

ONLINE-ONLY SUPPLEMENTARY MATERIAL

Supplementary Table 1. Syntax used through database searching on PubMed, Scopus, and Web of Science.

PubMed <up to March 21, 2022>

#1	"NAFLD" AND "risk of incident heart failure"	49
#2	"fatty liver" AND "risk of incident heart failure"	82
#3	"non-alcoholic steatohepatitis" AND "risk of incident heart failure"	16
#4	"NASH" AND "risk of incident heart failure"	38
#5	"NAFLD" AND "incident heart failure"	2
#6	"fatty liver" AND "incident heart failure"	3
#7	"non-alcoholic steatohepatitis" AND "incident heart failure"	0
#8	"NASH" AND "incident heart failure"	0
#9	"NAFLD" AND "heart failure"	103
#10	"fatty liver" AND "heart failure"	244
#11	"non-alcoholic steatohepatitis" AND "heart failure"	38
#12	"NASH" AND "heart failure"	97

Scopus <up to March 21, 2022>

#1	"NAFLD" AND "risk of incident heart failure"	14
#2	"fatty liver" AND "risk of incident heart failure"	26
#3	"non-alcoholic steatohepatitis" AND "risk of incident heart failure"	4
#4	"NASH" AND "risk of incident heart failure"	4
#5	"NAFLD" AND "incident heart failure"	2
#6	"fatty liver" AND "incident heart failure"	2
#7	"non-alcoholic steatohepatitis" AND "incident heart failure"	4
#8	"NASH" AND "incident heart failure"	4
#9	"NAFLD" AND "heart failure"	189
#10	"fatty liver" AND "heart failure"	768
#11	"non-alcoholic steatohepatitis" AND "heart failure"	149
#12	"NASH" AND "heart failure"	94

Web of Science <up to March 21, 2022>

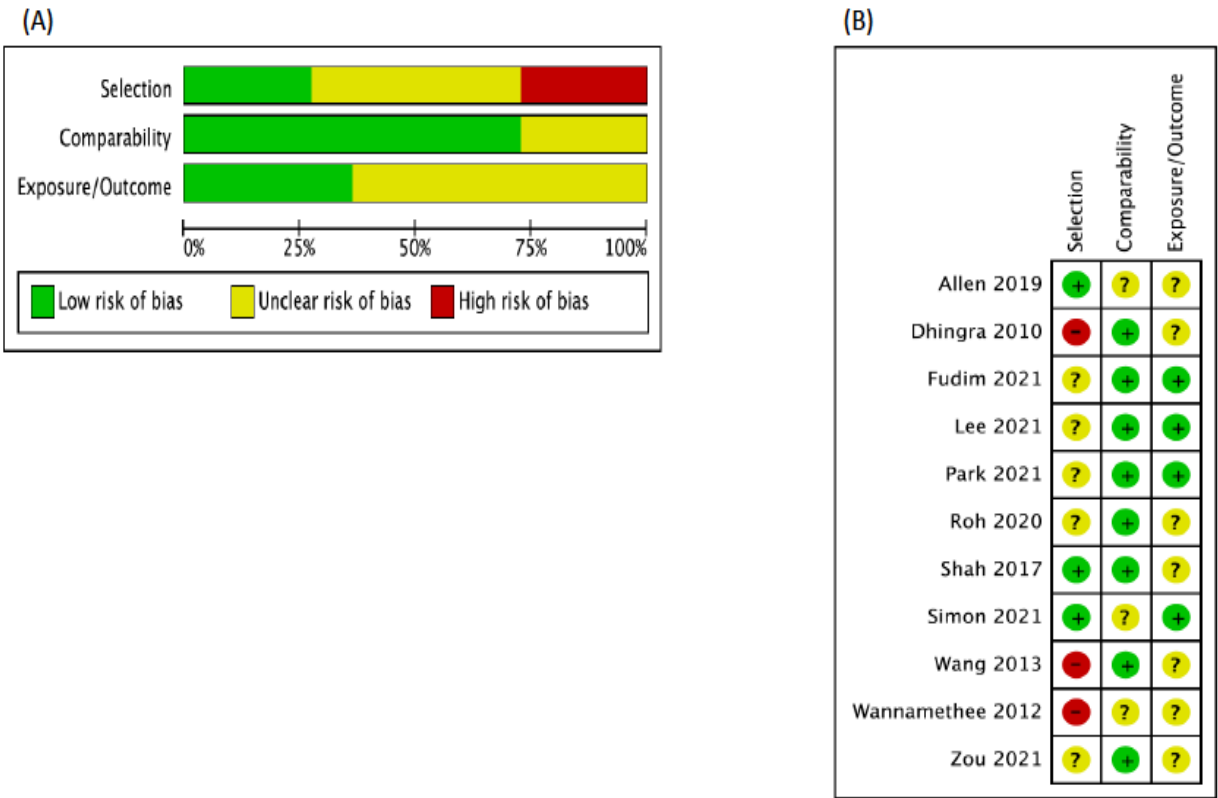
#1	"NAFLD" AND "risk of incident heart failure"	143
#2	"fatty liver" AND "risk of incident heart failure"	166
#3	"non-alcoholic steatohepatitis" AND "risk of incident heart failure"	143
#4	"NASH" AND "risk of incident heart failure"	143
#5	"NAFLD" AND "incident heart failure"	73
#6	"fatty liver" AND "incident heart failure"	96
#7	"non-alcoholic steatohepatitis" AND "incident heart failure"	73
#8	"NASH" AND "incident heart failure"	73
#9	"NAFLD" AND "heart failure"	73
#10	"fatty liver" AND "heart failure"	96
#11	"non-alcoholic steatohepatitis" AND "heart failure"	73
#12	"NASH" AND "heart failure"	73

