

## **ABSTRACT**

**Background :** In Indonesia, hepatocellular carcinoma becomes the 9th most common cancer. Patients that are detected in the early stage are prone to have a better survival rate than the patients that come in the late stage. There are a lot of things that can affect the survival rate of the patient. This study talks about one year survival rate of patients that have predictive factors such as comorbidities, stage of the cancer, and treatment option that has been given.

**Aim :** The objective of this study is to find the effect of etiology and comorbid to one year survival rate of the patients with hepatocellular carcinoma in Sardjito hospital.

**Methods :** This study used cohort retrospective analytical study. Using medical records from Sardjito hospital of patients that have been diagnosed with hepatocellular carcinoma based on MSCT abdomen three phase and or liver biopsy. from the year 2019-2023. Then the patient will be followed for one year through the medical record. The analysis study would be analyzed using Kaplan Meier and hazard ratio.

**Results:** This study examines the one-year survival rates of 135 HCC patients at RSUP Dr. Sardjito Yogyakarta. Hepatitis and NAFLD were the main etiology. Renal disease (p-value 0.018; RR 0.627) and lung disease (p-value 0.012; RR 0.638) significantly impact survival, while hypertension, heart disease, obesity, and diabetes did not. Advanced stages (p-value <0.001; RR 0.562) often lower the one year survival rate of the patients. While the early stage (p-value 0.003; RR 1.719) might have a higher chance to survive after one year. Treatment with TACE (p-value 0.067; RR 1.2) was common, while no treatment (p- value 0.003; RR 0.266) and surgical resection (p-value 0.016; RR 0.402) reduced survival likelihood.

**Conclusion:** Etiology (Hepatitis virus infection, NAFLD, AFLD), comorbidities (Renal disease and lungs disease), stadium of cancer (early stage and end stage), and treatment option (no treatment, surgical resection, and TACE) affect one year survival rate of patients with HCC in General Hospital Dr. Sardjito.

**Keywords:** Hepatocellular Carcinoma, Etiology, Survival Rate, Cancer Stadium, Comorbidity, Treatment Options.

## **ABSTRACT**

**Latar Belakang:** Di Indonesia, hepatoseluler karsinoma menempati urutan kanker ke-9 yang paling sering dijumpai. Pasien yang didiagnosis pada stadium awal memiliki tingkat kelangsungan hidup yang lebih tinggi. Proposal ini membahas tentang pengaruh faktor seperti komorbid, stadium kanker, dan pilihan pengobatan terhadap *survival rate* pasien dalam waktu 1 tahun.

**Tujuan :** Penelitian ini bertujuan untuk mengetahui pengaruh etiologi dan komorbid terhadap *Survival rate* 1 tahun pasien hepatoseluler karsinoma di RSUP Sardjito.

**Metode :** Penelitian ini menggunakan metode analisis retrospektif kohort dengan melihat data dari rekam medis RSUP Sardjito. Data mencakup semua pasien dengan diagnosis hepatoseluler karsinoma dari tahun 2019 hingga 2023. Pasien akan dipantau selama satu tahun melalui rekam medis. Data akan dianalisis dengan menggunakan Kaplan Meier dan Hazard ratio.

**Hasil:** Penelitian ini mengevaluasi *survival rate* satu tahun pada 135 pasien karsinoma hepatoseluler di RSUP Dr. Sardjito Yogyakarta. Etiologi yang sering ditemukan adalah hepatitis dan NAFLD. Komorbid penyakit ginjal (p-value 0.018; RR 0.627) dan penyakit paru (p-value 0.012; RR 0.638) memiliki dampak signifikan terhadap *survival rate*, sedangkan hipertensi, penyakit jantung, obesitas, dan diabetes tidak signifikan. Kasus dengan stadium lanjut (p-value <0.001; RR 0.562) cenderung memiliki prognosis buruk, sementara pasien dengan stadium awal (p-value 0.003; RR 1.719) menunjukkan *survival rate* yang lebih baik. Pengobatan dengan TACE paling sering digunakan (p-value 0.067; RR 1.2).

**Kesimpulan:** Etiologi (infeksi Hepatitis, NAFLD, AFLD), komorbid (penyakit ginjal dan penyakit paru-paru), stadium kanker (stadium awal dan stadium akhir), dan pilihan pengobatan (tidak diberikan pengobatan, reseksi bedah, dan TACE) mempengaruhi kelangsungan hidup satu tahun pasien HCC di RSUP Dr. Sardjito.

**Kata kunci:** Hepatoseluler Karsinoma, Etiologi, Komorbiditas, *Survival Rate*, Komorbiditas, Stadium kanker, Pilihan pengobatan.