

INTISARI

Penelitian ini bertujuan untuk menganalisis ketahanan hidup satu tahun pada pasien penyakit tulang metastatik di RSUP Dr. Sardjito, dengan fokus pada perbandingan ketahanan hidup satu tahun antara kelompok dengan organ asal kanker primer yang diketahui (*known origin*) dan yang tidak diketahui (*unknown origin*), serta menganalisis variasi ketahanan hidup satu tahun berdasarkan organ asal kanker primer pada kelompok *known origin*. Penelitian menggunakan desain kohort retrospektif terhadap 41 pasien yang terdiagnosis penyakit tulang metastatik (ICD-10 C79.5) periode Januari 2020-Juli 2024. Data dikumpulkan dari rekam medis elektronik dan dianalisis menggunakan metode Kaplan-Meier, uji log-rank, dan regresi Cox.

Hasil penelitian menunjukkan *one-year survival rate* keseluruhan sebesar 19,5%. Analisis berdasarkan status organ asal menunjukkan bahwa kelompok *known origin* memiliki *one-year survival rate* 24,0%, sedangkan kelompok *unknown origin* memiliki *one-year survival rate* 12,5%, dan perbedaan ini tidak signifikan secara statistik ($p=0,12$). Analisis lebih lanjut pada kelompok *known origin* ($n=25$) menunjukkan pengaruh heterogen organ asal kanker primer terhadap ketahanan hidup satu tahun, yakni kanker tiroid menunjukkan efek protektif yang signifikan secara statistik dengan *one-year survival rate* 42,9%, sementara kanker payudara tidak menunjukkan perbedaan signifikan dibandingkan kanker paru. Analisis regresi Cox multivariat mengidentifikasi bahwa kanker tiroid (HR: 0,13; 95% CI: 0,03-0,55; $p=0,006$) dan tidak menerima kombinasi terapi sistemik dan *metastatic-directed treatment* (khususnya pasien yang hanya mendapat terapi lokal: HR: 13,56; 95% CI: 1,97-93,47; $p=0,008$) merupakan faktor prognostik independen yang signifikan terhadap *one-year survival*.

Disimpulkan bahwa: 1) Status organ asal kanker primer (*known origin versus unknown origin*) tidak menunjukkan pengaruh yang signifikan secara statistik terhadap ketahanan hidup satu tahun pasien penyakit tulang metastatik; 2) Pasien dengan penyakit tulang metastatik akibat kanker tiroid memiliki ketahanan hidup satu tahun yang secara signifikan lebih baik dibandingkan pasien dengan metastasis tulang akibat kanker payudara maupun paru. Selain itu, organ asal dan kelengkapan modalitas terapi terbukti sebagai determinan prognosis yang independen.

Kata kunci: *One-year survival*, ketahanan hidup 12 bulan, metastasis tulang, *known origin*, *unknown origin*, prognosis, kohort retrospektif, RSUP Dr. Sardjito.

ABSTRACT

This study aimed to analyze one-year survival in patients with metastatic bone disease at Dr. Sardjito General Hospital, focusing on comparing one-year survival between groups with known and unknown primary cancer origins. The study also analyzed variations in one-year survival based on the primary cancer origin within the known origin group. The study used a retrospective cohort design involving 41 patients diagnosed with metastatic bone disease (ICD-10 C79.5) between January 2020 and July 2024. Data were collected from electronic medical records and analyzed using the Kaplan-Meier method, the log-rank test, and Cox regression.

The results showed an overall one-year survival rate of 19.5%. Analysis based on the organ of origin status showed that the known origin group had a one-year survival rate of 24.0%, while the unknown origin group had a one-year survival rate of 12.5%. This difference was not statistically significant ($p=0.12$). Further analysis in the known origin group ($n=25$) demonstrated a heterogeneous effect of the primary cancer's organ of origin on one-year survival. Thyroid cancer demonstrated a statistically significant protective effect with a one-year survival rate of 42.9%, while breast cancer showed no significant difference compared to lung cancer. Multivariate Cox regression analysis identified that thyroid cancer (HR: 0.13; 95% CI: 0.03-0.55; $p=0.006$) and not receiving combined systemic and metastatic-directed treatment (especially for patients receiving only local therapy: HR: 13.56; 95% CI: 1.97-93.47; $p=0.008$) were significant independent prognostic factors for one-year survival.

It was concluded that: 1) The status of the primary cancer's organ of origin (known versus unknown origin) did not have a statistically significant effect on one-year survival in patients with metastatic bone disease; 2) Patients with metastatic bone disease due to thyroid cancer have significantly better one-year survival than patients with bone metastases due to breast or lung cancer. Furthermore, the organ of origin and the completeness of treatment modalities have been shown to be independent prognostic determinants.

Keywords: One-year survival, 12-month survival, bone metastases, known origin, unknown origin, prognosis, retrospective cohort, Dr. Sardjito General Hospital.