

SUPPLEMENTAL MATERIAL

Supplemental Table 1. Between groups analysis

a) ITT Analysis ($n=50$; f-ESWT=26; UST=24)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
UST at baseline	1 (reference)	-	-
f-ESWT at 2 months	0.30	0.06 ; 1.40	0.127
f-ESWT at 6 months	0.17	0.01 ; 1.93	0.151
	Coefficient*	95 % C.I.	p value
p-NRS (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	-1.45	-2.67 ; -0.24	0.020
f-ESWT at 6 months vs UST at baseline	-1.42	-2.81 ; -0.02	0.047
LEFS total score (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	5.78	-4.07 ; 15.63	0.244
f-ESWT at 6 months vs UST at baseline	2.99	-8.28 ; 14.26	0.596

*mean variation

b) ITT Analysis adjusted for BMI ($n=44^{\#}$; f-ESWT=23; UST=14)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
UST at baseline	1 (reference)	-	-
f-ESWT at 2 months	0.29	0.06 ; 1.52	0.144
f-ESWT at 6 months	0.20	0.02 ; 2.53	0.215
	Coefficient*	95 % C.I.	p value
p-NRS (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	-1.26	-2.52 ; 0.00	0.050
f-ESWT at 6 months vs UST at baseline	-1.1	-2.52 ; 0.32	0.125
LEFS total score (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	5.04	-5.43 ; 15.51	0.337
f-ESWT at 6 months vs UST at baseline	2.25	-9.94 ; 14.44	0.712

*mean variation

BMI data missing for 6 patients

c) ITT Analysis adjusted for pain duration at baseline (n=49#; f-ESWT=26; UST=23)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
UST at baseline	1 (reference)	-	-
f-ESWT at 2 months	0.30	0.07 ; 1.40	0.127
f-ESWT at 6 months	0.17	0.01 ; 1.95	0.154
p-NRS (linear regression analysis)			
	Coefficient*	95 % C.I.	p value
	1 (reference)	-	-
f-ESWT at 2 months vs UST at baseline	-1.42	-2.64 ; -0.2	0.023
f-ESWT at 6 months vs UST at baseline	-1.38	-2.78 ; 0.01	0.052
LEFS total score (linear regression analysis)			
	1 (reference)	-	-
f-ESWT at 2 months vs UST at baseline	5.59	-4.19 ; 15.36	0.256
f-ESWT at 6 months vs UST at baseline	2.79	-8.41 ; 14.00	0.619

*mean variation

pain duration data missing for 1 patient

d) PP Analysis (LEFS: n=42; f-ESWT=24; UST=18)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
UST at baseline	1 (reference)	-	-
f-ESWT at 2 months	0.50	0.11 ; 2.30	0.373
f-ESWT at 6 months	0.23	0.02 ; 2.77	0.247
p-NRS (linear regression analysis)			
	Coefficient*	95 % C.I.	p value
	-0.87	-2.06 ; 0.32	0.149
f-ESWT at 2 months vs UST at baseline	-1.12	-2.56 ; 0.32	0.124
LEFS total score (linear regression analysis)			
	2.97	-7.88 ; 13.83	0.583
f-ESWT at 2 months vs UST at baseline	1.97	-10.15 ; 14.10	0.744

*mean variation

e) PP Analysis adjusted for BMI ($n=40^{\#}$, f-ESWT=22; UST=18)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
UST at baseline	1 (reference)	-	-
f-ESWT at 2 months	0.39	0.80 ; 1.96	0.251
f-ESWT at 6 months	0.23	0.02 ; 2.95	0.260
	Coefficient*	95 % C.I.	p value
p-NRS (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	1 (reference)	-	-
f-ESWT at 6 months vs UST at baseline	-0.87	-2.09 ; 0.36	0.159
	-1.05	-2.49 ; 0.4	0.151
LEFS total score (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	1 (reference)	-	-
f-ESWT at 6 months vs UST at baseline	3.87	-7.28 ; 15.03	0.487
	2.69	-9.94 ; 15.32	0.669

*mean variation

BMI data missing for 2 patients

f) PP Analysis adjusted for pain duration at baseline ($n=42$, f-ESWT=24; UST=18)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
UST at baseline	1 (reference)	-	-
f-ESWT at 2 months	0.47	0.10 ; 2.16	0.330
f-ESWT at 6 months	0.21	0.02 ; 2.56	0.221
	Coefficient*	95 % C.I.	p value
p-NRS (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	1 (reference)	-	-
f-ESWT at 6 months vs UST at baseline	-0.86	-2.05 ; 0.34	0.156
	-1.12	-2.56 ; 0.33	0.126
LEFS total score (linear regression analysis)			
f-ESWT at 2 months vs UST at baseline	1 (reference)	-	-
f-ESWT at 6 months vs UST at baseline	2.89	-8.03 ; 13.81	0.596
	1.97	-10.21 ; 14.15	0.745

*mean variation

p-NRS= pain-numeric rating scale; LEFS= lower extremity functional scale; f-ESWT= focused extracorporeal shock wave therapy; UST=ultrasound therapy.

