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# 1. Corneometry (skin moisture)

## 1.1. Descriptive statistics

*Table S1.1.1 Descriptive statistics for Corneometry measurements by site and timepoint*

| Skin Hydration [AU] | Baseline N = 30 | 60 min N = 30 | 28th day N = 30 | 30th day N = 30 |
|---|---|---|---|---|
| **Left shin (Test product)** | | | | |
| N Non-missing | 30 | 30 | 30 | 30 |
| Mean (SD) | 18.71 (5.23) | 31.83 (7.11) | 35.89 (6.81) | 33.52 (6.25) |
| Median [Q1, Q3] | 18.15 [15.77, 21.77] | 33.60 [26.20, 38.20] | 34.74 [31.80, 41.70] | 32.87 [28.27, 39.10] |
| Min - Max | 9.13 - 29.23 | 20.17 - 43.57 | 22.73 - 51.17 | 21.97 - 46.73 |
| **Right shin (Comparison product)** | | | | |
| N Non-missing | 30 | 30 | 30 | 30 |
| Mean (SD) | 19.26 (5.49) | 22.83 (8.90) | 23.74 (10.67) | 22.56 (8.71) |
| Median [Q1, Q3] | 19.12 [15.03, 22.77] | 21.35 [15.67, 29.50] | 20.70 [14.27, 31.47] | 21.38 [15.63, 28.77] |
| Min - Max | 9.23 - 31.30 | 7.23 - 40.07 | 7.17 - 47.00 | 8.83 - 38.13 |
| **Untreated left volar forearm** | | | | |
| N Non-missing | 30 | 30 | 30 | 30 |
| Mean (SD) | 30.22 (5.88) | 30.70 (6.21) | 30.49 (6.08) | 30.81 (6.95) |
| Median [Q1, Q3] | 30.72 [25.47, 34.53] | 31.04 [25.80, 35.47] | 30.85 [25.87, 34.97] | 30.67 [25.70, 35.20] |
| Min - Max | 17.47 - 41.00 | 17.53 - 41.43 | 17.63 - 41.10 | 18.17 - 46.73 |

*Table S1.1.2 Descriptive statistics for Corneometry difference from baseline in measurements by site and timepoint*

| Skin Hydration [AU] | 60 min N = 30 | 95% CI | 28th day N = 30 | 95% CI | 30th day N = 30 | 95% CI |
|---|---|---|---|---|---|---|
| **Left shin (Test product)** | | 11.34 - 14.88 | | 14.33 - 20.03 | | 12.08 - 17.53 |
| N Non-missing | 30 | | 30 | | 30 | |
| Mean (SD) | 13.11 (4.74) | | 17.18 (7.64) | | 14.81 (7.30) | |
| Median [Q1, Q3] | 12.05 [10.36, 15.97] | | 16.77 [13.70, 21.47] | | 15.40 [12.47, 20.04] | |
| Min - Max | 5.57 - 26.73 | | -6.50 - 32.37 | | -3.40 - 32.03 | |
| **Right shin (Comparison product)** | | 1.71 - 5.41 | | 1.67 - 7.29 | | 0.69 - 5.92 |
| N Non-missing | 30 | | 30 | | 30 | |
| Mean (SD) | 3.56 (4.95) | | 4.48 (7.53) | | 3.30 (7.00) | |
| Median [Q1, Q3] | 2.17 [0.13, 6.66] | | 2.54 [-0.47, 9.70] | | 0.70 [-0.97, 6.70] | |
| Min - Max | -5.80 - 15.60 | | -15.50 - 18.43 | | -7.97 - 19.47 | |
| **Untreated left volar forearm** | | -0.15 - 1.10 | | -0.27 - 0.81 | | -0.40 - 1.58 |
| N Non-missing | 30 | | 30 | | 30 | |
| Mean (SD) | 0.47 (1.67) | | 0.27 (1.44) | | 0.59 (2.65) | |
| Median [Q1, Q3] | 0.17 [-0.10, 0.80] | | 0.10 [-0.34, 0.64] | | 0.32 [-0.77, 0.74] | |
| Min - Max | -1.67 - 8.43 | | -1.53 - 6.83 | | -1.73 - 13.73 | |

