## Statistical Guidance JID Innovations

Please read our recently published <u>Commentary</u> detailing many of the simple errors often seen by our statistical editors on submitted manuscripts. We strongly suggest consultation with a statistician in both the planning and analysis of your study.

- Include a Statistical Methods section, as part of Methods and Materials, including a paragraph on limitations of the analysis as appropriate.
- Assess the distribution of the data (normal or non-normal) and utilize statistical tests appropriate for the distribution pattern of the data.
- For non-parametric data consider presenting data using median (Q1-Q3), box-plots or dot plots (actual data points)).
- Ensure correct terminology is utilized for the statistical analysis utilized e.g.:
- o multivariate versus multivariable analysis.
- o repeated measures ANOVA versus standard ANOVA.
- using interquartile range (when reporting the difference between the percentiles) vs 25th-75th percentiles (when reporting the percentile values themselves).
- Report values to no more than 3 decimal places; use exponential notation only if more accuracy is needed (e.g., genome studies with many comparisons).

