# APPENDICES

***APPENDIX A***

**DPPH Antioxidant Scavenging Assay:**

**Ascorbic acid**

Control Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SD |
|---|---|---|---|---|
| 2.762 | 2.773 | 2.766 | 2.767 | 0.006 |

Ascorbic acid Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|
| 0.109 | 0.110 | 0.135 | 0.118 | 0.606 |
| 0.120 | 0.117 | 0.120 | 0.119 | 0.622 |
| 0.125 | 0.125 | 0.122 | 0.124 | 0.631 |
| 0.120 | 0.128 | 0.130 | 0.126 | 0.605 |
| 0.137 | 0.125 | 0.155 | 0.139 | 0.508 |
| 1.915 | 1.901 | 1.965 | 1.927 | 0.242 |
| 2.309 | 2.307 | 2.320 | 2.312 | 0.243 |
| 2.444 | 2.440 | 2.469 | 2.451 | 0.244 |

Ascorbic acid Standard Inhibition Percentage

| CONCENTRATION µgram/ml | % inhibition |
|---|---|
| 200.00 | 95.74 |
| 100.00 | 95.70 |
| 50.00 | 95.52 |
| 25.00 | 95.45 |
| 12.50 | 94.98 |
| 6.25 | 30.36 |
| 3.13 | 16.44 |
| 1.56 | 11.42 |

**Methanol**

Control Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SD |
|---|---|---|---|---|
| 3.613 | 3.618 | 3.613 | 3.612 | 0.007 |

Methanol Extract Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|
| 1.353 | 1.347 | 1.404 | 1.368 | 0.018 |
| 1.879 | 1.870 | 1.855 | 1.868 | 0.007 |
| 2.834 | 2.892 | 2.926 | 2.884 | 0.027 |
| 2.994 | 3.028 | 3.035 | 3.019 | 0.013 |
| 3.181 | 3.197 | 3.213 | 3.197 | 0.009 |
| 3.352 | 3.301 | 3.280 | 3.311 | 0.021 |
| 3.391 | 3.428 | 3.387 | 3.402 | 0.013 |
| 3.493 | 3.476 | 3.357 | 3.442 | 0.043 |

Methanol Inhibition Percentage

| CONCENTRATION µgram/ml | % inhibition |
|---|---|
| 200.00 | 62.13 |
| 100.00 | 48.28 |
| 50.00 | 20.16 |
| 25.00 | 16.42 |
| 12.50 | 11.49 |
| 6.25 | 8.33 |
| 3.13 | 5.81 |
| 1.56 | 4.72 |

**Water**

Control Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SD |
|---|---|---|---|---|
| 2.541 | 2.529 | 2.535 | 2.535 | 0.006 |

Water Extract Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|
| 2.442 | 2.427 | 2.444 | 2.438 | 0.005 |
| 2.439 | 2.420 | 2.434 | 2.431 | 0.006 |
| 2.371 | 2.367 | 2.387 | 2.375 | 0.006 |
| 2.335 | 2.384 | 2.304 | 2.341 | 0.023 |
| 2.258 | 2.269 | 2.265 | 2.264 | 0.003 |
| 2.076 | 2.072 | 2.077 | 2.075 | 0.002 |
| 1.559 | 1.541 | 1.559 | 1.553 | 0.006 |
| 1.015 | 1.020 | 1.070 | 1.035 | 0.018 |

Water Inhibition Percentage

| CONCENTRATION µgram/ml | % inhibition |
|---|---|
| 200.00 | 59.17 |
| 100.00 | 38.74 |
| 50.00 | 18.14 |
| 25.00 | 10.69 |
| 12.50 | 7.65 |
| 6.25 | 6.31 |
| 3.13 | 4.10 |
| 1.56 | 3.83 |

**Chlorofoam**

Control Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SD |
|---|---|---|---|---|
| 3.583 | 3.614 | 3.603 | 3.600 | 0.016 |

Chlorofoam Extract Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|
| 2.350 | 2.372 | 2.385 | 2.369 | 0.010 |
| 2.696 | 2.683 | 2.694 | 2.691 | 0.004 |
| 3.288 | 3.237 | 3.252 | 3.239 | 0.015 |
| 3.306 | 3.315 | 3.306 | 3.309 | 0.003 |
| 3.327 | 3.348 | 3.333 | 3.336 | 0.006 |
| 3.442 | 3.420 | 3.413 | 3.424 | 0.009 |
| 3.439 | 3.455 | 3.456 | 3.450 | 0.006 |
| 3.436 | 3.471 | 3.458 | 3.455 | 0.010 |

Chlorofoam Inhibition Percentage

| CONCENTRATION µgram/ml | % inhibition |
|---|---|
| 200.00 | 34.19 |
| 100.00 | 25.24 |
| 50.00 | 10.03 |
| 25.00 | 8.08 |
| 12.50 | 7.33 |
| 6.25 | 4.89 |
| 3.13 | 4.17 |
| 1.56 | 4.03 |

**Petroleum Ether**

Control Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SD |
|---|---|---|---|---|
| 3.427 | 3.430 | 3.451 | 3.436 | 0.013 |

Petroleum Ether Extract Absorbance

| Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|
| 2.712 | 2.695 | 2.744 | 2.717 | 0.014 |
| 3.064 | 3.075 | 3.074 | 3.071 | 0.003 |
| 3.209 | 3.210 | 3.235 | 3.218 | 0.008 |
| 3.259 | 3.250 | 3.259 | 3.256 | 0.003 |
| 3.270 | 3.252 | 3.252 | 3.258 | 0.006 |
| 3.276 | 3.279 | 3.285 | 3.280 | 0.003 |
| 3.298 | 3.293 | 3.294 | 3.295 | 0.002 |
| 3.303 | 3.304 | 3.311 | 3.306 | 0.003 |

Petroleum Ether Inhibition Percentage

| CONCENTRATION µgram/ml | % inhibition |
|---|---|
| 200.00 | 20.92 |
| 100.00 | 10.62 |
| 50.00 | 6.34 |
| 25.00 | 5.24 |
| 12.50 | 5.18 |
| 6.25 | 4.54 |
| 3.13 | 4.10 |
| 1.56 | 3.79 |

***APPENDIX B***

**Ferric Reducing Power Assay**

BHA

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|---|
| 0 | 0.064 | 0.061 | 0.069 | 0.065 | 0.002 |
| 125 | 0.157 | 0.156 | 0.149 | 0.154 | 0.003 |
| 250 | 0.168 | 0.158 | 0.158 | 0.161 | 0.003 |
| 375 | 0.161 | 0.166 | 0.149 | 0.157 | 0.005 |
| 500 | 0.195 | 0.19 | 0.183 | 0.189 | 0.004 |

Methanol Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|---|
| 0 | 0.056 | 0.058 | 0.059 | 0.058 | 0.001 |
| 125 | 0.090 | 0.086 | 0.085 | 0.087 | 0.002 |
| 250 | 0.126 | 0.134 | 0.135 | 0.132 | 0.003 |
| 375 | 0.142 | 0.147 | 0.146 | 0.145 | 0.002 |
| 500 | 0.169 | 0.161 | 0.157 | 0.162 | 0.004 |

Water Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|---|
| 0 | 0.071 | 0.069 | 0.061 | 0.067 | 0.003 |
| 125 | 0.091 | 0.087 | 0.088 | 0.089 | 0.001 |
| 250 | 0.095 | 0.097 | 0.094 | 0.095 | 0.001 |
| 375 | 0.099 | 0.094 | 0.099 | 0.097 | 0.002 |
| 500 | 0.103 | 0.110 | 0.105 | 0.106 | 0.002 |

Chlorofoam Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|---|
| 0 | 0.056 | 0.058 | 0.059 | 0.058 | 0.001 |
| 125 | 0.080 | 0.080 | 0.08 | 0.080 | 0 |
| 250 | 0.095 | 0.116 | 0.095 | 0.102 | 0.007 |
| 375 | 0.098 | 0.100 | 0.105 | 0.101 | 0.002 |
| 500 | 0.143 | 0.120 | 0.124 | 0.129 | 0.007 |