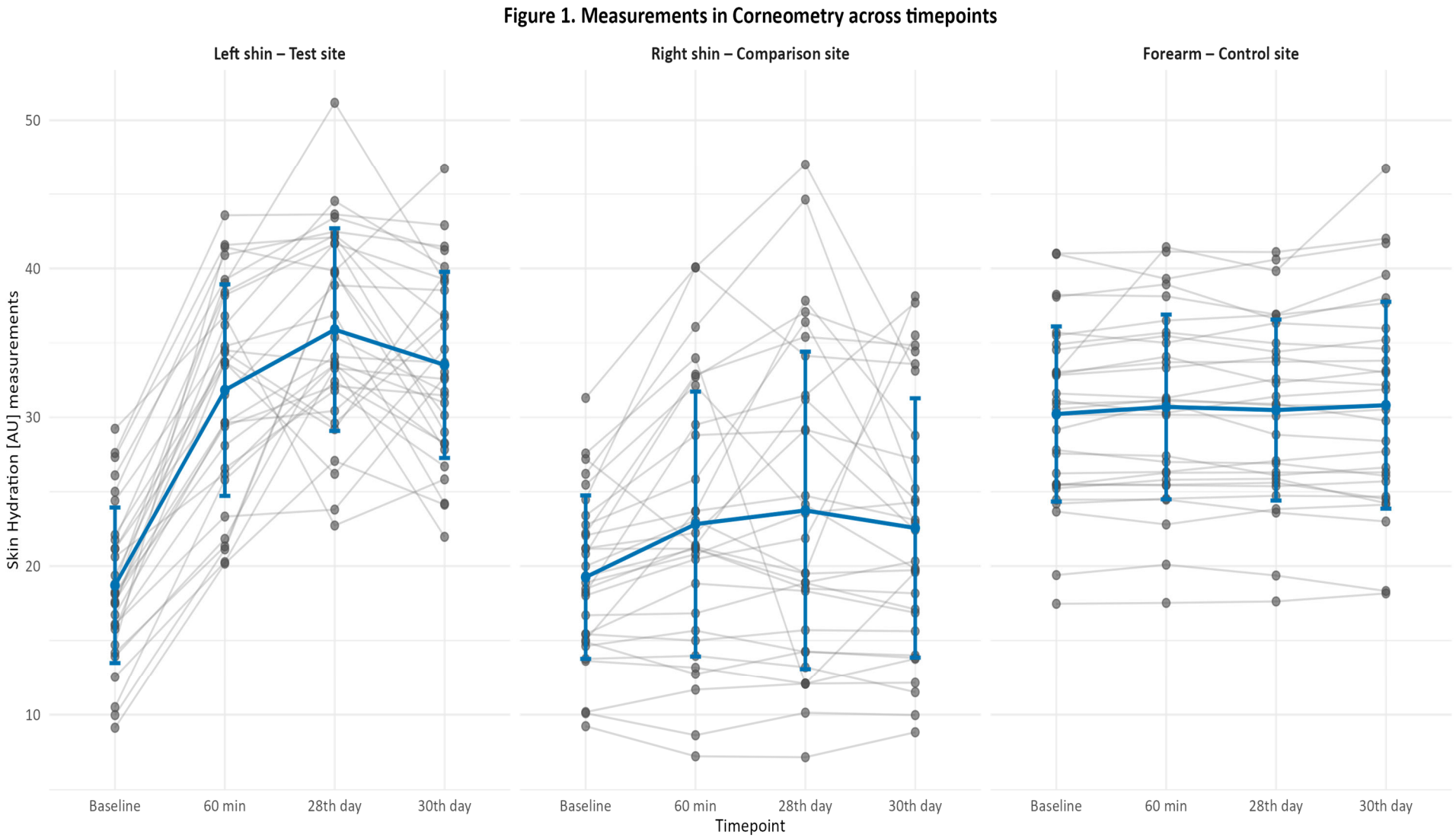
Abbreviation: CI = Confidence Interval for Mean

*Table S1.1.3 Descriptive statistics for Corneometry relative change from baseline [%] in measurements by site and timepoint*

| Skin Hydration [AU] | 60 min N = 30 | 95% CI | 28th day N = 30 | 95% CI | 30th day N = 30 | 95% CI |
|---|---|---|---|---|---|---|
| **Left shin (Test product)** | | 62.38 - 88.91 | | 81.34 - 130.34 | | 70.49 - 113.00 |
| N Non-missing | 30 | | 30 | | 30 | |
| Mean (SD) | 75.6 (35.5) | | 105.8 (65.6) | | 91.7 (56.9) | |
| Median [Q1, Q3] | 63.3 [52.1, 106.9] | | 86.3 [62.4, 154.5] | | 83.7 [56.4, 127.8] | |
| Min - Max | 25.9 - 181.8 | | -22.2 - 297.9 | | -11.6 - 217.9 | |
| **Right shin (Comparison product)** | | 7.31 - 24.94 | | 8.36 - 33.18 | | 4.39 - 30.91 |
| N Non-missing | 30 | | 30 | | 30 | |
| Mean (SD) | 16.1 (23.6) | | 20.8 (33.2) | | 17.6 (35.5) | |
| Median [Q1, Q3] | 13.5 [0.8, 26.1] | | 16.7 [-2.7, 50.2] | | 3.8 [-4.3, 30.4] | |
| Min - Max | -21.7 - 63.8 | | -56.2 - 78.0 | | -28.9 - 106.8 | |
| **Untreated left volar forearm** | | -0.37 - 3.43 | | -0.79 - 2.53 | | -1.43 - 4.72 |
| N Non-missing | 30 | | 30 | | 30 | |
| Mean (SD) | 1.5 (5.1) | | 0.9 (4.4) | | 1.6 (8.2) | |
| Median [Q1, Q3] | 0.5 [-0.3, 2.3] | | 0.3 [-0.9, 2.2] | | 1.0 [-2.6, 2.4] | |
| Min - Max | -4.1 - 25.5 | | -5.3 - 20.7 | | -6.2 - 41.6 | |

