Title

COVID-19 PANDEMIC IMPACT ON DIAGNOSIS OF HEPATOCELLULAR CARCINOMA IN THE UNITED STATES

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Authors

Kaur, Bhupinder (Rose)
Yeo, Yee Hui
Luu, Micheal
et al.

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Abstract Form

Hospital Affiliation:	Cedars-Sinai Medical Center
Presenter Name (Last, First):	Kaur, Bhupinder ("Rose")
Co-Authors:	Yee Hui Yeo, MD, Micheal Luu, MPH, Jeff Liang, MD, Walid Ayoub, MD, Alexander Kuo, MD, Hirsh Trivedi, MD, Kamya Sankar, MD, Jun Gong, MD, Andrew Hendifar, MD, Arsen Ospiov, MD, Kambiz Kosari, MD, Nicholas Nissen, MD, Amit G. Singal, Ju Dong Yang
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Abstract

Background: The Coronavirus Disease 2019 (COVID-19) pandemic has had a considerable impact on healthcare systems. Little is known about the change in magnitude of HCC diagnosis during the pandemic period in the United States (U.S.). Herein, we sought to determine the impact of the pandemic on incident HCC cases and the characteristics in the U.S.

Methods: This is a retrospective study of the U.S. National Cancer Database (NCDB) analyzing incident HCCs in the U.S. from 2010 to 2020. The number of reported HCC cases was assessed and the rate was calculated using the total population for each year from the census bureau. Trend analysis was performed using joinpoint regression analysis and a polynomial regression model was used to calculate the estimated number of HCC cases in 2020 according to the trend of rates from 2010-2019. Additionally, cancer stage, and treatment modality were calculated.

Results: The number of HCC cases reported during the pandemic year was significantly reduced from the prior year (19,597 cases in 2019 to 16,188 in 2020). The predicted number of HCC cases in 2020 was 19,011, however, 14.8% less than the estimated number of HCC cases were diagnosed in 2020. There were no racial-ethnic disparities in incident HCC reduction in 2020 versus pre-COVID years. There was minimal impact on the tumor stage and receipt of curative treatment in 2020.

Conclusions: There was a clinically significant reduction in reported cases of HCC in 2020 versus pre-COVID years. Tumor stage and proportion of patients receiving curative treatment remain largely stable during the first year of COVID-19 pandemic.