**Modified STROBE Statement—checklist of items that should be included in reports of observational studies (Cohort/Cross-sectional and case-control studies)**

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|  | Item No | Recommendation |
| **Title and abstract** | 1 | (*a*) Indicate the study’s design with a commonly used term in the title or the abstract |
| (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found **Abstract available** |
| Introduction | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported **Pages 3-4 (Introduction)** |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses **Page 4 (Introduction)** |
| Methods | | |
| Study design | 4 | Present key elements of study design early in the paper **Methods in the Supplement file** |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection **Methods in the Supplement file** |
| Participants | 6 | (*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up **Methods in the Supplement file**  *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 |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable  **Not Applicable** |
| Data sources/ measurement | 8\* | For each variable of interest, give sources of data and details of methods of assessment (measurement). **Methods in the Supplement file** |
| Bias | 9 | Describe any efforts to address potential sources of bias  **Not Applicable** |
| Study size | 10 | Explain how the study size was arrived at (if applicable) **Methods in the Supplement file** |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  **Methods in the Supplement file** |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding **Methods in the Supplement file** |
| (*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\* | 1. 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 analyzed   **Page 5 (Results)** |
| (c) **Use of a flow diagram Tables 1& 2 and Figure 6** |
| Descriptive data | 14\* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders **Described for each of the five cases separately (Page 5, 7, 9, 11 and 12)** |
| (b) Indicate number of participants with missing data for each variable of interest **Antigenic Factor I level missing for 2 patients (Case #2 and #5)** |
| (c) *Cohort study*—Summarise follow-up time (eg, average and total amount) **Described for each case** |
| Outcome data | 15\* | *Cohort study*—Report numbers of outcome events or summary measures over time **Described under “Implications” for each case.** |
| *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 | 1. 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** |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses **Performed Genetic, Functional and Structural analyses for each variant** |
| Discussion | | |
| Key results | 18 | Summarise key results with reference to study objectives **Discussion (Pages 14, 15 and 16)** |
| 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 **Discussion (Page 15)** |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence **Discussion (Pages 14 and 15)** |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results **Discussion (Page 14, 15 and 16)** |

\*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.