Petroleum Ether Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE |
|---|---|---|---|---|---|
| 0 | 0.049 | 0.051 | 0.051 | 0.050 | 0.001 |
| 125 | 0.073 | 0.078 | 0.076 | 0.076 | 0.001 |
| 250 | 0.076 | 0.075 | 0.074 | 0.075 | 0.001 |
| 375 | 0.087 | 0.085 | 0.085 | 0.086 | 0.001 |
| 500 | 0.088 | 0.089 | 0.085 | 0.087 | 0.001 |

***APPENDIX C***

**Metal Chelating Assay**

EDTA

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE | % |
|---|---|---|---|---|---|---|
| 0 | 2.29 | 2.26 | 2.382 | 2.311 | 0.037 | 0 |
| 20 | 2.005 | 2.088 | 1.959 | 2.017 | 0.037 | 12.7 |
| 40 | 1.101 | 0.998 | 1.098 | 1.066 | 0.034 | 53.9 |
| 60 | 0.110 | 0.100 | 0.096 | 0.102 | 0.004 | 95.6 |
| 80 | 0.055 | 0.056 | 0.052 | 0.054 | 0.001 | 97.7 |
| 100 | 0.047 | 0.046 | 0.047 | 0.047 | 0.001 | 98 |

Methanol Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE | % |
|---|---|---|---|---|---|---|
| 0 | 2.005 | 2.008 | 2.035 | 2.016 | 0.010 | 0 |
| 20 | 1.895 | 1.880 | 1.892 | 1.889 | 0.005 | 6.3 |
| 40 | 1.703 | 1.699 | 1.716 | 1.706 | 0.005 | 15.4 |
| 60 | 1.460 | 1.454 | 1.487 | 1.467 | 0.010 | 27.2 |
| 80 | 1.332 | 1.339 | 1.352 | 1.341 | 0.006 | 33.5 |
| 100 | 1.299 | 1.290 | 1.281 | 1.290 | 0.005 | 36 |

Water Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE | % |
|---|---|---|---|---|---|---|
| 0 | 1.973 | 1.940 | 2.078 | 1.997 | 0.042 | 0 |
| 20 | 1.889 | 1.920 | 1.936 | 1.915 | 0.014 | 4.1 |
| 40 | 1.850 | 1.902 | 1.843 | 1.865 | 0.019 | 6.6 |
| 60 | 1.817 | 1.832 | 1.820 | 1.823 | 0.005 | 8.7 |
| 80 | 1.682 | 1.639 | 1.647 | 1.656 | 0.013 | 17.1 |
| 100 | 1.646 | 1.657 | 1.635 | 1.646 | 0.006 | 17.6 |

Chlorofoam Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE | % |
|---|---|---|---|---|---|---|
| 0 | 1.991 | 1.954 | 1.992 | 1.979 | 0.013 | 0 |
| 20 | 1.904 | 1.896 | 1.96 | 1.920 | 0.020 | 3 |
| 40 | 1.896 | 1.907 | 1.945 | 1.916 | 0.015 | 3.2 |
| 60 | 1.906 | 1.909 | 1.885 | 1.900 | 0.008 | 4 |
| 80 | 1.888 | 1.855 | 1.837 | 1.860 | 0.015 | 6 |
| 100 | 1.729 | 1.705 | 1.672 | 1.702 | 0.013 | 14 |

Petroleum Ether Extract

| Concentration µg/ml | Abs 1 | Abs 2 | Abs 3 | Average | SE | % |
|---|---|---|---|---|---|---|
| 0 | 1.980 | 1.92 | 2.025 | 1.984 | 0.030 | 0 |
| 20 | 1.920 | 1.904 | 1.945 | 1.926 | 0.012 | 2.9 |
| 40 | 1.901 | 1.919 | 1.945 | 1.919 | 0.013 | 3.3 |
| 60 | 1.924 | 1.872 | 1.877 | 1.891 | 0.017 | 4.7 |
| 80 | 1.895 | 1.782 | 1.840 | 1.805 | 0.033 | 9 |
| 100 | 1.757 | 1.733 | 1.754 | 1.746 | 0.030 | 12 |

***APPENDIX D***

**Total Flavonoid Contents (TFC)**

| **Quercetin (mg/ml)** | **Abs 1** | **Abs 2** | **Abs 3** | **Mean** | **SE** |
|---|---|---|---|---|---|
| **0** | 0.000 | 0.000 | 0 | 0 | 0 |
| **0.5** | 0.287 | 0.303 | 0.283 | 0.291 | 0.006 |
| **1.0** | 0.566 | 0.577 | 0.648 | 0.597 | 0.026 |
| **1.5** | 0.906 | 0.857 | 0.736 | 0.833 | 0.05 |
| **2.0** | 0.954 | 1.130 | 1.159 | 1.081 | 0.06 |
| **2.5** | 1.307 | 1.311 | 1.315 | 1.311 | 0.002 |

Extract

| Extarct | Abs 1 | Abs 2 | Abs 3 | Mean | SE |
|---|---|---|---|---|---|
| Water | 1.000 | 0.953 | 1.012 | 0.988 | 0.018 |
| Methanol | 0.860 | 0.868 | 0.870 | 0.866 | 0.003 |
| Petroleum | 0.816 | 0.809 | 0.805 | 0.810 | 0.003 |
| Chlorofoam | 0.204 | 0.234 | 0.203 | 0.214 | 0.010 |

*APPENDIX E*

**Total Phenolic Contents (TPC)**

| **Concentration gallic acid [ug/ml]** | **Absorbance 765nm** | | | **Mean SD** |
|---|---|---|---|---|
| | **1** | **2** | **3** | |
| 0 | 0.002 | 0.003 | 0.002 | 0.002 |
| 25 | 0.272 | 0.289 | 0.276 | 0.189 |
| 50 | 0.448 | 0.410 | 0.410 | 0.353 |
| 75 | 0.648 | 0.653 | 0.654 | 0.497 |
| 100 | 0.641 | 0.67 | 0.671 | 0.665 |
| 125 | 0.799 | 0.745 | 0.762 | 0.814 |

| **Concentration gallic acid [ug/ml]** | **Absorbance 765nm** | | | **Mean SD** | **Total Phenolic Content (mg/g dry mass)** |
|---|---|---|---|---|---|
| | **1** | **2** | **3** | | |
| Gallic acid | 0.541 | 0.670 | 0.571 | 0.594 | - |
| Water | 0.450 | 0.447 | 0.420 | 0.439 | 62.714 ± 0.009 |
| Methanol | 0.077 | 0.078 | 0.087 | 0.080 | 11.428 ± 0.003 |
| Chlorofoam | 0.082 | 0.103 | 0.092 | 0.092 | 13.143 ± 0.006 |
| Petroleum Ether | 0.089 | 0.088 | 0.080 | 0.086 | 12.285± 0.002 |

***APPENDIX F***

BSLA

Table: Water crude extract of *Rhodomyrtus tomentosa*

| **Concentration Sample [µg/ml]** | **Total No of Shrimp** | **Number of Dead** | **Percentage Mortality (%)** | **$LC_{50}$ [µg/ml]** | **95 percent confidence** |
|---|---|---|---|---|---|
| 1000 | 10 | 6 | 60 | *616.083* | 141.674 – 1215910 |
| 100 | 10 | 2 | 20 | | |
| 10 | 10 | 1 | 10 | | |

| Concentration | Reading 1 | Reading 2 | Reading 3 | Average | SE |
|---|---|---|---|---|---|
| 1000 | 5 | 6 | 6 | 6 | 0.333333 |
| 100 | 3 | 1 | 2 | 2 | 0.57735 |
| 10 | 1 | 2 | 1 | 1 | 0.333333 |

