STROBE Statement—checklist of items that should be included in reports of observational studies

Section/item	Item No	Recommendation	Reported on Page Number/Line Number	Reported on Section/Paragraph
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	Pg3 L58	Abstract P 3
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Pg3-4 L48-74	Abstract P 1-4
Introduction				
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported	Pg5 L80-91	Intro P 1
Objectives	3	State specific objectives, including any prespecified hypotheses	Pg5 L93-98	Intro P 2
Methods				
Study design	4	Present key elements of study design early in the paper	Pg5-6 L95-98, 118-119	Intro P 2 / Methods P 3
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Pg5 L94 / Pg8 L161 / Pg9 L173-174 / Pg10 L216	Intro P 3 / Results P 1 and P2
Participants	6	(a) ***Cohort study***—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up ***Case-control study***—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls ***Cross-sectional study***—Give the eligibility criteria, and the sources and methods of selection of participants	Pg5 L93-96 / Pg6 L102-119	Into P 3 / Methods P 1-3
		(b) ***Cohort study***—For matched studies, give matching criteria and number of exposed and unexposed ***Case-control study***—For matched studies, give matching criteria and the number of controls per case		
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Pg10 L207-214 / Pg18-21 F1 and T1-3	Figure 1 / Tables 1-3 / Result P 5
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Pg6 L118-119 / Pg8 L151-157	Methods P 3 and P 7
Bias	9	Describe any efforts to address potential sources of bias	Pg11-12 L237-240	Comments P 2
Study size	10	Explain how the study size was arrived at	Pg5-8 L101-162	Method P1-7 / Results P1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Pg8 L151-157	Methods P7

Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Pg8 L151-157	Methods P7
		(b) Describe any methods used to examine subgroups and interactions	Pg8 L151-157	Methods P7
		(c) Explain how missing data were addressed	Pg8 L151-157	Methods P7
		(d) ***Cohort study***—If applicable, explain how loss to follow-up was addressed ***Case-control study***—If applicable, explain how matching of cases and controls was addressed ***Cross-sectional study***—If applicable, describe analytical methods taking account of sampling strategy	Pg20-22, T1-3	Tables 1-3
		(e) Describe any sensitivity analyses	N/a - This was a case	N/a
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	Pg8 L161	Results P1
		(b) Give reasons for non-participation at each stage	N/a - This is a single stage	N/a
		(c) Consider use of a flow diagram	N/a - All patients	N/a
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Pg19-21 T1-3	Tables 1-3
		(b) Indicate number of participants with missing data for each variable of interest	N/a - No patients had	N/a
		(c) ***Cohort study***—Summarise follow-up time (eg, average and total amount)	Pg19-21 T1-3	Tables 1-3
Outcome data	15*	***Cohort study***—Report numbers of outcome events or summary measures over time	Pg 18-21 F1 and T1-3	Figure 1 Tables 1-3
		Case-control study—Report numbers in each exposure category, or summary measures of exposure	N/a - This is a cohort	N/a
		Cross-sectional study—Report numbers of outcome events or summary measures	N/a - This is a cohort	N/a
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	N/a - relative risk and odds ratios were not	N/a
		(b) Report category boundaries when continuous variables were categorized	N/a - Continuous variables	N/a
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/a - Relative risk is not	N/a
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/a - Additional statistical.	N/a
Discussion				
Key results	18	Summarise key results with reference to study objectives	Pg12-14 L245-298	Comments P3-6
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	p11-12 L237-243	Comments P2

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Pg12-14 L255-298	Comments P4-6
Generalisability	21	Discuss the generalisability (external validity) of the study results	Pg14 L291-298	Comment P6
Other information				
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Pg15 L300-301	Acknowledgements

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.

Article information: https://dx.doi.org/10.21037/jtd-21-836
*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.