

Goal	Measurement (from Gaussian population)	Rank, score, or measurement (from non-Gaussian population)	Binomial (2 possible outcomes)	Survival time
Describe one group	Mean, SD	Median, interquartile range	Proportion	Kaplan Meier survival curve
Compare one group to a hypothetical value	One-sample <i>t</i> -test	Wilcoxon test	Chi-square or Binomial test	
Compare two unpaired groups	Unpaired <i>t</i> -test	Mann-Whitney test	Fisher's test (chi-square for large samples)	Log-rank test or Mantel-Haenszel*
Compare two paired groups	Paired <i>t</i> -test	Wilcoxon test	McNemar's test	Conditional proportional hazards regression
Compare three or more unmatched groups	One-way ANOVA	Kruskal-Wallis test	Chi-square test	Cox proportional hazard regression
Compare three or more matched groups	Repeated-measures ANOVA	Friedman test	Cochrane Q**	Conditional proportional hazards regression
Quantify association between two variables	Pearson correlation	Spearman correlation	Contingency coefficients	
Predict value from another measured variable	Simple linear regression or nonlinear regression	Nonparametric regression	Simple logistic regression*	Cox proportional hazard regression
Predict value from several measured or binomial variables	Multiple linear regression or multiple nonlinear regression		Multiple logistic regression	Cox proportional hazard regression

Source: GraphPad Software online resources (<http://www.graphpad.com/support/faqid/1790/>)