Supplemental Table 1: Raw microbiological data for MRSA

| Treatment                  | CFU          | Dilution Factor 1 (scientific notation) | Dilution Factor 2 (1:20 for final pipet step) | CFU/mL  | CFU/sample Log10 Transformed | Average | Standard Deviation |
|----------------------------|--------------|-----------------------------------------|-----------------------------------------------|---------|-------------------------------|---------|--------------------|
| Collagen controls (+ controls) | 22           | 1.00E+06                                | 0.03                                          | 7.33E+08| 1.47E+09                      | 9.16633142 | 0.301686579        |
|                            | 48           | 1.00E+06                                | 0.03                                          | 1.60E+09| 3.20E+09                      | 9.50514998 |                   |
|                            | 16           | 1.00E+06                                | 0.03                                          | 5.33E+08| 1.07E+09                      | 9.02802872 |                   |
|                            | 15           | 1.00E+06                                | 0.03                                          | 5.00E+08| 1.00E+09                      | 9.0000000 |                   |
|                            | 22           | 1.00E+06                                | 0.03                                          | 7.33E+08| 1.47E+09                      | 9.16633142 |                   |
|                            | 43           | 1.00E+06                                | 0.03                                          | 1.43E+09| 2.87E+09                      | 9.45737720 |                   |
|                            | 21           | 1.00E+06                                | 0.03                                          | 7.00E+08| 1.40E+09                      | 9.14612804 |                   |
|                            | 93           | 1.00E+06                                | 0.03                                          | 3.10E+09| 6.20E+09                      | 9.79239169 |                   |
| Silver Sulfadizine 1%      | 22           | 1.00E+06                                | 0.03                                          | 7.33E+08| 1.47E+09                      | 9.16633142 |                   |
|                            | 50           | 1.00E+06                                | 0.03                                          | 1.67E+09| 3.33E+09                      | 9.52287875 |                   |
|                            | 31           | 1.00E+03                                | 0.03                                          | 1.03E+06| 2.07E+06                      | 6.31527043 |                   |
|                            | 53           | 1.00E+03                                | 0.03                                          | 1.77E+06| 3.53E+06                      | 6.54818461 |                   |
|                            | 106          | 1.00E+03                                | 0.03                                          | 3.53E+06| 7.07E+06                      | 6.84921461 |                   |
|                            | 44           | 1.00E+03                                | 0.03                                          | 1.47E+06| 2.93E+06                      | 6.46736142 |                   |
|                            | 8            | 1.00E+03                                | 0.03                                          | 2.67E+05| 5.33E+05                      | 5.72699873 |                   |
|                            | 65           | 1.00E+03                                | 0.03                                          | 2.17E+06| 4.33E+06                      | 6.63682210 |                   |
| Neosporin                  | 31           | 1.00E+04                                | 0.03                                          | 1.03E+07| 2.07E+07                      | 7.31527043 |                   |
|                            | 36           | 1.00E+03                                | 0.03                                          | 1.20E+06| 2.40E+06                      | 6.38021124 |                   |
|                            | 26           | 1.00E+03                                | 0.03                                          | 8.67E+05| 1.73E+06                      | 6.23888209 |                   |
|                            | 18           | 1.00E+04                                | 0.03                                          | 6.00E+06| 1.20E+07                      | 7.07918125 |                   |
|                            | 35           | 1.00E+04                                | 0.03                                          | 1.17E+07| 2.33E+07                      | 7.36797697 |                   |
|                            | 27           | 1.00E+03                                | 0.03                                          | 9.00E+05| 1.80E+06                      | 6.25527251 |                   |
|                            | 40           | 1.00E+04                                | 0.03                                          | 1.33E+07| 2.67E+07                      | 7.42596873 |                   |
