



## PERBANDINGAN RENTANG WAKTU STANDAR DAN TIDAK STANDAR PADA POST TRANSARTERIAL CHEMOEMBOLIZATION 2 MENGGUNAKAN mRECIST CT SCAN ABDOMEN PASIEN KARSINOMA HEPATOSELULAR

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### INTISARI

**Latar Belakang :** Karsinoma hepatoselular adalah penyebab kematian keempat di dunia terkait kanker.. Menurut stadium BCLC, *transarterial chemoembolization* adalah pilihan pengobatan lini pertama untuk HCC stadium menengah. Evaluasi respon tumor yang digunakan adalah kriteria mRECIST. Perbandingan rentang waktu standar ( $\leq 95$  hari) dan tidak standar ( $>95$  hari) pada hasil terapi post TACE 2 berdasarkan kriteria mRECIST diperlukan untuk dapat menentukan prognosis pasien Karsinoma Hepatoselular.

**Tujuan :** Mengetahui perbedaan hasil terapi post TACE 2 lebih baik pada rentang waktu standar dibandingkan dengan rentang waktu tidak standar berdasarkan penilaian respon terapi mRECIST menggunakan CT Scan Abdomen.

**Bahan dan Metode :** Penelitian ini merupakan penelitian observasional analitik, desain retrospektif *cross sectional*. Sampel adalah 44 pasien KHS dengan metode pengambilan secara *consecutive non-random sampling* yang menjalani TACE 1 dan TACE 2 di ruang Catheter lab Instalansi Radiologi RSUP dr.Sardjito dan pemeriksaan CT scan abdomen setelah TACE 2 pada rentang waktu standar ( $\leq 95$  hari) dan rentang waktu tidak standar ( $>95$  hari) pada Januari 2014 – Desember 2022. Uji reliabilitas melibatkan dokter spesialis radiologi.

**Hasil :** Dari 44 sampel penelitian, hasil uji interobserver didapatkan nilai Kappa sebesar 0,783 dan intra observer adalah 1,000. Uji hipotesis Mann Whitney didapatkan proporsi terbanyak adalah stable disease di jarak TACE standar ( $\leq 95$  hari) yaitu 25 pasien (83.3%), nilai  $p=0,030$  ( $p<0,05$ ). Tidak terdapat perbedaan hasil respon terapi menurut mRECIST berdasarkan jenis kelamin, usia, lokasi KHS, ascites, nekrosis, thrombus vena porta, bentuk nodul, jumlah nodul, dan ukuran nodul ( $p>0,05$ ). Analisis multivariate berupa jarak TACE tidak standar memiliki nilai  $p=0,021$ , dengan koefisien regresi -2,227.

**Kesimpulan :** Terdapat perbedaan yang bermakna menurut kriteria mRECIST jarak standar lebih baik dibandingkan tidak standar ( $p=0,030$ ). Pengukuran hasil respon terapi menurut mRECIST pada interobserver yaitu kesesuaian yang cukup baik serta uji intraobserver yaitu kesesuaian sangat baik. Tidak terdapat perbedaan karakteristik jenis kelamin, usia, lokasi, ascites, nekrosis, thrombus vena porta, bentuk nodul, jumlah nodul, ukuran nodul, rentang waktu TACE 1 ke TACE 2. Hasil analisis multivariate yaitu memiliki derajat hasil respon terapi 2 tingkat lebih rendah dibandingkan jarak standar.

**Kata Kunci :** TACE, KHS, mRECIST, rentang waktu standar dan tidak standar, CT scan abdomen



## COMPARISON OF STANDARD AND NON-STANDARD TIME RANGE IN POST TRANSARTERIAL CHEMOEMBOLIZATION 2 USING mRECIST CT SCAN ABDOMEN IN HEPATOCELLULAR CARCINOMA PATIENTS

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### ABSTRACT

**Background :** Hepatocellular carcinoma (HCC) is the world's fourth most common cause of cancer-related death. According to the BCLC stage, transarterial chemoembolization is the first-line treatment option for intermediate stage HCC. Evaluation of tumor response used is the mRECIST criteria. A comparison of standard ( $\leq 95$  days) and nonstandard ( $> 95$  days) timeframes on post-TACE 2 therapy results based on mRECIST criteria is necessary to be able to determine the prognosis of Hepatocellular Carcinoma patients.

**Objective:** Knowing the difference in post-TACE 2 therapy results is better at standard time intervals compared to non-standard time ranges based on the assessment of response to mRECIST therapy using Abdomen CT Scan.

**Materials and Methods :** This study is an analytic observational study, a retrospective cross-sectional design. Samples were 44 KHS patients with consecutive non-random sampling who underwent TACE 1 and TACE 2 in the Catheter Lab Radiology Installation Dr. Sardjito Hospital and abdominal CT scan examination after TACE 2 at standard time ranges ( $\leq 95$  days) and non-standard time ( $> 95$  days) in January 2014 – December 2022. The reliability test involved a radiologist.

**Results:** Of the 44 research samples, the results of the interobserver test according to mRECIST obtained a Kappa value of 0.783 and an intraobserver value of 1.000. The Mann-Whitney hypothesis test found that the highest proportion was stable disease at the standard TACE range ( $\leq 95$  days), namely 25 patients (83.3%),  $p = 0.030$  ( $p < 0.05$ ). There were no differences in the results of the response to therapy according to mRECIST based on gender, age, location of KHS, ascites, necrosis, portal vein thrombus, nodule shape, nodule number, and nodule size ( $p > 0.05$ ). Multivariate analysis in the form of non-standard TACE distance has a value of  $p = 0.021$ , with a regression coefficient of -2.227.

**Conclusion:** There is a significant difference according to mRECIST criteria, standard distance is better than nonstandard ( $p=0.030$ ). The measurement of the results of the therapeutic response according to mRECIST on the interobserver is a fairly good suitability and the intraobserver test is a very good suitability. There were no differences in the characteristics of gender, age, location, ascites, necrosis, portal vein thrombus, nodule shape, number of nodules, nodule size, time range from TACE 1 to TACE 2. The results of multivariate analysis were having a degree of response to therapy 2 levels lower than standard distance.

Keywords: TACE, HCC, mRECIST, standard and non standard time ranges, abdominal CT scan