

**Supplemental table.** Results of assessment of reporting quality of included studies.

QUIPS tool components	Description	Gottlieb et al. 1990	Eichhorn et al. 1993	Madsen et al. 1997	Ceremuzynski et al. 2000	Cohen et al. 2003	Adamopoulos et al. 2009	Vaduganathan et al. 2013	Naksuk et al. 2016
<u>1. Study participation</u>									
1.1 Source of target population	The source or population of interest is adequately described for key characteristics	Uncertain	Yes	Yes	Yes	No	Yes	Yes	Yes
1.2 Method used to identify population	The sampling frame and recruitment are adequately described, including methods to identify the sample sufficient to limit potential bias	No	Yes	Yes	Yes	No	Yes	Yes	Yes
1.3 Adequate study participation	There is adequate participation in the study by eligible individuals	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1.4 Inclusion and exclusion criteria	Inclusion and exclusion criteria are adequately described	No	Yes	Yes	Yes	Uncertain	Yes	Yes	Yes
1.5 Baseline characteristics	The baseline study sample (i.e., individuals entering the study) is adequately described for key characteristics	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

<b>Summary Study participation</b>	The study sample represents the population of interest on key characteristics, sufficient to limit potential bias of the observed relationship between prognostic factor and outcome.	High bias	Low bias	Low bias	Low bias	High bias	Low bias	Low bias	Low bias
<u>2. Study attrition</u>									
2.1 Proportion of baseline sample available for analysis	Response rate (i.e., proportion of study sample completing the study and providing outcome data) is adequate.	Yes	Yes	Yes	Yes	Uncertain	Yes	Yes	Uncertain
2.2 Attempts to collect information on participants who dropped out	Attempts to collect information on participants who dropped out of the study are described.	No	No	Uncertain	Uncertain	No	No	No	Uncertain
2.3 Reasons and potential impact of subjects lost to follow-up	Reasons for loss to follow up	Yes	No	Yes	Uncertain	Yes	No	No	Uncertain
	Adequate description of participants lost to follow up	Yes	No	Yes	No	No	No	No	Uncertain
	Proportion of participants lost to follow up <10%	Yes	Yes	Yes	Yes	Uncertain	Yes	Yes	Uncertain
2.4 Outcome and prognostic factor	There are no important differences between key	Uncertain	Uncertain	Yes	Uncertain	No	Uncertain	Uncertain	No

information on those lost to follow-up

characteristics and outcomes in participants who completed the study and those who did not.

<b>Study attrition summary</b>	Loss to follow-up (from baseline sample to study population analyzed) is not associated with key characteristics (i.e., the study data adequately represent the sample) sufficient to limit potential bias to the observed relationship between PF and outcome.	Moderate	High	Moderate	High	High	High	High	High
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3. Prognostic factor measurement

3.1 Definition of prognostic factor	Clear definition or description of serum magnesium levels or magnesium	Yes	Yes	Unertain	Yes	Yes	Yes	Yes	Yes
3.2 Valid and Reliable Measurement of PF	Method of PF measurement is adequately valid and reliable to limit misclassification bias (e.g., may include relevant outside sources of information on measurement properties, also characteristics, such	Unertain	Yes	Unertain	Nul	Unertain	Unertain	Yes	Yes

	as blind measurement and limited reliance on recall).								
3.3 Method and Setting of PF Measurement	The method and setting of measurement of PF is the same for all study participants.	Unertain	Yes	Unertain	Yes	Yes	Yes	Yes	Yes
3.4 Proportion of data on PF available for analysis	Adequate proportion of the study sample has complete data for serum magnesium levels or magnesium concentration	Yes	Yes	Unertain	Yes	Yes	Yes	Yes	Yes
3.5 Methods used for missing data	Appropriate methods of imputation are used for missing data on serum magnesium or magnesium concentration	Unertain	Unertain	Unertain	Unertain	Unertain	Yes	Yes	Unertain
Prognostic factor measurement summary	PF is adequately measured in study participants to sufficiently limit potential bias.	High	Moderate	High	Moderate	Moderate	Moderate	Low	Moderate
4. Outcome measurement									
4.1 Definition of the Outcome	A clear definition of outcome is provided, including duration of follow-up and level and extent of the outcome construct.	Uncertain	Uncertain	Yes	Uncertain	Uncertain	No	Uncertain	Yes

4.2 Valid and Reliable Measurement of Outcome	The method of outcome measurement used is adequately valid and reliable to limit misclassification bias	Yes	Yes	Yes	Yes	Yes	Uncertain	Uncertain	Yes
	Continuous variables are reported or appropriate cut-points for serum magnesium levels	No	Yes	Yes	Yes	Yes	Uncertain	Uncertain	Yes
4.3 Method and Setting of Outcome Measurement	The method and setting of outcome measurement is the same for all study participants.	No	Yes	Yes	Yes	Yes	Uncertain	Yes	Yes
<b>Outcome measurement summary</b>	Outcome of interest is adequately measured in study participants to sufficiently limit potential bias.	High	Moderate	Low	Moderate	Moderate	High	High	Low
<b><u>5. Study confounding</u></b>									
5.1 Important Confounders Measured	All important confounders, including treatments (e.g. arterial hypertension, diabetes, prior history of myocardial infarction, chronic kidney disease, NYHA class, LVEF), are measured.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5.2 Definition of the confounding factor	Clear definitions of the important confounders measured are provided	Uncertain	Uncertain	No	Yes	No	Uncertain	Yes	No

5.3 Valid and Reliable Measurement of Confounders	Measurement of all important confounders is adequately valid and reliable	No	Uncertain	Uncertain	Yes	No	Uncertain	Uncertain	Uncertain
5.4 Method and Setting of Confounding Measurement	The method and setting of confounding measurement are the same for all study participants.	Uncertain	Yes	Uncertain	Yes	Uncertain	Uncertain	Uncertain	Yes
5.5 Method used for missing data	Appropriate methods are used for missing confounder data	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	Uncertain	Yes	Uncertain
5.6 Appropriate Accounting for Confounding	Important potential confounders are accounted for in the analysis	Uncertain	Yes	Yes	Yes	Uncertain	Yes	Yes	Yes
<b>Study confounding summary</b>	Important potential confounders are appropriately accounted for, limiting potential bias with respect to the relationship between PF and outcome.	High	High	High	Moderate	High	High	Moderate	Moderate
<b><u>6. Statistical analysis and reporting</u></b>									
6.1 Presentation of analytical strategy	There is sufficient presentation of data to assess the adequacy of the analysis.	Uncertain	Yes	Yes	Yes	Yes	Yes	Yes	Yes

6.2 Model development strategy	The strategy for model building (i.e., inclusion of variables in the statistical model) is appropriate and is based on a conceptual framework or model.	Uncertain	Uncertain	Yes	Yes	Uncertain	Yes	Yes	Yes
	The selected statistical model is adequate for the design of the study.	Yes	Uncertain	Yes	Yes	Uncertain	Yes	Yes	Yes
6.3 Reporting of results	There is no selective reporting of results.	Uncertain	Uncertain	Yes	Yes	Yes	Yes	Yes	Yes
<b>Statistical Analysis and Presentation Summary</b>	The statistical analysis is appropriate for the design of the study, limiting potential for presentation of invalid or spurious results.	High	High	Low	Low	High	Low	Low	Low