

Skin Moisture

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Content

1	Facial Skin Moisture	1
1.1	Descriptive statistics and test for normal distribution	1
1.2	Figures	1
1.3	Statistical comparisons	1
2	Forearm Skin Moisture	2
2.1	Descriptive statistics and test for normal distribution	2
2.2	Figures	2
2.3	Statistical comparisons	2
3	Statistical methods	3

1 Facial Skin Moisture

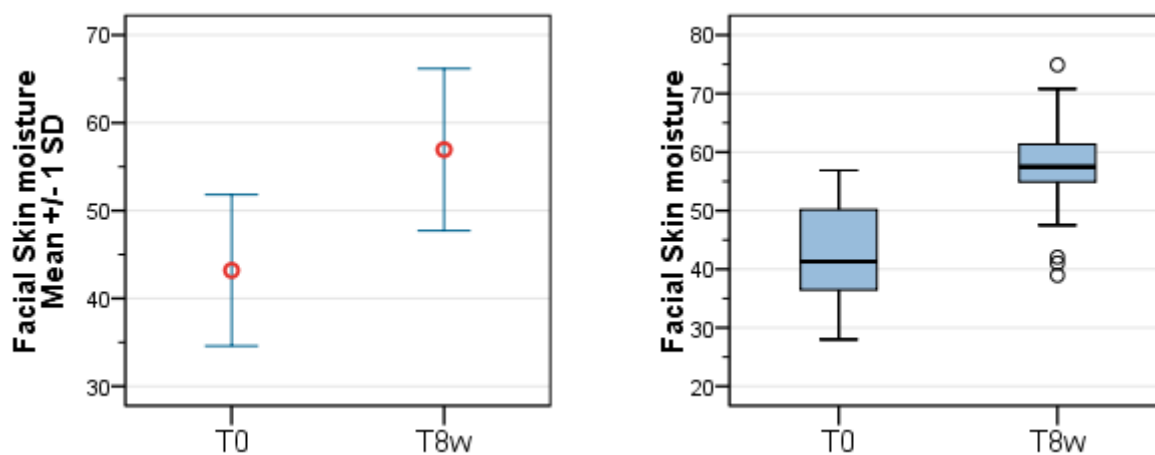
1.1 Descriptive statistics and test for normal distribution

Facial Skin Moisture	N	Mean	Standard deviation	Min	Max	Percentiles		
						25th	50th (Median)	75th
T0	20	43.19	8.62	28.00	56.90	54.88	57.50	61.88
T8 weeks	20	56.95	9.24	38.95	74.90	5.63	10.90	21.54
Difference T8w-T0	20	13.76	9.31	1.75	32.65	12.27	25.28	53.99
Percentage Change T8w-T0	20	34.77	24.94	3.08	80.08	54.88	57.50	61.88

Facial Skin Moisture	Kolmogorov-Smirnov test with Lilliefors correction		
	Statistics	df	p value
T0	0.166	20	p=0.150
T8 weeks	0.210	20	p=0.021

We could show significant deviations from normal distribution in facial skin moisture at T8w (Kolmogorov-Smirnov-Test, $p=0.021$). Consequently, statistical analyses will be performed using non-parametric methods.

1.2 Figures



1.3 Statistical comparisons

We could show a significant increase in facial skin moisture between baseline measurement in T0 and measurement after 8 weeks (Wilcoxon matched pairs test, $p<0.001$).

2 Forearm Skin Moisture

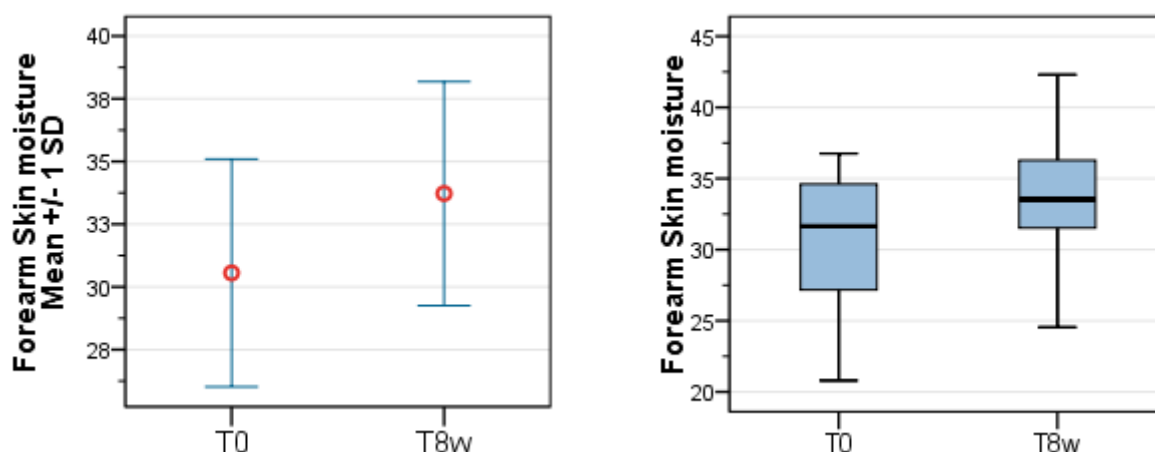
2.1 Descriptive statistics and test for normal distribution

Forearm Skin Moisture	N	Mean	Standard deviation	Min	Max	Percentiles		
						25th	50th (Median)	75th
T0	20	30.56	4.54	20.80	36.75	27.06	31.65	34.83
T8 weeks	20	33.72	4.47	24.55	42.30	31.24	33.53	36.36
Difference T8w-T0	20	3.16	3.01	-0.20	11.05	0.88	2.03	5.06
Percentage Change T8w-T0	20	11.08	10.53	-0.56	35.36	2.64	6.32	18.02

Forearm Skin Moisture	Kolmogorov-Smirnov test with Lilliefors correction		
	Statistics	df	p value
T0	0.129	20	p=0.200
T8 weeks	0.117	20	p=0.200

We could not show any significant deviations from normal distribution in forearm skin moisture at both measurement time points (Kolmogorov-Smirnov-Test, $p \geq 0.05$). Consequently, statistical analyses will be performed using parametric methods.

2.2 Figures



2.3 Statistical comparisons

We could show a significant increase in forearm skin moisture between baseline measurement in T0 and measurement after 8 weeks (Matched pairs t test, $p < 0.001$).

3 Statistical methods

All measurements were presented as mean and standard deviation, minimum and maximum, as well as quartiles. They were tested for normal distribution at both time points using the Kolmogorov Smirnov test with Lilliefors correction.

Facial skin moistures showed significant deviations from normal distribution at 8 weeks, consequently time points were compared the non-parametric Wilcoxon matches pairs test. In forearm skin moisture measurements we could not show any significant deviation from normal distribution thus time points were compared by parametric matched pairs test.

All tests were performed two sided with significance level of 5%. Statistical analyses were done by using SPSS Statistics 24 (SPSS Inc. an IBM Company, Chicago, IL).

4 Conclusion

4.1 Facial moisture

We could show a significant increase in facial skin moisture between baseline measurement in T0 and measurement after 8 weeks (Wilcoxon matched pairs test, $p < 0.001$).

4.2 Forearm moisture

We could show a significant increase in forearm skin moisture between baseline measurement in T0 and measurement after 8 weeks (Matched pairs t test, $p < 0.001$).