

## ABSTRACT

**Background:** Breast cancer is the most common type of cancer worldwide and a leading cause of global mortality, with two out of three patients experiencing recurrence not surviving beyond five years. Disease-Free Survival (DFS) in breast cancer patients varies and is influenced by multiple factors. This study aims to analyze the 5-year Disease-Free Survival of breast cancer patients based on patient characteristics and clinical aspects at Raden Mattaher General Hospital, Jambi.

**Methods:** This study utilized secondary data analysis from medical records of breast cancer patients diagnosed between 2017 and 2019 at Raden Mattaher General Hospital, Jambi, using a retrospective cohort design. A total of 96 patients were included from a dynamic cohort population. Data analysis was conducted using the Kaplan-Meier method and log-rank test with STATA 14, considering p-values <0.05 as statistically significant.

**Results:** The probability of 5-year Disease-Free Survival among breast cancer patients at Raden Mattaher General Hospital was 61.85%. Lower Disease-Free Survival probabilities were observed in patients aged <40 years (41.30%), BMI  $\geq 23$  kg/m<sup>2</sup> (45.92%), stage III (5.03%), poor tumor grade (30.25%), positive nodal status (23.86%), tumor size >50 mm (10.70%), non-luminal subtype (28.56%), lymphovascular invasion (27.08%), and those receiving only surgery or chemotherapy (33.33%).

**Conclusion:** Significant differences were found in Disease-Free Survival based on age, BMI, stage, grade, nodal status, tumor size, molecular subtype, lymphovascular invasion, and type of therapy ( $p < 0.05$ ). Despite undergoing primary treatment, patients remain at risk of recurrence. Therefore, early diagnosis, regular follow-ups and education on recurrence symptoms are essential, and hospitals must ensure proper monitoring and appropriate treatment.

**Keywords:** Breast Cancer, Disease Free Survival, Cohort Retrospective

## ABSTRAK

**Latar Belakang:** Kanker payudara merupakan jenis kanker paling umum di dunia dan penyebab utama kematian global, dengan dua dari tiga pasien yang mengalami kekambuhan tidak bertahan hingga lima tahun. Kesintasan bebas kekambuhan (*Disease Free Survival*) pada pasien kanker payudara bervariasi dan dipengaruhi oleh berbagai faktor. Penelitian ini bertujuan untuk menganalisis *Disease Free Survival* 5 tahun pada pasien kanker payudara berdasarkan aspek penderita dan klinis di RSUD Raden Mattaher Jambi.

**Metode:** Penelitian ini menggunakan analisis data sekunder dari rekam medis pasien kanker payudara yang didiagnosis tahun 2017–2019 di RSUD Raden Mattaher Jambi, dengan desain kohort retrospektif. Sampel berjumlah 96 pasien dari populasi kohort dinamis (*cohort dynamic*). Analisis dilakukan dengan metode Kaplan-Meier dan uji *log-rank* menggunakan STATA 14, dengan nilai  $p < 0,05$  dianggap signifikan.

**Hasil:** Probabilitas kesintasan bebas kekambuhan selama 5 tahun pada pasien kanker payudara di RSUD Raden Mattaher Jambi adalah 61,85%. Probabilitas kesintasan bebas kekambuhan lebih rendah pada pasien berusia  $< 40$  tahun (41,30%), IMT  $\geq 23$  kg/m<sup>2</sup> (45,92%), stadium III (5,03%), grade buruk (30,25%), status nodal positif (23,86%), ukuran tumor  $> 50$  mm (10,70%), subtype non-luminal (28,56%), invasi limfovaskular (27,08%), serta yang hanya menjalani pembedahan atau kemoterapi (33,33%).

**Kesimpulan:** Terdapat perbedaan signifikan dalam rata-rata waktu kesintasan bebas kekambuhan berdasarkan usia, IMT, stadium, grade, status nodal, ukuran tumor, subtype molekuler, invasi limfovaskular, dan jenis terapi ( $p < 0,05$ ). Meskipun telah menjalani pengobatan utama, pasien tetap berisiko mengalami kekambuhan. Oleh karena itu, diagnosis dini, kontrol rutin dan edukasi terkait gejala kekambuhan sangat diperlukan, serta rumah sakit perlu memastikan pemantauan dan perawatan yang tepat.

**Kata Kunci :** Kanker Payudara, *Disease Free Survival*, Kohort Retrospektif.