

ABSTRAK

Penyakit kardiovaskular merupakan penyebab kematian nomor satu di dunia. *Framingham Risk Score*, *Pooled Cohort Equation* dan *CVRiskcalculator* merupakan metode untuk memprediksi risiko 10 tahun penyakit kardiovaskular, penelitian ini bertujuan untuk melihat apakah terdapat perbedaan bermakna secara rerata maupun kategorik risiko dan rekomendasi terapi statin antara ketiga metode tersebut. Jenis penelitian yang digunakan adalah observasional analitik dengan rancangan *cross-sectional*. Teknik sampling yang digunakan berupa *purposive sampling* untuk menentukan lokasi penelitian dan *cluster random sampling* untuk menentukan sampel penelitian. Penelitian ini dilakukan pada 169 responden yang telah memenuhi kriteria inklusi berusia 40 – 65 tahun, berpuasa minimal 8 jam dan dapat dilakukan pengambilan sampel darah, serta kriteria eksklusi riwayat penyakit kardiovaskular, tekanan darah sistolik >200mmHg dan kadar kolesterol >320mg/dL atau <130mg/dL. Hasil uji komparasi *repeated anava post-hoc bonferroni* menunjukkan hasil adanya perbedaan bermakna antara *Framingham Risk Score* dan *CVRiskcalculator* ($p<0,01$) tapi tidak ada perbedaan bermakna antara *Pooled Cohort Equation* dan *CVRiskcalculator* ($p=1,00$), serta hasil uji *marginal homogeneity* terdapat perbedaan bermakna antara *Framingham Risk Score* dan *CVRiskcalculator* ($p<0,01$) dan hasil yang sama antara *Pooled Cohort Equation* dan *CVRiskcalculator* ($p=1,0$), juga terdapat perbedaan bermakna dari hasil uji *mcnemar* ($p<0,01$). Kesimpulan penelitian ini adalah nilai rerata dan kategorikal terapi maupun risiko metode *Framingham Risk Score* dan *CVRiskcalculator* adalah berbeda, serta nilai rerata dan kategorikal terapi maupun risiko dari metode *CVRiskcalculator* dan *Pooled Cohort Equation* adalah sama.

Kata kunci: Penyakit Kardiovaskular (CVD); Faktor Risiko; *Framingham Risk Score* (FRS); *Pooled Cohort Equation* (PCE); dan *CVRiskcalculator*.

ABSTRACT

Cardiovascular disease is the number one cause of death of humankind in worldwide. Framingham Risk Score, Pooled Cohort Equation and CVRiskcalculator are the methods that used to predict 10 years cardiovascular disease risk. This research aim to see if there is a significant difference result in average and categorical of risk and statin therapy recommendation between this methods. This research is an analytic observational research with cross-sectional study. This research uses purposive sampling method to choose the research location and using the cluster random sampling method to choose the sample. This research has used 169 respondents subject that has been fulfilled the inclusion criteria aged between 40-65, fasting for 8 hours and willing to give their blood samples, with exclusion criteria subject with cardiovascular disease history, systolic blood pressure $>200\text{mmHg}$ and cholesterol $>320\text{mg/dL}$ or $<130\text{mg/dL}$. Results of comparing test using repeated anava post-hoc bonferroni are found differences between *Framingham Risk Score* and *CVRiskcalculator* ($p<0.01$), but there is same result between *Pooled Cohort Equation* and *CVRiskcalculator* ($p=1.00$). Result for marginal homogeneity test are there is a difference between Framingham Risk Score and CVRiskcalculator ($p<0,01$) and the same result of Pooled Cohort Equation and CVRiskcalculator ($p=1,00$), the result for mc nemar test are there is a difference between Framingham Risk Score and Pooled Cohort Equation ($p<0,01$). The conclusion of this research are there is significant difference between *Framingham Risk Score* and *CVRiskcalculator*, but the result of *Pooled Cohort Equation* and *CVRiskcalculator* are same in average or categorical risk and statin therapy.

Keywords: Cardiovascular Disease (CVD), Risk factor, *Framingham Risk Score* (FRS), *Pooled Cohort Equation* (PCE) and *CVRiskcalculator*.