

**FAKULTAS KEDOKTERAN  
UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAKARTA**

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**ANALISIS PERUBAHAN BIOMARKA JANTUNG DAN INFLAMASI  
TERHADAP LAMA RAWAT INAP PADA PASIEN INFARK MIOKARD  
AKUT ELEVASI SEGMENT ST SETELAH INTERVENSI KORONER  
PERKUTAN PRIMER**

RINCIAN HALAMAN (xvii + 96 halaman, 14 tabel, 10 gambar, 6 lampiran)

**ABSTRAK**

**Tujuan**

Penelitian ini bertujuan untuk menganalisis hubungan perubahan biomarka jantung dan inflamasi terhadap lama rawat inap pada pasien IMA-EST setelah IKPP.

**Metode**

Penelitian ini merupakan studi analitik observasional dengan desain potong lintang menggunakan data rekam medis pasien IMA-EST yang menjalani IKPP di RSUP Persahabatan Jakarta periode Juni 2022-Juni 2025. Variabel yang dianalisis meliputi perubahan high-sensitivity cardiac troponin I (hs-cTnI), rasio red cell distribution width (RDW) terhadap trombosit (RDW/Trombosit), rasio hemoglobin terhadap RDW (Hb/RDW), dan rasio trigliserida terhadap *high density lipoprotein* (TG/HDL) terhadap lama rawat inap. Analisis data dilakukan secara univariat, bivariat, dan multivariat sesuai distribusi data.

**Hasil**

Hasil penelitian menunjukkan bahwa perubahan beberapa biomarka jantung dan inflamasi berhubungan secara bermakna dengan lama rawat inap pasien IMA-EST setelah IKPP.

**Kesimpulan**

Temuan ini mengindikasikan bahwa pemantauan perubahan biomarka secara multimarker dapat memberikan nilai prognostik tambahan dalam memprediksi durasi perawatan. Penelitian ini diharapkan dapat menjadi dasar dalam stratifikasi risiko dan optimalisasi manajemen klinis pasien IMA-EST.

**Daftar Pustaka** : 72 (2010-2025)

**Kata Kunci** : biomarka inflamasi, biomarka jantung, infark miokard akut dengan elevasi segmen ST, intervensi koroner perkutan primer, lama rawat inap

**FACULTY OF MEDICINE  
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**Undergraduate Thesis, December 2025**

**ERLANGGA DWITYA AJIUTAMA, No. NRP 2210211200**

**ANALYSIS OF CARDIAC AND INFLAMMATORY BIOMARKER  
CHANGES WITH LENGTH OF STAY IN ST-SEGMENT ELEVATION  
ACUTE MYOCARDIAL INFARCTION PATIENTS AFTER PRIMARY  
PERCUTANEOUS CORONARY INTERVENTION**

PAGE DETAIL (xvii + 96 pages, 14 tables, 10 pictures, 6 appendices)

**ABSTRACT**

**Objective**

This study aims to analyze the relationship between changes in cardiac and inflammatory biomarkers and the length of stay in STEMI patients after pPCI.

**Method**

This study is an observational analytical study with a cross-sectional design using medical record data of STEMI patients undergoing PPCI at RSUP Persahabatan Jakarta for the period of June 2022-June 2025. Variables analyzed include changes in high-sensitivity cardiac troponin I (hs-cTnI), red cell distribution width (RDW) to platelet ratio (RDW/Platelet), hemoglobin to RDW ratio (Hb/RDW), and triglyceride to high-density lipoprotein ratio (TG/HDL) toward length of stay. Data analysis was performed univariately, bivariately, and multivariately according to the data distribution.

**Result**

The research results showed that changes in several cardiac and inflammatory biomarkers were significantly associated with the length of stay of STEMI patients after PPCI.

**Conclusion**

These findings indicate that monitoring biomarker changes in a multimarker manner can provide additional prognostic value in predicting the duration of care. This study is expected to serve as a basis for risk stratification and the optimization of clinical management for STEMI patients.

**References** : 72 (2010-2025)

**Keywords** : cardiac biomarkers, inflammatory biomarkers, length of stay, ST-elevation myocardial infarction, primary percutaneous coronary intervention