Checklist for **statistical analysis**

|  |  |
| --- | --- |
|  | Yes/No |
| **Type and applicability of test used**  |  |
| Comparisons of interest are clearly defined |  |
| Name of tests applied are clearly stated. |  |
| All statistical methods identified unambiguously. |  |
| Justification for use of test is given.  |  |
| Data meet all assumptions of tests applied (non-normal data sets, small sample sizes) |  |
| Adjustments made for multiple testing is explained. |  |
| **Details about the test** |  |
| n is reported at the start of the study and for each analysis thereafter. |  |
| Sample size calculation (or justification) is given. |  |
| Alpha level is given for all statistical tests. |  |
| Tests are clearly identified as one or two-tailed. |  |
| Randomization procedures or other ways to eliminate bias in sampling are described. |  |
| **Summary of descriptive statistics** |  |
| n for each data set is clearly stated |  |
| A clearly labelled measure of centre (e.g. mean or median) is given |  |
| A clearly labelled measure of variability (e.g. standard deviation, range, percentiles) is given. |  |
| All numbers following a ± sign are identified as standard errors (s.e.m.) or standard deviations (s.d.). |  |
| **Extras**  |  |
| Any unusual or complex statistical methods are clearly defined and explained. |  |
| Any data exclusions are stated and explained. |  |
| Any discrepancies in the value of n between analyses are clearly explained and justified. |  |
| Data transformations (logarithmic, ….) are explained |  |
| **Graphs** |  |
| Any distorted effect sizes (e.g. by truncation of y axis) are clearly labelled and justified. |  |
| Error bars in graphs, or confidence intervals, are included, or their absence is explained. |  |

|  |
| --- |
| PhD Student signature |
|  |