StatXact 9 ®

The Most Popular Exact Statistics Analysis Software

StatXact® 9 has over 140 tests and procedures and more non-parametric methods than any statistical software package.

What sets StatXact apart? Other statistical software rely on large-sample assumptions for inferences, risking incorrect conclusions from data sets not normally distributed. Instead, StatXact makes exact inferences by permuting data actually observed, eliminating the need for distributional assumptions.

Statisticians and researchers find exact and non-parametric inference methods particularly useful with smaller sample size problems.

New in Version 9

- R code support: Write and run your own R scripts in StatXact

- Tests for two ordered correlated multinomials

- Exact designs for two independent binomials

Only in StatXact

Exact tests for superiority, equivalence and non-inferiority of paired and independent binomial data

Exact confidence intervals for difference , ratio and odds ratio of proportions for two independent and related binomial data

Exact tests on unordered, singly ordered and doubly ordered RxC tables, with Cochran-Mantel-Haenszel (CMH) tests

Exact Tests of trend in C independent and correlated binomial populations

Exact tests for independent and correlated two samples data: Wilcoxon Mann-Whitney, Normal scores, Savage scores, and Permutation

Exact inference on one-sample Poisson rates and Homogeneity and CI on common relative risks and trend in C ordered rates for Poisson data

Exact power and sample size for comparing two binomials by Barnard's unconditional exact test for difference and ratio

Exact power and sample size for comparing two binomials for noninferiority and equivalence for difference and ratio

StatXact® PROCs for SAS Users

Did you know you can use Cytel's non-parametric and exact methods within SAS? StatXact® PROCs plugs into SAS, providing immediate access to:
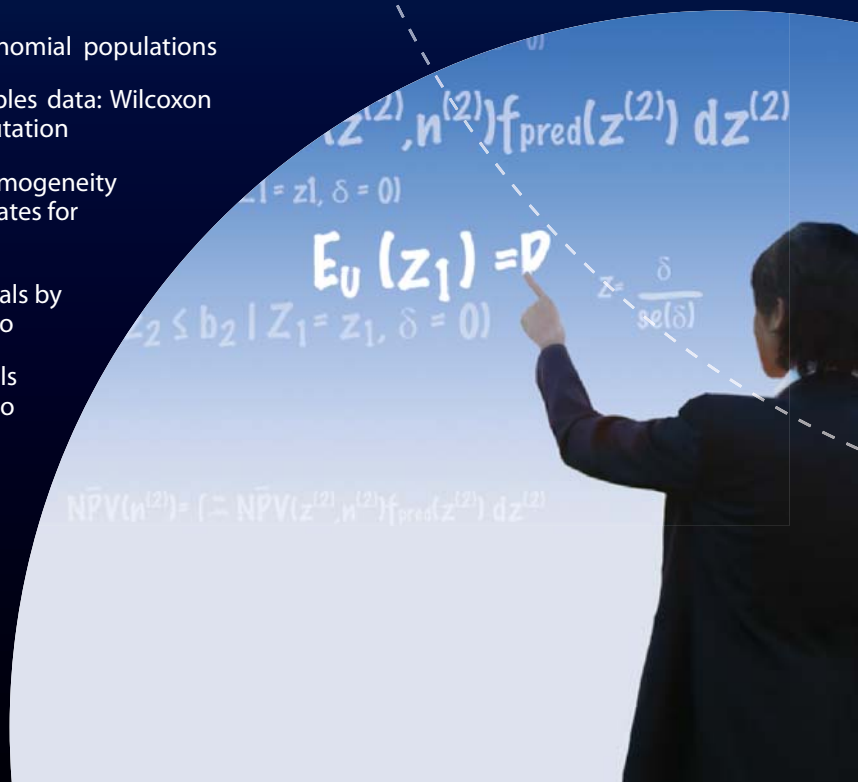
Over 130 additional tests and procedures – all fully referenced and validated

More non-parametric inference exact statistics – see back page

Automation of batch jobs and documentation for submittals

All within SAS.

Cytel

StatXact 9 compared to SAS

The most non-parametric and exact methods. Now with R integration and expanded OS support.

