

INTISARI

PAN IMMUNE INFLAMMATION VALUE (PIV) SEBAGAI INDIKATOR PROGNOSTIK

PADA PASIEN KANKER PAYUDARA DI RSUP DR. SARDJITO

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Latar Belakang

Nilai Pan Immune Inflammation Value (PIV) merupakan salah satu indikator prognostik yang baru pada pasien kanker payudara. Belum diketahui nilai PIV terhadap kesintasan pasien kanker payudara di Indonesia.

Metode Penelitian

Penelitian dilakukan secara retrospektif, melibatkan 208 pasien kanker payudara yang terdiagnosa tahun 2018-2024 di RSUP Dr. Sardjito. Nilai PIV diambil dari hasil pemeriksaan darah rutin sebelum dilakukan terapi. Analisis kesintasan menggunakan kurva Kaplan Meier. Uji univariat faktor prognostik menggunakan *log – rank test*, diikuti dengan uji multivariat *Cox proportional hazard* dan *Step Wise Backward*. Hasil dinyatakan bermakna secara statistik bilai nilai $p < 0,05$.

Hasil Penelitian

Saat terdiagnosis, 56,7% subjek berusia ≥ 50 tahun dengan rerata usia $52,38 \pm 9$ tahun. Sebanyak 52,9% subjek memiliki indeks massa tubuh (IMT) ≥ 23 kg/m², 63,4% subjek memiliki tumor T3-4, 68,2% subjek N (+), 29% subjek M (+), 31,3% subjek mengalami anemia, 87,5% subjek mendapat kemoterapi, 89,4% subjek mendapatkan operasi, 57,7% subjek mendapatkan radioterapi. Berdasarkan stadium penyakit 28,4% subjek tergolong dalam stadium awal, 71,6% subjek tergolong dalam stadium lanjut. Sebanyak 60,6% subjek masih hidup pada *follow-up* 36 bulan, dengan rerata kesintasan 32,5 bulan. Variabel yang signifikan pada uji bivariat terhadap kesintasan hidup adalah nilai PIV, IMT, T, N, M, stadium, Subtipe Her 2+, operasi, kemoterapi, dan radioterapi. Variabel yang signifikan pada uji multivariat terhadap kesintasan adalah nilai PIV tinggi ($> 576,5$), stadium lanjut, subtipe HER 2+ dan radioterapi.

Kesimpulan

Nilai PIV memiliki indikator prognostik pada pasien kanker payudara di RSUP dr. Sardjito, dengan *cut off* 576,5. Nilai PIV tinggi ($>576,5$) memiliki kesintasan dengan hazard ratio sebesar 2,6 dan bermakna secara signifikan dengan analisis multivariat $p = 0.001$.

Kata Kunci: PIV, kanker payudara, faktor prognostik

ABSTRACT

PAN IMMUNE INFLAMMATION VALUE (PIV) AS PROGNOSTIC INDICATOR IN BREAST CANCER PATIENTS IN DR. SARDJITO GENERAL HOSPITAL

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Background

Pan Immune Inflammation Value, a novel biomarker of survival in breast cancer patients. Currently there is no data on the prognostic value of PIV in Indonesian breast cancer patients.

Methods

A retrospective cohort study was conducted involving 208 breast cancer patients diagnosed between 2018-2024 in Dr. Sardjito General Hospital. PIV was examined using routine blood examination before therapy. Survival analysis was performed using *Kaplan Meier* curve. Univariate analysis of potential prognostic factor was conducted using *log-rank test*, followed by multivariate analysis using *Cox proportional hazard* and *Step Wise Backward*. Significant value was set at $p < 0,05$.

Results

At diagnosis, 56,7% subjects were ≥ 50 years old, with mean of 52.38 ± 9 years. Fifty two percent subjects had body mass index (BMI) $> 23 \text{ kg/m}^2$, 63.4% subjects had T3-4 tumor, 68.2% subjects had N (+), 29% subjects had M (+), 31.3% subjects had anemia, 87.5% subjects received chemotherapy, 89.4% subjects received surgery, 57.7% subjects received radiotherapy. According to disease stage, 28.4% subjects were early stage and 71.6% subjects were late stage. As many as 60.6% subject were alive at 36 months follow up, with mean survival of 32.5 months. Variables significant in bivariate analysis were PIV, BMI, tumor size, lymph node, metastasis, stage, subtype Her2+, surgery, chemotherapy, and radiotherapy were significant. Variables significant in multivariate analysis were high PIV (>576.5), late stage, subtype HER 2+ and radiotherapy.

Conclusion

PIV is independently associated with prognostic factor in breast cancer patients in Dr. Sardjito General Hospital with cut off 576.5. High PIV ($>576,5$) had worse survival with hazard ratio 2.6 and $p = 0.001$.

Keywords: PIV, breast cancer, prognostic factor