Supplementary table 2 Scores of eligible studies according to REMARK criteria

Study	Introduction	Materials and methods										Results							Discussion		Total scores
		Patients		Specimen characteristics	Assay methods	Study design				Statistical analysis		Data		Analysis and presentation							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Zhang, 2015	1	0.5	0	1	1	0	0	0	0	1	1	0	1	1	0.5	0	0	0	1	1	10
Zhao, 2017	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1	1	1	0	1	1	16
Okuma, 2017	1	0.5	1	1	1	0.5	0	1	0	1	1	0	1	1	0.5	1	1	0	1	1	14.5
Vecchiarelli, 2018	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0.5	0	0	0	1	1	13.5
Okuma, 2018	1	0.5	1	1	1	0	0	1	0	1	1	0	1	1	0.5	0	0	0	1	1	12
Costantini, 2018	1	0.5	1	1	1	1	0	1	0	1	1	0	1	0	0.5	0	0	0	1	1	12
Jin, 2018	1	1	1	1	1	0.5	1	1	0	1	1	0	1	0	0	1	1	0	1	1	14.5
Tiako Meyo, 2020	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	1	17
Castello, 2020	1	0.5	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	1	1	9.5
Mazzaschi, 2020	1	1	1	1	1	0.5	1	1	0	1	1	0	1	1	1	1	1	0	1	1	16.5
Jia, 2020	1	0.5	1	1	1	0.5	0	1	0	1	1	0	1	1	1	1	0	0	1	1	14
Murakami, 2020	1	0.5	1	1	1	0.5	0	1	0	1	1	0	1	1	1	1	1	0	1	1	15

REMARK: REporting Recommendations for tumour MARKer prognostic studies.
Item 1: State the marker examined, the study objectives, and any prespecified hypotheses.
Item 2: Describe the characteristics (e.g. disease stage or comorbidities) of the study patients, including their source and inclusion and exclusion criteria.
Item 3: Describe treatments received and how chosen (e.g. randomised or rule-based).
Item 4: Describe type of biological material used (including control samples), and methods of preservation and storage.
Item 5: Specify the assay method used and provide (or reference) a detailed protocol, including specific reagents or kits used, quality control procedures, reproducibility assessments, quantitation methods, and scoring and reporting protocols. Specify whether and how assays were performed blinded to the study end point.
Item 6: State the method of case selection, including whether prospective or retrospective and whether stratification or matching (e.g. by stage of disease or age) was employed. Specify the time period from which cases were taken, the end of the follow-up period, and the median follow-up time.
Item 7: Precisely define all clinical end points examined.
Item 8: List all candidate variables initially examined or considered for inclusion in models.
Item 9: Give rationale for sample size; if the study was designed to detect a specified effect size, give the target power and effect size.
Item 10: Specify all statistical methods, including details of any variable selection procedures and other model-building issues, how model assumptions were verified, and how missing data were handled.
Item 11: Clarify how marker values were handled in the analyses; if relevant, describe methods used for cutpoint determination.
Item 12: Describe the flow of patients through the study, including the number of patients included in each stage of the analysis (a diagram may be helpful) and reasons for dropout. Specifically, both overall and for each subgroup extensively examined report the numbers of patients and the number of events.

Item 13: Report distributions of basic demographic characteristics (at least age and sex), standard (disease-specific) prognostic variables, and tumour marker, including numbers of missing values.
Item 14: Show the relation of the marker to standard prognostic variables.
Item 15: Present univariate analyses showing the relation between the marker and outcome, with the estimated effect (e.g. hazard ratio and survival probability). Preferably provide similar analyses for all other variables being analysed. For the effect of a tumour marker on a time-to-event outcome, a Kaplan–Meier plot is recommended.
Item 16: For key multivariable analyses, report estimated effects (e.g. hazard ratio) with confidence intervals for the marker and, at least for the final model, all other variables in the model.
Item 17: Among reported results, provide estimated effects with confidence intervals from an analysis in which the marker and standard prognostic variables are included, regardless of their significance.
Item 18: If done, report results of further investigations, such as checking assumptions, sensitivity analyses, internal validation.
Item 19: Interpret the results in the context of the prespecified hypotheses and other relevant studies; include a discussion of limitations of the study.
Item 20: Discuss implications for future research and clinical value.