Table: Methanol crude extract of *Rhodomyrtus tomentosa*

| **Concentration Sample [µg/ml]** | **Total No of Shrimp** | **Number of Dead** | **Percentage Mortality (%)** | **$LC_{50}$ [µg/ml]** | **95 percent confidence** |
|---|---|---|---|---|---|
| 1000 | 10 | 7 | 70 | 316.228 | 75.036 – 14612.65 |
| 100 | 10 | 3 | 30 | | |
| 10 | 10 | 1 | 10 | | |

| Concentration | Reading 1 | Reading 2 | Reading 3 | average | SE |
|---|---|---|---|---|---|
| 1000 | 7 | 5 | 8 | 7 | 0.881917 |
| 100 | 3 | 3 | 3 | 3 | 0 |
| 10 | 1 | 1 | 2 | 1 | 0.333333 |

Table: Crude chlorofoam extract of *Rhodomyrtus tomentosa*

| **Concentration Sample [µg/ml]** | **Total No of Shrimp** | **Number of Dead** | **Percentage Mortality (%)** | **$LC_{50}$ [µg/ml]** | **95 percent confidence** |
|---|---|---|---|---|---|
| 1000 | 10 | 8 | 80 | 100 | 11.413 – 876.213 |
| 100 | 10 | 5 | 50 | | |
| 10 | 10 | 2 | 20 | | |

| Concentration | Reading 1 | Reading 2 | Reading 3 | average | SE |
|---|---|---|---|---|---|
| 1000 | 8 | 8 | 9 | 8 | 0.333333 |
| 100 | 5 | 4 | 6 | 5 | 0.57735 |
| 10 | 3 | 2 | 2 | 2 | 0.333333 |

Table: Crude petroleum ether extract of *Rhodomyrtus tomentosa*

| **Concentration Sample [µg/ml]** | **Total No of Shrimp** | **Number of Dead** | **Percentage Mortality (%)** | **$LC_{50}$ [µg/ml]** | **95 percent confidence** |
|---|---|---|---|---|---|
| 1000 | 10 | 10 | 100 | 31.623 | 4.706 – 89.698 |
| 100 | 10 | 7 | 70 | | |
| 10 | 10 | 3 | 30 | | |

| Concentration | Reading 1 | Reading 2 | Reading 3 | average | SE |
|---|---|---|---|---|---|
| 1000 | 10 | 10 | 10 | 10 | 0 |
| 100 | 8 | 7 | 5 | 7 | 0.881917 |
| 10 | 3 | 4 | 3 | 3 | 0.333333 |

## *APPENDIX G*

MTD

MALE RABBITS

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| Weight | 4 | 2400.0000 | 35.82364 | 17.91182 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| Weight | 133.990 | 3 | .000 | 2400.00000 | 2342.9966 | 2457.0034 |

FEMALE RABBITS

**One-Sample Statistics**

| | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|
| Weight | 4 | 2479.0000 | 31.94787 | 15.97394 |

**One-Sample Test**

| | Test Value = 0 | | | | | |
|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | |
| | t | df | Sig. (2-tailed) | Mean Difference | Lower | Upper |
| Weight | 155.190 | 3 | .000 | 2479.00000 | 2428.1638 | 2529.8362 |

## Organ Weight

## Heart

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| 1.00 | 6 | 4.6667 | .51640 | .21082 | 4.1247 | 5.2086 | 4.00 | 5.00 |
| 2.00 | 6 | 6.6667 | .81650 | .33333 | 5.8098 | 7.5235 | 6.00 | 8.00 |
| 3.00 | 6 | 6.3333 | .51640 | .21082 | 5.7914 | 6.8753 | 6.00 | 7.00 |
| 4.00 | 6 | 5.3333 | 1.21106 | .49441 | 4.0624 | 6.6043 | 4.00 | 7.00 |
| Total | 24 | 5.7500 | 1.11316 | .22722 | 5.2800 | 6.2200 | 4.00 | 8.00 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 15.167 | 3 | 5.056 | 7.583 | .001 |
| Within Groups | 13.333 | 20 | .667 | | |
| Total | 28.500 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1.00 | 2.00 | -2.00000* | .47140 | .002 | -3.3799 | -.6201 |
| | 3.00 | -1.66667* | .47140 | .012 | -3.0465 | -.2868 |
| | 4.00 | -.66667 | .47140 | 1.000 | -2.0465 | .7132 |
| 2.00 | 1.00 | 2.00000* | .47140 | .002 | .6201 | 3.3799 |
| | 3.00 | .33333 | .47140 | 1.000 | -1.0465 | 1.7132 |
| | 4.00 | 1.33333 | .47140 | .062 | -.0465 | 2.7132 |
| 3.00 | 1.00 | 1.66667* | .47140 | .012 | .2868 | 3.0465 |
| | 2.00 | -.33333 | .47140 | 1.000 | -1.7132 | 1.0465 |
| | 4.00 | 1.00000 | .47140 | .280 | -.3799 | 2.3799 |
| 4.00 | 1.00 | .66667 | .47140 | 1.000 | -.7132 | 2.0465 |
| | 2.00 | -1.33333 | .47140 | .062 | -2.7132 | .0465 |
| | 3.00 | -1.00000 | .47140 | .280 | -2.3799 | .3799 |

*. The mean difference is significant at the 0.05 level.

# Liver

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1.00 | 6 | 57.3333 | 4.96655 | 2.02759 | 52.1213 | 62.5454 |
| 2.00 | 6 | 131.1667 | 14.64809 | 5.98006 | 115.7944 | 146.5389 |
| 3.00 | 6 | 110.8333 | 4.70815 | 1.92209 | 105.8924 | 115.7742 |
| 4.00 | 6 | 90.0000 | 6.48074 | 2.64575 | 83.1989 | 96.8011 |
| Total | 24 | 97.3333 | 29.04370 | 5.92852 | 85.0693 | 109.5974 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 17884.333 | 3 | 5961.444 | 78.595 | .000 |
| Within Groups | 1517.000 | 20 | 75.850 | | |
| Total | 19401.333 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1.00 | 2.00 | -73.83333* | 5.02825 | .000 | -88.5516 | -59.1150 |
| | 3.00 | -53.50000* | 5.02825 | .000 | -68.2183 | -38.7817 |
| | 4.00 | -32.66667* | 5.02825 | .000 | -47.3850 | -17.9484 |
| 2.00 | 1.00 | 73.83333* | 5.02825 | .000 | 59.1150 | 88.5516 |
| | 3.00 | 20.33333* | 5.02825 | .004 | 5.6150 | 35.0516 |
| | 4.00 | 41.16667* | 5.02825 | .000 | 26.4484 | 55.8850 |
| 3.00 | 1.00 | 53.50000* | 5.02825 | .000 | 38.7817 | 68.2183 |
| | 2.00 | -20.33333* | 5.02825 | .004 | -35.0516 | -5.6150 |
| | 4.00 | 20.83333* | 5.02825 | .003 | 6.1150 | 35.5516 |
| 4.00 | 1.00 | 32.66667* | 5.02825 | .000 | 17.9484 | 47.3850 |
| | 2.00 | -41.16667* | 5.02825 | .000 | -55.8850 | -26.4484 |
| | 3.00 | -20.83333* | 5.02825 | .003 | -35.5516 | -6.1150 |

*. The mean difference is significant at the 0.05 level.

