

JE編集委員会企画
疫学研究に求められる
観察研究の報告ガイドライン

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2) 医療経済研究機構 研究部

第28回日本疫学会学術総会
2018/2/1 (木) 16:30~18:30
コラッセ福島

報告ガイドライン (reporting guidelines), 論文に**必要不可欠な最小限の情報**リスト



CONSORT 2010 checklist of information to include when reporting a randomised trial*

| Section/Topic | Item No | Checklist item | Reported on page No |
|---------------------------|---------|---|---------------------|
| Title and abstract | | | |
| | 1a | Identification as a randomised trial in the title | _____ |
| | 1b | Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts) | _____ |
| Introduction | | | |
| Background and objectives | 2a | Scientific background and explanation of rationale | _____ |
| | 2b | Specific objectives or hypotheses | _____ |
| Methods | | | |
| Trial design | 3a | Description of trial design (such as parallel, factorial) including allocation ratio | _____ |
| | 3b | Important changes to methods after trial commencement (such as eligibility criteria), with reasons | _____ |
| Participants | 4a | Eligibility criteria for participants | _____ |
| | 4b | Settings and locations where the data were collected | _____ |
| Interventions | 5 | The interventions for each group with sufficient details to allow replication, including how and when they were actually administered | _____ |
| Outcomes | 6a | Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed | _____ |

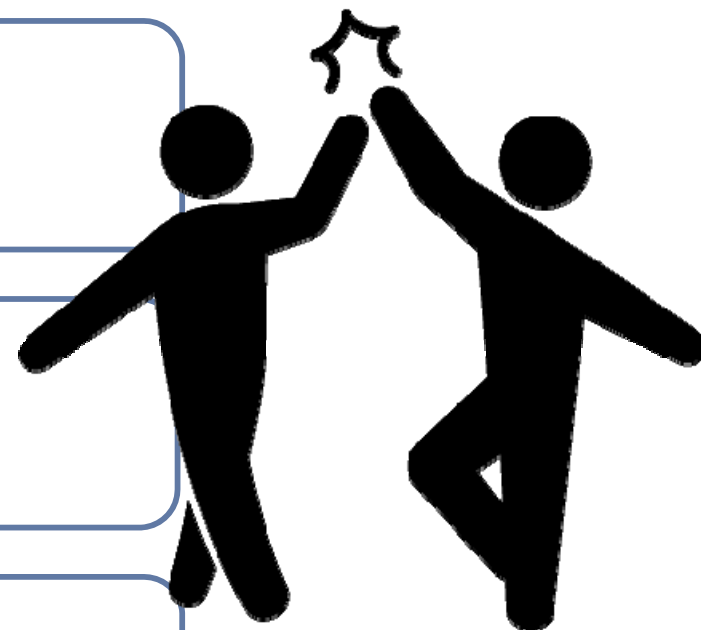
報告ガイドライン, **4つ**のメリット

読者が**理解**しやすくなる

研究者が**追試**しやすくなる

医師が**治療意思決定**に使いやすくなる

系統的レビューに参照されやすくなる



主な報告ガイドライン

| 研究法 | 報告ガイドライン |
|----------------|-----------------------|
| 無作為化比較試験 | CONSORT |
| 観察研究 | STROBE |
| 系統的レビュー | PRISMA |
| 症例報告 | CARE |
| 質的研究 | SRQR / COREQ |
| 診断精度研究 / 予測モデル | STARD / TRIPOD |
| 医療の質向上の活動 | SQUIRE |
| 医療経済評価 | CHEERS |
| 動物による非臨床試験 | ARRIVE |
| 研究計画書 | SPIRIT / PRISMA-P |
| 診療ガイドライン | AGREE / RIGHT |

389の報告ガイドライン



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and

Clinical area

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and

Section of report

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[RECORDS: Improved reporting of Monte Carlo Radiation transport studies: Report of the AAPM Research Committee Task Group 268](#)



