



Patch for StatXact 7 with Cytel Studio (version 7.0.0)

This patch is applicable only if you are running StatXact 7 with Cytel Studio 7. Do not apply this patch on any other version.

Bug Fix 1

In page 433 (Section 14.4.6) of the StatXact 7 user manual 97.50% Upper Confidence Bound (Exact) is shown as 1.0583. After the patch, StatXact will show this value as 1.037 as shown in the following screenshot.

Workbook4
Vaccine.cyd Tests of Non-Inferiority (EX)

Unconditional Test of Non-Inferiority Using Ratio of Two Binomial Proportions

binomial (type = independent, test_type = ratio, compute = noninf, method = exact, popl = column, gamma = 1e-006, margin = 0.9, time_limit = none);

Data File: Vaccine.cyd

Number of Rows: 2
Number of Columns: 2

Summary of the Test Statistic:

$H_0: (\pi_2/\pi_1) \geq \rho_0$ vs $H_1: (\pi_2/\pi_1) < \rho_0$

Binomial Proportions [Placebo]: $\hat{\pi}_{Hat_1}$	0.8
Binomial Proportions [Vaccine]: $\hat{\pi}_{Hat_2}$	0.4667
Ratio of Proportion: $\hat{\pi}_{Hat_2}/\hat{\pi}_{Hat_1}$	0.5833
Maximum Margin of Non-Inf: $\pi_2/\pi_1 = \rho_0$	0.9
Std. Error: (restricted mle of stdev of $\hat{\pi}_{Hat_2} - \hat{\pi}_{Hat_1} * \rho_0$ given ρ_0)	0.1689
Standardized Test Statistic: $(\hat{\pi}_{Hat_2} - \hat{\pi}_{Hat_1} * \rho_0) / \text{Std. Error}$	-1.5

Inference:

Type	P-Value		97.50% Upper Confidence Bound
	Tail	1-Sided	
Asymptotic	.LE.	0.06683	1.029
Exact	.LE.	0.08567	1.037

Patch for StatXact 7 with Cytel Studio (version 7.0.0) continued

Bug Fix 2

In page 445 (Section 14.4.9) of the StatXact 7 User Manual, the 95% upper confidence limit (Exact) is shown as 94.0396. After the patch, this value will change to 250.1 as shown in the following screen shot:

binomial (type = independent, test_type = ratio, test_statistic = std1, compute = ci, method = exact, gamma = 1e-006, time_limit = none);

Data File: Trnsco.cyd

Number of Rows: 2
Number of Columns: 2

Summary of the Test Statistic:

Binomial Proportions [young]: piHat_1	0.04
Binomial Proportions [Old]: piHat_2	0.3704
Ratio of Proportions: piHat_2/piHat_1	9.259
Std. Error: (pooled estimate of stdev of piHat_2-piHat_1)	0.1134
Standardized Difference: (piHat_2-piHat_1)/Std. Error	2.915

Inference:

Type	Tail	P-Value		95.00% Conf. Interval for pi_2/pi_1	
		1-Sided	2*1-Sided	Lower Limit	Upper Limit
Asymptotic	.GE.	0.001781	0.003562	1.718	55.19
Exact	.GE.	0.00177	0.003541	1.745	250.1

For more information visit: <http://www.cytel.com/Support/patches.asp>