Abbreviation: CI = Confidence Interval for Mean

***Figure S1. Corneometry measurements across timepoints***



## 1.2. Within-site over time comparisons

***Table S1.2.1 Within-site comparisons of Corneometry (Left shin – Test site) paired comparisons: T0 vs T60min, T0 vs T28, T0 vs T30.***

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 60 min | 13.11 | 4.74 | 11.34 | 14.88 | Paired t-test | <0.001 | <0.001 |
| 28th day | 17.18 | 7.64 | 14.33 | 20.03 | Paired t-test | <0.001 | <0.001 |
| 30th day | 14.81 | 7.30 | 12.08 | 17.53 | Paired t-test | <0.001 | <0.001 |

***Table S1.2.2 Within-site comparisons of Corneometry (Right shin – Comparison site) paired comparisons: T0 vs T60min, T0 vs T28, T0 vs T30.***

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 60 min | 3.56 | 4.95 | 1.71 | 5.41 | Paired t-test | <0.001 | 0.001 |
| 28th day | 4.48 | 7.53 | 1.67 | 7.29 | Wilcoxon signed-rank | 0.005 | 0.015 |
| 30th day | 3.30 | 7.00 | 0.69 | 5.92 | Wilcoxon signed-rank | 0.048 | 0.145 |

***Table S1.2.3 Within-site comparisons of Corneometry (Forearm – Control site) paired comparisons: T0 vs T60min, T0 vs T28, T0 vs T30.***

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 60 min | 0.47 | 1.67 | -0.15 | 1.10 | Wilcoxon signed-rank | 0.070 | 0.211 |
| 28th day | 0.27 | 1.44 | -0.27 | 0.81 | Wilcoxon signed-rank | 0.381 | 1.000 |
| 30th day | 0.59 | 2.65 | -0.40 | 1.58 | Wilcoxon signed-rank | 0.360 | 1.000 |

## 1.3. Between-sites at the same timepoint

### *Table S1.3.1 Between-site comparisons at the same timepoints*

| Left vs Right shin at: | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| Baseline | -0.55 | 4.78 | -2.33 | 1.24 | Paired t-test | 0.535 | 1.000 |
| 60 min | 9.00 | 7.36 | 6.25 | 11.75 | Paired t-test | <0.001 | <0.001 |
| 28th day | 12.15 | 10.05 | 8.40 | 15.90 | Paired t-test | <0.001 | <0.001 |
| 30th day | 10.96 | 8.14 | 7.92 | 13.99 | Wilcoxon signed-rank | <0.001 | <0.001 |
| **Left shin vs Forearm at:** | | | | | | | |
| Baseline | -11.51 | 6.70 | -14.01 | -9.01 | Paired t-test | <0.001 | <0.001 |
| 60 min | 1.13 | 8.98 | -2.22 | 4.48 | Paired t-test | 0.496 | 1.000 |
| 28th day | 5.40 | 9.69 | 1.79 | 9.02 | Paired t-test | 0.005 | 0.014 |
| 30th day | 2.71 | 10.43 | -1.18 | 6.60 | Paired t-test | 0.165 | 0.496 |
| **Right shin vs Forearm at:** | | | | | | | |
| Baseline | -10.96 | 6.87 | -13.53 | -8.39 | Paired t-test | <0.001 | <0.001 |
| 60 min | -7.87 | 9.09 | -11.26 | -4.48 | Paired t-test | <0.001 | <0.001 |
| 28th day | -6.75 | 11.13 | -10.90 | -2.59 | Paired t-test | 0.002 | 0.007 |
| 30th day | -8.25 | 10.03 | -11.99 | -4.50 | Paired t-test | <0.001 | <0.001 |

## 1.4. One-sample test for testing significance of relative (percentage) change vs. 0%

### *Table S1.4.1 Relative (%) change in Corneometry from baseline (T0)*

| Site | Relative (%) change from baseline (T0) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value |
|---|---|---|---|---|---|---|---|
| Left shin – Test site | 60 min | 75.64 | 35.53 | 62.38 | 88.91 | Wilcoxon signed-rank | <0.001 |
| | 28th day | 105.84 | 65.60 | 81.34 | 130.34 | Paired t-test | <0.001 |
| | 30th day | 91.74 | 56.92 | 70.49 | 113.00 | Paired t-test | <0.001 |
| Right shin – Comparison site | 60 min | 16.13 | 23.61 | 7.31 | 24.94 | Paired t-test | <0.001 |
| | 28th day | 20.77 | 33.24 | 8.36 | 33.18 | Paired t-test | 0.002 |
| | 30th day | 17.65 | 35.51 | 4.39 | 30.91 | Wilcoxon signed-rank | 0.046 |
| Forearm – Control site | 60 min | 1.53 | 5.09 | -0.37 | 3.43 | Wilcoxon signed-rank | 0.074 |
| | 28th day | 0.87 | 4.45 | -0.79 | 2.53 | Wilcoxon signed-rank | 0.399 |
| | 30th day | 1.64 | 8.24 | -1.43 | 4.72 | Wilcoxon signed-rank | 0.365 |