Reporting guidelines for main study types

| | | |
|---|-------------------------|----------------------------|
| Randomised trials | CONSORT | Extensions |
| Observational studies | STROBE | Extensions |
| Systematic reviews | PRISMA | Extensions |
| Case reports | CARE | Extensions |
| Qualitative research | SRQR | COREQ |
| Diagnostic / prognostic studies | STARD | TRIPOD |
| Quality improvement studies | SQUIRE | |
| Economic evaluations | CHEERS | |
| Animal pre-clinical studies | ARRIVE | |
| Study protocols | SPIRIT | PRISMA-P |

投稿規定, 報告ガイドライン参照を**推奨**

The Journal of Epidemiology encourages authors to follow statements of reporting guidelines for authors.

[STROBE](http://www.strobe-statement.org/index.php?id=strobe-home) Statements: reporting observational studies
<http://www.strobe-statement.org/index.php?id=strobe-home>

[CONSORT](http://www.consort-statement.org/) Statements: reporting the results of randomized controlled trials.
<http://www.consort-statement.org/>

[PRISMA](http://www.prisma-statement.org/): reporting systematic reviews and meta-analysis of randomized trials.
<http://www.prisma-statement.org/>

CONSORT声明への低い遵守率

605試験, 日本発のRCT, 出版年2010

■ Yes ■ 不明 ■ No

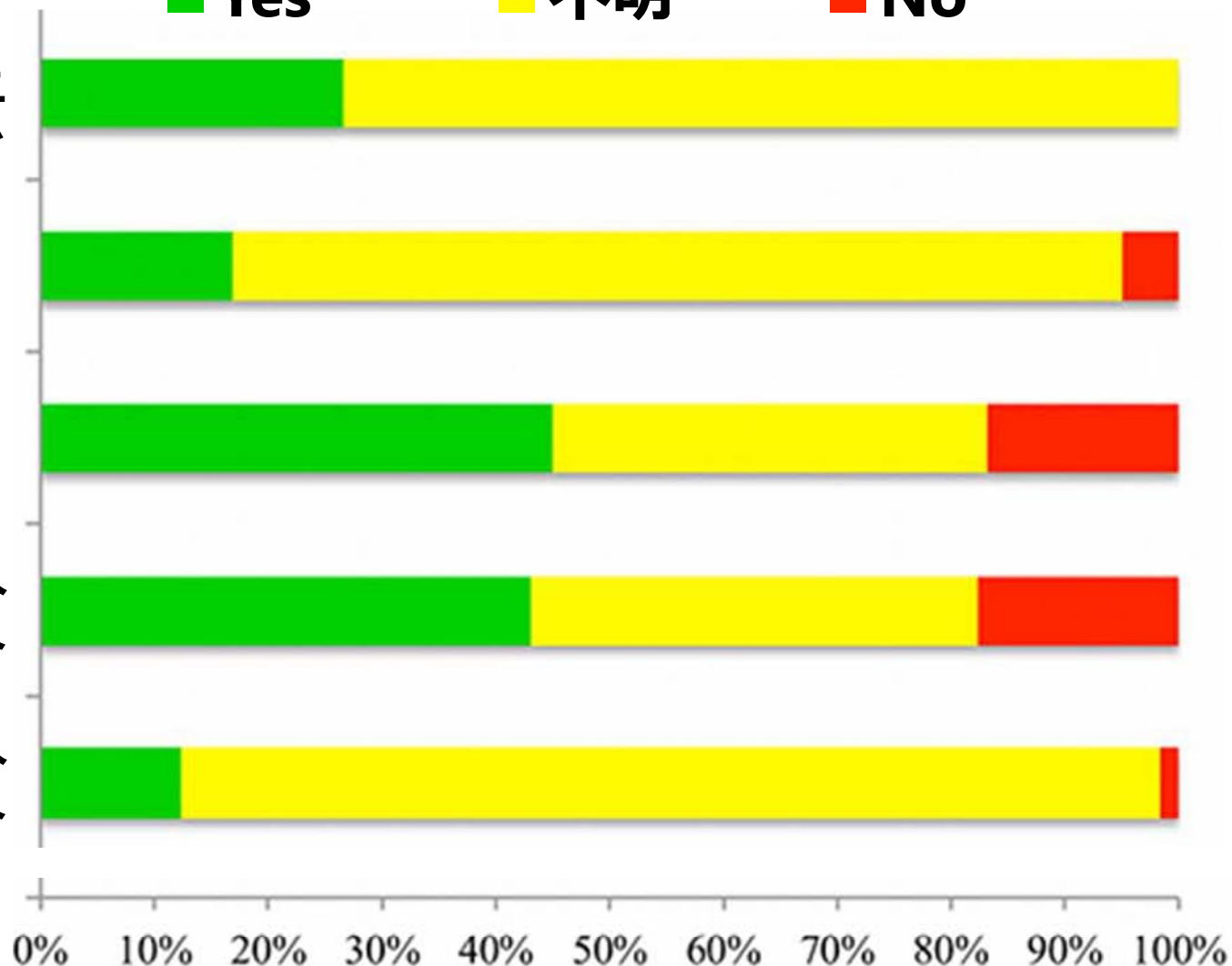
① 無作為化の方法

② 割付の隠蔽化

③ 患者への盲検

④ 治療者への盲検

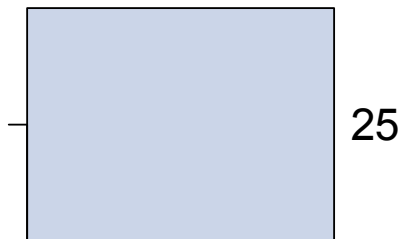
⑤ 評価者への盲検



STROBE声明への低い遵守率

220研究, 疫学・一般10誌, 出版年2010~2012

①共変量の選択理由

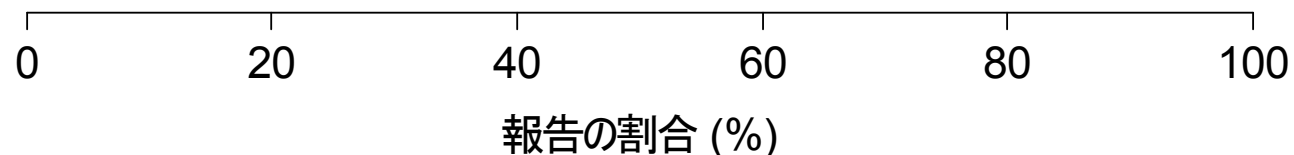