Column 1

	StatXact	SAS
One-sample Goodness-of-Fit		
Chi-Square	YES	YES
Kolmogorov	YES	
Lilliefors	YES	
Runs	YES	
Paired Samples		
Sign	YES	YES
Wilcoxon Signed-Rank	YES	
Hodges Lehman Estimates	YES	
Permutation	YES	
McNemar - Conditional	YES	YES
McNemar - Unconditional	YES	
Marginal Homogeneity	YES	
Two Independent Samples		
Wilcoxon-Mann-Whitney	YES	YES*
Hodges Lehman estimates	YES	YES
Normal Scores	YES	YES*
Savage Scores	YES	YES*
Siegel-Tukey	YES	YES
Ansari-Bradley	YES	YES
Klotz	YES	YES
Mood	YES	YES
Conover	YES	YES
Permutation	YES	YES*
Logrank	YES	
Wilcoxon-Gehan	YES	
Kolmogorov-Smirnov	YES	YES
Wald-Wolfowitz Runs	YES	
K Related Samples		
Friedman	YES	
Kendall's W	YES	
Cochran's Q	YES	
Quade	YES	
Page	YES	
K Independent Samples		
Median	YES	YES
Kruskall-Wallis	YES	YES
Normal Scores	YES	YES
Savage	YES	YES
ANOVA with General Scores	YES	YES
Jonckheere-Terpstra	YES	YES
Linear by Linear	YES	YES
Logrank	YES	
Wilcoxon-Gehan	YES	
Tarone and Ware Trend	YES	

Column 2

	StatXact	SAS
One-Sample Rates and Proportions		
Binomial	YES	YES
Multinomial	YES	
Poisson	YES	
Poisson Rates		
Homogeneity of Relative Risks	YES	
CI on Common Relative Risk	YES	
Trend in C Ordered Poisson Rates	YES	
Two Independent Binomials		
Fisher's Exact	YES	YES
Pearson's Chi-square	YES	YES
Likelihood Ratio	YES	YES
CI on Odds Ratio	YES	YES
Barnard's Test for Superiority	YES	
Tests of Non-inferiority	YES	
Tests of Equivalence	YES	
CI on Difference of Proportions	YES	
CI on Ratio of Proportions	YES	
Two Related Binomials		
McNemar	YES	YES
CI on odds Ratio	YES	
Test for Superiority	YES	
Tests of Non-inferiority	YES	
Tests of Equivalence	YES	
CI on Difference of Proportions	YES	
Stratified 2x2 Tables		
Homogeneity of Odds Ratios	YES	YES
CI on Common Odds Ratios	YES	YES
C Ordered Binomials (with or without strata)		
Cochran-Armitage Trend	YES	YES*
Permutation with General Scores	YES	YES*
Trend Test for Clustered Data	YES	
Test for Interaction Across Strata	YES	
Two Ordered Multinomials (with or without strata)		
Wilcoxon-Mann-Whitney	YES	YES*
Savage Scores	YES	YES*
Normal Scores	YES	YES*
Permutation with General Scores	YES	YES*
Test for Interaction Across Strata	YES	
Unordered RxC Table		
Pearson's ChiSquare	YES	YES
Likelihood Ratio	YES	YES
Fisher-Freeman-Halton	YES	YES

* StatXact 9 can handle stratified or unstratified data SAS can handle only unstratified data

Column 3

	StatXact	SAS
Single Ordered RxC Table		
Kruskal-Wallis	YES	YES
Normal Scores	YES	YES
Savage	YES	YES
ANOVA with Arbitrary Scores	YES	YES
Doubly Ordered RxC Table		
Jonckheere-Terpstra	YES	YES
Linear by Linear Association	YES	YES
Stratified RxC Tables		
Unordered RxC Table	YES	
Single Ordered RxC Table	YES	
Doubly Ordered RxC Table	YES	
Correlated Categorical Data		
C Binomial Population		
Test of Correlation	YES	
Test for Trend	YES	
Multiple Binary Outcomes		
Test for Trend	YES	
Two Ordered Multinomials		
Wilcoxon Ranksum	YES	
Savage Scores	YES	
Normal Scores	YES	
Permutation with General Score	YES	
Measures of Association (nominal)		
Contingency Coefficients	YES	
Goodman-Kruskal-Tau	YES	
Uncertainty Coefficient	YES	
Measures of Association (ordinal)		
Pearson's Correlation	YES	YES
Spearman's Correlation	YES	YES
Kendall's Concordance	YES	
Kendall's Tau and Somers' D	YES	YES
Gamma Coefficient	YES	
Measures of Agreement		
Cohen's Kappa	YES	YES
Weighted Kappa	YES	YES
Power & Sample Size		
One Binomial	YES	YES
Paired Binomials:Difference	YES	YES
Two Binomials:Difference		
Superiority (conditional)	YES	YES
Superiority (unconditional)	YES	
Non-inferiority	YES	
Equivalence	YES	
Two Binomials: Ratio		
Superiority (unconditional)	YES	
Non-inferiority	YES	
Equivalence	YES	
K ordered Binomials	YES	
Two Ordered Multinomials (power)	YES	