

The REMARK checklist

Item to be reported		Reported on Page Number/Line Number	Reported on Section/Paragraph
INTRODUCTION			
1	State the marker examined, the study objectives, and any pre-specified hypotheses.	3/43-73	Introduction/1-3
MATERIALS AND METHODS			
Patients			
2	Describe the characteristics (e.g., disease stage or co-morbidities) of the study patients, including their source and inclusion and exclusion criteria.	4/77-84	Materials and methods/1
3	Describe treatments received and how chosen (e.g., randomized or rule-based).	NA All detail data of patients are acquired from publicly available databases	NA All detail data of patients are acquired from publicly available databases
Specimen characteristics			
4	Describe type of biological material used (including control samples) and methods of preservation and storage.	NA This study does not involve biological material.	NA This study does not involve biological material
Assay methods			
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 endpoint.	5/86-137	Materials and methods/2-10
Study design			
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 used. Specify the time period from which cases were taken, the end of the follow-up period, and the median follow-up time.	NA All detail data of patients are acquired from publicly available databases	NA All detail data of patients are acquired from publicly available databases
7	Precisely define all clinical endpoints examined.	6/116-121	Materials and methods/7
8	List all candidate variables initially examined or considered for inclusion in models.	5/86-109 Variables were analyzed using bioinformatics analysis and listed in figure 1-3	Materials and methods/2-5 Results/1-3 Variables were analyzed using bioinformatics analysis and listed in figure 1-3
9	Give rationale for sample size; if the study was designed to detect a specified effect size, give the target power and effect size.	NA The data in this study was	NA The data in this study was

		obtained from public databases. We analyzed all the data from the listed dataset	obtained from public databases. We analyzed all the data from the listed dataset
Statistical analysis methods			
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.	6/139-144	Materials and methods/11
11	Clarify how marker values were handled in the analyses; if relevant, describe methods used for cutpoint determination.	6/143-144	Materials and methods/11

RESULTS			
Data			
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.	NA The data in this study was obtained from public databases. The detail information of patients was submitted in online webset	NA The data in this study was obtained from public databases. The detail information of patients was submitted in online webset
13	Report distributions of basic demographic characteristics (at least age and sex), standard (disease-specific) prognostic variables, and tumor marker, including numbers of missing values.	NA The data in this study was obtained from public databases. The detail information of patients was submitted in online webset	NA The data in this study was obtained from public databases. The detail information of patients was submitted in online webset
Analysis and presentation			
14	Show the relation of the marker to standard prognostic variables.	7/174-183 8/197-204	Results/4,7
15	Present univariable 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 analyzed. For the effect of a tumor marker on a time-to-event outcome, a Kaplan-Meier plot is recommended.	7/174-183 8/197-204	Results/4,7
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.	NA Multivariable analyses was not conducted in this study	NA Multivariable analyses was not conducted in this study
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 statistical significance.	We marked it in the figures	We marked it in the figures
18	If done, report results of further investigations, such as checking assumptions, sensitivity analyses, and internal validation.	Prior to the data-analysis, the original data were subjected to quality control using R statistical software.	Prior to the data-analysis, the original data were subjected to quality control using R statistical software.
DISCUSSION			
19	Interpret the results in the context of the pre-specified hypotheses and other relevant studies; include a discussion of limitations of the study.	11/280	Discussion/7
20	Discuss implications for future research and clinical value.	11/282	Discussion/7

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*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.