

## Profil kadar Supression of Tumorigenicity 2 (ST2) sebelum dan sesudah terapi pada sindrom koroner akut = Profile of Supression of Tumorigenicity 2 (ST2) value before and after acute coronary syndrome treatment

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### Abstrak

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Latar Belakang: Perlunya stratifikasi risiko dan evaluasi terapi berkala pada sindrom koroner akut (SKA) terkait mortalitas dan morbiditas di kemudian hari.

Petanda biokimia ST2 praktis dan lebih murah, serta tidak dipengaruhi oleh usia, jenis kelamin dan fungsi ginjal. Kadarnya dapat berbeda antar ras, namun belum ada data yang menyajikan profil kadar ST2 awal dan penurunan pasca terapi definitif di Indonesia.

Metode: Studi deskriptif longitudinal pada 40 subjek yang diperiksa kadar ST2 secara ELISA saat awal dan setelah terapi definitif.

Hasil: Didapatkan proporsi kadar ST2 awal <35 ng/mL lebih dominan ( 52,5% vs. 47,5%). Kadar ST2 awal tertinggi didapatkan pada IMA-NST, yaitu 46,79 ng/mL (kuartil-1 3,67 ng/mL, dan kuartil-3 102,41 ng/mL) yang memiliki awitan terlama (48 jam). Hipertensi memiliki proporsi tertinggi (91,7%) dan usia berbanding lurus dengan kadar ST2. Proporsi kadar ST2 yang tidak mengalami penurunan sebesar 30%, terutama APTS (41,7%) dengan usia rerata 3 tahun lebih tua (58 tahun vs. 55 tahun).

Simpulan: Didapatkan kadar ST2 <35 ng/mL pada sebagian besar subjek, tertinggi pada IMA-NST. Lama awitan, hipertensi dan usia diduga berhubungan dengan kadar ST2 awal tinggi. Kadar ST2 pasca terapi menurun pada sebagian besar subjek.

**ABSTRACT**  
Background: Acute coronary syndrome been a burden for causing high mortality

and morbidity, therefore risk stratification and therapy evaluation are needed. A new biomarker ST2 is practice and less expensive for daily usage and it also doesn't influenced by age, gender, and kidney function. The ST2 value are different in due to race among countires. There is no data available regarding ST2 baseline and after definitive treatment profile in Indonesia.

Method: It is a longitudinal descriptive study that conducted prospectively on 40 subjects. The value of ST2 was examined using ELISA methods at baseline and after definite treatment.

Result: The proporsion of baseline ST2 <35 ng/mL are dominan (52,5% vs. 47,5%). The highest of ST2 baseline value are found in NSTEMI-ACS it?s 46,79 ng/mL (kuartil-1 3,67 ng/mL, dan kuartil-3 102,41 ng/mL) and it also had the longest onset of chest pain (48 hours). Hypertension had the highest proporsion (91,7%) and age were proportional to the ST2 value. The proportion of the ST2

value that didn't decreased after therapy were lesser than the decrease (30% vs. 70%), especially UAP (41,7%) that had 3 years older ages (58 years old vs. 55 years old).

Conclusion: Proportion of baseline of ST2 value <35 ng/mL groups were higher than ST2 level >=35 ng/mL (52,5% vs. 47,5%), and the highest baseline ST2 level were found in NSTEMI-ACS. Onset of angina, hypertension and age were found to be dominant in patient with early ST2 level >=35 ng/mL. The ST2 value were decreasing in most of the subject after treatment. ;Background: Acute coronary syndrome been a burden for causing high mortality

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