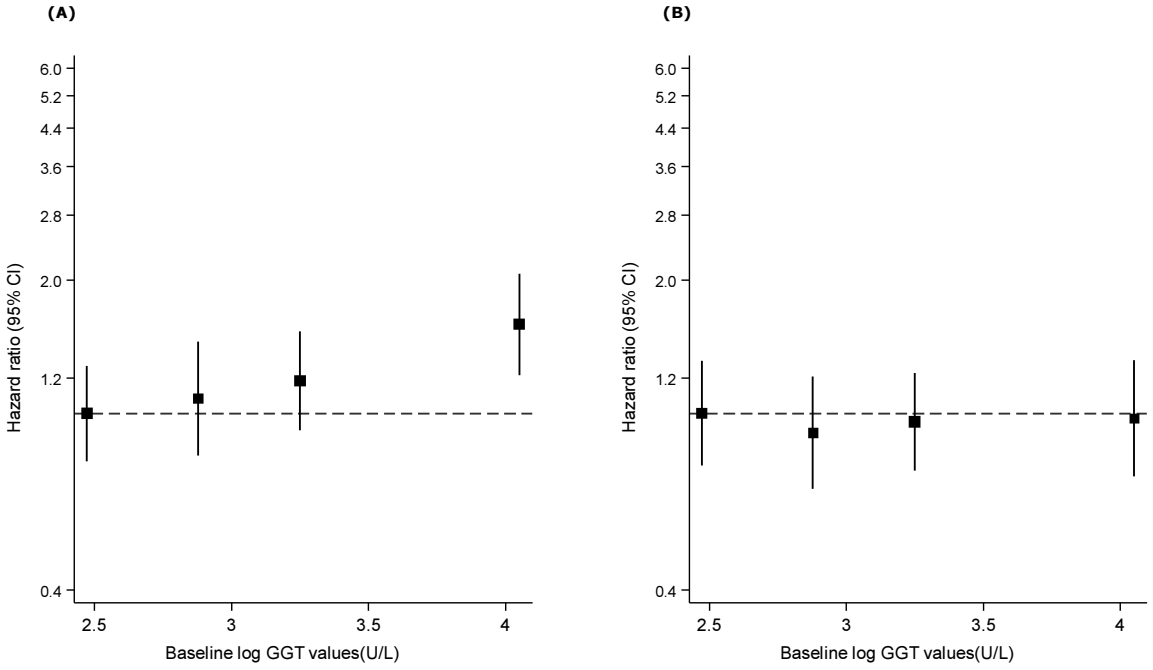
Supplementary material 1: STROBE Statement

Section/Topic	Item #	Recommendation	Reported on page #
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	Page 1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 3-4
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 3-4
Methods			
Study design	4	Present key elements of study design early in the paper	Study Design and Participants
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Study Design and Participants
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	Study Design and Participants
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed	Not applicable
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Assessment of risk markers
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Assessment of risk markers
Bias	9	Describe any efforts to address potential sources of bias	Statistical Analyses
Study size	10	Explain how the study size was arrived at	Statistical Analyses
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Statistical Analyses

Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	Statistical Analyses
		(*b*) Describe any methods used to examine subgroups and interactions	Statistical Analyses
		(*c*) Explain how missing data were addressed	Not applicable
		(*d*) If applicable, explain how loss to follow-up was addressed	Not applicable
		(*e*) Describe any sensitivity analyses	Statistical Analyses
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	Study population
		(b) Give reasons for non-participation at each stage	Study population
		(c) Consider use of a flow diagram	
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Results; Tables 1
		(b) Indicate number of participants with missing data for each variable of interest	
		(c) Summarise follow-up time (eg, average and total amount)	Results
Outcome data	15*	Report numbers of outcome events or summary measures over time	Results
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	Results; Table 2
		(*b*) Report category boundaries when continuous variables were categorized	Results; Table 2
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Results; Figure 2
Discussion			
Key results	18	Summarise key results with reference to study objectives	Discussion - Summary of main findings
Limitations			
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion
Generalisability	21	Discuss the generalisability (external validity) of the study results	Discussion
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Page 13

Supplementary material 2. Hazard ratios for chronic kidney disease by quartiles of baseline values of gamma-glutamyltransferase



A, adjusted for age; **B**, adjusted for age, body mass index, systolic blood pressure, history of hypertension, prevalent coronary heart disease, smoking status, history of diabetes, total cholesterol, high-density lipoprotein cholesterol, alcohol consumption, and estimated glomerular filtration rate; GGT, gamma-glutamyltransferase

Supplementary material 3: Characteristics of previous prospective studies compared with current study

Lead author, publication year	Name of study/source of participants	Location of study	Year(s) of baseline survey	Baseline age range (years)	% male	Duration of follow-up	Total no. of participants	No. of SCD cases	Covariates adjusted for
Ryu, 2007	Semiconductor manufacturing company	Korea	2002	36.9	100.0	2.5	10,337	366	Age, baseline glomerular filtration rate, body mass index, fasting glucose, systolic blood pressure, total cholesterol, uric acid, homeostatic model assessment for insulin resistance, C-reactive protein, smoking, alcohol consumption, incident diabetes, and incident hypertension
Shen, 2016	Health Management Center of Shandong Provincial	China	2005-2010	44.8	66.7	10.0	21,818	1,456	Age, gender, baseline serum creatinine, incident hypertension, body mass index, alanine aminotransferase, albumin, white blood cell, total cholesterol, triglycerides, haemoglobin, cardiovascular disease, diabetes, smoking status, and drinking status
Current study	Kuopio Ischaemic Heart Disease study	Finland	1984-1989	42-61	100.0	25.6	2,338	221	Age, body mass index, systolic blood pressure, history of hypertension, prevalent coronary heart disease, smoking status, history of diabetes, total cholesterol, high-density lipoprotein cholesterol, alcohol consumption, and estimated glomerular filtration rate, total energy intake, socioeconomic status, physical activity, and C-reactive protein