

## Prediction of cardiovascular disease mortality by proteinuria and reduced kidney function: pooled analysis of 39,000 individuals from 7 cohort studies in Japan

Deskripsi Lengkap: <https://lib.fkm.ui.ac.id/detail.jsp?id=102052&lokasi=lokal>

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### Abstrak

There are limited studies addressing whether proteinuria and estimated glomerular filtration rate (eGFR) are independently associated with cardiovascular disease in Asia. Using data from 7 prospective cohorts recruited between 1980 and 1994 in Japan, we assessed the influence of proteinuria ( $\geq 1+$  on dipstick) and reduced eGFR on the risk of cardiovascular disease mortality in 39,405 participants (40-89 years) without kidney failure. During a 10.1-year follow-up, 1,927 subjects died from cardiovascular disease. Proteinuria was associated with a 1.75-fold (95% confidence interval (CI): 1.44, 2.11) increased risk of cardiovascular disease mortality after adjustment for potential confounding factors. Additionally, the multivariate-adjusted hazard ratio of cardiovascular disease mortality increased linearly with lower eGFR levels ( $P(\text{trend}) < 0.001$ ): Subjects with eGFR of  $< 45$  mL/minute/1.73 m<sup>2</sup> had a 2.22-fold (95% CI: 1.60, 3.07) greater risk of cardiovascular disease mortality than those with eGFR of  $\geq 90$  mL/minute/1.73 m<sup>2</sup>. Subjects with both proteinuria and eGFR of  $< 45$  mL/minute/1.73 m<sup>2</sup> had a 4.05-fold (95% CI: 2.55, 6.43) higher risk of cardiovascular disease mortality compared with those with neither of these risk factors. There was no evidence of interaction in the relationship between proteinuria and lower eGFR ( $P(\text{interaction}) = 0.77$ ). The present results suggest that proteinuria and lower eGFR are independent risk factors for cardiovascular disease mortality in the Japanese population.