|                            | 25           | 1.00E+04                                | 0.03                                          | 8.33E+06| 1.67E+07                      | 7.22184875 |                   |
| Gentamicin 1%              | 30           | 1.00E+02                                | 0.05                                          | 6.00E+04| 1.20E+05                      | 5.07918125 |                   |
|                            | 30           | 1.00E+02                                | 0.05                                          | 6.00E+04| 1.20E+05                      | 5.07918125 |                   |
|                            | 57           | 1.00E+02                                | 0.05                                          | 1.14E+05| 2.28E+05                      | 5.35793485 |                   |
|                            | 29           | 1.00E+03                                | 0.05                                          | 5.80E+05| 1.16E+06                      | 6.06445799 |                   |
|                            | 64           | 1.00E+03                                | 0.05                                          | 1.28E+06| 2.56E+06                      | 6.40823997 |                   |
|                            | 19           | 1.00E+03                                | 0.05                                          | 3.80E+05| 7.60E+05                      | 5.88081359 |                   |
|                            | 44           | 1.00E+03                                | 0.05                                          | 8.80E+05| 1.76E+06                      | 6.24551267 |                   |
|                            | 59           | 1.00E+03                                | 0.05                                          | 1.18E+06| 2.36E+06                      | 6.37291200 |                   |
| Mupirocin 2%               | 51           | 1.00E+03                                | 0.03                                          | 1.70E+06| 3.40E+06                      | 6.53147892 |                   |
|                            | 98           | 1.00E+03                                | 0.03                                          | 3.27E+06| 6.53E+06                      | 6.81513482 |                   |
|                            | 16           | 1.00E+03                                | 0.03                                          | 5.33E+05| 1.07E+06                      | 6.02802872 |                   |
|                            | 52           | 1.00E+03                                | 0.03                                          | 1.73E+06| 3.47E+06                      | 6.53991208 |                   |
|                            | 47           | 1.00E+03                                | 0.03                                          | 1.57E+06| 3.13E+06                      | 6.49600660 |                   |
|                            | 32           | 1.00E+03                                | 0.03                                          | 1.07E+06| 2.13E+06                      | 6.32905872 |                   |
|    |       |       |       |       |        |
|----|-------|-------|-------|-------|--------|
| 6  | 1.00E+03 | 0.03  | 2.00E+05 | 4.00E+05 | 5.60205999 |
| 3  | 1.00E+03 | 0.03  | 1.00E+05 | 2.00E+05 | 5.30103000 |
| 73 | 1.00E+04 | 0.05  | 1.46E+07 | 2.92E+07 | 7.46538285 |
| 56 | 1.00E+04 | 0.05  | 1.12E+07 | 2.24E+07 | 7.35024802 |
| 100| 1.00E+04 | 0.05  | 2.00E+07 | 4.00E+07 | 7.60205999 |
| 47 | 1.00E+05 | 0.05  | 9.40E+07 | 1.88E+08 | 8.27415785 |
| 34 | 1.00E+05 | 0.05  | 6.80E+07 | 1.36E+08 | 8.13353891 |
| 13 | 1.00E+05 | 0.05  | 2.60E+07 | 5.20E+07 | 7.71600334 |
| 65 | 1.00E+04 | 0.05  | 1.30E+07 | 2.60E+07 | 7.41497335 |
| 27 | 1.00E+05 | 0.05  | 5.40E+07 | 1.08E+08 | 8.03342376 |

| Retapamulin 1% |       |       |       |       |        |
|---------------|-------|-------|-------|-------|--------|
| 0             | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0             | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0             | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |

| CZ-01179 0.5% |       |       |       |       |        |
|---------------|-------|-------|-------|-------|--------|
| 0             | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0             | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0             | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |

| CZ-01179 1% |       |       |       |       |        |
|-------------|-------|-------|-------|-------|--------|
| 0           | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0           | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0           | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |

| CZ-01179 2% |       |       |       |       |        |
|-------------|-------|-------|-------|-------|--------|
| 0           | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0           | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |
| 0           | 1.00E+00 | 0.03  | 0.00E+00 | 0.00E+00 | 0.00000000 |