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

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	1	Line 1-2
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	3-4	Line 45-76
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	5-7	Line 89-142
Objectives	3	State specific objectives, including any prespecified hypotheses	7-8	Line 144-161
Methods				
Study design	4	Present key elements of study design early in the paper	23	Line 479-497
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	30-31	Line 639-641
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  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed	23	Line 480-483
		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	23	Line 486-495
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	23	Line 495-497
Bias	9	Describe any efforts to address potential sources of bias	25	Line 526-531
Study size	10	Explain how the study size was arrived at	23	Line 483-485

Continued on next page

Quantitative	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which		
variables		groupings were chosen and why		
Statistical	12	(a) Describe all statistical methods, including those used to control for confounding	30	Line 633-637
methods		(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		
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined	9	Line 179-181
		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		
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on	9	Line 179-181
		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)	23	Line 489
Outcome data	15*	Cohort study—Report numbers of outcome events or summary measures over time	9	Line 179-181
		Case-control study—Report numbers in each exposure category, or summary measures of exposure		
		Cross-sectional study—Report numbers of outcome events or summary measures		
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision	9-18	Line 177-370
		(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		

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses		
Discussion				
Key results	18	Summarise key results with reference to study objectives	19	Line 404-414
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss	21	Line 450-451
		both direction and magnitude of any potential bias		
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of	19	Line 411-421
		analyses, results from similar studies, and other relevant evidence		
Generalisability	21	Discuss the generalisability (external validity) of the study results	22	Line 458-459
Other informati	on			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the	4	Line 78-83
		original study on which the present article is based		

<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.