

Supplementary material 2: The Quality in Prognostic studies (QUIPS) risk of bias tool. Adapted from (21), PF = prognostic factor.

Bias Assessment Domain	Optimal Study Description	Considerations	Overall risk of bias
<b>Study Participation</b>	The study sample adequately represents the population of interest	a. Adequate participation in the study by eligible individuals b. Adequate description of : - source population or population of interest - baseline study sample - sampling frame and recruitment - period and place of recruitment - inclusion and exclusion criteria	The relationship between the PF and outcome is: - very likely ( <b>High bias</b> ) - maybe ( <b>Moderate bias</b> ) - unlikely ( <b>Low bias</b> ) to be different for participants and eligible nonparticipants.
<b>Study Attrition</b>	The final study data presented adequately represents the initial study sample	a. Adequate response rate for study participants b. Description of attempts to collect information on participants who dropped out c. Adequate description of participants lost to follow-up and reasons for this. d. Ensure no important differences exist between those who completed the study and those who did not	The relationship between the PF and outcome is - very likely ( <b>High bias</b> ) - maybe ( <b>Moderate bias</b> ) - unlikely ( <b>Low bias</b> ) to be different for those completing the study versus those who didn't.
<b>Prognostic Factor (PF) Measurement</b>	The PF is measured in a similar way for all participants, in a valid manner, with adequate sample of complete data	a. A clear description of the PF is provided b. Method of PF measurement is adequately valid and reliable c. Continuous variables are reported or appropriate cut points are used d. The method and setting of measurement of PF is the same for all study participants e. Adequate proportion of the study sample has complete data for the PF variable f. Appropriate methods of imputation are used for missing PF data	The measurement of the PF is - very likely ( <b>High bias</b> ) - maybe ( <b>Moderate bias</b> ) - unlikely ( <b>Low bias</b> ) to be different for different levels of the outcome of interest.
<b>Outcome Measurement</b>	The outcome of interest is measured in the same way for all study participants	a. A clear definition of the outcome is provided b. Method of outcome measurement used is adequately valid and reliable c. The method and setting of outcome measurement is the same for all study participants	The measurement of the outcome of interest is - very likely ( <b>High bias</b> ) - maybe ( <b>Moderate bias</b> ) - unlikely ( <b>Low bias</b> ) to be different related to the baseline level of the PF
<b>Study Confounding</b>	Important potential confounding factors are appropriately accounted for	a. All important confounders are measured b. Clear definitions of the important confounders measured are provided c. Measurement of all important confounders is adequately valid and reliable d. The method and setting of confounding measurement are the same for all study participants e. Important potential confounders are accounted for in the study design and analysis	The observed effect of the PF on the outcome is - very likely ( <b>High bias</b> ) - maybe ( <b>Moderate bias</b> ) - unlikely ( <b>Low bias</b> ) to be distorted by an additional factor related to PF and outcome
<b>Statistical Analysis and Reporting</b>	The statistical analysis is appropriate, and all primary outcomes are reported	a. Sufficient presentation of data to assess the adequacy of the statistical analysis b. Strategy for model building is appropriate and is based on a conceptual framework or model c. The selected statistical model is adequate for the design of the study d. There is no selective reporting of results	The reported results are - very likely ( <b>High bias</b> ) - maybe ( <b>Moderate bias</b> ) - unlikely ( <b>Low bias</b> ) to be spurious or biased related to the analytical and/or reporting methods used.