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Year 2

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### **“Disparities in Treatment of Hepatocellular Carcinoma in Hepatitis C Positive Patients”**

**BACKGROUND:** Primary liver cancer is the sixth most diagnosed cancer and the third leading cause of cancer death worldwide in 2020, with approximately 906,000 new cases and 830,000 deaths.<sup>1</sup> Hepatocellular Carcinoma (HCC) comprises 85-90% of primary liver cancers. Risk factors for HCC vary by region. According to recent data, Hepatitis C Virus (HCV) accounts for approximately one-third of HCC cases in the United States (US). Studies have shown HCC and HCV disproportionately impact racial/ethnic minorities in the US. This population is encouraged to perform screening in 6-months intervals to avoid delays in diagnosis and progression of the disease.<sup>2</sup> Moreover, socioeconomic status (SES) and insurance status may limit preventive and surveillance measures.

**OBJECTIVES:** Our study aims to identify disparities in HCC stage by age, race, ethnicity, gender, or SES at the time of diagnosis. Also, we seek to determine average duration from diagnosis to treatment and identify if one group carries a higher burden of disease.

**METHODS:** This was a retrospective chart review of HCV+ patients diagnosed with HCC at University Medical Center New Orleans (UMCNO) from March 2013 to May 2021. The medical record was reviewed to collect basic demographics, staging at the time of diagnosis according to Barcelona Clinic Liver Cancer (BCLC), as well as duration to treatment. Data was analyzed using SAS 9.4. We looked at associations between demographics, delays in treatment, and stage.

**RESULTS:** Our population consisted of 149 patients, 91% male, 61% black vs 33% white, 98% non-Hispanic. Of all patients, 6% had private insurance, 85% had Medicaid/Medicare, and 9% were uninsured. Median age at diagnosis was 61 years and 88% had either early, intermediate, or advanced stage HCC (BCLC Stages A, B, and C, respectively), 32% Stage B. While there were no significant differences based on demographics, there appears to be a relationship between HCC stage and delay in treatment. No delays occurred mainly with stage 3, and delays mostly occurred with stage 2. Of all patients, 83% received HCC treatment with a median time to treatment of 79.5 days, with 65% experiencing a delay in treatment. There was no association between treatment delay and age, race, SES, or gender.

**CONCLUSIONS:** Most of the patients in our study experienced a delay in treatment. Results emphasize the importance of screening for HCC in the HCV population given that only 30% of the population was diagnosed with stages 0/A according to BCLC.

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<sup>1</sup> Sung, H, Ferlay, J, Siegel, RL, Laversanne, M, Soerjomataram, I, Jemal, A, Bray, F. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 2021; 71: 209- 249. <https://doi.org/10.3322/caac.21660>

<sup>2</sup> Kronenfeld JP, Ryon EL, Goldberg D, Lee RM, Yopp A, Wang A, Lee AY, Luu S, Hsu C, Silberfein E, Russell MC, Livingstone AS, Merchant NB, Goel N. Disparities in Presentation at Time of Hepatocellular Carcinoma Diagnosis: A United States Safety-Net Collaborative Study. *Ann Surg Oncol.* 2021 Apr;28(4):1929-1936. doi: 10.1245/s10434-020-09156-4. Epub 2020 Sep 25. PMID: 32975686; PMCID: PMC8099037.