



## Correlation of Progesterone Induced Blocking Factor and Neutrophil-Lymphocyte Ratio in Preterm and Term Delivery

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**Abstract:** **Objective:** This study aimed to determine difference of Progesterone Induced Blocking Factor, Neutrophil-Lymphocyte Ratio levels between preterm and term labor, and also to examine correlation between PIBF and NLR in preterm and term labor women. **Methods:** This is a comparative analytical study with cross-sectional design. Subjects were divided into two groups consisting of 33 persons per group. Data was analyzed with Independent T-test and Mann-Whitney test. Correlation between two variables was measured with Pearson correlation calculation. **Results:** Mean levels of PIBF was lower in preterm labor ( $973.18 \pm 290.91$  ng/ml) compared to term labor ( $3338.06 \pm 2165.89$  ng/ml) ( $p = 0.000 < 0.005$ ). Average NLR was greater in preterm labor ( $12.62 \pm 6.44$ ) than term labor ( $5.17 \pm 1.64$ ) with significant differences. Correlation value (Pearson) between PIBF and NLR in preterm labor was strongly negative (-0.543), whereas correlation between PIBF and NLR in term labor was weakly negative (-0.135). **Conclusion:** Average of PIBF levels in preterm labor was lower than term labor. Average of NLR in preterm labor was greater than term labor. There was a negative correlation between serum levels of PIBF and NLR in preterm labor and there was no correlation between serum levels of PIBF and NLR in term labor. **Keywords:** Preterm labor, PIBF, NLR.