

## EVALUASI RESPON TUMOR MENURUT RECIST 1.1 DAN *MODIFIED* RECIST PADA PASIEN KARSINOMA HEPATOSELULER SETELAH TACE

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### INTISARI

**Latar Belakang:** Karsinoma hepatoseluler (KHS) adalah tumor primer paling sering kelima didunia. *Transarterial chemoembolization* (TACE) adalah terapi pilihan khususnya pada KHS *intermediate*. Beberapa kriteria yang dapat digunakan untuk evaluasi respon terapi setelah tindakan TACE diantaranya RECIST 1.1 dan *modified* RECIST (mRECIST).

**Tujuan Penelitian:** Mengetahui perbedaan evaluasi respon tumor menurut RECIST 1.1 dan mRECIST.

**Metode Penelitian:** Subyek penelitian terdiri dari 38 citra MSCT scan abdomen 4 fase pada masing-masing kriteria yang telah mendapatkan terapi TACE menggunakan lipiodol dan doxorubicin. Uji perbedaan menggunakan uji Mann Whitney, dilanjutkan dengan *survival rate* menggunakan metode Kaplan-Meier.

**Hasil:** Menurut RECIST 1.1 tidak ada subyek yang dikategorikan *complete response* (CR) maupun *partial response* (PR), 10 (26,3%) *progressive disease* (PD), dan 28 (73,7%) *stable disease* (SD). Menurut mRECIST 4 (10,5%) CR, 4 (10,5%) PR, 20 (52,6%) SD dan 10 (26,3%) PD ( $p = 0,003$ ). Berdasarkan respon (CR, PR) dan tidak respon (SD, PD), menurut RECIST 1.1 keseluruhan subyek tidak respon terhadap terapi TACE. Menurut mRECIST 8 (21,1%) respon dan 30 (78,9%) tidak respon terhadap TACE ( $p = 0,000$ ). Kaplan Meier pada masing-masing kriteria didapatkan *median overall survival* 17 bulan (95% CI, 13,0-20,08).

**Kesimpulan:** Terdapat perbedaan yang bermakna antara evaluasi respon tumor menurut RECIST 1.1 dan mRECIST ( $p = 0,003$ ). Terdapat perbedaan yang bermakna antara respon maupun tidak respon terhadap terapi TACE menurut RECIST 1.1 dan mRECIST ( $p = 0,000$ ). TACE memberikan manfaat bagi kelangsungan hidup pasien KHS dengan *median overall survival rate* 17 bulan pada kelompok RECIST 1.1 maupun mRECIST.

**Kata Kunci:** Karsinoma Hepatoseluler, TACE, RECIST 1.1, mRECIST

## EVALUATION OF TUMOR RESPONSE ACCORDING TO RECIST 1.1 AND MODIFIED RECIST IN HEPATOCELLULAR CARCINOMA PATIENTS AFTER TACE

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### ABSTRACT

**Background:** Hepatocellular carcinoma (KHS) is the fifth most common primary tumor in the world. Transarterial chemoembolization (TACE) is the therapy of choice especially in intermediate KHS. Some criteria that can be used to evaluate therapeutic response after TACE actions include RECIST 1.1 and modified RECIST (mRECIST).

**Objective:** Knowing the difference in evaluation of tumor response according to RECIST 1.1 and mRECIST.

**Material and Methods:** The study subjects consisted of 38 multislices computed tomography scanning (MSCT scan) 4-phase abdominal images in each group of criteria who had received TACE using lipiodol and doxorubicin in January 2015-May 2018 at Dr. Sardjito general hospital, Yogyakarta. Tumor response evaluation was performed on the image of MSCT scan 4 phases abdominal before TACE and after one month the TACE action used the RECIST 1.1 and mRECIST criteria. Differences of RECIST 1.1 and mRECIST were performed by Mann Whitney test, followed by survival rate using the Kaplan-Meier method.

**Results:** According to RECIST 1.1 there were no subjects categorized as complete response (CR) or partial response (PR), 10 (26.3%) progressive disease (PD), and 28 (73.7%) stable disease (SD). According to the mRECIST 4 (10.5%) CR, 4 (10.5%) PR, 20 (52.6%) SD and 10 (26.3%) PD ( $p = 0.003$ ). Based on the response (CR, PR) and no response (SD, PD), according to RECIST 1.1 all subjects (100%) did not respond to TACE therapy. According to the mRECIST, 8 (21.1%) responded and 30 (78.9%) did not respond to TACE ( $p = 0.000$ ). Followed by Kaplan Meier on each criterion obtained median overall survival was 17 month (95% CI, 13.0-20.08) in the RECIST 1.1 and mRECIST groups.

**Conclusion:** There was a significant difference between evaluation of tumor response according to RECIST 1.1 and mRECIST in patients with KHS after TACE ( $p = 0.003$ ). There was a significant difference between the response and non-response to TACE therapy in patients with KHS according to RECIST 1.1 and mRECIST ( $p = 0.000$ ). TACE provides benefits for the survival of KHS patients with a 17-month median overall survival rate in the RECIST 1.1 and mRECIST groups.

**Keyword:** Hepatocellular Carcinoma, TACE, RECIST 1.1, mRECIST