

# Strepto\_1

WORKSHEET 1

## One-way ANOVA: Ag+Zno, zno, Ag, Control

### Method

Null hypothesis All means are equal  
Alternative hypothesis Not all means are equal  
Significance level  $\alpha = 0.05$

Equal variances were assumed for the analysis.

### Factor Information

Factor	Levels	Values
Factor	4	Ag+Zno, zno, Ag, Control

### Analysis of Variance

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Factor	3	2.54861E+14	8.49537E+13	249.35	0.000
Error	44	1.49906E+13	3.40696E+11		
Total	47	2.69852E+14			

### Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
583692	94.44%	94.07%	93.39%

### Means

Factor	N	Mean	StDev	95% CI
Ag+Zno	12	7675000	738376	(7335416, 8014584)
zno	12	11575000	630814	(11235416, 11914584)
Ag	12	10162500	281079	(9822916, 10502084)
Control	12	14037500	583655	(13697916, 14377084)

Pooled StDev = 583692

### Tukey Pairwise Comparisons

#### Grouping Information Using the Tukey Method and 95% Confidence

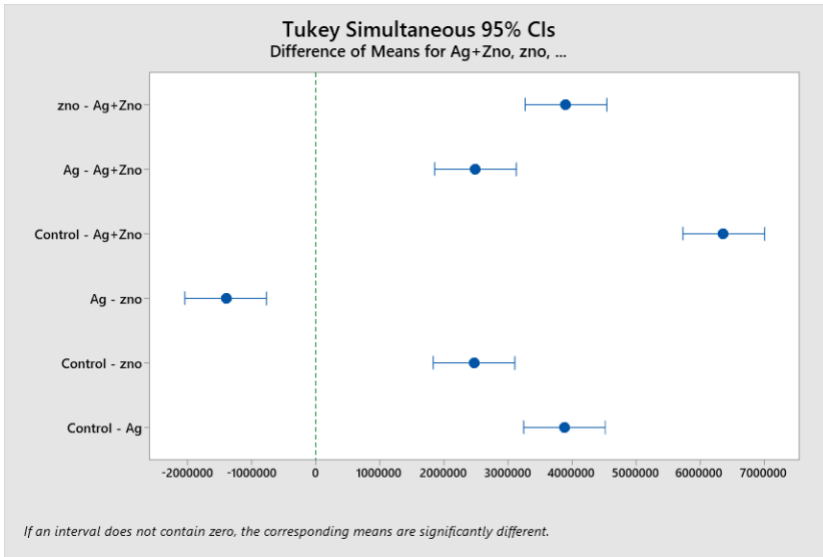
Factor	N	Mean	Grouping
Control	12	14037500	A
zno	12	11575000	B
Ag	12	10162500	C
Ag+Zno	12	7675000	D

Means that do not share a letter are significantly different.

### Tukey Simultaneous Tests for Differences of Means

Difference of Levels	Difference of Means	SE of Difference	95% CI	T-Value	Adjusted P-Value
zno - Ag+Zno	3900000	238291	(3263080, 4536920)	16.37	0.000010
Ag - Ag+Zno	2487500	238291	(1850580, 3124420)	10.44	0.000010
Control - Ag+Zno	6362500	238291	(5725580, 6999420)	26.70	0.000010
Ag - zno	-1412500	238291	(-2049420, -775580)	-5.93	0.000012
Control - zno	2462500	238291	(1825580, 3099420)	10.33	0.000010
Control - Ag	3875000	238291	(3238080, 4511920)	16.26	0.000010

Individual confidence level = 98.95%



**Dunnnett Multiple Comparisons with a Control**

**Grouping Information Using the Dunnnett Method and 95% Confidence**

Factor	N	Mean	Grouping
Control (control)	12	14037500	A
zno	12	11575000	
Ag	12	10162500	
Ag+Zno	12	7675000	

Means not labeled with the letter A are significantly different from the control level mean.

**Dunnnett Simultaneous Tests for Level Mean - Control Mean**

Difference of Levels	Difference of Means	SE of Difference	95% CI	T-Value	Adjusted P-Value
Ag+Zno - Control	-6362500	238291	(-6942242, -5782758)	-26.70	0.000
zno - Control	-2462500	238291	(-3042242, -1882758)	-10.33	0.000
Ag - Control	-3875000	238291	(-4454742, -3295258)	-16.26	0.000

Individual confidence level = 98.09%