## Kidney

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| 1.00 | 6 | 10.8333 | .75277 | .30732 | 10.0433 | 11.6233 | 10.00 | 12.00 |
| 2.00 | 6 | 10.8333 | .75277 | .30732 | 10.0433 | 11.6233 | 10.00 | 12.00 |
| 3.00 | 6 | 12.8333 | 1.72240 | .70317 | 11.0258 | 14.6409 | 10.00 | 15.00 |
| 4.00 | 6 | 12.6667 | 2.58199 | 1.05409 | 9.9570 | 15.3763 | 10.00 | 17.00 |
| Total | 24 | 11.7917 | 1.81729 | .37095 | 11.0243 | 12.5590 | 10.00 | 17.00 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 22.125 | 3 | 7.375 | 2.740 | .070 |
| Within Groups | 53.833 | 20 | 2.692 | | |
| Total | 75.958 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1.00 | 2.00 | .00000 | .94722 | 1.000 | -2.7726 | 2.7726 |
| | 3.00 | -2.00000 | .94722 | .285 | -4.7726 | .7726 |
| | 4.00 | -1.83333 | .94722 | .403 | -4.6060 | .9393 |
| 2.00 | 1.00 | .00000 | .94722 | 1.000 | -2.7726 | 2.7726 |
| | 3.00 | -2.00000 | .94722 | .285 | -4.7726 | .7726 |
| | 4.00 | -1.83333 | .94722 | .403 | -4.6060 | .9393 |
| 3.00 | 1.00 | 2.00000 | .94722 | .285 | -.7726 | 4.7726 |
| | 2.00 | 2.00000 | .94722 | .285 | -.7726 | 4.7726 |
| | 4.00 | .16667 | .94722 | 1.000 | -2.6060 | 2.9393 |
| 4.00 | 1.00 | 1.83333 | .94722 | .403 | -.9393 | 4.6060 |
| | 2.00 | 1.83333 | .94722 | .403 | -.9393 | 4.6060 |
| | 3.00 | -.16667 | .94722 | 1.000 | -2.9393 | 2.6060 |

*APPENDIX D*

## Body Weight of Experimental Animals at Different Time

### Body Weight Week 0

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | 2079.1667 | 96.30247 | 39.31532 | 1978.1034 | 2180.2299 | 2000.00 | 2270.00 |
| G2 | 6 | 2265.0000 | 158.39823 | 64.66581 | 2098.7712 | 2431.2288 | 2060.00 | 2505.00 |
| G3 | 6 | 2383.3333 | 168.95759 | 68.97665 | 2206.0232 | 2560.6434 | 2215.00 | 2645.00 |
| G4 | 6 | 2105.0000 | 82.09750 | 33.51617 | 2018.8440 | 2191.1560 | 2005.00 | 2240.00 |
| Total | 24 | 2208.1250 | 176.36926 | 36.00122 | 2133.6508 | 2282.5992 | 2000.00 | 2645.00 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 367186.458 | 3 | 122395.486 | 7.029 | .002 |
| Within Groups | 348254.167 | 20 | 17412.708 | | |
| Total | 715440.625 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -185.83333 | 76.18554 | .145 | -408.8375 | 37.1708 |
| | G3 | -304.16667* | 76.18554 | .004 | -527.1708 | -81.1625 |
| | G4 | -25.83333 | 76.18554 | 1.000 | -248.8375 | 197.1708 |
| G2 | G1 | 185.83333 | 76.18554 | .145 | -37.1708 | 408.8375 |
| | G3 | -118.33333 | 76.18554 | .816 | -341.3375 | 104.6708 |
| | G4 | 160.00000 | 76.18554 | .292 | -63.0041 | 383.0041 |
| G3 | G1 | 304.16667* | 76.18554 | .004 | 81.1625 | 527.1708 |
| | G2 | 118.33333 | 76.18554 | .816 | -104.6708 | 341.3375 |
| | G4 | 278.33333* | 76.18554 | .009 | 55.3292 | 501.3375 |
| G4 | G1 | 25.83333 | 76.18554 | 1.000 | -197.1708 | 248.8375 |
| | G2 | -160.00000 | 76.18554 | .292 | -383.0041 | 63.0041 |
| | G3 | -278.33333* | 76.18554 | .009 | -501.3375 | -55.3292 |

*. The mean difference is significant at the 0.05 level.

# Body Weight Week 5

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | 2141.6667 | 88.69423 | 36.20927 | 2048.5878 | 2234.7456 | 2015.00 | 2255.00 |
| G2 | 6 | 2720.0000 | 196.92638 | 80.39486 | 2513.3384 | 2926.6616 | 2405.00 | 3005.00 |
| G3 | 6 | 2740.8333 | 65.14727 | 26.59626 | 2672.4655 | 2809.2012 | 2610.00 | 2780.00 |
| G4 | 6 | 2396.6667 | 116.08905 | 47.39315 | 2274.8387 | 2518.4946 | 2225.00 | 2570.00 |
| Total | 24 | 2499.7917 | 279.34115 | 57.02027 | 2381.8362 | 2617.7471 | 2015.00 | 3005.00 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 1472886.458 | 3 | 490962.153 | 30.510 | .000 |
| Within Groups | 321837.500 | 20 | 16091.875 | | |
| Total | 1794723.958 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -578.33333* | 73.23905 | .000 | -792.7128 | -363.9539 |
| | G3 | -599.16667* | 73.23905 | .000 | -813.5461 | -384.7872 |
| | G4 | -255.00000* | 73.23905 | .014 | -469.3794 | -40.6206 |
| G2 | G1 | 578.33333* | 73.23905 | .000 | 363.9539 | 792.7128 |
| | G3 | -20.83333 | 73.23905 | 1.000 | -235.2128 | 193.5461 |
| | G4 | 323.33333* | 73.23905 | .002 | 108.9539 | 537.7128 |
| G3 | G1 | 599.16667* | 73.23905 | .000 | 384.7872 | 813.5461 |
| | G2 | 20.83333 | 73.23905 | 1.000 | -193.5461 | 235.2128 |
| | G4 | 344.16667* | 73.23905 | .001 | 129.7872 | 558.5461 |
| G4 | G1 | 255.00000* | 73.23905 | .014 | 40.6206 | 469.3794 |
| | G2 | -323.33333* | 73.23905 | .002 | -537.7128 | -108.9539 |
| | G3 | -344.16667* | 73.23905 | .001 | -558.5461 | -129.7872 |

*. The mean difference is significant at the 0.05 level.

# Body Weight Week 10

### Descriptives

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | 2365.0000 | 51.18594 | 20.89657 | 2311.2837 | 2418.7163 | 2320.00 | 2445.00 |
| G2 | 6 | 2873.3333 | 150.08886 | 61.27352 | 2715.8247 | 3030.8419 | 2600.00 | 3005.00 |
| G3 | 6 | 2765.0000 | 90.88454 | 37.10346 | 2669.6225 | 2860.3775 | 2630.00 | 2855.00 |
| G4 | 6 | 2634.1667 | 78.82999 | 32.18221 | 2551.4397 | 2716.8937 | 2540.00 | 2735.00 |
| Total | 24 | 2659.3750 | 215.02938 | 43.89269 | 2568.5761 | 2750.1739 | 2320.00 | 3005.00 |

### ANOVA

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 865361.458 | 3 | 288453.819 | 29.121 | .000 |
| Within Groups | 198104.167 | 20 | 9905.208 | | |
| Total | 1063465.625 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -508.33333* | 57.46074 | .000 | -676.5278 | -340.1389 |
| | G3 | -400.00000* | 57.46074 | .000 | -568.1944 | -231.8056 |
| | G4 | -269.16667* | 57.46074 | .001 | -437.3611 | -100.9722 |
| G2 | G1 | 508.33333* | 57.46074 | .000 | 340.1389 | 676.5278 |
| | G3 | 108.33333 | 57.46074 | .444 | -59.8611 | 276.5278 |
| | G4 | 239.16667* | 57.46074 | .003 | 70.9722 | 407.3611 |
| G3 | G1 | 400.00000* | 57.46074 | .000 | 231.8056 | 568.1944 |
| | G2 | -108.33333 | 57.46074 | .444 | -276.5278 | 59.8611 |
| | G4 | 130.83333 | 57.46074 | .204 | -37.3611 | 299.0278 |
| G4 | G1 | 269.16667* | 57.46074 | .001 | 100.9722 | 437.3611 |
| | G2 | -239.16667* | 57.46074 | .003 | -407.3611 | -70.9722 |
| | G3 | -130.83333 | 57.46074 | .204 | -299.0278 | 37.3611 |

*. The mean difference is significant at the 0.05 level.