## 1.5. Between-site comparisons for relative (%) change at the same timepoints

*Table S1.5.1 Between-site comparisons for relative (%) change at the same timepoints*

| Left vs Right shin at: | Mean difference | SD | 95% CI Lower | 95% CI Upper | Cohen's d | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|---|
| 60 min | 59.52 | 46.11 | 42.30 | 76.74 | 1.29 | Paired t-test | <0.001 | <0.001 |
| 28th day | 85.07 | 69.86 | 58.99 | 111.16 | 1.22 | Paired t-test | <0.001 | <0.001 |
| 30th day | 74.10 | 64.91 | 49.86 | 98.33 | 1.14 | Paired t-test | <0.001 | <0.001 |
| **Left shin vs Forearm at:** | | | | | | | | |
| 60 min | 74.11 | 34.64 | 61.18 | 87.05 | 2.14 | Wilcoxon signed-rank | <0.001 | <0.001 |
| 28th day | 104.97 | 63.61 | 81.22 | 128.72 | 1.65 | Paired t-test | <0.001 | <0.001 |
| 30th day | 90.10 | 55.80 | 69.26 | 110.94 | 1.61 | Paired t-test | <0.001 | <0.001 |
| **Right shin vs Forearm at:** | | | | | | | | |
| 60 min | 14.60 | 24.04 | 5.62 | 23.57 | 0.61 | Paired t-test | 0.002 | 0.007 |
| 28th day | 19.90 | 33.13 | 7.53 | 32.27 | 0.60 | Paired t-test | 0.003 | 0.008 |
| 30th day | 16.00 | 35.28 | 2.83 | 29.18 | 0.45 | Wilcoxon signed-rank | 0.128 | 0.384 |

# 2. TEWL

## 2.1. Descriptive statistics

### *Table S2.1.1 Descriptive statistics for TEWL measurements by site and timepoint*

| TEWL [g/h/m2] | Baseline N = 30 | 14th day N = 30 | 28th day N = 30 |
|---|---|---|---|
| **Left shin (Test product)** | | | |
| N Non-missing | 30 | 30 | 30 |
| Mean (SD) | 12.95 (6.78) | 10.42 (4.78) | 9.81 (3.57) |
| Median [Q1, Q3] | 10.83 [6.86, 19.11] | 10.06 [6.82, 15.10] | 9.75 [6.58, 12.66] |
| Min - Max | 4.55 - 28.12 | 2.65 - 19.23 | 4.57 - 16.19 |
| **Right shin (Comparison product)** | | | |
| N Non-missing | 30 | 30 | 30 |
| Mean (SD) | 12.98 (7.33) | 15.01 (9.50) | 14.14 (8.22) |
| Median [Q1, Q3] | 10.10 [7.76, 17.83] | 12.33 [6.70, 23.99] | 10.73 [6.67, 21.56] |
| Min - Max | 3.83 - 32.70 | 3.09 - 32.72 | 3.38 - 31.76 |
| **Untreated left volar forearm** | | | |
| N Non-missing | 30 | 30 | 30 |
| Mean (SD) | 10.11 (2.05) | 10.17 (2.30) | 10.19 (1.84) |
| Median [Q1, Q3] | 10.54 [8.29, 11.63] | 10.56 [8.45, 11.65] | 10.64 [8.45, 11.52] |
| Min - Max | 6.27 - 13.07 | 5.91 - 15.99 | 6.22 - 13.16 |

### *Table S2.1.2 Descriptive statistics for TEWL difference from baseline in measurements by site and timepoint*

| TEWL [g/h/m2] | 14th day N = 30 | 95% CI | 28th day N = 30 | 95% CI |
|---|---|---|---|---|
| **Left shin (Test product)** | | -3.76 - -1.28 | | -4.65 - -1.62 |
| N Non-missing | 30 | | 30 | |
| Mean (SD) | -2.52 (3.32) | | -3.13 (4.05) | |
| Median [Q1, Q3] | -2.58 [-4.71, -0.64] | | -1.86 [-5.47, -0.54] | |
| Min - Max | -8.89 - 7.05 | | -16.45 - 2.34 | |
| **Right shin (Comparison product)** | | 0.22 - 3.85 | | -0.98 - 3.31 |
| N Non-missing | 30 | | 30 | |
| Mean (SD) | 2.04 (4.87) | | 1.16 (5.74) | |
| Median [Q1, Q3] | 1.54 [-0.47, 3.77] | | 1.42 [-0.82, 3.58] | |
| Min - Max | -8.09 - 17.17 | | -20.11 - 16.45 | |
| **Untreated left volar forearm** | | -0.59 - 0.70 | | -0.26 - 0.42 |
| N Non-missing | 30 | | 30 | |
| Mean (SD) | 0.06 (1.72) | | 0.08 (0.91) | |
| Median [Q1, Q3] | 0.05 [-0.32, 0.32] | | 0.01 [-0.48, 0.56] | |

| TEWL [g/h/m2] | 14th day N = 30 | 95% CI | 28th day N = 30 | 95% CI |
|---|---|---|---|---|
| Min - Max | -5.09 - 6.74 | | -2.45 - 2.21 | |

