

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

| | Item No | Recommendation | Answer |
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| 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 | Study design included in title, and methods section of the abstract (Page 1, line 1-2; Page 3, line 40-43). Methods, results, and conclusion included in abstract (Page 3-4, line 40-67). |
| Introduction | | | |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | See introduction section (Page 5-6, line 71-81). |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | See introduction section (Page 6, line 82-100). |
| Methods | | | |
| Study design | 4 | Present key elements of study design early in the paper | See methods <i>Study Design and patients</i> (Page 6-7, line 104-116). |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | See methods <i>Study Design and patients</i> (Page 6-7, line 104-116). |
| 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 | Eligibility criteria see methods <i>Study design and patients</i> Page 6-7, line 104-116). Rationale for cases and controls (positive blood culture and negative blood culture) were described in methods <i>Microbiology and infection biomarkers</i> (Page 7-8, line 119-137). |
| | | (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 | N/A. We did not perform case-control matching, but we used multivariable logistic regression analysis for baseline adjustment (Page 9-10, line 172-175). |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | See methods (Page 6,-7 line 111-114; Page 8, line 140-142; Page 9-10, line 172-175). |
| 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 | Data sources: see methods <i>Study design and patients, Microbiology and infection biomarkers</i> (Page 6-7, line 104-116; Page 7-8, line 119-137). Assessment: see methods <i>Statistical analysis</i> (Page 8-10, line 146-187). |
| Bias | 9 | Describe any efforts to address potential sources of bias | See methods <i>Statistical analysis</i> (Page 9-10, line 172-175). |
| Study size | 10 | Explain how the study size was arrived at | See results <i>Patient characteristics and outcomes</i> (Page 10, line 191-195); Fig. 1. |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | See methods <i>Statistical analysis</i> (Page 8, line 145-148; Page 10, line 176-179); Table S1. |

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| Statistical methods | 12 | (a) Describe all statistical methods, including those used to control for confounding | See methods <i>Statistical analysis</i> (Page 8-10, line 145-187). |
| | | (b) Describe any methods used to examine subgroups and interactions | Subgroups: See methods <i>Statistical analysis</i> (Page 9, line 168-172). |
| | | (c) Explain how missing data were addressed | See methods <i>Statistical analysis</i> (Page 8-9, line 153-154). |
| | | (d) <i>Cohort study</i> —If applicable, explain how loss to follow-up was addressed | N/A. We did not perform case-control matching, but we used multivariable logistic regression analysis for baseline adjustment (Page 9-10, line 172-175). |
| | | <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 | |
| | | (e) Describe any sensitivity analyses | We performed subgroup analysis instead of sensitivity analysis. (Page 10, line 167-172). |
| 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 | See results <i>Patient characteristics and outcomes</i> (Page 10, line 191-195); Fig. 1. |
| | | (b) Give reasons for non-participation at each stage | Fig. 1. |
| | | (c) Consider use of a flow diagram | Fig. 1. |
| Descriptive data | 14* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | See results <i>Patient characteristics and outcomes</i> (Page 10-11, line 195-202); Table 1. |
| | | (b) Indicate number of participants with missing data for each variable of interest | Fig. 1. Seventeen episodes of blood cultures with insufficient laboratory results were not included in subsequent analysis. |
| | | (c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount) | N/A. This is not a cohort study. |
| Outcome data | 15* | <i>Cohort study</i> —Report numbers of outcome events or summary measures over time | N/A. This is not a cohort study. |
| | | <i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure | See results <i>Patient characteristics and outcomes</i> (Page 11, line 202-206); Table 1 and Table 2. We reported outcome data in patients with positive cultures and patients with negative cultures. Exposure category was not appropriate in our study. |
| | | <i>Cross-sectional study</i> —Report numbers of outcome events or summary measures | N/A. This is not a cross-sectional study. |
| 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 | See results <i>Components coordinates as a useful tool in assisting judgement of blood culture results and Components coordinates as a useful tool for mortality risk stratification in patients with positive blood cultures</i> (Page 12-13, line 224-251); Fig.5 and Fig.7. |
| | | (b) Report category boundaries when continuous variables were categorized | See methods <i>Statistical analysis</i> (Page 9, line 159-162); Table S1; Fig.8. |
| | | (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | N/A. This study was not to establish a causal link between exposure and outcome, therefore, absolute risk was not the concern of our study. |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and | We have provided analyses of subgroups (Page 12-13, line 230- |

sensitivity analyses

239; Fig. 4,5) and exploratory analysis (Page 13-14, line 255-276; Fig. 8, Fig S2, Fig S3).

Discussion

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| Key results | 18 | Summarise key results with reference to study objectives | See <i>conclusion</i> (Page 19-20, line 379-386). |
| 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 | See <i>discussion</i> (Page 18- 19, line 352-376). |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | See <i>discussion</i> (Page 17- 19, line 336-376). |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | See <i>discussion</i> (Page 19, line 372-376). |

Other information

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| 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 | See Footnote <i>Funding</i> (Page 22, line 411). |
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*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.

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*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.