## 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 3, Line 11 | Methods |
| | | (b) Provide in the abstract an informative and balanced summary of what was done and what was found | Page 3, Line 21 | Results |
| **Introduction** | | | | |
| Background/ rationale | 2 | Explain the scientific background and rationale for the investigation being reported | Page 6, Line 2 | Paragraph 1 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | Page 6, Line 13 | Paragraph 3 |
| **Methods** | | | | |
| Study design | 4 | Present key elements of study design early in the paper | Page 6, Line 13 | Paragraph 3 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | Page 6, Line 17 | Paragraph 1 |
| Participants | 6 | (a) ***Cohort study***—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up<br>***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<br>***Cross-sectional study***—Give the eligibility criteria, and the sources and methods of selection of participants | Page 6, Line 17 | Paragraph 1 |
| | | (b) ***Cohort study***—For matched studies, give matching criteria and number of exposed and unexposed<br>***Case-control study***—For matched studies, give matching criteria and the number of controls per case | Not applicable | Not applicable |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | Page 10, Line 24 | Paragraph 1 |
| 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 10, Line 24 | Paragraph 1 |
| Bias | 9 | Describe any efforts to address potential sources of bias | Not applicable | Not applicable |
| Study size | 10 | Explain how the study size was arrived at | Not applicable | Not applicable |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | Not applicable | Not applicable |

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| Statistical methods | 12 | (a) Describe all statistical methods, including those used to control for confounding | Not applicable | Not applicable |
| | | (b) Describe any methods used to examine subgroups and interactions | Not applicable | Not applicable |
| | | (c) Explain how missing data were addressed | Not applicable | Not applicable |
| | | (d) ***Cohort study***—If applicable, explain how loss to follow-up was addressed<br>***Case-control study***—If applicable, explain how matching of cases and controls was addressed<br>***Cross-sectional study***—If applicable, describe analytical methods taking account of sampling strategy | Not applicable | Not applicable |
| | | (e) Describe any sensitivity analyses | Not applicable | Not applicable |
| **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 | Not applicable | Not applicable |
| | | (b) Give reasons for non-participation at each stage | Not applicable | Not applicable |
| | | (c) Consider use of a flow diagram | Not applicable | Not applicable |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | Page 10, Line 24 | Paragraph 1 |
| | | (b) Indicate number of participants with missing data for each variable of interest | Not applicable | Not applicable |
| | | (c) ***Cohort study***—Summarise follow-up time (eg, average and total amount) | Not applicable | Not applicable |
| Outcome data | 15* | ***Cohort study***—Report numbers of outcome events or summary measures over time | Not applicable | Not applicable |
| | | ***Case-control study***—Report numbers in each exposure category, or summary measures of exposure | Page 12, line 14 | Paragraph 1 |
| | | ***Cross-sectional study***—Report numbers of outcome events or summary measures | Not applicable | Not applicable |
| 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 | Not applicable | Not applicable |
| | | (b) Report category boundaries when continuous variables were categorized | Not applicable | Not applicable |
| | | (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Not applicable | Not applicable |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | Not applicable | Not applicable |
| **Discussion** | | | | |
| Key results | 18 | Summarise key results with reference to study objectives | Page 11, Line 21 | Paragraph 1 |
| 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 | Page 13, Line 6 | Paragraph 5 |

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| 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, Line 10 | Paragraph 6 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | Not applicable | Not applicable |
| **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 | Not applicable | Not applicable |

*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/asj-23-4
*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.