*APPENDIX E*

## Triacylglycerides (TG) Level of Experimental Animal

### Triacylglycerides Week 0

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .4000 | .10954 | .04472 | .2850 | .5150 | .20 | .50 |
| G2 | 6 | .4000 | .08944 | .03651 | .3061 | .4939 | .30 | .50 |
| G3 | 6 | .5333 | .13880 | .05667 | .3877 | .6790 | .37 | .70 |
| G4 | 6 | .5167 | .17224 | .07032 | .3359 | .6974 | .30 | .80 |
| Total | 24 | .4625 | .13819 | .02821 | .4041 | .5209 | .20 | .80 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .095 | 3 | .032 | 1.829 | .174 |
| Within Groups | .345 | 20 | .017 | | |
| Total | .439 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | .00000 | .07579 | 1.000 | -.2219 | .2219 |
| | G3 | -.13333 | .07579 | .563 | -.3552 | .0885 |
| | G4 | -.11667 | .07579 | .836 | -.3385 | .1052 |
| G2 | G1 | .00000 | .07579 | 1.000 | -.2219 | .2219 |
| | G3 | -.13333 | .07579 | .563 | -.3552 | .0885 |
| | G4 | -.11667 | .07579 | .836 | -.3385 | .1052 |
| G3 | G1 | .13333 | .07579 | .563 | -.0885 | .3552 |
| | G2 | .13333 | .07579 | .563 | -.0885 | .3552 |
| | G4 | .01667 | .07579 | 1.000 | -.2052 | .2385 |
| G4 | G1 | .11667 | .07579 | .836 | -.1052 | .3385 |
| | G2 | .11667 | .07579 | .836 | -.1052 | .3385 |
| | G3 | -.01667 | .07579 | 1.000 | -.2385 | .2052 |

# Triacylglycerides Week 5

### Descriptives

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .4667 | .18619 | .07601 | .2713 | .6621 | .30 | .70 |
| G2 | 6 | 1.3000 | .36878 | .15055 | .9130 | 1.6870 | .80 | 1.90 |
| G3 | 6 | .5967 | .20037 | .08180 | .3864 | .8069 | .42 | .89 |
| G4 | 6 | .3133 | .14445 | .05897 | .1617 | .4649 | .20 | .60 |
| Total | 24 | .6692 | .44641 | .09112 | .4807 | .8577 | .20 | 1.90 |

### ANOVA

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 3.425 | 3 | 1.142 | 19.711 | .000 |
| Within Groups | 1.158 | 20 | .058 | | |
| Total | 4.583 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.83333* | .13895 | .000 | -1.2401 | -.4266 |
| | G3 | -.13000 | .13895 | 1.000 | -.5367 | .2767 |
| | G4 | .15333 | .13895 | 1.000 | -.2534 | .5601 |
| G2 | G1 | .83333* | .13895 | .000 | .4266 | 1.2401 |
| | G3 | .70333* | .13895 | .000 | .2966 | 1.1101 |
| | G4 | .98667* | .13895 | .000 | .5799 | 1.3934 |
| G3 | G1 | .13000 | .13895 | 1.000 | -.2767 | .5367 |
| | G2 | -.70333* | .13895 | .000 | -1.1101 | -.2966 |
| | G4 | .28333 | .13895 | .329 | -.1234 | .6901 |
| G4 | G1 | -.15333 | .13895 | 1.000 | -.5601 | .2534 |
| | G2 | -.98667* | .13895 | .000 | -1.3934 | -.5799 |
| | G3 | -.28333 | .13895 | .329 | -.6901 | .1234 |

*. The mean difference is significant at the 0.05 level.

# Triacylglycerides Week 10

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .5500 | .15166 | .06191 | .3908 | .7092 | .30 | .70 |
| G2 | 6 | .7167 | .17224 | .07032 | .5359 | .8974 | .50 | 1.00 |
| G3 | 6 | .8950 | .54519 | .22257 | .3229 | 1.4671 | .51 | 1.94 |
| G4 | 6 | .5583 | .26806 | .10944 | .2770 | .8396 | .30 | 1.00 |
| Total | 24 | .6800 | .33521 | .06842 | .5385 | .8215 | .30 | 1.94 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .476 | 3 | .159 | 1.504 | .244 |
| Within Groups | 2.109 | 20 | .105 | | |
| Total | 2.584 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.16667 | .18747 | 1.000 | -.7154 | .3821 |
| | G3 | -.34500 | .18747 | .484 | -.8938 | .2038 |
| | G4 | -.00833 | .18747 | 1.000 | -.5571 | .5404 |
| G2 | G1 | .16667 | .18747 | 1.000 | -.3821 | .7154 |
| | G3 | -.17833 | .18747 | 1.000 | -.7271 | .3704 |
| | G4 | .15833 | .18747 | 1.000 | -.3904 | .7071 |
| G3 | G1 | .34500 | .18747 | .484 | -.2038 | .8938 |
| | G2 | .17833 | .18747 | 1.000 | -.3704 | .7271 |
| | G4 | .33667 | .18747 | .526 | -.2121 | .8854 |
| G4 | G1 | .00833 | .18747 | 1.000 | -.5404 | .5571 |
| | G2 | -.15833 | .18747 | 1.000 | -.7071 | .3904 |
| | G3 | -.33667 | .18747 | .526 | -.8854 | .2121 |

*APPENDIX F*

## Total Cholesterol (TC) Level of Experimental Animal

### Total Cholesterol Week 0

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .9500 | .38859 | .15864 | .5422 | 1.3578 | .50 | 1.40 |
| G2 | 6 | 1.3667 | .39328 | .16055 | .9539 | 1.7794 | .90 | 1.80 |
| G3 | 6 | 1.3833 | .17224 | .07032 | 1.2026 | 1.5641 | 1.20 | 1.60 |
| G4 | 6 | 1.1167 | .33116 | .13520 | .7691 | 1.4642 | .80 | 1.60 |
| Total | 24 | 1.2042 | .36173 | .07384 | 1.0514 | 1.3569 | .50 | 1.80 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .785 | 3 | .262 | 2.351 | .103 |
| Within Groups | 2.225 | 20 | .111 | | |
| Total | 3.010 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.41667 | .19257 | .257 | -.9803 | .1470 |
| | G3 | -.43333 | .19257 | .215 | -.9970 | .1303 |
| | G4 | -.16667 | .19257 | 1.000 | -.7303 | .3970 |
| G2 | G1 | .41667 | .19257 | .257 | -.1470 | .9803 |
| | G3 | -.01667 | .19257 | 1.000 | -.5803 | .5470 |
| | G4 | .25000 | .19257 | 1.000 | -.3137 | .8137 |
| G3 | G1 | .43333 | .19257 | .215 | -.1303 | .9970 |
| | G2 | .01667 | .19257 | 1.000 | -.5470 | .5803 |
| | G4 | .26667 | .19257 | 1.000 | -.2970 | .8303 |
| G4 | G1 | .16667 | .19257 | 1.000 | -.3970 | .7303 |
| | G2 | -.25000 | .19257 | 1.000 | -.8137 | .3137 |
| | G3 | -.26667 | .19257 | 1.000 | -.8303 | .2970 |

