

## INTISARI

Penyakit kardiovaskuler merupakan penyebab utama kematian di dunia. Penyakit ini disebabkan oleh gangguan fungsi jantung dan pembuluh darah. Penelitian ini merupakan penelitian observasional analitik dengan menggunakan rancangan potong melintang (*cross sectional*), terdapat 168 responden yang telah memenuhi kriteria. Responden dieksklusi bila memiliki riwayat penyakit kardiovaskuler, tekanan darah sistolik  $\geq 200$ mmHg dan kolesterol total  $>320$ mg/dL atau  $<130$ mg/dL. Pengujian statistik pada penelitian ini dengan menggunakan *repeated anova post hoc Bonferroni* dan menunjukkan adanya perbedaan bermakna antara *Framingham Risk Score Body Mass Index* (FRS BMI) dan *Pooled Cohort Equation* (PCE) ( $p < 0,01$ ), *Framingham Risk Score Body Mass Index* (FRS BMI) dan *Framingham Risk Score Cholesterol* (FRS *cholesterol*) ( $p < 0,01$ ). Penelitian ini menggunakan uji *marginal homogeneity* untuk mengetahui perbedaan antar kategori risiko dan rekomendasi statin. Terdapat perbedaan bermakna antara hasil rata-rata perhitungan risiko FRS BMI ( $14,6 \pm 11,7$ ) dan PCE ( $6,8 \pm 6,4$ ), FRS BMI ( $14,6 \pm 11,7$ ) dan FRS *cholesterol* ( $13,3 \pm 11,3$ ). Uji perbedaan antara FRS BMI berdasarkan jumlah kategori risiko rendah, sedang dan tinggi dengan FRS *cholesterol* menunjukkan perbedaan yang signifikan yakni dengan nilai  $p < 0,01$ . Uji perbedaan kategori risiko antara FRS BMI dengan PCE menunjukkan hasil tidak berbeda secara signifikan  $p = 0,11$ . Terdapat perbedaan rekomendasi terapi statin pada PCE dan FRS BMI, namun tidak terdapat perbedaan yang signifikan pada rekomendasi statin FRS BMI dan FRS *cholesterol*.

**Kata kunci:** Risiko penyakit kardiovaskuler, *Framingham Risk Score Body Mass Index*, *Framingham Risk Score cholesterol*, *Pooled Cohort Equation*.

## ABSTRACT

Cardiovascular disease is the major cause of death in the world, the disease is caused by impaired heart and blood vessel function. This research was an observational analytic research using cross sectional design. This study used 168 respondents who have met the criteria. Respondents were excluded if they had a history of cardiovascular disease, systolic blood pressure  $\geq 200$ mmHg and total cholesterol  $> 320$ mg/dL or  $< 130$ mg/dL. This research tested statistics with post hoc Bonferroni to show significant differences between Framingham Risk Score Body Mass Index (FRS BMI) and Pooled Cohort Equation (PCE) ( $p < 0.01$ ), Framingham Risk Score Body Mass Index (FRS BMI) and Framingham Risk Score Cholesterol (FRS cholesterol) ( $p < 0.01$ ). Marginal homogeneity test have been used to determine the differences between risk categories and statin recommendations. There is a significant difference between risk calculation result of FRS BMI ( $14,6 \pm 11,7$ ) and PCE ( $6,8 \pm 6,4$ ), FRS BMI ( $14,6 \pm 11,7$ ) and FRS cholesterol ( $13,3 \pm 11,3$ ). The difference test between FRS BMI based on low, medium and high risk categories with FRS cholesterol showed significant difference, p value  $< 0.01$ . Difference test between FRS BMI and PCE showed no significant difference with p-value = 0,11. The study also showed that there were differences in recommendation of statin therapy on PCE and FRS BMI, but there were no significant differences in the recommendation of statin therapy between FRS BMI and FRS cholesterol.

**Keywords:** Cardiovascular Disease Risk, Framingham Risk Score Body Mass Index, Framingham Risk Score Cholesterol, Pooled Cohort Equation.

