# Potential value of Hematological biomarkers in Assessment of inflammatory response and disease activity in Systemic Lupus Erythematosus patients

### **Thesis**

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By

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**Title of thesis:** Potential value of hematological biomarkers in assessment of inflammatory response and disease activity in systemic lupus erythematosus patients.

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#### **Abstract**

The thesis aims to investigate a possible association between neutrophil to lymphocyte ratio, platelet to lymphocyte ratio, mean platelet volume levels and Systemic lupus erythematosus disease activity as the disease has highly variable course with vague and unpredictable symptoms.

The study involved 63Egyptian SLE patients (58 females and 5males) and 20 age and sex matched healthy controls. Patients were subjected to full history and clinical examination.

This study showed that both NLR and PLR were significantly higher in SLE patients compared to controls also, lymphocytic count was significantly lower in cases compared to controls.

This study showed that there was no statistically significant difference between cases and controls as regards procalcitonin.

This study showed that neutrophil to lymphocyte ratio and platelet to lymphocyte ratio were significantly higher in cases with nephritis when compared to those without nephritis.

**Key words:** Systemic lupus erythematosus, neutrophil to lymphocyte ratio, platelet to lymphocyte ratio, mean platelet volume.