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**Scientific Abstract**

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Topics: Measurement

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### **Respiratory Muscle Strength in Systemic Lupus Erythematosus Women with Low Level Disease Activity Scale**

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**Objectives:** Patients with Systemic Lupus Erythematosus (SLE) often experience decrease in respiratory muscle strength result in low cardiopulmonary endurance and physical fitness that will affect quality of life and exercise capacity due to autoimmune pathophysiology. The purpose of this study is to assess respiratory muscle strength score in SLE women with Low Level Disease Activity Score (LLDAS).

**Methods and Materials:** Cross sectional study was done in ten women aged 20-50 years old and normal Body Mass Index (BMI) with SLE that categorized LLDAS in West Java Province, Indonesia. Respiratory muscle strength was measured by Maximal Inspiratory Pressure (MIP) and Maximal Expiratory Pressure (MEP) using MicroRPM<sup>o</sup> (Respiratory Pressure Meter).

**Results:** Ten SLE women aged  $33 \pm 9.44$  years old and BMI  $21.97 \pm 2.37$  kg/m<sup>2</sup> showed MIP score  $64.5 \pm 25.43$  cmH<sub>2</sub>O and MEP score  $49 \pm 16.87$  cmH<sub>2</sub>O.

**Conclusion:** Women with SLE that categorized in LLDAS have lower score of Maximal Inspiratory Pressure and Maximal Expiratory Pressure than normal person according to European Respiratory Society Annual Congress 2013.