| Section/Topic                        | Item No | Checklist item                                                                 | Reported on Page Number/Line Number | Reported on Section/Paragraph                      |
|-------------------------------------|---------|---------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------|
| **Title and abstract**              |         |                                                                                 |                                     |                                                   |
| 1a Identification as a randomised trial in the title | Page 1 / Line 2-3 | Title                                                                         | No reported on Section/Paragraph          |
| 1b Structured summary of trial design, methods, results, and conclusions (for specific guidance see Table 2) | Page 3 / Line 40-62 | Abstract                                                                       | No reported on Section/Paragraph          |
| **Introduction**                    |         |                                                                                 |                                     |                                                   |
| 2a Scientific background and explanation of rationale | Page 4 / Line 68-89 | Introduction / Paragraph                                                        | No reported on Section/Paragraph          |
| 2b Specific objectives or hypotheses | Page 4 / Line 85-88 | Introduction / Paragraph                                                        | No reported on Section/Paragraph          |
| **Methods**                         |         |                                                                                 |                                     |                                                   |
| 3a Description of trial design (such as parallel, factorial) including allocation ratio | Page 5 / Line 93-94 | Materials and Methods -                                                       | No reported on Section/Paragraph          |
| 3b Important changes to methods after trial commencement (such as eligibility criteria), with reasons | N/A | No changes after trial                                                         | No reported on Section/Paragraph          |
| 4a Eligibility criteria for participants | Page 5 / Line 95-104 | Materials and Methods -                                                       | No reported on Section/Paragraph          |
| 4b Settings and locations where the data were collected | Page 5 / Line 95-97 | Materials and Methods -                                                       | No reported on Section/Paragraph          |
| 5 The interventions for each group with sufficient details to allow replication, including how and when they were actually administered | Page 5-7 / Line 111-142 | Materials and Methods - PICC catheterization                                    | No reported on Section/Paragraph          |
| **Outcomes**                        |         |                                                                                 |                                     |                                                   |
| 6a Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed | Page 7 / Line 155-156 | Materials and Methods - Main outcome indicators / PICC catheterization          | No reported on Section/Paragraph          |
| 6b Any changes to trial outcomes after the trial commenced, with reasons | N/A | No changes after trial                                                         | No reported on Section/Paragraph          |
| 7a How sample size was determined | Page 5 / Line 93-94 | Materials and Methods -                                                       | No reported on Section/Paragraph          |
| 7b When applicable, explanation of any interim analyses and stopping guidelines | N/A | No interim analyses and                                                        | No reported on Section/Paragraph          |
| **Randomisation:**                  |         |                                                                                 |                                     |                                                   |
| 8a Method used to generate the random allocation sequence | Page 5 / Line 111-113 | Materials and Methods -                                                       | No reported on Section/Paragraph          |
| 8b Type of randomisation; details of any restriction (such as blocking and block size) | Page 5 / Line 111-113 | Materials and Methods -                                                       | No reported on Section/Paragraph          |
| 9 Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned | Page 5 / Line 111-113 | Materials and Methods - PICC catheterization methods / Paragraph 1 | No reported on Section/Paragraph          |
| Implementation | 10 | Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions | Page 5 / Line 111-113 | Materials and Methods - PICC catheterization |
|----------------|----|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------|
| Blinding       | 11a | If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how | Page 5 / Line 111-113 | Materials and Methods - PICC catheterization |
|                | 11b | If relevant, description of the similarity of interventions | N/A | Not relevant |
| Statistical methods | 12a | Statistical methods used to compare groups for primary and secondary outcomes | Page 7-8 / Line 159-166 | Materials and Methods - |
|                | 12b | Methods for additional analyses, such as subgroup analyses and adjusted analyses | Page 7-8 / Line 159-166 | Materials and Methods - |

### Results

| Participant flow (a diagram is strongly recommended) | 13a | For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome | Page 8 / Line 170-174 | Results - General data / Paragraph 1 |
|-----------------------------------------------------|----|------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------|
|                                                     | 13b | For each group, losses and exclusions after randomisation, together with reasons | Page 8 / Line 170-174 | Results - General data / |
| Recruitment                                          | 14a | Dates defining the periods of recruitment and follow-up | Page 8 / Line 170-174 | Results - General data / |
|                                                     | 14b | Why the trial ended or was stopped | Page 8 / Line 170-174 | Results - General data / |
| Baseline data                                        | 15 | A table showing baseline demographic and clinical characteristics for each group | Page 8 / Line 170-174 | Results - General data / |
| Numbers analysed                                     | 16 | For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups | Page 8 / Line 177-178 | Results - IC-ECG changes / Paragraph 1 |
| Outcomes and estimation                              | 17a | For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval) | Page 8-9 / Line 176-194 | Results / Paragraph 2-3 |
|                                                     | 17b | For binary outcomes, presentation of both absolute and relative effect sizes is recommended | N/A | No binary outcomes |
| Ancillary analyses                                   | 18 | Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory | N/A | No other analyses performed |
| Harms                                                | 19 | All important harms or unintended effects in each group (for specific guidance see CONSORT for harms) | N/A | No unintended effects |