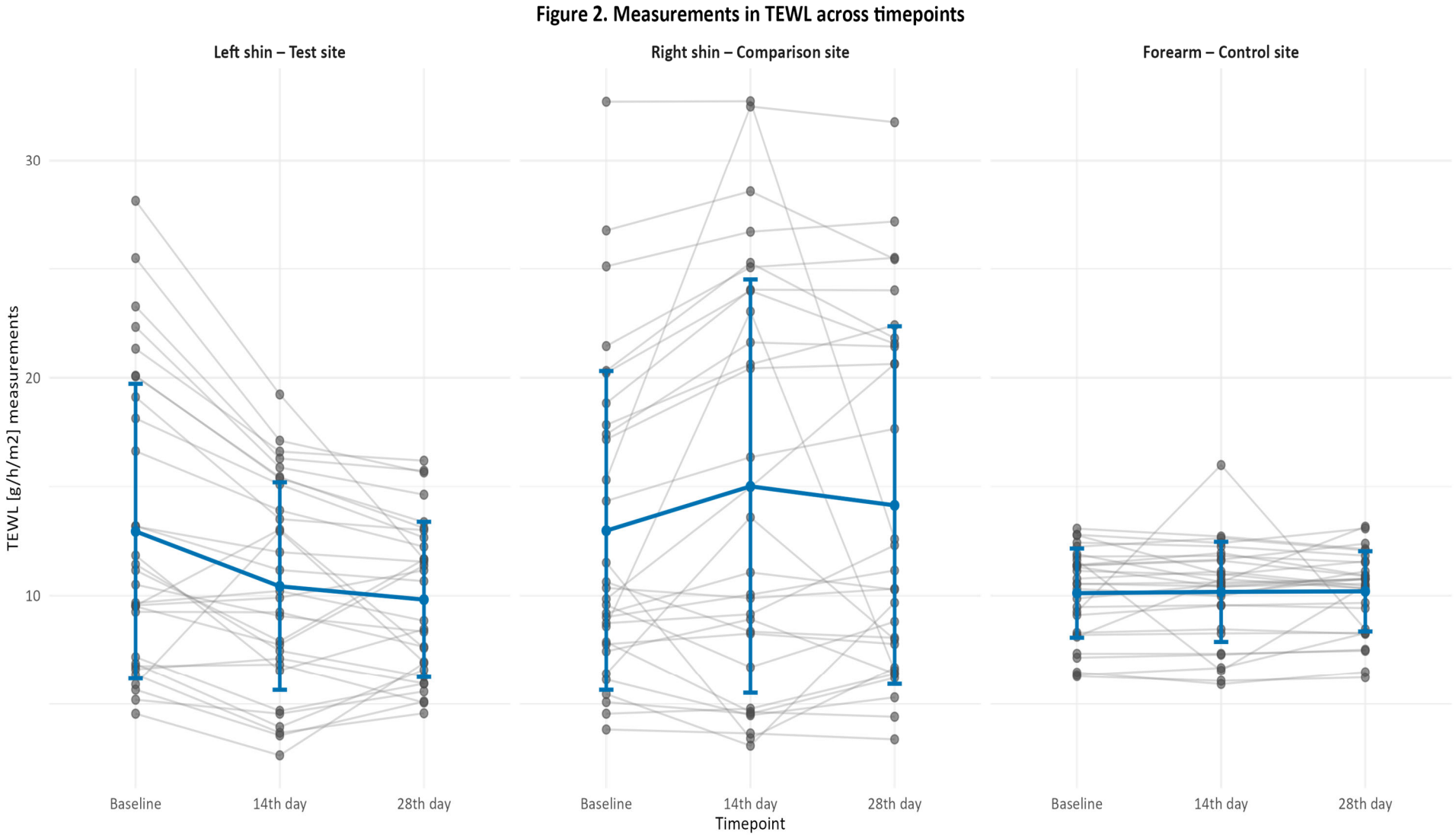
Abbreviation: CI = Confidence Interval

***Table S2.1.3 Descriptive statistics for TEWL relative change from baseline [%] in measurements by site and timepoint***

| TEWL [g/h/m2] | 14th day N = 30 | 95% CI | 28th day N = 30 | 95% CI |
|---|---|---|---|---|
| **Left shin (Test product)** | | -26.91 - -3.48 | | -24.88 - -8.01 |
| N Non-missing | 30 | | 30 | |
| Mean (SD) | -15.2 (31.4) | | -16.4 (22.6) | |
| Median [Q1, Q3] | -22.6 [-32.9, -9.0] | | -20.5 [-32.0, -8.5] | |
| Min - Max | -44.7 - 119.5 | | -58.5 - 51.4 | |
| **Right shin (Comparison product)** | | -3.25 - 32.20 | | -1.94 - 26.71 |
| N Non-missing | 30 | | 30 | |
| Mean (SD) | 14.5 (47.5) | | 12.4 (38.4) | |
| Median [Q1, Q3] | 9.1 [-4.7, 20.5] | | 10.0 [-11.7, 24.9] | |
| Min - Max | -70.3 - 168.5 | | -61.5 - 109.7 | |
| **Untreated left volar forearm** | | -5.11 - 7.95 | | -1.92 - 5.35 |
| N Non-missing | 30 | | 30 | |
| Mean (SD) | 1.4 (17.5) | | 1.7 (9.7) | |
| Median [Q1, Q3] | 0.5 [-3.0, 3.2] | | 0.2 [-4.2, 6.2] | |
| Min - Max | -43.8 - 72.9 | | -19.2 - 30.4 | |

