

## INTISARI

### RASIO LIMFOSIT – MONOSIT SEBAGAI FAKTOR PROGNOSIS MORTALITAS PADA PASIEN ADENOKARSINOMA PARU STADIUM 4 DI RSUP DR SARDJITO

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**Latar Belakang:** Prognosis Mortalitas pada pasien kanker merupakan alat bantu yang berguna dalam menentukan terapi terbaik pada pasien yang menderita kanker. Berbagai variabel prognosis telah diteliti yang berkorelasi dengan prognosis mortalitas pasien, salah satunya adalah Limfosit-Monosit ratio (LMR), LMR ini pada penelitian terdahulu dinyatakan nilainya turun pada pasien yang mempunyai prognosis buruk penyakit kankernya. Saat ini belum ada yang meneliti tentang korelasi LMR pada adenokarsinoma paru di Indonesia

**Tujuan Penelitian :** Mengetahui korelasi antara nilai LMR dengan mortalitas pada pasien adenokarsinoma paru.

**Metode Penelitian:** Penelitian kohort retrospektif yang melibatkan 207 pasien Adenokarsinoma paru stadium di RSUP dr Sardjito terkumpul dari Januari 2014 sampai Januari 2020. Data karakteristik dasar didapatkan dari rekam medik di instalasi rekam medis RSUP Dr Sardjito. Nilai LMR didapatkan dari data laboratorium di rekam medis sebelum terapi kanker. Data mortalitas didapatkan dari rekam medis dan dari telepon kepada keluarga pasien sesuai protokol ethical clearance. Analisis data dengan menggunakan perangkat lunak SPSS versi 23 dengan nilai kemaknaan  $p < 0,05$  dan interval kepercayaan 95%.

**Hasil Penelitian:** Pada studi ini didapatkan mortalitas < 6 bulan hanya 37,2% total populasi. Nilai LMR sesuai analisa ROC didapat cutoff  $< 1,75$ . Hasil analisa bivariat didapatkan nilai signifikansi antara LMR dan mortalitas 6 bulan dimana LMR rendah memiliki resiko relatif sebesar 3,17 x untuk mortalitas < 6 bulan dibandingkan dengan nilai LMR yang lebih tinggi ( $p < 0,05$ , 95% CI 1,76 – 5,69). Dari analisa multivariate tidak didapatkan variabel yang signifikan meningkatkan nilai prognosis LMR.

**Kesimpulan:** Nilai LMR yang rendah berhubungan dengan peningkatan mortalitas adenokarsinoma paru stadium IV

**Kata Kunci :** LMR, Adenokarsinoma paru, Prognosis Mortalitas, Limfosit, Monosit

## ABSTRACT

### LYMPHOCYTE – MONOCYTE RATIO AS A PROGNOSTIC FACTOR IN MORTALITY OF STAGE 4 PULMONARY ADENOCARCINOMA AT DR SARDJITO HOSPITAL

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**Background:** Prognosis Mortality in cancer patients is a useful tool in determining the best therapy for patients suffering from cancer. Various prognostic variables have been studied that correlate with the prognosis of patient mortality, one of which is the lymphocyte-monocyte ratio (LMR). In previous studies, the value of this LMR was decreased in patients who had a poor prognosis of cancer. Currently, no one has studied the correlation between LMR in pulmonary adenocarcinoma in Indonesia

**Objective :** Knowing the correlation between the LMR value and mortality in pulmonary adenocarcinoma patients.

**Methods:** This retrospective cohort study involving 207 patients with pulmonary adenocarcinoma at the Dr. Sardjito Hospital the data was collected from January 2014 to January 2020. Basic characteristic data were obtained from medical records at the Dr. Sardjito Hospital medical record installation. LMR values obtained from laboratory data in medical records before cancer therapy. Mortality data were obtained from medical records and from telephone to the patient's family in accordance to ethical clearance protocol. The data was analyzed using SPSS version 23 software with a significance value of  $p < 0.05$  and a 95% confidence interval.

**Results:** In this study, it was found that the mortality <6 months was only 37.2% of the total population. The cutoff of LMR value according to the ROC analysis is 1.75. The results of the bivariate analysis showed a significance value between LMR and 6 month mortality where low LMR had a relative risk of 3.17x for mortality <6 months compared to higher LMR values ( $p < 0.05$ , 95% CI 1.76 - 5 , 69). From the multivariate analysis, there were no significant variables to increase the prognosis value of LMR.

**Conclusion:** Low LMR values are associated with increased mortality of stage IV pulmonary adenocarcinoma

*Keywords : LMR, Pulmonary Adenocarcinoma, Lymphocytes, Monocytes, mortality*