

**HUBUNGAN VARIASI GENETIK CYP2E1 DENGAN SKOR APRI PADA  
PASIEN SIROSIS HEPATIS DI RSUD PROF. DR. MARGONO  
SOEKARJO PURWOKERTO**

**ABSTRAK**

**Latar Belakang:** Sirosis hepatitis merupakan suatu bentuk penyakit hati kronis akibat kerusakan hati berkelanjutan oleh karena berbagai faktor yang ditandai dengan adanya perubahan struktur jaringan hati dan penurunan fungsi hati. Skor *Aspartate Aminotransferase-to-Platelet Ratio Index* (APRI) digunakan untuk menilai derajat keparahan sirosis hepatis. Variasi genetik CYP2E1 diduga berperan dalam perkembangan penyakit hati. Hubungan variasi genetik CYP2E1 dengan skor APRI pada sirosis hepatitis belum banyak diketahui.

**Tujuan:** Mengetahui hubungan variasi genetik CYP2E1 dengan skor APRI pada pasien sirosis hepatitis di RSUD Prof. Dr. Margono Soekarjo Purwokerto.

**Metode:** Penelitian analitik observasional dengan desain *cross-sectional* dilakukan pada 30 pasien terdiagnosis sirosis hepatitis di RSUD Prof. Dr. Margono Soekarjo Purwokerto periode Mei – Oktober 2019. Pengambilan data menggunakan teknik *total sampling* dengan mengambil data uji laboratorium darah dan PCR-RFLP. Analisis data menggunakan uji *Kruskal-Wallis*.

**Hasil:** Variasi genetik CYP2E1 terbanyak berupa genotipe c1/c1 yang ditemui pada 24 subjek (80%). Distribusi skor APRI didominasi oleh rentang skor APRI yang tergolong ke dalam kelas II (0,5-2) dan kelas III (>2) yaitu masing-masing sebanyak 12 subjek (40%). Uji *Kruskal-Wallis* menunjukkan hasil tidak terdapat hubungan antara variasi genetik CYP2E1 dengan skor APRI ( $p=0,533$ ).

**Kesimpulan:** Tidak terdapat hubungan antara variasi genetik CYP2E1 dengan skor APRI pada pasien sirosis hepatitis di RSUD Prof. Dr. Margono Soekarjo Purwokerto.

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Kata kunci: Sirosis hepatitis, skor APRI, Variasi Genetik CYP2E1

**CORRELATION OF CYP2E1 GENETIC VARIATION WITH APRI SCORE  
AMONG HEPATIC CIRRHOSIS PATIENTS IN PROF. DR. MARGONO  
SOEKARJO GENERAL HOSPITAL PURWOKERTO**

**ABSTRACT**

**Background :** Cirrhosis is a form of chronic liver disease due to sustained liver damage caused by various factors characterized by changes in liver tissue structure and decreased liver function. The Aspartate Aminotransferase-to-Platelet Ratio Index (APRI) score is used to assess the severity of hepatic cirrhosis. CYP2E1 genetic variation is thought to play a role in the development of liver disease. The correlation of CYP2E1 genetic variation with APRI score in hepatic cirrhosis is not yet widely known.

**Aim :** To understand the correlation of CYP2E1 genetic variation with APRI score in hepatic cirrhosis patients at Prof. Dr. Margono Soekarjo General Hospital Purwokerto.

**Methods:** Observational analytical study with cross-sectional design was conducted among 30 patients diagnosed with hepatic cirrhosis at Prof. Dr. Margono Soekarjo General Hospital Purwokerto from May to October 2019. Data collection was performed using total sampling technique with data taken from blood laboratory test and PCR-RFLP. Data was analysed using the Kruskal-Wallis test.

**Results:** The most common CYP2E1 genetic variation were c1/c1 genotype found in 24 samples (80%). APRI score distribution was dominated by the APRI score range which belongs to Class II (0.5-2) and Class III (>2) each found in 12 samples respectively (40%). The Kruskal-Wallis test showed no link between CYP2E1 genetic variation and APRI score ( $p=0.533$ ).

**Conclusions:** There is no correlation between CYP2E1 genetic variation and APRI score in hepatic cirrhosis patients at Prof. Dr. Margono Soekarjo General Hospital Purwokerto.

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**Keywords:** APRI score, Cirrhosis, CYP2E1 genetic variation,