

The sixth most prevalent and third-leading cause of cancer-related mortality is liver cancer (Singh et al., 2020). According to Singh et al. (2020), in hepatocellular carcinoma (HCC), dysplastic macro nodules evolve early and develop into cancer. Screening should enable us to find lesions early. HCC is often diagnosed in its mature stages since it is asymptomatic until it grows extensive (Singh et al., 2020).

Presently, the most prevalent strategy for evaluating suspicious HCC nodules is the combination of serum alpha-fetoprotein testing and imaging technology such as computed tomography or magnetic resonance imaging (Zheng et al., 2018). Unfortunately, serum alpha-fetoprotein detection sensitivity for early-stage HCC is only 39 to 65 percent. In addition, patients with benign liver conditions like hepatitis and cirrhosis may also have a higher alpha-fetoprotein level in their blood. Thus, precise noninvasive HCC biomarkers are needed (Zheng et al., 2018). According to Zheng et al. (2018), previous research has shown that long noncoding RNAs (lncRNAs) have excellent potential as cancer biomarkers. This study examined the diagnostic and prognostic potential of serum lncRNA urothelial carcinoma associated 1 (UCA1) for hepatocellular cancer (HCC). The UCA1 expression in blood samples from 105 HCC, 105 BLD, and 105 healthy people were studied using reverse-transcription polymerase chain reaction to determine the connection between serum UCA1 and HCC clinicopathological characteristics and survival. HCC patients expressed considerably more serum UCA1, distinguishing them from BLD and healthy controls. Furthermore, serum UCA1 expression correlated with high tumor grade, big tumor size, positive vascular invasion, and advanced TNM stage. In addition, high serum UCA1 levels independently predicted worse HCC prognosis in multivariate analysis (Zheng et al., 2018).

Because HCC tumors are not all the same inside, it is becoming more apparent that a single biomarker may not be enough to diagnose HCC early and that a combination of biomarkers may be needed to improve sensitivity (Singal et al., 2020). Many studies show fewer people participate in HCC surveillance programs and get screened every six months. For HCC monitoring to work, a specific network of doctors, patients, and healthcare systems must focus on a biannual screening strategy for high-risk HCC patients (Singal et al., 2020). Encourage the use of specialized tools, such as the help of trained people, websites, patient group meetings, educational screencasts, and smartphone apps, to improve patient education. Patient participation in the decision-making process is also strongly suggested in tailoring screening programs (Singal et al., 2020). Intensification of specific compliance-enhancing measures is also required (Singal et al., 2020). In the same way, putting clinical reminder systems in place for physicians helps them stick to surveillance timelines in everyday practice (Singal et al., 2020).

References

Singal, A. G., Lampertico, P., & Nahon, P. (2020). Epidemiology and surveillance for hepatocellular carcinoma: New trends. *Journal of Hepatology*, 72(2), 250.

<https://doi.org/10.1016/j.jhep.2019.08.025>

Singh, G., Yoshida, E. M., Rathi, S., Marquez, V., Kim, P., Erb, S. R., & Salh, B. S. (2020). Biomarkers for hepatocellular cancer. *World Journal of Hepatology*, 12(9), 558-573.

<https://doi.org/10.4254/wjh.v12.i9.558>

Zheng, Z., Pang, C., Yang, Y., Duan, Q., Zhang, J., & Liu, W. (2018). Serum long noncoding RNA urothelial carcinoma-associated 1: A novel biomarker for diagnosis and prognosis of