Supplementary Table 2. Cohort studies excluded at the eligibility step of PRISMA diagram (n=6 studies).

Author, year (PMID)	Main reasons for exclusion
Dunn MA <i>et al.</i> 2013 (PMID: 23944954)	Unsatisfactory inclusion criteria (cohort of patients with type 2 diabetes)
Vita T <i>et al.</i> 2019 (PMID: 30835188)	Unsatisfactory inclusion criteria (cohort of patients with suspected coronary artery disease)
VanWagner LB <i>et al.</i> 2020 (PMID: 32067588)	Unsatisfactory outcome measures (subclinical changes over time in left ventricular structure and function)
Ichikawa K <i>et al.</i> 2021 (PMID: 33413363)	Unsatisfactory inclusion criteria (cohort of patients with type 2 diabetes)
Lee CO <i>et al.</i> 2021 (PMID: 34184611)	Unsatisfactory inclusion criteria (cross-sectional analysis from the National Health and Nutrition Examination Survey 1999-2016 for the data of interest)
Viera Barbosa J <i>et al.</i> 2022 (PMID: 35041626)	Unsatisfactory inclusion criteria (cohort of patients with NAFLD or NASH without a control group)

Supplementary Figure 1. (A) Risk of bias graph: review authors’ judgments about each domain of the Newcastle-Ottawa scale (NOS) presented as percentages across all included studies. (B) Cochrane risk of bias study-by-study table.

