Research checklist*

| | Item | Recommendation | Reported on manuscript page |
|------------------------------|------|---|-----------------------------|
| Title and abstract | | | |
| | 1 | (a) Indicate the study's design with a commonly used term in the title or the abstract | Page 1 |
| | | (b) Provide in the abstract an informative and balanced summary of what was done and what was found | Page 4 |
| Introduction | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | Page 5 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | Page 5 |
| Methods | | | |
| Study design | 4 | Present key elements of study design early in the paper | Pages 5-9 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | Pages 6-8 |
| 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 | Pages 6-8 |
| Variables | 7 | (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 Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give | Page 8 |
| variables | / | diagnostic criteria, if applicable | Pages 6-9 |
| 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 | Pages 7-9 |
| Bias | 9 | Describe any efforts to address potential sources of bias | Pages 7-9 |
| Study size | 10 | Explain how the study size was arrived at | Page 6 |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why | Pages 7-9 |
| Statistical methods | 12 | (a) Describe all statistical methods, including those used to control for confounding | Pages 7-9 |
| | | (b) Describe any methods used to examine subgroups and interactions | Pages 8-9 |
| | | (c) Explain how missing data were addressed | Pages 7-8 |
| | | (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 | Pages 8-9 Page 14 |
| Results | | | U - |
| Participants | 13 | (a) Report the numbers of individuals at each stage of the study—eg, numbers potentially eligible, examined | Page 9, Table 1, Appendix |

| | | for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | Table A2 |
|-------------------|----|---|-------------------------------------|
| | | (b) Give reasons for non-participation at each stage | Not applicable |
| | | (c) Consider use of a flow diagram | Not applicable |
| Descriptive data | 14 | (a) Give characteristics of study participants (eg, demographic, clinical, social) and information on exposures and potential confounders | Page 9 |
| | | (b) Indicate the number of participants with missing data for each variable of interest | Table A2 |
| | | (c) Cohort study—summarise follow-up time (eg, average and total amount) | Page 9 |
| Outcome data | 15 | Cohort study—report numbers of outcome events or summary measures over time 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 | Page 9, Table 1 |
| 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 | Pages 10-11, Tables 1-3 |
| | | (b) Report category boundaries when continuous variables were categorised | Pages 10-11, Tables 1-3 |
| | | (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | Not applicable |
| Other analyses | 17 | Report other analyses done—eg, analyses of subgroups and interactions, and sensitivity analyses | Pages 10-11, Tables 2-3 Table A3 |
| Discussion | | | |
| Key results | 18 | Summarise key results with reference to study objectives | Pages 11-13 |
| 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 | Pages 13-14 |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | Pages 11-13 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | Pages 12-13 |
| 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 2 |

^{*}von Elm E, Altman DG, Egger M, Pocock SJ, Gotzsche PC, Vandenbroucke JP. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. Lancet 2007;370:1453-7.