical and Manufacturing Engineering (SMME), National University of Sciences and Technology (NUST), Islamabad, Pakistan

### INTRODUCTION

people (31,950 men and 28,480 women) will be diagnosed with pancreatic cancer, which is 3.2% of all new cancer cases. It is also estimated that total of 48,220 people (25,270 men and 22,950 women) will die of pancreatic cancer, which is 7.8% of all cancers related death in the year 2021. The five-year relative survival rate is under 10% in the United States. Among the various risk factors, inflammation has a remarkable effect on the progression and development of various cancer including pancreatic cancer [1]. In this editorial we will underpin the impact of the pandemic on cancer mortality and various challenges in the treatment and diagnosis worldwide.

Coronavirus disease 2019 (COVID-19), is severe lungs infection caused by exposure to coronavirus SARS-CoV-2, which adversely influenced and perturbed all sectors of life and declared pandemic globally. COVID-19 is a chronic inflammatory condition characterized by life-threatening episodes in the form of acute respiratory distress syndrome (ARDS) [2]. COVID-19 has greatly impacted the treatment and prognosis of various diseases including cancer. Cancer patients are spearheaded and at the frontline of risk from COVID-19, because increase in the death rate of cancer patients has been seen during pandemic [3]. Also, cancer diagnosis, treatment and patient management has been damped by COVID-19. Diagnostic procedures and biochemical screening for the determination of stage of cancer were greatly reduced during the pandemic followed by reductions in surgical procedure, treatment plan and management of pancreatic cancer. It has been reported that there was a 46% decline in diagnoses of six common cancers (breast, colorectal, lung, pancreas, stomach, and esophagus) during 2020, compared with 2019, ranging from a 25% drop for pancreatic cancer to 52% for breast cancer [3]. Pancreatic cancer patients are susceptible to COVID-19 infection; therefore, relative risks of treatment during hospitalization and death need to be cautiously adjusted. The emergence of different genotypes of corona virus have now started to amplified in various states, which further worst the episodes of pandemic, we must protect pancreatic cancer patients with great care [3, 4].

Both National Institutes of Health (NIH) and National Cancer Institute (NCI) have been set up guidelines and were approachable

for the implementation of research and development directions during pandemic ([www.cancer.gov](http://www.cancer.gov)). The NCI has worked with the U.S. Food and Drug Administration to increase innovation and support for clinical trials addressing the relationship between COVID-19 and cancer. Importantly, COVID-19-related immune suppression and ineffective chemotherapy mechanism be deeply studied to assess the relative risks of treatment versus death during pandemic. In line with this, high throughput clinical trials of innovative cellular therapies, such as tumor-infiltrating lymphocytes (TILs) and chimeric antigen receptor (CART) cells, will also be unfavorable in pandemic as these also often require input from critical care/intensive therapy unit (ITU), as ITU has been found to focus on the COVID-19 pandemic.

In summary, early diagnosis such as collection of blood samples, imaging, and available clinical data is essential to understand how COVID-19 affects pancreatic cancer patients. Currently, there are many challenges for pancreatic cancer patients alongside the COVID-19 pandemic, but early management can improve the quality of life and overall survival in 2021. Different cancer societies need to educate public and raise awareness about the underlying pathophysiology of cancer and COVID-19, provide learning and support for health care professionals and translate the output of early diagnosis research for the management of cancer patients. If we continuously sidelining life-threatening conditions such as cancer, it may create another public health crisis during current pandemic. Let's hand together to enhance interconnective organizational communication for patients throughout the pandemic to avoid any terrifying scenario in future.

### REFERENCES

1. Siegel RL, Miller KD, Fuchs HE, Jemal A. Cancer statistics, 2021. *CA Cancer J. Clin.* 2021, 71, 1, 7-33.
2. Dekker E, Chiu HM, Lansdorp-Vogelaar I, et al. Colorectal cancer screening in the COVID 19 era. *Gastroenterology.* 2020.
3. Kaufman HW, Chen Z, Niles J, Fesko Y. Changes in the number of US patients with newly identified cancer before and during the Coronavirus Disease 2019 (COVID-19) pandemic. *JAMA Netw Open.* 2020;3(8):e2017267.
4. American Cancer Society Cancer Action Network. COVID-19 pandemic ongoing impact on cancer patients and survivors survey findings summary. 2020

**Correspondence to:** Shehzad A, Department of Biomedical Sciences, School of Mechanical and Manufacturing Engineering (SMME), National University of Sciences and Technology (NUST), H-12, Islamabad, Pakistan, Tel: +9290856062, Email: [adeeb.shehzad@smme.nust.edu.pk](mailto:adeeb.shehzad@smme.nust.edu.pk) (AS)

**Received:** January 15, 2021, **Accepted:** January 28, 2021, **Published:** February 4, 2021

**Citation:** Shehzad A (2021) Pancreatic Cancer and COVID-19: Treatment and Challenges during pandemic. *Pancreat Disord Ther.* 11:S6.e001

**Copyright:** © 2021 Shehzad A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.