

## Attachment 1

Statistical analysis of RH increase after blistering. Influential factor: Material

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Before-After	,129	108	,000	,928	108	,000

a. Lilliefors Significance Correction

### Report

Before blistering -After blistering

Material	N	Minimum	Maximum	Mean	Std. Deviation
ACL	32	1,12	9,95	4,15	2,525
P200	20	4,40	12,48	9,28	2,628
P250	20	0,21	13,58	9,41	4,258
PVC	4	5,85	6,37	6,11	0,287
TRI	32	-0,05	6,30	3,28	1,662
Total	108	-0,05	13,58	5,89	3,809

### Kruskal-Wallis Test

#### Ranks

Material	N	Mean Rank	
Before-After	ACL	32	40,31
	P200	20	82,10
	P250	20	79,33
	PVC	4	64,50
	TRI	32	34,67
	Total	108	

#### Test Statistics<sup>a,b</sup>

	Before-After
Chi-Square	47,894
df	4
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: Material

### Mann-Whitney Test

**Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	ACL	32	18,34	587,00
	P200	20	39,55	791,00
	Total	52		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	59,000
Wilcoxon W	587,000
Z	-4,909
Asymp. Sig. (2-tailed)	,000

**Mann-Whitney Test**

**Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	ACL	32	19,83	634,50
	P250	20	37,18	743,50
	Total	52		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	106,500
Wilcoxon W	634,500
Z	-4,016
Asymp. Sig. (2-tailed)	,000

**Mann-Whitney Test**

**Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	ACL	32	17,63	564,00
	PVC	4	25,50	102,00
	Total	36		

**Test Statistics<sup>a</sup>**

	Before-After

Mann-Whitney U	36,000
Wilcoxon W	564,000
Z	-1,410
Asymp. Sig. (2-tailed)	,159
Exact Sig. [2*(1-tailed Sig.)]	,173 <sup>b</sup>

## Mann-Whitney Test

**Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	ACL	32	34,02	1088,50
	TRI	32	30,98	991,50
	Total	64		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	463,500
Wilcoxon W	991,500
Z	-,651
Asymp. Sig. (2-tailed)	,515

## Mann-Whitney Test

**Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	P200	20	18,70	374,00
	P250	20	22,30	446,00
	Total	40		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	164,000
Wilcoxon W	374,000
Z	-,974
Asymp. Sig. (2-tailed)	,330
Exact Sig. [2*(1-tailed Sig.)]	,341 <sup>b</sup>

## Mann-Whitney Test

**Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	P200	20	13,70	274,00
	PVC	4	6,50	26,00
	Total	24		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	16,000
Wilcoxon W	26,000
Z	-1,859
Asymp. Sig. (2-tailed)	,063
Exact Sig. [2*(1-tailed Sig.)]	,068 <sup>b</sup>

**Mann-Whitney Test****Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	P200	20	41,65	833,00
	TRI	32	17,03	545,00
	Total	52		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	17,000
Wilcoxon W	545,000
Z	-5,699
Asymp. Sig. (2-tailed)	,000

**Mann-Whitney Test****Ranks**

Material		N	Mean Rank	Sum of Ranks
Before-After	P250	20	13,70	274,00
	PVC	4	6,50	26,00
	Total	24		

**Test Statistics<sup>a</sup>**

	Before-After
Mann-Whitney U	16,000
Wilcoxon W	26,000
Z	-1,859
Asymp. Sig. (2-tailed)	,063
Exact Sig. [2*(1-tailed Sig.)]	,068 <sup>b</sup>

## Mann-Whitney Test

### Ranks

Material		N	Mean Rank	Sum of Ranks
Before-After	P250	20	37,65	753,00
	TRI	32	19,53	625,00
	Total	52		

### Test Statistics<sup>a</sup>

	Before-After
Mann-Whitney U	97,000
Wilcoxon W	625,000
Z	-4,194
Asymp. Sig. (2-tailed)	,000

## Mann-Whitney Test

### Ranks

Material		N	Mean Rank	Sum of Ranks
Before-After	PVC	4	33,50	134,00
	TRI	32	16,63	532,00
	Total	36		

### Test Statistics<sup>a</sup>

	Before-After
Mann-Whitney U	4,000
Wilcoxon W	532,000
Z	-3,020
Asymp. Sig. (2-tailed)	,003
Exact Sig. [2*(1-tailed Sig.)]	,000 <sup>b</sup>

Attachment Table I

Material	N	The lowest RH change	The highest RH change	Average RH change(M)	SD
ACL	32	1,12	9,95	4,15	2,525
P200	20	4,40	12,48	9,28	2,628
P250	20	0,21	13,58	9,41	4,258
PVC	4	5,85	6,37	6,11	0,287
TRI	32	-0,05	6,30	3,28	1,662
Total	108	-0,05	13,58	5,89	3,809

Attachment Table II

Material		Mean change	Mann-Whitney U	p
ACL	P200	-5,13	59,0	0,000
	P250	-5,26	106,5	0,000
	PVC	-1,96	36,0	0,159
	TRI	0,87	463,5	0,515
P200	ACL	5,13	59,0	0,000
	P250	-0,14	164,0	0,330
	PVC	3,17	16,0	0,063
	TRI	6,00	17,0	0,000
P250	ACL	5,26	106,5	0,000
	P200	0,14	164,0	0,330
	PVC	3,30	16,0	0,063
	TRI	6,14	97,0	0,000
PVC	ACL	1,96	36,0	0,159
	P200	-3,17	16,0	0,063
	P250	-3,30	16,0	0,063
	TRI	2,83	4,0	0,003
TRI	ACL	-0,87	463,5	0,515
	P200	-6,00	17,0	0,000
	P250	-6,14	97,0	0,000
	PVC	-2,83	4,0	0,003

## Statistical analysis of RH increase after blistering. Influential factor: cavity size

Attachment Table III

Before-After

Cavity size	N	The lowest RH change [%]	The highest RH change [%]	Average RH change(M)	SD [% RH]
1	20	0,21	11,94	5,6486	3,60598
2	24	2,65	13,02	6,3122	3,82716
3	24	1,12	13,58	4,8624	4,12475
4	24	2,28	11,76	6,3431	3,05150
5	16	-0,05	13,57	6,4041	4,64028
Total	108	-0,05	13,58	5,8876	3,80893

## Kruskal-Wallis Test

### Ranks

Cavity size	N	Mean Rank
Before-After 1	20	52,65
2	24	59,21
3	24	42,60
4	24	60,56
5	16	58,50
Total	108	

### Test Statistics<sup>a,b</sup>

	Before-After
Chi-Square	5,234
df	4
Asymp. Sig.	<b>0,264</b>

