

Prognostic value of liver stiffness in patients with heart failure: a systematic review and meta-analysis

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Supplementary Material S2. NHLBI Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

Criteria	Saito et al, 2018	Hopper et al, 2012	Van Kleef et al, 2015	Sakamoto et al, 2022	Nakayama et al, 2021	Saito et al, 2021	Colli et al, 2010	Taniguchi et al, 2014	Omote et al, 2018	Zeng et al, 2021
Was the research question or objective in this paper clearly stated?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the study population clearly specified and defined?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the participation rate of eligible persons at least 50%?	yes	yes	yes	yes	CD	yes	yes	yes	yes	yes
Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was a sample size justification, power description, or variance and effect estimates provided?	no	no	no	no	no	no	yes	no	no	no
For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	yes	no	yes	yes	yes	yes	yes	no	yes	no
Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	yes	NA	yes	yes	NA	yes	yes	NA	yes	NA
For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the exposure(s) assessed more than once over time?	no	yes	no	yes	no	no	yes	no	no	no
Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were the outcome assessors blinded to the exposure status of participants?	yes	NR	NR	yes	NR	yes	NR	yes	NR	NR
Was loss to follow-up after baseline 20% or less?	yes	NA	yes	yes	NA	yes	yes	NA	yes	NA
Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	yes	no	yes	no	no	yes	no	yes	yes	yes
Rating	good	fair	good	good	fair	good	good	fair	good	fair

[illegible]

Criteria	Yoshihisa et al, 2020	Avila et al, 2021	Panchani et al, 2022	Zhang et al, 2021	Chen et al, 2022	Yang et al, 2024	Chon et al, 2014	Chen et al, 2016	Millonig et al, 2010	Lointier et al, 2024
Was the research question or objective in this paper clearly stated?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the study population clearly specified and defined?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the participation rate of eligible persons at least 50%?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was a sample size justification, power description, or variance and effect estimates provided?	no	no	no	no	no	no	yes	no	no	no
For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	yes	yes	yes	yes	yes	yes	yes	NA	yes	yes
For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the exposure(s) assessed more than once over time?	no	no	no	no	yes	no	yes	no	yes	no
Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Were the outcome assessors blinded to the exposure status of participants?	yes	NR	NR	yes	yes	NR	yes	yes	NR	NR
Was loss to follow-up after baseline 20% or less?	yes	yes	yes	yes	yes	yes	yes	NA	yes	yes
Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	yes	yes	yes	yes	yes	yes	yes	no	no	yes
Rating	good	good	good	good	good	good	good	fair	good	good

Criteria	Ihne-Schubert et al, 2024	Ohara et al, 2020	Urabe et al, 2024	Icen et al, 2019
Was the research question or objective in this paper clearly stated?	yes	yes	yes	yes
Was the study population clearly specified and defined?	yes	yes	yes	yes
Was the participation rate of eligible persons at least 50%?	yes	yes	yes	yes
Were all the subjects selected or recruited from the same or similar populations (including the same time period)? Were inclusion and exclusion criteria for being in the study prespecified and applied uniformly to all participants?	yes	yes	yes	yes
Was a sample size justification, power description, or variance and effect estimates provided?	no	no	no	no
For the analyses in this paper, were the exposure(s) of interest measured prior to the outcome(s) being measured?	yes	yes	yes	yes
Was the timeframe sufficient so that one could reasonably expect to see an association between exposure and outcome if it existed?	yes	yes	yes	yes
For exposures that can vary in amount or level, did the study examine different levels of the exposure as related to the outcome (e.g., categories of exposure, or exposure measured as continuous variable)?	yes	yes	yes	yes
Were the exposure measures (independent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	yes	yes	yes	yes
Was the exposure(s) assessed more than once over time?	yes	no	no	no
Were the outcome measures (dependent variables) clearly defined, valid, reliable, and implemented consistently across all study participants?	yes	yes	yes	yes
Were the outcome assessors blinded to the exposure status of participants?	NR	yes	NR	NR
Was loss to follow-up after baseline 20% or less?	yes	yes	yes	yes
Were key potential confounding variables measured and adjusted statistically for their impact on the relationship between exposure(s) and outcome(s)?	yes	yes	yes	yes
Rating	good	good	good	good