## 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	Page 2/Line 24	Abstract/Para.1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 2/Line 34-41	Abstract/Para.3
Introduction			,	-
Background/ rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 4-6/ 50-83	Introduction/Para 1-2
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 6-7/93-107	Introduction/Para 2-3
Methods				
Study design	4	Present key elements of study design early in the paper	Page 7/110	Methods/ Para.1
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 7-8/123-124	Methods/ Para.1
Participants	6	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up <i>Case-control study</i> —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 <i>Cross-sectional study</i> —Give the eligibility criteria, and the sources and methods of selection of participants	Page 7/110-123	Methods/ Para.1
		(b) <i>Cohort study</i> —For matched studies, give matching criteria and number of exposed and unexposed <i>Case-control study</i> —For matched studies, give matching criteria and the number of controls per case	Page 8/130-134	Methods/ Para.3
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	N/A	N/A
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	Page 7/116-120	Methods/ Para.1
Bias	9	Describe any efforts to address potential sources of bias	Page 8/129-134 Page9/147-149	Methods/ Para.3,4
Study size	10	Explain how the study size was arrived at	Page 7/120-123	Methods/ Para.1
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page 8/136-137	Methods/ Para.4

12	(a) Describe all statistical methods, including those used to control for confounding	Page 8/136-137	Methods/ Para.4
	(b) Describe any methods used to examine subgroups and interactions	Page 8/143-145	Methods/ Para.4
	(c) Explain how missing data were addressed	Page 8/137-138	Methods/ Para.4
	(d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> —If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> —If applicable, describe analytical methods taking account of sampling strategy	Page 7/115	Methods/ Para.1
	(e) Describe any sensitivity analyses	Page 8/143-145	Methods/ Para.4
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	Page 9/153-156	Results/Para.1
	(b) Give reasons for non-participation at each stage	N/A	N/A
	(c) Consider use of a flow diagram	Page 7/122-123	Methods/ Para.1
14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 9/156-162	Results/Para.1
	(b) Indicate number of participants with missing data for each variable of interest	N/A	N/A
	(c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)	Page 9/156	Results/Para.1
15*	Cohort study—Report numbers of outcome events or summary measures over time	Page 9/167	Results/Para.2
	Case-control study—Report numbers in each exposure category, or summary measures of exposure	N/A	N/A
	Cross-sectional study—Report numbers of outcome events or summary measures	N/A	N/A
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	Page 10/172-173	Results/Para 3
	(b) Report category boundaries when continuous variables were categorized	N/A	N/A
	(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A	N/A
17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Page 10/183-196	Results/Para.4
18	Summarise key results with reference to study objectives	Page 12/218-224	Discussion/Para 1
		Page 16/302-318	Discussion/Para.5
	13* 14* 15* 16	(b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (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 (e) Describe any sensitivity analyses  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 (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram  14*  (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders (b) Indicate number of participants with missing data for each variable of interest (c) Cohort study—Summarise follow-up time (eg, average and total amount)  15*  Cohort study—Report numbers of outcome events or summary measures over time  Case-control study—Report numbers of outcome events or summary measures of exposure  Cross-sectional study—Report numbers of outcome events or summary measures  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 (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period  Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	(b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) Cohort study—If applicable, explain how loss to follow-up was addressed Cuse-control study—If applicable, explain how loss to follow-up was addressed Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy  (e) Describe any sensitivity analyses  Page 8/143-145  13* (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram  Page 7/122-123  14* (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders (b) Indicate number of participants with missing data for each variable of interest (c) Cohort study—Summarise follow-up time (eg, average and total amount)  Page 9/156  Cohort study—Report numbers of outcome events or summary measures over time  Cuse-control study—Report numbers of outcome events or summary measures  16 (a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval).  Make clear which confounders when continuous variables were category, or summary measures  17 (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period  N/A  Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses  Page 10/182-193  Page 10/183-196

Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 13-14/254-276	Discussion/Para.2				
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 16/305-310	Discussion/Para.5				
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	Page 17/325-328	Acknowledgments				

<sup>\*</sup>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/tgh-24-11

<sup>\*</sup>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.