

INTISARI

Latar Belakang: Psoriasis vulgaris merupakan penyakit kulit inflamasi kronis yang dimediasi sistem imun, ditandai dengan lesi eritematosa, skuama, dan inflamasi sistemik. Penilaian derajat keparahan umumnya menggunakan Psoriasis Area Severity Index (PASI), namun indeks ini bersifat subjektif dan belum sepenuhnya mencerminkan inflamasi sistemik. Oleh karena itu, diperlukan biomarker hematologis sederhana yang dapat melengkapi penilaian klinis. Rasio eosinofil neutrofil (REN) dan rasio eosinofil monosit (REM) mencerminkan keseimbangan inflamasi sistemik yang melibatkan neutrofil, monosit, dan eosinofil sebagai sel kunci dalam patogenesis psoriasis.

Tujuan: Menilai hubungan REN dan REM dengan derajat keparahan psoriasis vulgaris berdasarkan skor PASI dan menentukan nilai cut-off optimal pada populasi Indonesia.

Metode: Penelitian observasional analitik potong lintang dilakukan pada 51 pasien psoriasis vulgaris tipe plak di RSUP Dr. Sardjito Yogyakarta (Januari 2023–Juli 2025). Analisis menggunakan uji Mann–Whitney, uji Spearman dan analisis *Receiver Operating Characteristic* (ROC).

Hasil: Sebanyak 23 pasien (45,1%) memiliki psoriasis ringan dan 28 pasien (54,9%) sedang–berat. Nilai median REN dan REM lebih tinggi pada psoriasis ringan (REN 0,06 vs 0,04; $p=0,012$; REM 0,52 vs 0,33; $p=0,003$). Analisis ROC menunjukkan nilai *cut-off* REN 0,0482 (sensitivitas 65,2%; spesifisitas 71,4%) dan REM 0,4913 (sensitivitas 60,9%; spesifisitas 89,3%) dalam membedakan psoriasis ringan dan sedang–berat.

Kesimpulan: REN dan REM berhubungan signifikan dengan skor PASI dan berpotensi sebagai biomarker hematologis sederhana untuk menilai keparahan psoriasis secara objektif dan terjangkau.

Kata Kunci : Psoriasis vulgaris, PASI, rasio eosinofil neutrofil, rasio eosinofil monosit, biomarker hematologi.

ABSTRACT

Background: *Psoriasis vulgaris* is a chronic immune-mediated inflammatory skin disease characterized by erythematous plaques with scaling and systemic inflammation. Disease severity is commonly assessed using the Psoriasis Area and Severity Index (PASI); however, this index is partly subjective and does not fully reflect systemic inflammatory activity. Therefore, simple hematologic biomarkers such as the eosinophil–neutrophil ratio (ENR) and eosinophil–monocyte ratio (EMR) have been proposed to complement clinical assessment, as these ratios reflect the balance of immune and inflammatory cell activity central to psoriasis pathogenesis.

Objectives: To evaluate the correlation between ENR and EMR and psoriasis severity based on PASI, and to determine their optimal cut-off values in the Indonesian population.

Methods: This cross-sectional analytic study included 51 patients with plaque-type psoriasis at Dr. Sardjito General Hospital, Yogyakarta, from January 2023 to July 2025. Data were obtained from medical records and analyzed using the Mann–Whitney test, Spearman’s test, and Receiver Operating Characteristic (ROC) analysis.

Results: Twenty-three patients (45.1%) had mild psoriasis and twenty-eight (54.9%) moderate–severe disease. Median ENR and EMR values were significantly higher in mild psoriasis (ENR 0.06 vs. 0.04, $p=0.012$; EMR 0.52 vs. 0.33, $p=0.003$). ROC analysis yielded cut-off values of 0.0482 for ENR (sensitivity 65.2%, specificity 71.4%) and 0.4913 for EMR (sensitivity 60.9%, specificity 89.3%).

Conclusion: ENR and EMR correlate negatively with PASI and may serve as accessible, low-cost hematologic biomarkers for objective assessment of psoriasis severity.

Keywords: *Psoriasis vulgaris*, PASI, eosinophil neutrophil ratio, eosinophil monocyte ratio, hematological biomarker.