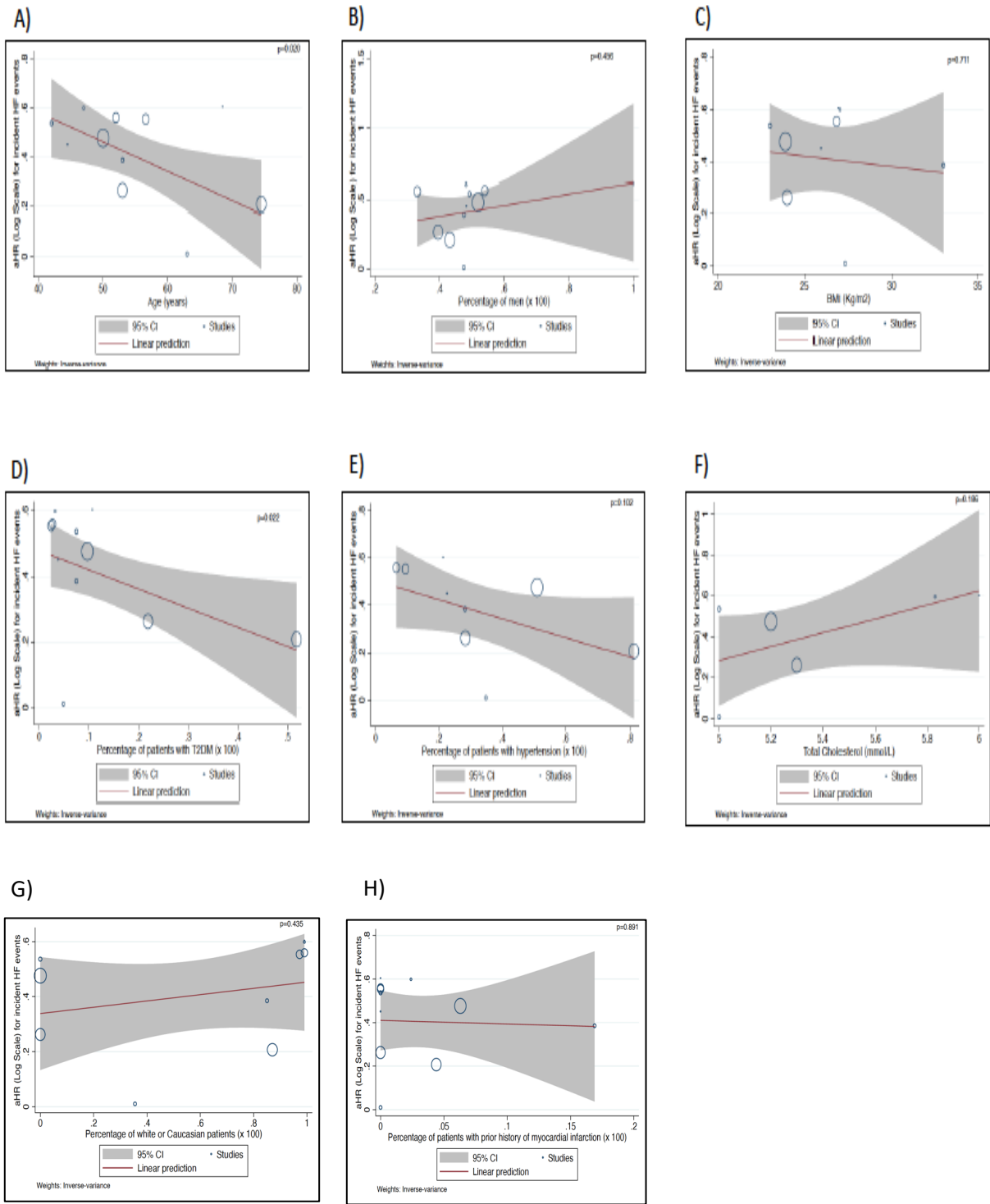
Supplementary Fig. 1



Supplementary Figure 2. Univariable meta-regression analyses. A meta-analysis of the association of age (A), male sex (B), body mass index (C), percentage of pre-existing type 2 diabetes (D), percentage of pre-existing hypertension (E), plasma cholesterol concentration (F), White or Caucasian ethnicity (G), and percentage of prior history of myocardial infarction (H) with the risk of new-onset HF.

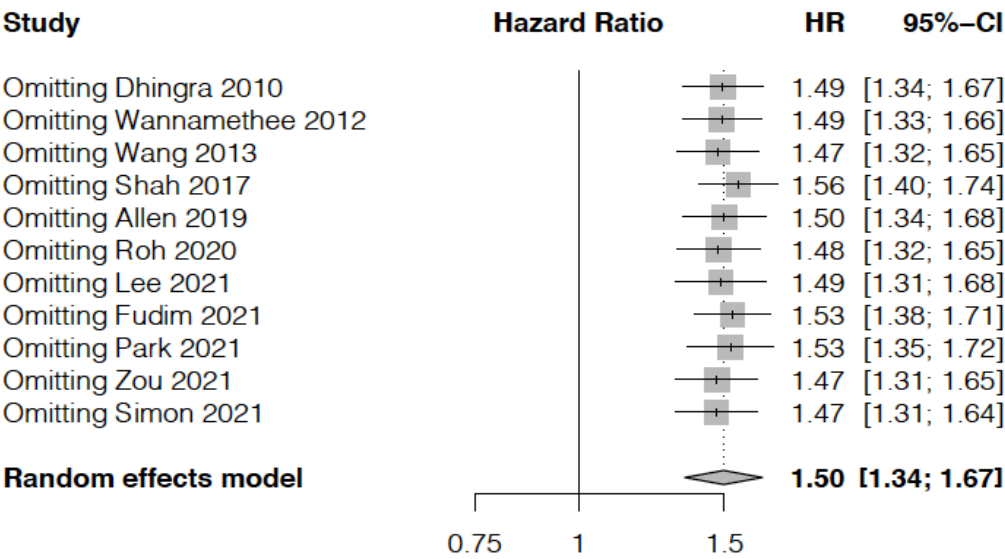
NB: Only the associations of age ($p=0.020$) and pre-existing diabetes ($p=0.022$) with the risk of new-onset HF were statistically significant.

Supplementary Fig. 2



Supplementary Figure 3. Meta-analysis estimates for the 11 eligible studies, given named study is omitted. The effect size was expressed as random-effects HRs and 95% confidence intervals for all eligible studies.

Supplementary Figure 3



Supplementary Figure 4. Funnel plot of standard error by log-hazard ratio for the risk of developing new-onset HF (n=11 eligible studies). *P*-values by the Egger's regression test.

