# CRIS Guidelines (Checklist for Reporting *In-vitro* Studies)*

| Section/Topic | Item No | Checklist item | Reported on page No |
|---|---|---|---|
| **Title and abstract** | | | |
| | 1a | Identification as an in vitro/laboratory study in the title | 1 |
| | 1b | Structured summary of trial design, methods, results, and conclusions | 1 |
| **Introduction** | | | |
| Background and objectives | 2a | Scientific background and explanation of rationale | 2-3 |
| | 2b | Specific objectives or hypotheses | 3 |
| **Methods** | | | |
| Interventions | 3 | The intervention for each group, including how and when they were actually administered, with sufficient detail to allow replication | 5 |
| Outcomes | 4 | Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed | 4-5 |
| Sample size | 5 | How sample size was determined | 4 |
| Randomisation: | | | |
| Sequence generation | 6 | Method used to generate the random allocation sequence | NA |
| Allocation concealment mechanism | 7 | 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 | NA |
| Implementation | 8 | Who generated the random allocation sequence, who enrolled teeth, and who assigned teeth to intervention | NA |
| Blinding | 9 | If done, who was blinded after assignment to interventions (for example, care providers, those assessing outcomes) and how | 4 (those assessing outcome) |
| Statistical methods | 10 | Statistical methods used to compare groups for primary and secondary outcomes | 6 |
| **Results** | | | |
| Numbers analysed | 11a | For each group, number of ‘items’ (drugs) included in each analysis and whether the analysis was by original assigned groups | 7-8, 16 (Table 1) |

| | | | |
|---|---|---|---|
| Outcomes and estimation | 11b | For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval) | 7-8, 17 (Table 2), 19 (Table 3) |
| **Discussion** | | | |
| Limitations | 12a | Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses | 11 |
| Generalisability | 12b | Generalisability (external validity, applicability) of the trial findings | 10-11 |
| Interpretation | 12c | Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence | 9-11 |
| **Other information** | | | |
| Protocol | 24 | Where the full trial protocol can be accessed, if available | NA |
| Funding | 25 | Sources of funding and other support (such as supply of drugs), role of funders | Title page |

*This checklist was developed by the authors based on the following sources:


1. Krithikadatta J, Gopikrishna V, Datta M. CRIS Guidelines (Checklist for Reporting In-vitro Studies): A concept note on the need for standardized guidelines for improving quality and transparency in reporting in-vitro studies in experimental dental research. *J Conserv Dent*. **2014**;17(4):301–304.
2. Faggion CM Jr. Guidelines for reporting pre-clinical in vitro studies on dental materials. *J Evid Based Dent Pract*. **2012**;12(4):182–189.
3. www.consort-statement.org.