Abbreviation: CI = Confidence Interval

***Figure S2. TEWL measurements across timepoints***



## 2.2. Within-site over time comparisons

*Table S2.2.1 Within-site comparisons of TEWL (Left shin – Test site) paired comparisons: T0 vs T14, T0 vs T28.*

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 14th day | -2.52 | 3.32 | -3.76 | -1.28 | Paired t-test | <0.001 | <0.001 |
| 28th day | -3.13 | 4.05 | -4.65 | -1.62 | Wilcoxon signed-rank | <0.001 | <0.001 |

*Table S2.2.2 Within-site comparisons of TEWL (Right shin – Comparison site) paired comparisons: T0 vs T14, T0 vs T28.*

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 14th day | 2.04 | 4.87 | 0.22 | 3.85 | Wilcoxon signed-rank | 0.022 | 0.045 |
| 28th day | 1.16 | 5.74 | -0.98 | 3.31 | Wilcoxon signed-rank | 0.046 | 0.092 |

*Table S2.2.3 Within-site comparisons of TEWL (Forearm – Control site) paired comparisons: T0 vs T14, T0 vs T28.*

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 14th day | 0.06 | 1.72 | -0.59 | 0.70 | Wilcoxon signed-rank | 0.888 | 1.000 |
| 28th day | 0.08 | 0.91 | -0.26 | 0.42 | Paired t-test | 0.620 | 1.000 |

## 2.3. Between-sites at the same timepoint

*Table S2.3.1 Between-site comparisons at the same timepoints*

| Left vs Right shin at: | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| Baseline | -0.03 | 2.44 | -0.94 | 0.88 | Paired t-test | 0.944 | 1.000 |
| 14th day | -4.59 | 5.24 | -6.55 | -2.64 | Wilcoxon signed-rank | <0.001 | <0.001 |
| 28th day | -4.33 | 5.54 | -6.39 | -2.26 | Wilcoxon signed-rank | <0.001 | 0.002 |
| **Left shin vs Forearm at:** | | | | | | | |
| Baseline | 2.84 | 6.17 | 0.53 | 5.14 | Paired t-test | 0.018 | 0.053 |
| 14th day | 0.25 | 4.00 | -1.24 | 1.75 | Paired t-test | 0.731 | 1.000 |
| 28th day | -0.38 | 2.99 | -1.50 | 0.74 | Paired t-test | 0.492 | 1.000 |
| **Right shin vs Forearm at:** | | | | | | | |
| Baseline | 2.87 | 6.75 | 0.35 | 5.39 | Wilcoxon signed-rank | 0.077 | 0.231 |
| 14th day | 4.84 | 8.57 | 1.64 | 8.05 | Paired t-test | 0.004 | 0.013 |
| 28th day | 3.95 | 7.44 | 1.17 | 6.73 | Wilcoxon signed-rank | 0.053 | 0.160 |

## 2.4. One-sample test for testing significance of relative (percentage) change vs. 0%

*Table S2.4.1 Relative (%) change in TEWL from baseline (T0)*

| Site | Relative (%) change from baseline (T0) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value |
|---|---|---|---|---|---|---|---|
| Left shin – Test site | 14th day | -15.19 | 31.38 | -26.91 | -3.48 | Wilcoxon signed-rank | <0.001 |
| | 28th day | -16.44 | 22.58 | -24.88 | -8.01 | Paired t-test | <0.001 |
| Right shin – Comparison site | 14th day | 14.48 | 47.47 | -3.25 | 32.20 | Wilcoxon signed-rank | 0.104 |
| | 28th day | 12.38 | 38.37 | -1.94 | 26.71 | Wilcoxon signed-rank | 0.109 |
| Forearm – Control site | 14th day | 1.42 | 17.49 | -5.11 | 7.95 | Wilcoxon signed-rank | 0.846 |
| | 28th day | 1.72 | 9.73 | -1.92 | 5.35 | Wilcoxon signed-rank | 0.531 |

