

**Notes**

Description	Perform One-Way ANOVA
User Name	su2li
Operation Time	2/22/2019 11:17:32
Report Status	Report generated from Data Changed
Data Filter	No

**Input Data**

	Data	Range
MR-1	[Book4]Sheet1!A"MR-1"	[1*:3*]
$\Delta$ menC	[Book4]Sheet1!B"menC::tn"	[1*:3*]
MR-1+ACNQ	[Book4]Sheet1!C"MR-1+ACNQ"	[1*:3*]
$\Delta$ menC+ACN	[Book4]Sheet1!D"menC::tn+ACN"	[1*:3*]

**Descriptive Statistics**

	N Analysis	N Missing	Mean	Standard Deviation	SE of Mean
MR-1	3	0	1.38543	0.23027	0.13295
menC::tn	3	0	1.14818	0.24799	0.14318
MR-1+ACNQ	3	0	46.67687	3.35527	1.93717
menC::tn+AC	3	0	42.37444	4.83352	2.79063

**One Way ANOVA****Overall ANOVA**

	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	5641.83491	1880.61164	216.56535	5.36088E-8
Error	8	69.47045	8.68381		
Total	11	5711.30536			

Null Hypothesis: The means of all levels are equal.

Alternative Hypothesis: The means of one or more levels are different.

At the 0.001 level, the population means are significantly different.

**Fit Statistics**

	R-Square	Coeff Var	Root MSE	Data Mean
	0.98784	0.1287	2.94683	22.89623

**Means Comparisons****Tukey Test**

	MeanDiff	SEM	q Value	Prob	Alpha	Sig	LCL	UCL
$\Delta$ menC MR-1	-0.23725	2.40608	0.13945	0.99963	0.001	0	-15.5107	15.0362
MR-1+ACNQ MR-1	45.29144	2.40608	26.62083	1.84137E-7	0.001	1	30.01799	60.56489
MR-1+ACNQ $\Delta$ menC	45.52869	2.40608	26.76028	1.71633E-7	0.001	1	30.25524	60.80214
$\Delta$ menC+ACNQ MR-1	40.98901	2.40608	24.092	5.34533E-7	0.001	1	25.71556	56.26246
$\Delta$ menC+ACNQ $\Delta$ menC	41.22626	2.40608	24.23145	5.05081E-7	0.001	1	25.95281	56.49971
$\Delta$ menC+ACNQ MR-1+A	-4.30243	2.40608	2.52883	0.34463	0.001	0	-19.57588	10.97102

Sig equals 1 indicates that the difference of the means is significant at the 0.001 level.

Sig equals 0 indicates that the difference of the means is not significant at the 0.001 level.

**Homogeneity of Variance Test****Levene's Test(Absolute Deviations)**

	DF	Sum of Squares	Mean Square	F Value	Prob>F
Model	3	26.82522	8.94174	6.22707	0.01733
Error	8	11.48758	1.43595		

At the 0.001 level, the population variances are not significantly different.

**Powers**

	Alpha	Sample Size	Power
Actual Power	0.001	12	1

**Box Charts**