②調整前後の効果推定値



③未測定のコ変量

による影響の方向性



EQUATOR Network, 報告ガイドラインのポータルサイト

Online portal

academic writing tools and resources

370⁺ reporting guidelines
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adding   &  soon

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Library for health research reporting

The Library contains a comprehensive searchable database of reporting guidelines and also links to other resources relevant to research reporting.

 Search for reporting guidelines

 Not sure which reporting guideline to use?

 Reporting guidelines under development

 Visit the library for more resources



Reporting guidelines for main study types

| | | | |
|---------------------------------|---------|------------|-------|
| Randomised trials | CONSORT | Extensions | Other |
| Observational studies | STROBE | Extensions | Other |
| Systematic reviews | PRISMA | Extensions | Other |
| Case reports | CARE | Extensions | Other |
| Qualitative research | SRQR | COREQ | Other |
| Diagnostic / prognostic studies | STARD | TRIPOD | Other |
| Quality improvement studies | SQUIRE | | Other |
| Economic evaluations | CHEERS | | Other |
| Animal pre-clinical studies | ARRIVE | | Other |
| Study protocols | SPIRIT | PRISMA-P | Other |
| Clinical practice guidelines | AGREE | RIGHT | Other |



See all 389 reporting guidelines



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Giving and receiving constructive peer review