# Total Cholesterol Week 5

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .9500 | .17607 | .07188 | .7652 | 1.1348 | .60 | 1.10 |
| G2 | 6 | 24.8833 | .33714 | .13764 | 24.5295 | 25.2371 | 24.30 | 25.20 |
| G3 | 6 | 12.6333 | 4.12052 | 1.68219 | 8.3091 | 16.9576 | 8.40 | 18.20 |
| G4 | 6 | 15.9667 | 8.33347 | 3.40212 | 7.2212 | 24.7121 | 4.70 | 24.20 |
| Total | 24 | 13.6083 | 9.77147 | 1.99459 | 9.4822 | 17.7345 | .60 | 25.20 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 1763.228 | 3 | 587.743 | 27.157 | .000 |
| Within Groups | 432.850 | 20 | 21.643 | | |
| Total | 2196.078 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -23.93333* | 2.68592 | .000 | -31.7953 | -16.0713 |
| | G3 | -11.68333* | 2.68592 | .002 | -19.5453 | -3.8213 |
| | G4 | -15.01667* | 2.68592 | .000 | -22.8787 | -7.1547 |
| G2 | G1 | 23.93333* | 2.68592 | .000 | 16.0713 | 31.7953 |
| | G3 | 12.25000* | 2.68592 | .001 | 4.3880 | 20.1120 |
| | G4 | 8.91667* | 2.68592 | .021 | 1.0547 | 16.7787 |
| G3 | G1 | 11.68333* | 2.68592 | .002 | 3.8213 | 19.5453 |
| | G2 | -12.25000* | 2.68592 | .001 | -20.1120 | -4.3880 |
| | G4 | -3.33333 | 2.68592 | 1.000 | -11.1953 | 4.5287 |
| G4 | G1 | 15.01667* | 2.68592 | .000 | 7.1547 | 22.8787 |
| | G2 | -8.91667* | 2.68592 | .021 | -16.7787 | -1.0547 |
| | G3 | 3.33333 | 2.68592 | 1.000 | -4.5287 | 11.1953 |

*. The mean difference is significant at the 0.05 level.

# Total Cholesterol Week 10

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .7333 | .20656 | .08433 | .5166 | .9501 | .60 | 1.00 |
| G2 | 6 | 25.9833 | 1.40914 | .57528 | 24.5045 | 27.4621 | 23.80 | 27.70 |
| G3 | 6 | 17.0500 | 1.02518 | .41853 | 15.9741 | 18.1259 | 15.50 | 18.20 |
| G4 | 6 | 16.0667 | 1.59391 | .65071 | 14.3940 | 17.7394 | 13.60 | 18.00 |
| Total | 24 | 14.9583 | 9.33699 | 1.90591 | 11.0157 | 18.9010 | .60 | 27.70 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 1977.028 | 3 | 659.009 | 469.056 | .000 |
| Within Groups | 28.099 | 20 | 1.405 | | |
| Total | 2005.128 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -25.25000* | .68434 | .000 | -27.2531 | -23.2469 |
| | G3 | -16.31667* | .68434 | .000 | -18.3198 | -14.3135 |
| | G4 | -15.33333* | .68434 | .000 | -17.3365 | -13.3302 |
| G2 | G1 | 25.25000* | .68434 | .000 | 23.2469 | 27.2531 |
| | G3 | 8.93333* | .68434 | .000 | 6.9302 | 10.9365 |
| | G4 | 9.91667* | .68434 | .000 | 7.9135 | 11.9198 |
| G3 | G1 | 16.31667* | .68434 | .000 | 14.3135 | 18.3198 |
| | G2 | -8.93333* | .68434 | .000 | -10.9365 | -6.9302 |
| | G4 | .98333 | .68434 | .997 | -1.0198 | 2.9865 |
| G4 | G1 | 15.33333* | .68434 | .000 | 13.3302 | 17.3365 |
| | G2 | -9.91667* | .68434 | .000 | -11.9198 | -7.9135 |
| | G3 | -.98333 | .68434 | .997 | -2.9865 | 1.0198 |

*. The mean difference is significant at the 0.05 level.

*APPENDIX G*

## Low Density Lipoprotein (LDL) Level on Experimental Animal

### Low Density Lipoprotein Week 0

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .2317 | .19874 | .08113 | .0231 | .4402 | .04 | .57 |
| G2 | 6 | .3300 | .17866 | .07294 | .1425 | .5175 | .14 | .62 |
| G3 | 6 | .4317 | .26814 | .10947 | .1503 | .7131 | .05 | .76 |
| G4 | 6 | .4483 | .29444 | .12021 | .1393 | .7573 | .11 | .87 |
| Total | 24 | .3604 | .24064 | .04912 | .2588 | .4620 | .04 | .87 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .182 | 3 | .061 | 1.054 | .391 |
| Within Groups | 1.150 | 20 | .058 | | |
| Total | 1.332 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.09833 | .13845 | 1.000 | -.5036 | .3069 |
| | G3 | -.20000 | .13845 | .984 | -.6053 | .2053 |
| | G4 | -.21667 | .13845 | .800 | -.6219 | .1886 |
| G2 | G1 | .09833 | .13845 | 1.000 | -.3069 | .5036 |
| | G3 | -.10167 | .13845 | 1.000 | -.5069 | .3036 |
| | G4 | -.11833 | .13845 | 1.000 | -.5236 | .2869 |
| G3 | G1 | .20000 | .13845 | .984 | -.2053 | .6053 |
| | G2 | .10167 | .13845 | 1.000 | -.3036 | .5069 |
| | G4 | -.01667 | .13845 | 1.000 | -.4219 | .3886 |
| G4 | G1 | .21667 | .13845 | .800 | -.1886 | .6219 |
| | G2 | .11833 | .13845 | 1.000 | -.2869 | .5236 |
| | G3 | .01667 | .13845 | 1.000 | -.3886 | .4219 |

# Low Density Lipoprotein Week 5

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .0933 | .03077 | .01256 | .0610 | .1256 | .04 | .13 |
| G2 | 6 | 23.2950 | .33399 | .13635 | 22.9445 | 23.6455 | 23.09 | 23.97 |
| G3 | 6 | 11.6467 | 4.24353 | 1.73242 | 7.1934 | 16.1000 | 7.19 | 17.26 |
| G4 | 6 | 15.3050 | 7.73994 | 3.15982 | 7.1824 | 23.4276 | 5.77 | 23.56 |
| Total | 24 | 12.5850 | 9.47372 | 1.93382 | 8.5846 | 16.5854 | .04 | 23.97 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 1674.148 | 3 | 558.049 | 28.608 | .000 |
| Within Groups | 390.134 | 20 | 19.507 | | |
| Total | 2064.282 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -23.20167* | 2.54995 | .000 | -30.6657 | -15.7377 |
| | G3 | -11.55333* | 2.54995 | .001 | -19.0173 | -4.0893 |
| | G4 | -15.21167* | 2.54995 | .000 | -22.6757 | -7.7477 |
| G2 | G1 | 23.20167* | 2.54995 | .000 | 15.7377 | 30.6657 |
| | G3 | 11.64833* | 2.54995 | .001 | 4.1843 | 19.1123 |
| | G4 | 7.99000* | 2.54995 | .031 | .5260 | 15.4540 |
| G3 | G1 | 11.55333* | 2.54995 | .001 | 4.0893 | 19.0173 |
| | G2 | -11.64833* | 2.54995 | .001 | -19.1123 | -4.1843 |
| | G4 | -3.65833 | 2.54995 | 1.000 | -11.1223 | 3.8057 |
| G4 | G1 | 15.21167* | 2.54995 | .000 | 7.7477 | 22.6757 |
| | G2 | -7.99000* | 2.54995 | .031 | -15.4540 | -.5260 |
| | G3 | 3.65833 | 2.54995 | 1.000 | -3.8057 | 11.1223 |

*. The mean difference is significant at the 0.05 level.