## 2.5. Between-site comparisons for relative (%) change at the same timepoints

*Table S2.5.1 Between-site comparisons for relative (%) change at the same timepoints*

| Left vs Right shin at: | Mean difference | SD | 95% CI Lower | 95% CI Upper | Cohen's d | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|---|
| 14th day | -29.67 | 35.16 | -42.80 | -16.54 | -0.84 | Wilcoxon signed-rank | <0.001 | <0.001 |
| 28th day | -28.83 | 37.36 | -42.78 | -14.88 | -0.77 | Wilcoxon signed-rank | <0.001 | 0.001 |
| **Left shin vs Forearm at:** | | | | | | | | |
| 14th day | -16.61 | 22.46 | -25.00 | -8.23 | -0.74 | Wilcoxon signed-rank | 0.001 | 0.004 |
| 28th day | -18.16 | 22.18 | -26.44 | -9.88 | -0.82 | Wilcoxon signed-rank | <0.001 | <0.001 |
| **Right shin vs Forearm at:** | | | | | | | | |
| 14th day | 13.06 | 42.55 | -2.83 | 28.95 | 0.31 | Wilcoxon signed-rank | 0.056 | 0.167 |
| 28th day | 10.67 | 39.24 | -3.98 | 25.32 | 0.27 | Paired t-test | 0.147 | 0.442 |

# 3. Skin roughness (Antera 3D)

## 3.1. Descriptive statistics

*Table S3.1.1 Descriptive statistics for Skin roughness (Antera 3D) measurements by site and timepoint*

| Skin Roughness [µm] | Baseline N = 30 | 28th day N = 30 |
|---|---|---|
| **Left shin (Test product)** | | |
| N Non-missing | 30 | 30 |
| Mean (SD) | 45978.93 (19107.83) | 41631.33 (16548.31) |
| Median [Q1, Q3] | 52596.50 [46547.00, 56392.00] | 43384.00 [40138.00, 50535.00] |
| Min - Max | 4698.00 - 71694.00 | 4309.00 - 72457.00 |
| **Right shin (Comparison product)** | | |
| N Non-missing | 30 | 30 |
| Mean (SD) | 47628.50 (20339.01) | 48075.27 (20819.76) |
| Median [Q1, Q3] | 48845.50 [42272.00, 58069.00] | 47050.00 [41617.00, 56211.00] |
| Min - Max | 4158.00 - 92665.00 | 4373.00 - 99712.00 |

*Table S3.1.2 Descriptive statistics for Skin roughness (Antera 3D) difference from baseline in measurements by site and timepoint*

| Skin Roughness [µm] | 28th day N = 30 | 95% CI |
|---|---|---|
| **Left shin (Test product)** | | -13853.92 - 5158.72 |
| N Non-missing | 30 | |
| Mean (SD) | -4347.60 (25458.39) | |
| Median [Q1, Q3] | -5186.50 [-13047.00, -667.00] | |
| Min - Max | -55983.00 - 65006.00 | |
| **Right shin (Comparison product)** | | -8299.69 - 9193.22 |
| N Non-missing | 30 | |
| Mean (SD) | 446.77 (23423.44) | |
| Median [Q1, Q3] | -853.00 [-7349.00, 4566.00] | |
| Min - Max | -53369.00 - 50349.00 | |