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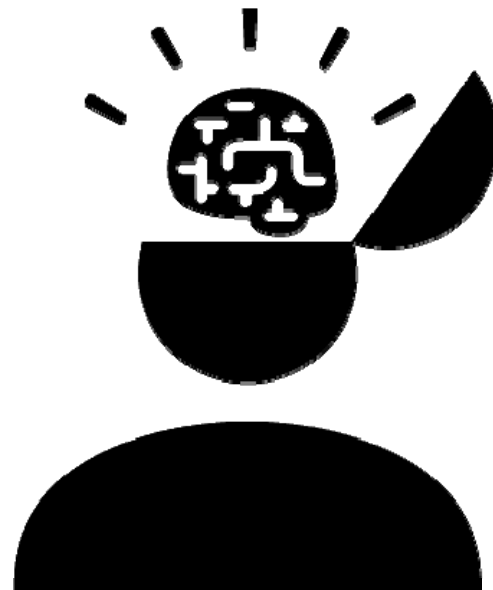
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シンポジウムの主旨

- ✓ 観察研究における研究報告の質向上のためのガイドラインの普及啓発
- ✓ 疫学会の会員が頻用するデザイン・領域にフォーカス



横断研究, 相田潤先生 (東北大学)

Strengthening the Reporting of Observational Studies in Epidemiology (STROBE): Explanation and Elaboration

| | | |
|--------------------------------------|----|--|
| 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 |
| INTRODUCTION | | |
| Background/ rationale | 2 | Explain the scientific background and rationale for the investigation being reported |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses |
| METHODS | | |
| Study design | 4 | Present key elements of study design early in the paper |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection |
| 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 (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 |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable |
| 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 |
| Bias | 9 | Describe any efforts to address potential sources of bias |
| Study size | 10 | Explain how the study size was arrived at |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why |
| Statistical methods | 12 | (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed |

データベース研究, 康永秀生先生 (東京大学)

The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement

| Title and Abstract | | |
|----------------------|---|--|
| | 1 | <p>(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.</p> <p>RECORD 1.1: The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. RECORD 1.2: If applicable, the geographic region and time frame within which the study took place should be reported in the title or abstract. RECORD 1.3: If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.</p> |
| Introduction | | |
| Background rationale | 2 | Explain the scientific background and rationale for the investigation being reported. |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses. |
| Methods | | |
| Study Design | 4 | Present key elements of study design early in the paper. |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection. |
| Participants | 6 | <p>(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. (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.</p> <p>RECORD 6.1: The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. RECORD 6.2: Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. RECORD 6.3: If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.</p> |

観察研究のメタアナリシス, 後藤温先生 (国立がん研究センター)

Meta-analysis of Observational Studies in Epidemiology A Proposal for Reporting

Reporting of background should include

- Problem definition
- Hypothesis statement
- Description of study outcome(s)
- Type of exposure or intervention used
- Type of study designs used
- Study population

Reporting of search strategy should include

- Qualifications of searchers (eg, librarians and investigators)
- Search strategy, including time period included in the synthesis and keywords
- Effort to include all available studies, including contact with authors
- Databases and registries searched
- Search software used, name and version, including special features used (eg, explosion)
- Use of hand searching (eg, reference lists of obtained articles)
- List of citations located and those excluded, including justification
- Method of addressing articles published in languages other than English
- Method of handling abstracts and unpublished studies
- Description of any contact with authors

Reporting of methods should include

- Description of relevance or appropriateness of studies assembled for assessing the hypothesis to be tested
- Rationale for the selection and coding of data (eg, sound clinical principles or convenience)
- Documentation of how data were classified and coded (eg, multiple raters, blinding, and interrater reliability)
- Assessment of confounding (eg, comparability of cases and controls in studies where appropriate)
- Assessment of study quality, including blinding of quality assessors; stratification or regression on possible predictors of study results
- Assessment of heterogeneity
- Description of statistical methods (eg, complete description of fixed or random effects model; justification of whether the chosen models account for predictors of study results, dose-response models, or cumulative meta-analysis) in sufficient detail to be replicated
- Provision of appropriate tables and graphics

発表の構成

- デザインと研究例の説明
- ガイドラインのスコープ
- 特に重要な項目の解説
- 良い報告例の紹介 (可能な限りJEから)
- Take Home Messages