Supplemental Table 2. Within groups analysis

a) ITT Analysis – f-ESWT group (n=26)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
baseline	1 (reference)	-	-
2 months vs baseline	0.10	0.03 ; 0.29	<0.001
6 months vs baseline	0.02	0.00 ; 0.14	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.06			
p-NRS (linear regression analysis)			
2 months vs baseline	-3.03	-3.70 ; -2.36	<0.001
6 months vs baseline	-4.32	-5.21 ; -3.44	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.003			
LEFS total score (linear regression analysis)			
2 months vs baseline	16.08	8.94 ; 23.23	<0.001
6 months vs baseline	19.02	11.48 ; 26.94	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.22			

*mean variation

b) ITT Analysis adjusted for BMI – f-ESWT group (n=23[#])

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
baseline	1 (reference)	-	-
2 months vs baseline	0.05	0.01 ; 0.21	<0.001
6 months vs baseline	0.01	0.00 ; 0.10	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.101			
p-NRS (linear regression analysis)			
2 months vs baseline	-3.04	-3.81 ; -2.27	<0.001
6 months vs baseline	-4.19	-5.11 ; -3.28	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.012			
LEFS total score (linear regression analysis)			
2 months vs baseline	16.48	8.72 ; 24.25	<0.001
6 months vs baseline	19.84	11.11 ; 28.57	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.234			

*mean variation

[#] BMI data missing for 3 patients

c) ITT Analysis adjusted for pain duration at baseline – f-ESWT group (n=26)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
baseline	1 (reference)	-	-
2 months vs baseline	0.06	0.02 ; 0.24	<0.001
6 months vs baseline	0.01	0.00 ; 0.09	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.057			
 p-NRS (linear regression analysis)			
2 months vs baseline	-3.01	-3.69 ; -2.34	<0.001
6 months vs baseline	-4.31	-5.21 ; -3.42	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.003			
 LEFS total score (linear regression analysis)			
2 months vs baseline	15.97	8.69 ; 23.24	<0.001
6 months vs baseline	19.15	11.33 ; 26.27	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.223			

*mean variation

d) ITT Analysis – UST group (n=24)

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
baseline	1 (reference)	-	-
2 months vs baseline	0.32	0.11 ; 0.96	0.042
6 months vs baseline	0.10	0.03 ; 0.37	0.001 [§]
[§] 6 months vs 2 months: p value = 0.021			
 p-NRS (linear regression analysis)			
2 months vs baseline	-1.58	-2.65 ; -0.51	0.006
6 months vs baseline	-2.91	-4.05 ; -1.76	<0.001 [§]
[§] 6 months vs 2 months: p value = 0.004			
 LEFS total score (linear regression analysis)			
2 months vs baseline	10.30	3.03 ; 17.58	0.008
6 months vs baseline	16.21	7.47 ; 24.96	0.001 [§]
[§] 6 months vs 2 months: p value = 0.018			

*mean variation

e) ITT Analysis adjusted for BMI – UST group (n=21[#])

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
baseline	1 (reference)	-	-
2 months vs baseline	0.28	0.09 ; 0.87	0.028
6 months vs baseline	0.09	0.02 ; 0.34	<0.001[§]
[§] 6 months vs 2 months: p value = 0.022			
p-NRS (linear regression analysis)			
2 months vs baseline	-1.76	-2.84 ; -0.69	0.003
6 months vs baseline	-3.08	-4.26 ; -1.91	<0.001[§]
[§] 6 months vs 2 months: p value = 0.0046			
LEFS total score (linear regression analysis)			
2 months vs baseline	11.43	3.77 ; 19.09	0.005
6 months vs baseline	17.58	8.32 ; 26.85	0.001[§]
[§] 6 months vs 2 months: p value = 0.015			

*mean variation

BMI data missing for 3 patients

f) ITT Analysis adjusted for pain duration at baseline – UST group (n=23[#])