# Low Density Lipoprotein Week 10

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .0567 | .02338 | .00955 | .0321 | .0812 | .03 | .08 |
| G2 | 6 | 24.7050 | 2.26633 | .92523 | 22.3266 | 27.0834 | 20.60 | 26.90 |
| G3 | 6 | 17.5717 | .83574 | .34119 | 16.6946 | 18.4487 | 16.40 | 18.90 |
| G4 | 6 | 15.2933 | 1.65432 | .67537 | 13.5572 | 17.0294 | 13.10 | 17.43 |
| Total | 24 | 14.4067 | 9.27725 | 1.89371 | 10.4892 | 18.3241 | .03 | 26.90 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 1936.689 | 3 | 645.563 | 301.241 | .000 |
| Within Groups | 42.860 | 20 | 2.143 | | |
| Total | 1979.550 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -24.64833* | .84519 | .000 | -27.1223 | -22.1744 |
| | G3 | -17.51500* | .84519 | .000 | -19.9890 | -15.0410 |
| | G4 | -15.23667* | .84519 | .000 | -17.7106 | -12.7627 |
| G2 | G1 | 24.64833* | .84519 | .000 | 22.1744 | 27.1223 |
| | G3 | 7.13333* | .84519 | .000 | 4.6594 | 9.6073 |
| | G4 | 9.41167* | .84519 | .000 | 6.9377 | 11.8856 |
| G3 | G1 | 17.51500* | .84519 | .000 | 15.0410 | 19.9890 |
| | G2 | -7.13333* | .84519 | .000 | -9.6073 | -4.6594 |
| | G4 | 2.27833 | .84519 | .083 | -.1956 | 4.7523 |
| G4 | G1 | 15.23667* | .84519 | .000 | 12.7627 | 17.7106 |
| | G2 | -9.41167* | .84519 | .000 | -11.8856 | -6.9377 |
| | G3 | -2.27833 | .84519 | .083 | -4.7523 | .1956 |

*. The mean difference is significant at the 0.05 level.

*APPENDIX H*

## High Density Lipoprotein (HDL) Level on Experimental Animal

### High Density Lipoprotein Week 0

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .5600 | .19677 | .08033 | .3535 | .7665 | .35 | .87 |
| G2 | 6 | .6700 | .07563 | .03088 | .5906 | .7494 | .58 | .77 |
| G3 | 6 | .6083 | .05269 | .02151 | .5530 | .6636 | .54 | .67 |
| G4 | 6 | .5267 | .06683 | .02728 | .4565 | .5968 | .44 | .60 |
| Total | 24 | .5912 | .11947 | .02439 | .5408 | .6417 | .35 | .87 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .070 | 3 | .023 | 1.802 | .179 |
| Within Groups | .258 | 20 | .013 | | |
| Total | .328 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.11000 | .06563 | .656 | -.3021 | .0821 |
| | G3 | -.04833 | .06563 | 1.000 | -.2404 | .1438 |
| | G4 | .03333 | .06563 | 1.000 | -.1588 | .2254 |
| G2 | G1 | .11000 | .06563 | .656 | -.0821 | .3021 |
| | G3 | .06167 | .06563 | 1.000 | -.1304 | .2538 |
| | G4 | .14333 | .06563 | .246 | -.0488 | .3354 |
| G3 | G1 | .04833 | .06563 | 1.000 | -.1438 | .2404 |
| | G2 | -.06167 | .06563 | 1.000 | -.2538 | .1304 |
| | G4 | .08167 | .06563 | 1.000 | -.1104 | .2738 |
| G4 | G1 | -.03333 | .06563 | 1.000 | -.2254 | .1588 |
| | G2 | -.14333 | .06563 | .246 | -.3354 | .0488 |
| | G3 | -.08167 | .06563 | 1.000 | -.2738 | .1104 |

# High Density Lipoprotein Week 5

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .5750 | .16778 | .06850 | .3989 | .7511 | .38 | .88 |
| G2 | 6 | .5867 | .05922 | .02418 | .5245 | .6488 | .52 | .69 |
| G3 | 6 | .6283 | .09432 | .03851 | .5293 | .7273 | .52 | .74 |
| G4 | 6 | .6117 | .15132 | .06177 | .4529 | .7705 | .50 | .86 |
| Total | 24 | .6004 | .11936 | .02436 | .5500 | .6508 | .38 | .88 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .010 | 3 | .003 | .220 | .882 |
| Within Groups | .317 | 20 | .016 | | |
| Total | .328 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.01167 | .07272 | 1.000 | -.2245 | .2012 |
| | G3 | -.05333 | .07272 | 1.000 | -.2662 | .1595 |
| | G4 | -.03667 | .07272 | 1.000 | -.2495 | .1762 |
| G2 | G1 | .01167 | .07272 | 1.000 | -.2012 | .2245 |
| | G3 | -.04167 | .07272 | 1.000 | -.2545 | .1712 |
| | G4 | -.02500 | .07272 | 1.000 | -.2378 | .1878 |
| G3 | G1 | .05333 | .07272 | 1.000 | -.1595 | .2662 |
| | G2 | .04167 | .07272 | 1.000 | -.1712 | .2545 |
| | G4 | .01667 | .07272 | 1.000 | -.1962 | .2295 |
| G4 | G1 | .03667 | .07272 | 1.000 | -.1762 | .2495 |
| | G2 | .02500 | .07272 | 1.000 | -.1878 | .2378 |
| | G3 | -.01667 | .07272 | 1.000 | -.2295 | .1962 |

# High Density Lipoprotein Week 10

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .5333 | .21593 | .08815 | .3067 | .7599 | .36 | .89 |
| G2 | 6 | .4233 | .09266 | .03783 | .3261 | .5206 | .25 | .51 |
| G3 | 6 | .5200 | .11437 | .04669 | .3000 | .5400 | .29 | .56 |
| G4 | 6 | .4967 | .12894 | .05264 | .3613 | .6320 | .36 | .73 |
| Total | 24 | .4933 | .14460 | .02952 | .4073 | .5294 | .25 | .89 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .056 | 3 | .019 | .884 | .466 |
| Within Groups | .425 | 20 | .021 | | |
| Total | .481 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | .11000* | .08412 | 1.000 | -.1362 | .3562 |
| | G3 | .11333 | .08412 | 1.000 | -.1329 | .3596 |
| | G4 | .03667 | .08412 | 1.000 | -.2096 | .2829 |
| G2 | G1 | -.11000* | .08412 | 1.000 | -.3562 | .1362 |
| | G3 | .00333* | .08412 | 1.000 | -.2429 | .2496 |
| | G4 | -.07333* | .08412 | 1.000 | -.3196 | .1729 |
| G3 | G1 | -.11333 | .08412 | 1.000 | -.3596 | .1329 |
| | G2 | -.00333* | .08412 | 1.000 | -.2496 | .2429 |
| | G4 | -.07667 | .08412 | 1.000 | -.3229 | .1696 |
| G4 | G1 | -.03667 | .08412 | 1.000 | -.2829 | .2096 |
| | G2 | .07333* | .08412 | 1.000 | -.1729 | .3196 |
| | G3 | .07667 | .08412 | 1.000 | -.1696 | .3229 |

*APPENDIX I*

## Malondialdehyde (MDA) Level on Experimental Animal

### Malondialdehyde (MDA) Level Week 0

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .044055556 | .0081443005 | .0033248968 | .035508636 | .052602475 | .0323333 | .0550000 |
| G2 | 6 | .048500000 | .0018708288 | .0007637627 | .046536685 | .050463314 | .0453333 | .0510000 |
| G3 | 6 | .044944444 | .0059494786 | .0024288645 | .038700850 | .051188039 | .0390000 | .0543333 |
| G4 | 6 | .043388889 | .0040738552 | .0016631444 | .039113640 | .047664138 | .0400000 | .0510000 |
| Total | 24 | .045222222 | .0055261055 | .0011280116 | .042888753 | .047555692 | .0323333 | .0550000 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .000 | 3 | .000 | 1.021 | .404 |
| Within Groups | .001 | 20 | .000 | | |
| Total | .001 | 23 | | | |