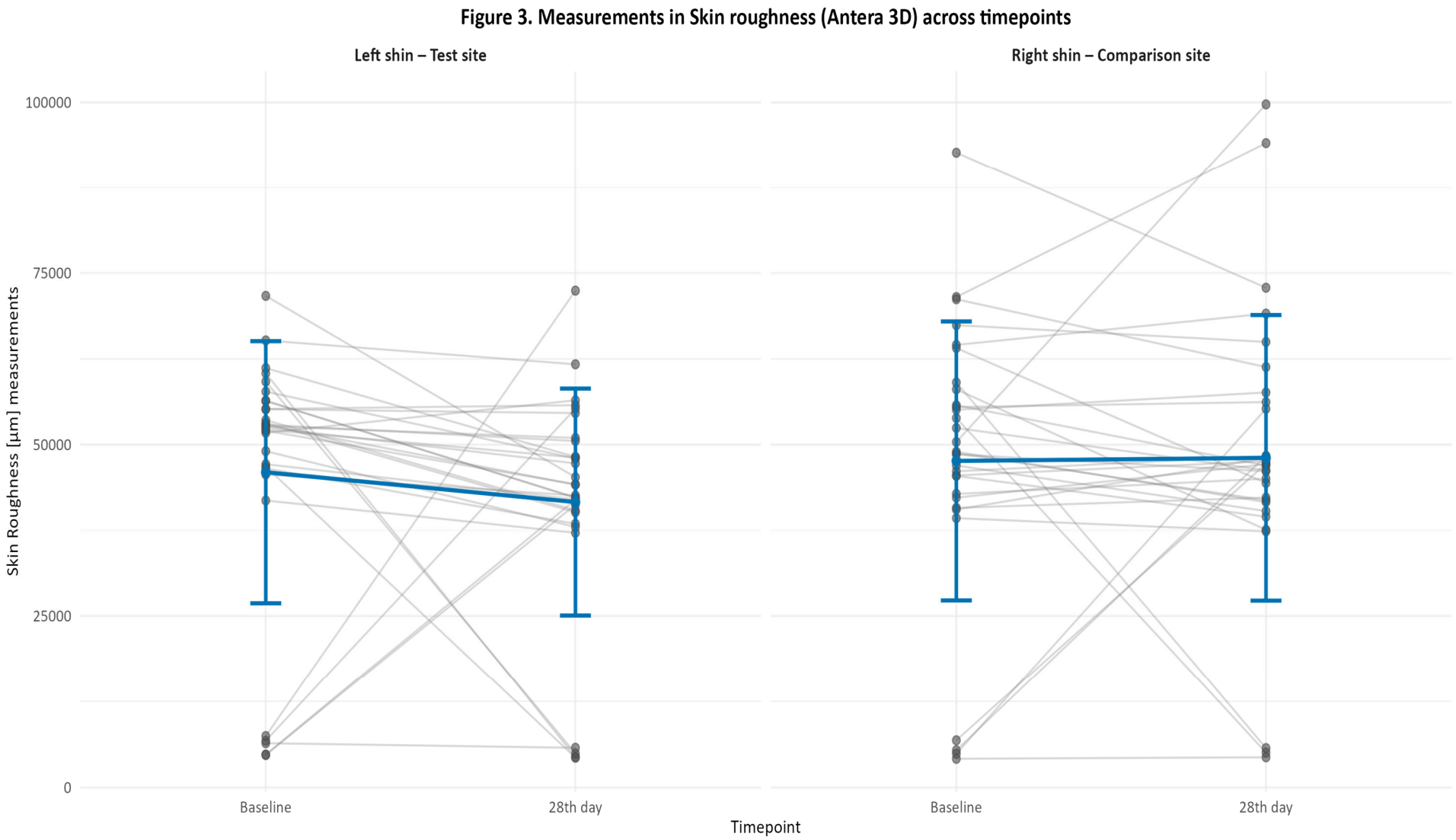
Abbreviation: CI = Confidence Interval

*Table S3.1.3 Descriptive statistics for Skin roughness (Antera 3D) relative change from baseline [%] in measurements by site and timepoint*

| Skin Roughness [µm] | 28th day N = 30 | 95% CI |
|---|---|---|
| **Left shin (Test product)** | | -19.66 - 190.77 |
| N Non-missing | 30 | |
| Mean (SD) | 85.6 (281.8) | |
| Median [Q1, Q3] | -11.1 [-24.5, -3.2] | |
| Min - Max | -92.7 - 872.4 | |
| **Right shin (Comparison product)** | | -21.39 - 170.49 |
| N Non-missing | 30 | |
| Mean (SD) | 74.5 (256.9) | |
| Median [Q1, Q3] | -1.1 [-14.1, 7.1] | |
| Min - Max | -90.6 - 1031.1 | |

Abbreviation: CI = Confidence Interval

*Figure S3. Skin roughness (Antera 3D) measurements across timepoints*



## 3.2. Within-site over time comparisons

*Table S3.2.1 Within-site comparisons of Skin roughness (Antera 3D) (Left shin – Test site) paired comparisons: T0 vs T28.*

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 28th day | -4347.60 | 25458.39 | -13853.92 | 5158.72 | Wilcoxon signed-rank | 0.018 | 0.018 |

*Table S3.2.2 Within-site comparisons of Skin roughness (Antera 3D) (Right shin – Comparison site) paired comparisons: T0 vs T28.*

| Comparison (vs Baseline) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| 28th day | 446.77 | 23423.44 | -8299.69 | 9193.22 | Wilcoxon signed-rank | 0.607 | 0.607 |

## 3.3. Between-sites at the same timepoint

*Table S3.3.1 Between-site comparisons at the same timepoints*

| Left vs Right shin at: | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|
| Baseline | -1649.57 | 28557.27 | -12313.03 | 9013.89 | Wilcoxon signed-rank | 0.593 | 0.593 |
| 28th day | -6443.93 | 25213.99 | -15858.99 | 2971.13 | Wilcoxon signed-rank | 0.217 | 0.217 |

## 3.4. One-sample test for testing significance of relative (percentage) change vs. 0%

*Table S3.4.1 Relative (%) change in Skin roughness (Antera 3D) from baseline (T0)*

| Site | Relative (%) change from baseline (T0) | Mean difference | SD | 95% CI Lower | 95% CI Upper | Test | p-value |
|---|---|---|---|---|---|---|---|
| Left shin – Test site | 28th day | 85.56 | 281.77 | -19.66 | 190.77 | Wilcoxon signed-rank | 0.025 |
| Right shin – Comparison site | 28th day | 74.55 | 256.93 | -21.39 | 170.49 | Wilcoxon signed-rank | 0.773 |

## 3.5. Between-site comparisons for relative (%) change at the same timepoints

*Table S3.5.1 Between-site comparisons for relative (%) change at the same timepoints*

| Left vs Right shin at: | Mean difference | SD | 95% CI Lower | 95% CI Upper | Cohen's d | Test | p-value | p-value (Bonferroni) |
|---|---|---|---|---|---|---|---|---|
| 28th day | 11.01 | 349.82 | -119.62 | 141.63 | 0.03 | Wilcoxon signed-rank | 0.113 | 0.113 |