



## KOMPARASI MONOTERAPI DIBANDINGKAN TERAPI KOMBINASI TERHADAP OUTCOME STATUS FUNGSIONAL PASIEN METASTASIS OTAK

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### ABSTRAK

**Latar Belakang:** Metastasis otak merupakan neoplasma intrakranial terbanyak pada populasi dewasa, dengan kejadian > 50% dari keseluruhan kasus tumor intrakranial. Tatalaksana metastasis otak, baik monoterapi maupun kombinasi, terus mengalami perkembangan untuk memperpanjang kesintasan dan luaran penderita. Penelitian ini bertujuan untuk membandingkan antara status fungsional pasien yang menerima monoterapi dengan terapi kombinasi dengan menggunakan skor *Karnofsky Performance Scale* (KPS)

**Metode:** Penelitian ini merupakan studi kohort retrospektif yang melibatkan 124 pasien metastasis otak RSUP Dr Sardjito di Yogyakarta. Data diperoleh melalui *cancer registry* neuro-onkologi pasien metastasis otak yang memenuhi kriteria inklusi. Analisis data dilakukan dengan tiga tahapan, yaitu analisis univariat, bivariat, dan multivariat. Nilai  $p<0,05$  menunjukkan signifikansi hasil penelitian.

**Hasil:** Usia rata-rata pasien dengan metastasis otak adalah 55,13 tahun, dengan predominansi jenis kelamin perempuan (64,8%). Majoritas pasien tidak memiliki komorbiditas (74,2%), sumber tumor primer dari kanker payudara (37,9%), memiliki ukuran tumor < 3 cm (55,3%), berjumlah multipel (62,9%), berlokasi di supratentorial (70,2%), tidak mengalami metastasis ekstrakranial (77,4%), mendapatkan monoterapi (67,7%) berupa radioterapi (71,0%). Terdapat perbedaan bermakna antara terapi ( $p=<0,001$ ), jenis terapi ( $p=0,013$ ), komorbiditas ( $p=0,039$ ), dan ukuran tumor ( $p<0,001$ ) dengan skor KPS. Namun, hanya terapi (monoterapi atau kombinasi) dan ukuran tumor yang berhubungan signifikan dengan skor KPS ( $p=0,001$ ;  $p=0,001$ ; secara berurutan).

**Kesimpulan:** Terdapat perbedaan signifikan antara monoterapi dibandingkan dengan terapi kombinasi dengan skor KPS lebih tinggi pada pasien yang menerima terapi kombinasi.

Kata Kunci: metastasis otak, monoterapi, status fungsional, terapi kombinasi

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## COMPARISON OF MONOTHERAPY VERSUS COMBINATION THERAPY ON OUTCOME FUNCTIONAL STATUS OF BRAIN METASTASIC PATIENTS

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### ABSTRACT

**Background:** Brain metastases (BM) are the most common intracranial neoplasms in the adult population, with an incidence of > 50% of all cases of intracranial tumors. Management of BM continues to develop to increase patient survivability. This study aimed to compare the functional status of patients who receive monotherapy with combination therapy by using the Karnofsky Performance Scale (KPS) score.

**Methods:** This research is a retrospective cohort study involving 124 brain metastasis patients from RSUP Dr. Sardjito in Yogyakarta. Data was obtained through *cancer registry neuro-oncology* of BM patients who met the inclusion criteria. Data analysis was carried out in three stages, namely univariate, bivariate, and multivariate. The p-value <0.05 indicates the significance of the research results.

**Results:** The average age of patients with brain metastases was 55.13 years, with a predominance of females (64.8%). The majority of patients had no comorbidities (74.2%), the source of the primary tumor was breast cancer (37.9%), had a tumor size < 3 cm (55.3%), was multiple (62.9%), located in supratentorial (70.2%), did not have extracranial metastases (77.4%), received monotherapy (67.7%) in the form of radiotherapy (71.0%). There were significant differences between therapy ( $p=<0.001$ ), type of therapy ( $p=0.013$ ), comorbidities ( $p=0.039$ ), and tumor size ( $p<0.001$ ) with the KPS score. However, only therapy (monotherapy or combination) and tumor size were significantly associated with KPS scores ( $p=0.001$ ;  $p=0.001$ ; respectively).

**Conclusion:** There is a significant difference between monotherapy compared with combination therapy with higher KPS scores in patients receiving combination therapy.

Keywords: brain metastases, combination therapy, functional status, monotherapy  
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