2.7 Analysis of the results

Statistical analyses were done using SIGMASTAT® and SIGMAPLOT® software. The level of significance was set at $P \leq 0.05$. Seroconversion rates were compared using a standard t-test or the Mann-Whitney Rank Sum Test.

Rottweiler Data

Comparison of HI Titres
Weeks

Average Log10 titres

2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0

Experimental
Control

Rottweiler group
Comparison of HI Titres

Boerboel Data

Weeks

Mean HI Titres

Experimental
Control

Boerboel group
Average Log10 titres

Weeks

Experimental

Control

Boerboel group
GSD Data

Comparison of HI Titres

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Mean HI Titres</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

- **Experimental**
- **Control**

GSD Group

Weeks

Mean HI Titres
General Stats

Stats for Rottweiler:

t-test

Data source: Rott Summary in DeKramer.JNB

Normality Test: Failed (P < 0.050)

Test execution ended by user request, Rank Sum Test begun

Mann-Whitney Rank Sum Test

Data source: Rott Summary in DeKramer.JNB

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Missing</th>
<th>Median</th>
<th>25%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Col 21</td>
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<td>0</td>
<td>4096.000</td>
<td>4096.000</td>
<td>8192.000</td>
</tr>
<tr>
<td>Col 22</td>
<td>4</td>
<td>0</td>
<td>192.000</td>
<td>128.000</td>
<td>256.000</td>
</tr>
</tbody>
</table>

T = 18.000  n(small)= 4  n(big)= 21  (P = 0.013)

The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference  (P = 0.013)

Stats for Boerboel

Mann-Whitney Rank Sum Test

Data source: BB Summary in DeKramer.JNB

Normality Test: Failed (P < 0.050)

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Missing</th>
<th>Median</th>
<th>25%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6weeks</td>
<td>32</td>
<td>6</td>
<td>3072.000</td>
<td>256.000</td>
<td>16384.000</td>
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<tr>
<td>6 weeks</td>
<td>25</td>
<td>8</td>
<td>128.000</td>
<td>128.000</td>
<td>256.000</td>
</tr>
</tbody>
</table>

T = 236.500  n(small)= 17  n(big)= 26  (P = <0.001)

The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference  (P = <0.001)
Stats for GSD

t-test

Data source: GSD Summary in DeKramer.JNB

Normality Test: Failed (P < 0.050)

Test execution ended by user request, Rank Sum Test begun

Mann-Whitney Rank Sum Test

Data source: GSD Summary in DeKramer.JNB

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Missing</th>
<th>Median</th>
<th>25%</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 weeks</td>
<td>49</td>
<td>10</td>
<td>8192.000</td>
<td>4096.000</td>
<td>8192.000</td>
</tr>
<tr>
<td>6 weeks</td>
<td>18</td>
<td>7</td>
<td>128.000</td>
<td>128.000</td>
<td>256.000</td>
</tr>
</tbody>
</table>

T = 80.000  n(small)= 11  n(big)= 39  (P = <0.001)

The difference in the median values between the two groups is greater than would be expected by chance; there is a statistically significant difference  (P = <0.001)