### Discussion

| Limitations                                          | 20 | Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses | Page 11 / Line 250-253 | Discussion / Paragraph 7 |
| Generalisability                                    | 21 | Generalisability (external validity, applicability) of the trial findings | Page 9-11 / Line 197-249 | Discussion / Paragraph 1-6 |
| Interpretation                                       | 22 | Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence | Page 9-11 / Line 197-249 | Discussion / Paragraph 1-6 |

### Other information

| Registration                                         | 23 | Registration number and name of trial registry | Page 3 / Line 61-62 | Abstract |
Protocol 24 Where the full trial protocol can be accessed, if available
Funding 25 Sources of funding and other support (such as supply of drugs), role of funders

*We strongly recommend reading this statement in conjunction with the CONSORT 2010 Explanation and Elaboration for important clarifications on all the items. If relevant, we also recommend reading CONSORT extensions for cluster randomised trials, non-inferiority and equivalence trials, non-pharmacological treatments, herbal interventions, and pragmatic trials. Additional extensions are forthcoming: for those and for up to date references relevant to this checklist, see www.consort-statement.org.

Table 2 Items to include when reporting a randomized trial in a journal or conference abstract

| Item                        | Description                                                                 | Reported on Page Number/Line Number | Reported on Section/Paragraph          |
|-----------------------------|----------------------------------------------------------------------------|------------------------------------|----------------------------------------|
| Title                       | Identification of the study as randomized                                  | Page 1 / Line 2-3                  | Title                                  |
| Authors *                   | Contact details for the corresponding author                              | Page 1-2 / Line 14-23              | Corresponding author                   |
| Trial design                | Description of the trial design (e.g. parallel, cluster, non-inferiority)  | Page 5 / Line 111-113              | Materials and Methods -                |
| Methods                     |
| Participants                | Eligibility criteria for participants and the settings where the data were collected | Page 5 / Line 95-104               | Materials and Methods -                |
| Interventions               | Interventions intended for each group                                       | Page 6-7 / Line 114-144            | Materials and Methods -                |
| Objective                   | Specific objective or hypothesis                                           | Page 4 / Line 85-88                | Introduction / Paragraph 2             |
| Outcome                     | Clearly defined primary outcome for this report                            | Page 7 / Line 159-160              | Materials and Methods -                |
| Randomization               | How participants were allocated to interventions                           | Page 7 / Line 155-156              | Materials and Methods -                |
| Blinding (masking)          | Whether or not participants, care givers, and those assessing the outcomes were blinded to group assignment | Page 5 / Line 111-113              | Materials and Methods -                |
| Results                     |
| Numbers randomized          | Number of participants randomized to each group                             | Page 8 / Line 170-174              | Results - General data /              |
| Recruitment                 | Trial status                                                                | Page 8 / Line 170-174              | Results - General data /              |
| Numbers analysed            | Number of participants analysed in each group                              | Page 8 / Line 170-174              | Results - General data /              |
| Outcome                     | For the primary outcome, a result for each group and the estimated effect size and its precision | Page 8-9 / Line 176-194            | Results / Paragraph 2-3               |
| Harms                       | Important adverse events or side effects                                    | N/A                                | No unintended effects                 |

4-3
| Conclusions | General interpretation of the results | Page 11 / Line 256-264 | Conclusion / Paragraph 1 |
|------------|------------------------------------|------------------------|--------------------------|
| Trial registration | Registration number and name of trial register | Page 3 / Line 61-62 | Abstract |
| Funding | Source of funding | Page 12 / Line 267-274 | Acknowledgment |

* this item is specific to conference abstracts

From: Hopewell S, Clarke M, Moher D, et al. CONSORT for reporting randomized controlled trials in journal and conference abstracts: explanation and elaboration. PLoS Med. 2008;5(1):e20

Article information: https://dx.doi.org/10.21037/tp-20-370
*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.