

INTISARI

Triple-negative breast cancer (TNBC) memiliki pilihan kemoterapi terbatas akibat ketiadaan reseptor estrogen, progesteron, dan HER2. Angka kejadian yang banyak pada usia muda meningkatkan beban ekonomi. Kemoterapi berbasis antrasiklin dan takson menjadi terapi standar pada pengobatan TNBC. Penambahan agen platinum memberikan luaran klinis yang lebih baik, meskipun terdapat peningkatan risiko kejadian efek samping dengan persentase yang variatif. Penelitian ini bertujuan mengetahui efektivitas biaya kemoterapi berbasis platinum dan non-platinum pada pasien TNBC dari perspektif rumah sakit.

Penelitian ini menggunakan desain kohort retrospektif dan melibatkan pasien wanita TNBC di RS Kanker Dharmais periode 1 Januari 2018 – 31 Desember 2023 yang memenuhi kriteria inklusi dan eksklusi. Parameter yang dinilai adalah *locoregional recurrence-free survival* (LRFS), *overall survival* (OS), efek samping, dan biaya medis langsung. Analisis dilakukan menggunakan *chi-square test*, metode *Kaplan-Meier* serta penghitungan *incremental cost effectiveness ratio* (ICER).

Sebanyak 40 pasien memenuhi kriteria inklusi dan eksklusi, terdiri atas 24 dan 16 pasien pada kelompok kemoterapi non-platinum dan platinum. *Overall survival* kelompok kemoterapi platinum lebih tinggi dibandingkan kelompok kemoterapi non-platinum namun tidak signifikan (median= 34 vs 29 bulan; $p=0,563$) sedangkan LRFS lebih baik secara signifikan pada kelompok kemoterapi non-platinum (median= 28 vs 7 bulan; $p=0,03$). Reaksi obat yang tidak diharapkan lebih banyak terjadi pada kelompok kemoterapi platinum (93,8% vs 87,5%). Rata-rata biaya medis langsung kelompok kemoterapi platinum secara signifikan lebih tinggi dibandingkan kemoterapi non-platinum (Rp 344.150.678 vs Rp 183.470.989 per pasien; $p=0,001$). Nilai ICER yang diperoleh Rp -14.822.850 menunjukkan kemoterapi non-platinum lebih *cost-saving* pada pasien TNBC di *setting* Indonesia.

Kata kunci: *triple-negative breast cancer*, efektivitas biaya, platinum

ABSTRACT

Triple-negative breast cancer (TNBC) is a subtype of breast cancer characterized by the absence of estrogen receptors (ER), progesterone receptors (PR), and human epidermal growth factor receptor 2 (HER2). Its high incidence among younger women contributes to a greater economic burden. Standard treatment typically includes anthracycline and taxane. While the addition of platinum agents may improve clinical outcomes, it also increases risk of adverse drug reactions (ADRs). This study aims to evaluate the cost-effectiveness of platinum-based versus non-platinum chemotherapy in TNBC patients from a hospital perspective.

A retrospective cohort designed was used, involving female TNBC patients treated at Dharmais Cancer Hospital between January 1, 2018 and December 31, 2023, who met the inclusion and exclusion criteria. Parameters assessed included locoregional recurrence-free survival (LRFS), overall survival (OS), ADRs, and direct medical costs. Data analysis included chi-square test, Kaplan-Meier analysis, and calculation of the incremental cost effectiveness ratio (ICER).

A total of 40 patients met the criteria, with 24 received non-platinum chemotherapy and 16 received platinum-based regimens. Although the platinum group showed a higher median OS (34 vs 29 months), the difference was not statistically significant ($p=0.563$). However, the non-platinum group demonstrated significantly better LRFS (median 28 vs 7 months; $p=0.03$). Adverse drug reactions were more frequent in the platinum group (93.8%) compared to the non-platinum group (87.5%). The average direct medical cost per patient was significantly higher in the platinum group (IDR 344,150,678 vs IDR 183,470,989; $p=0.001$). The resulting ICER of negative IDR 14,822,850 indicates that non-platinum chemotherapy is more cost-saving in the treatment of TNBC in the Indonesian healthcare setting.

Keywords: triple-negative breast cancer, cost-effectiveness, platinum