

PERBANDINGAN RESPON TERAPI *TRANSARTERIAL* *CHEMOEMBOLIZATION* PADA KARSINOMA HEPATOSELULER ANTARA KRITERIA *MODIFIED* DAN *VOLUMETRIC* RECIST PADA CT SCAN

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INTISARI

Latar Belakang. Karsinoma hepatoseluler/KHS merupakan etiologi keganasan hepar terbesar. *Transarterial Chemoembolization*/TACE merupakan modalitas terpilih pada kasus KHS stadium *intermediate*. Evaluasi respon terapi TACE pada area *viable tumor* dapat dilakukan dengan *modified* dan *volumetric* RECIST. Penelitian ini penting untuk diteliti karena perlu adanya data untuk melihat apakah terdapat perbedaan hasil respon terapi dan menilai kesesuaian kategori respon antara mRECIST dan vRECIST.

Tujuan. Tujuan penelitian ini untuk mengetahui perbedaan respon terapi setelah TACE pada pasien KHS antara kriteria mRECIST dan vRECIST

Bahan dan Metode. Penelitian ini merupakan studi analitik komparatif, desain *retrospective cross-sectional* dengan menggunakan data sekunder MSCT Abdomen 4 fase. Sampel adalah 50 pasien KHS yang sudah menjalani TACE dari bulan Januari 2018-April 2022, dan dilakukan secara *consecutive non random sampling*. Pengukuran lesi dilakukan hanya pada area *viable tumor* pada fase arteri dengan *software Phillips IntelliSpace Porta*. Uji reliabilitas melibatkan dokter spesialis radiologi dengan pengalaman kerja lebih dari 3 tahun.

Hasil. Terdapat perbedaan yang signifikan antara kelompok respon dan tidak respon terapi antara kriteria mRECIST dan vRECIST ($p=0,001$, $p<0,05$), dengan *measure of agreement* $\kappa = 0,511$ (95% *Confidence interval* 1,76-1,96), dan *proportion of agreement* 84%. Terdapat perbedaan yang signifikan antara kategori evaluasi respon (CR, PR, SD, PD) antara kriteria mRECIST dan vRECIST ($p=0,001$, $p<0,05$), dengan *measure of agreement* $\kappa = 0,573$ (95% *Confidence interval* 2,83-3,21). Uji reliabilitas mRECIST menunjukkan nilai α intraobserver 0,843 dan α interobserver 0,869. Uji reliabilitas vRECIST menunjukkan nilai α intraobserver 0,969 dan α interobserver 0,982.

Kesimpulan. Terdapat perbedaan yang bermakna terhadap evaluasi respon terapi TACE pada pasien KHS antara kriteria mRECIST dan vRECIST, dimana kesesuaian antara kedua kriteria tersebut berada dalam rentang sedang-baik. *Reproducibility* vRECIST lebih tinggi dibandingkan mRECIST terhadap evaluasi respon terapi KHS.

Kata Kunci. Karsinoma hepatoseluler, TACE, mRECIST, vRECIST, volumetrik

THE COMPARISON OF TRANSARTERIAL CHEMOEMBOLIZATION RESPONSE THERAPY IN HEPATOCELLULAR CARCINOMA BETWEEN MODIFIED AND VOLUMETRIC RECIST ON CT SCAN

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ABSTRACT

Background. Hepatocellular carcinoma (HCC) is the most common etiology of liver malignancy. Transarterial Chemoembolization/TACE is the modality of choice in cases of intermediate stage HCC. Evaluation of the response therapy to TACE in viable tumors can be done with modified and volumetric RECIST. This study is important to see if there are differences in the results of treatment responses and assess the suitability of response categories between mRECIST and vRECIST.

Objective. To determine the difference in response therapy after TACE in KHS patients between the mRECIST and vRECIST criteria

Material and Methods. This study is a comparative analytical study, with retrospective cross-sectional design and using secondary data of 4-phase abdominal MSCT. The samples were 50 HCC patients who had undergone TACE from January 2018-April 2022. Lesion measurements were performed only on the viable tumor area in the arterial phase using the Phillips IntelliSpace Porta software. The reliability test involves a radiologist with more than 3 years of work experience

Results. There was a significant difference between the response and non-response groups between the mRECIST and vRECIST criteria ($p=0.001$, $p<0.05$), with a measure of agreement $\kappa = 0.511$ (95% Confidence interval 1.76-1.96), and proportion of agreements 84%. There was a significant difference between the response evaluation categories (CR, PR, SD, PD) between the mRECIST and vRECIST criteria ($p=0.001$, $p<0.05$), with a measure of agreement $\kappa = 0.573$ (95% Confidence interval 2.83- 3.21). The mRECIST reliability test showed an α intraobserver value of 0.843 and an α interobserver of 0.869. The vRECIST reliability test showed an α intraobserver value of 0.969 and an α interobserver of 0.982.

Conclusion. There was a significant difference in the evaluation of the response therapy to TACE in HCC patients between the mRECIST and vRECIST criteria, where the suitability between the two criteria was in the moderate-good range. The reproducibility of vRECIST was higher than mRECIST in evaluating the response therapy to HCC.

Keywords. Hepatocellular Carcinoma, TACE, mRECIST, vRECIST, volumetri

