SUPPLEMENTARY INFORMATION

Koivuniemi R et al.

Comparison of the Therapeutic Effects of Native and Anionic Nanofibrillar Cellulose Hydrogels for Full-Thickness Skin Wound Healing

SUPPLEMENTARY MATERIALS AND METHODS

Power analysis

The sample size for all groups was calculated as follows:

Type 1 error rate = 5%

Co-efficient of variation, CV = 15%

Size of effect expected or of interest to detect, d = 25%

Number of replications, r = 15.7 x (CV/d)2, so r = 5.65 = 6.

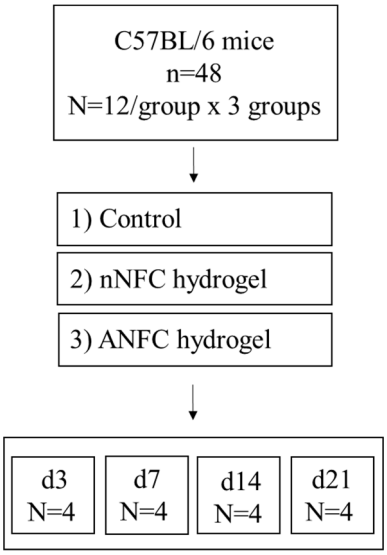
Six wounds per treatment group are required, and we proposed to include an additional 10% in case of unforeseen events (6 + 0.1*6 = 7 wounds in total). Two wounds will be created on each animal; therefore 4 animals are required per treatment group as indicated in Supplementary Table S1 below.

Supplementary Table S1. Originally planned treatment groups.

Treatment groups				
No of mice	Day 3	Day 7	Day 14	Day 21
Ctrl	4	4	4	4
nNFC	4	4	4	4

ANFC	4	4	4	4

There are three treatments that will be analyzed at 4 time points according to the Supplementary Figure S1 below; therefore 4 animals x 3 groups x 4 time points = 48 animals will be required for the study.



Supplementary Figure S1. In vivo wound treatments.

Due to splint failures, a death of two animals and an infection in one wound, the number of final samples valid for the analyses was less than expected. Therefore, some animals were regrouped during the study so that there would be at least seven animals per group at time points day 3 and day 7. The valid sample numbers are indicated in Supplementary Table S2 below.

Supplementary Table S2. The number of valid samples used for analyses.

No of valid final samples				
No of wounds	Day 3	Day 7	Day 14	Day 21

Ctrl	8	5	-	-
nNFC	8	5	-	-
ANFC	6	4	1	-

Randomization

Number of animals randomly assigned to different study groups and used for surgery:

Week 1					
Mon	Tue	Wed	Thu	Fri	Sat
3x Ctrl	2x nNFC	1x Ctrl	4x Ctrl		
2x nNFC	4x ANFC				

Week 2					
Mon	Tue	Wed	Thu	Fri	Sat
				8x nNFC	1x Ctrl
					2x nNFC
					1x ANFC

Week 3					
Mon	Tue	Wed	Thu	Fri	Sat
2x ANFC		6x ANFC	3x Ctrl	1x Ctrl	
			1x ANFC		

Week 4					
Mon	Tue	Wed	Thu	Fri	Sat
2x Ctrl	3x Ctrl				
2x nNFC					

Supplementary Figure S2. Randomization of animals used for surgery.