Continue

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.0044444443 | .0031861971 | 1.000 | -.013770823 | .004881934 |
| | G3 | -.0008888890 | .0031861971 | 1.000 | -.010215267 | .008437489 |
| | G4 | .0006666665 | .0031861971 | 1.000 | -.008659712 | .009993045 |
| G2 | G1 | .0044444443 | .0031861971 | 1.000 | -.004881934 | .013770823 |
| | G3 | .0035555553 | .0031861971 | 1.000 | -.005770823 | .012881934 |
| | G4 | .0051111108 | .0031861971 | .746 | -.004215268 | .014437489 |
| G3 | G1 | .0008888890 | .0031861971 | 1.000 | -.008437489 | .010215267 |
| | G2 | -.0035555553 | .0031861971 | 1.000 | -.012881934 | .005770823 |
| | G4 | .0015555555 | .0031861971 | 1.000 | -.007770823 | .010881934 |
| G4 | G1 | -.0006666665 | .0031861971 | 1.000 | -.009993045 | .008659712 |
| | G2 | -.0051111108 | .0031861971 | .746 | -.014437489 | .004215268 |
| | G3 | -.0015555555 | .0031861971 | 1.000 | -.010881934 | .007770823 |

# Malondialdehyde (MDA) Level Week 5

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .054666667 | .009203863 7 | .003757461 6 | .045007804 | .064325529 | .044666 7 | .068333 3 |
| G2 | 6 | .072333333 | .007208020 0 | .002942661 8 | .064768980 | .079897686 | .061666 7 | .081000 0 |
| G3 | 6 | .047833333 | .005071707 7 | .002070516 0 | .042510902 | .053155764 | .040666 7 | .054333 3 |
| G4 | 6 | .044555555 | .002187506 6 | .000893045 8 | .042259908 | .046851203 | .041333 3 | .047333 3 |
| Total | 24 | .054847222 | .012513173 4 | .002554240 8 | .049563373 | .060131072 | .040666 7 | .081000 0 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .003 | 3 | .001 | 22.057 | .000 |
| Within Groups | .001 | 20 | .000 | | |
| Total | .004 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.0176666665* | .0037324485 | .001 | -.028591988 | -.006741345 |
| | G3 | .0068333335 | .0037324485 | .492 | -.004091988 | .017758655 |
| | G4 | .0101111115 | .0037324485 | .081 | -.000814210 | .021036433 |
| G2 | G1 | .0176666665* | .0037324485 | .001 | .006741345 | .028591988 |
| | G3 | .0245000000* | .0037324485 | .000 | .013574679 | .035425321 |
| | G4 | .0277777780* | .0037324485 | .000 | .016852457 | .038703099 |
| G3 | G1 | -.0068333335 | .0037324485 | .492 | -.017758655 | .004091988 |
| | G2 | -.0245000000* | .0037324485 | .000 | -.035425321 | -.013574679 |
| | G4 | .0032777780 | .0037324485 | 1.000 | -.007647543 | .014203099 |
| G4 | G1 | -.0101111115 | .0037324485 | .081 | -.021036433 | .000814210 |
| | G2 | -.0277777780* | .0037324485 | .000 | -.038703099 | -.016852457 |
| | G3 | -.0032777780 | .0037324485 | 1.000 | -.014203099 | .007647543 |

*. The mean difference is significant at the 0.05 level.

# Malondialdehyde (MDA) Level Week 10

**Descriptives**

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| G1 | 6 | .047888889 | .0061919902 | .0025278694 | .041390794 | .054386984 | .0416667 | .0566667 |
| G2 | 6 | .067666667 | .0033993463 | .0013877773 | .064099272 | .071234062 | .0630000 | .0720000 |
| G3 | 6 | .043000000 | .0021186999 | .0008649556 | .040776561 | .045223439 | .0413333 | .0470000 |
| G4 | 6 | .046444444 | .0034555378 | .0014107174 | .042818080 | .050070809 | .0423333 | .0510000 |
| Total | 24 | .051250000 | .0105570683 | .0021549525 | .046792141 | .055707859 | .0413333 | .0720000 |

**ANOVA**

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | .002 | 3 | .001 | 44.864 | .000 |
| Within Groups | .000 | 20 | .000 | | |
| Total | .003 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| G1 | G2 | -.0197777777* | .0023509914 | .000 | -.026659410 | -.012896146 |
| | G3 | .0048888890 | .0023509914 | .304 | -.001992743 | .011770521 |
| | G4 | .0014444447 | .0023509914 | 1.000 | -.005437187 | .008326077 |
| G2 | G1 | .0197777777* | .0023509914 | .000 | .012896146 | .026659410 |
| | G3 | .0246666667* | .0023509914 | .000 | .017785035 | .031548299 |
| | G4 | .0212222223* | .0023509914 | .000 | .014340590 | .028103854 |
| G3 | G1 | -.0048888890 | .0023509914 | .304 | -.011770521 | .001992743 |
| | G2 | -.0246666667* | .0023509914 | .000 | -.031548299 | -.017785035 |
| | G4 | -.0034444443 | .0023509914 | .951 | -.010326076 | .003437188 |
| G4 | G1 | -.0014444447 | .0023509914 | 1.000 | -.008326077 | .005437187 |
| | G2 | -.0212222223* | .0023509914 | .000 | -.028103854 | -.014340590 |
| | G3 | .0034444443 | .0023509914 | .951 | -.003437188 | .010326076 |

*. The mean difference is significant at the 0.05 level.

# Aortic lesion

### Descriptives

Treatment

| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound | | |
| 1.00 | 6 | .0000 | .00000 | .00000 | .0000 | .0000 | .00 | .00 |
| 2.00 | 6 | 36.7223 | 18.74727 | 7.65354 | 17.0483 | 56.3964 | 20.24 | 71.88 |
| 3.00 | 6 | 15.4583 | 21.17891 | 8.64625 | -6.7676 | 37.6842 | .27 | 45.31 |
| 4.00 | 6 | 13.6350 | 6.49587 | 2.65193 | 6.8180 | 20.4520 | 4.53 | 21.80 |
| Total | 24 | 16.4539 | 19.05813 | 3.89022 | 8.4064 | 24.5015 | .00 | 71.88 |

### ANOVA

Treatment

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 4142.865 | 3 | 1380.955 | 6.559 | .003 |
| Within Groups | 4211.014 | 20 | 210.551 | | |
| Total | 8353.879 | 23 | | | |

**Multiple Comparisons**

Treatment

Bonferroni

| (I) Group | (J) Group | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1.00 | 2.00 | -36.72233* | 8.37756 | .002 | -61.2445 | -12.2002 |
| | 3.00 | -15.45833 | 8.37756 | .479 | -39.9805 | 9.0638 |
| | 4.00 | -13.63500 | 8.37756 | .716 | -38.1571 | 10.8871 |
| 2.00 | 1.00 | 36.72233* | 8.37756 | .002 | 12.2002 | 61.2445 |
| | 3.00 | 21.26400 | 8.37756 | .117 | -3.2581 | 45.7861 |
| | 4.00 | 23.08733 | 8.37756 | .073 | -1.4348 | 47.6095 |
| 3.00 | 1.00 | 15.45833 | 8.37756 | .479 | -9.0638 | 39.9805 |
| | 2.00 | -21.26400 | 8.37756 | .117 | -45.7861 | 3.2581 |
| | 4.00 | 1.82333 | 8.37756 | 1.000 | -22.6988 | 26.3455 |
| 4.00 | 1.00 | 13.63500 | 8.37756 | .716 | -10.8871 | 38.1571 |
| | 2.00 | -23.08733 | 8.37756 | .073 | -47.6095 | 1.4348 |
| | 3.00 | -1.82333 | 8.37756 | 1.000 | -26.3455 | 22.6988 |

*. The mean difference is significant at the 0.05 level.