Variable	OR	95 % C.I.	p value
p-NRS ≥ 4 (logistic regression analysis)			
baseline	1 (reference)	-	-
2 months vs baseline	0.33	0.11 ; 1.00	0.051
6 months vs baseline	0.10	0.03 ; 0.39	0.01[§]
[§] 6 months vs 2 months: p value = 0.022			
p-NRS (linear regression analysis)			
2 months vs baseline	-1.54	-2.61 ; -0.46	0.007
6 months vs baseline	-2.86	-4.00 ; -1.71	<0.001[§]
[§] 6 months vs 2 months: p value = 0.004			
LEFS total score (linear regression analysis)			
2 months vs baseline	9.98	2.49 ; 17.47	0.011
6 months vs baseline	15.82	7.17 ; 24.48	0.001[§]
[§] 6 months vs 2 months: p value = 0.015			

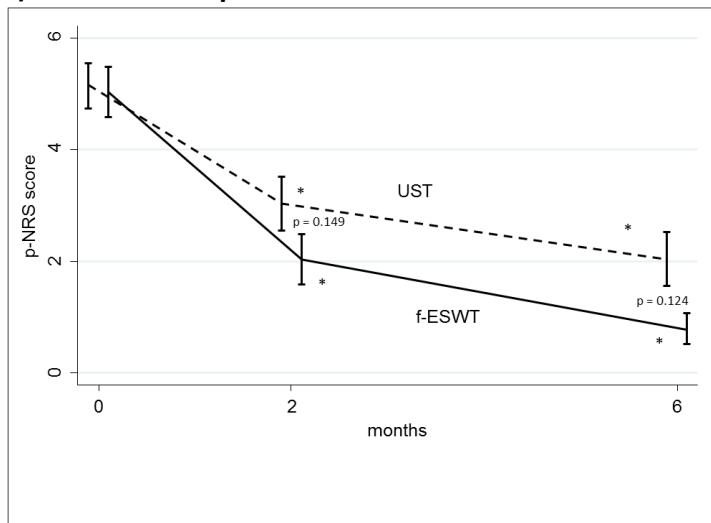
*mean variation

pain duration at baseline data missing for 1 patient

p-NRS= pain-numeric rating scale; LEFS= lower extremity functional scale; f-ESWT= focused extracorporeal shock wave therapy; UST=ultrasound therapy.

Supplemental Figure 1. Line charts of the outcome measures for the PP analysis
 (n=42: f-ESWT=24, UST=18)

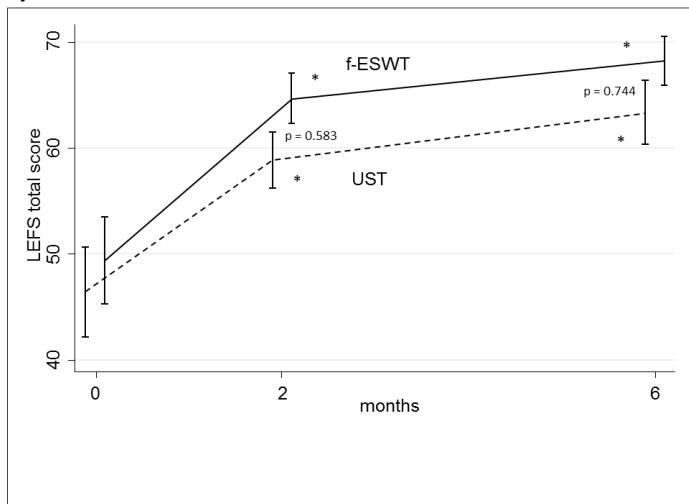
a) Line chart for p-NRS score



p-NRS = pain-numeric rating scale; f-ESWT = focused extracorporeal shock wave therapy; UST = ultrasound therapy.

[] = standard error; p values for the comparisons between groups at follow up 2 months and 6 months are reported
 * comparisons within group: f-ESWT: baseline – 2 months: p < 0.0001 ; 2 months – 6 months: p=0.005
 UST: baseline – 2 months: p < 0.001 ; 2 months – 6 months : p=0.171

b) Line chart for LEFS total score



LEFS = lower extremity functional scale; f-ESWT = focused extracorporeal shock wave therapy; UST = ultrasound therapy.

[] = standard error; p values for the comparisons between groups at follow up 2 months and 6 months are reported
 * comparisons within group: f-ESWT: baseline – 2 months: p < 0.001 ; 2 months – 6 months: p=0.011
 UST: baseline – 2 months: p < 0.061 ; 2 months – 6 months : p=0.03