



SP350 RELATIONSHIP BETWEEN NEUTROPHIL-TO-LYMPHOCYTE RATIO AND ERYTHROPOIETIN RESISTANCE INDEX. A MULTICENTER STUDY

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INTRODUCTION AND AIMS: Neutrophil-to-lymphocyte ratio (NLI) is an emerging inflammation biomarker. Inflammation has an important influence in the erythropoietin resistance. So, there could be a relationship between NLI and erythropoietin resistance.

METHODS: We study hemodialysis sessions of 534 patients in our 4 hemodialysis centers during June 2017. A total of 137 patients was excluded to our study due to different causes. Finally, we study 397 patients. NLI was calculated by the quotient between absolute value of neutrophils and absolute value of lymphocytes in the hemogram. The erythropoietin hyporesponsiveness index (EHRI) was obtained calculating the weekly dose of erythropoietin divided by the dry weight and divided again by the levels of serum hemoglobin.

RESULTS: EHRI was divide into quartiles and compared with the NLI averages in the four groups, there was statistically significant differences (p=0.00058) (Figure 1). In the regression analyzes, the NLI value was able to predict the EHRI (p>0.0001) (R² 0.045) (Figure 2).

CONCLUSIONS: NLI could be considered an acceptable biomarker of erythropoietin resistance.

Table 1: Quartiles EHRI vs averages NLI

	Quartile1	Quartile2	Quartile3	Quartile4
NLI	3,22(±1,68)	3,15(±1,53)	3,49(±1,91)	4,21(±2,46)
EHRI	2,43(±1,13)	5,85(±0,94)	10,33(±1,74)	25,19(±13,62)