Table 1. Useful Statistical Tests.

	Type of Data		
Purpose	Continuous and normally distributed	Continuous and nonnormally distributed	Categorical
Compare against a standard value	One-sample *t*-test	Wilcoxon signed-rank test	Chi-square test on one-way table
Compare two groups	Equal variances: two-sample *t*-test Unequal variances: Welch's *t*-test	Mann–Whitney U test	Fisher's exact test Chi-square test
Compare three or more groups	ANOVA Multiple comparisons procedures: Dunnett's, Tukey's, and Williams'	Kruskal–Wallis ANOVA Multiple comparisons procedures: Dunn's and Shirley's	Chi-square test Categorical data modeling
Test for a trend	Simple linear regression Pearson correlation	Spearman's rank order correlation Kendall's tau correlation	Cochran–Armitage trend test
Test for contribution of multiple factors	Multiway ANOVA Multiple linear regression Stepwise linear regression Repeated measures ANOVA	Robust regression Friedman test	Logistic regression Repeated measures logistic regression

Note: ANOVA = analysis of variance.

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