

Tables

Table 1. Sample Characteristics for Validation Sample

Gender (n=225)	Male	45/225
	Female	180/225
Age at surgery time (n=295)	Mean (S.D. ^a)	72.6(7.6)
	Range	51 - 89
Side (n=295)	Right	163/295
	Left	135/295
BMI ^b (n=295)	Mean (S.D. ^a)	26.3(4.7)
	Range	16.6 - 42.1
Preoperative ROM ^c (n=295)	Mean (S.D. ^a)	109.3(20.3)
	Range	40 - 145
Postoperative ROM ^c (n=295)	Mean (S.D. ^a)	121.9(13.1)
	Range	75 - 150
Time since surgery (month) (n=295)	Mean (S.D. ^a)	49.5(30.0)
	Range	12 - 139

^aS.D.: Standard deviation

^bBMI: Body Mass Index

^cROM: Range of Motion

**Table 2 Postoperative scores of
Forgotten Joint Score - 12 , The 2011 Knee Society Scoring system and Noise**

	Mean	S.D. ^a	min.	Max.	Ceiling effect	Floor effect
FJS-12 (n=295)	49.8 ± 28.4		0	100	15.59% (46/295)	11.86% (35/295)
KSS2011 (n=295)	119.3 ± 32.4		6	178	16.61% (49/295)	0.67% (2/295)
Noise (n=295)	3.1 ± 1.3		0	4	56.61% (167/295)	1.69% (5/295)

^a S.D. : Standard deviation

Table 3. Results of Forgotten Joint Score - 12

Questionnaire		Scores (mean $\pm$ S.D. ^a)	Missing rate
Are you aware of your artificial joint...			
1	in bed at night?	2.30 $\pm$ 1.42	0.00% (0/295)
2	when you are sitting on a chair for more than 1 hour?	2.40 $\pm$ 1.41	0.00% (0/295)
3	when you are walking for more than 15 minutes?	2.88 $\pm$ 1.51	0.00% (0/295)
4	when you are taking a bath/shower?	2.51 $\pm$ 1.47	0.00% (0/295)
5	when you are traveling in a car?	2.33 $\pm$ 1.34	0.34% (1/295)
6	when you are climbing stairs?	3.45 $\pm$ 1.44	0.00% (0/295)
7	when you are walking on uneven ground?	3.40 $\pm$ 1.41	1.02% (3/295)
8	when you are standing up from a low-sitting position?	3.67 $\pm$ 1.35	0.00% (0/295)
9	when you are standing for long periods of time?	3.29 $\pm$ 1.48	0.34% (1/295)
10	when you are doing housework or gardening?	3.15 $\pm$ 1.42	0.00% (0/295)
11	when you are taking a walk/hiking?	3.30 $\pm$ 1.46	2.71% (8/295)
12	when you are doing your favorite sport?	3.47 $\pm$ 1.48	14.58% (43/295)
<i>Scores never 1, almost never 2, seldom 3, sometimes 4, mostly 5</i>			

^a S.D. : Standard deviation

**Table 4. Postoperative Scores of 2011 Knee Society Scoring System (KSS 2011)
& Correlation between FJS-12 and Subcategories of KSS 2011**

	Postoperative Scores(mean $\pm$ SD ^a)	Spearman's correlation coefficient	p-value
2011 Knee Society Scoring System			
I.Symptoms score	19.5 $\pm$ 5.7	0.61	<0.001
II.Satisfaction score	27.7 $\pm$ 8.3	0.63	<0.001
III.Expectation score	10.6 $\pm$ 3.1	0.44	<0.001
IV.Functional activities score	61.5 $\pm$ 21.3	0.60	<0.001
i. Walking and standings	19.0 $\pm$ 9.3	0.41	<0.001
ii.Standard activities	23.1 $\pm$ 5.6	0.65	<0.001
iii.Advanced activities	11.3 $\pm$ 6.6	0.48	<0.001
iv.Discretionary activities	8.1 $\pm$ 5,3	0.45	<0.001

^a S.D. : Standard deviation

Table 5 Correlation to FJS-12, KSS2011, Noise

	mean(S.D. ^a)	FJS-12 to		KSS2011 to		Noise to	
Age	72.6 (7.6)	-0.06	<i>p</i> =0.266	-0.20	<i>P</i> <0.001	0.14	<i>p</i> =0.017
BMI ^b	26.3 (4.7)	0.04	<i>p</i> =0.519	-0.05	<i>p</i> =0.406	-0.09	<i>p</i> =0.126
Preoperative ROM ^c	109.3 (20.3)	-0.02	<i>p</i> =0.712	0.01	<i>p</i> =0.895	-0.12	<i>p</i> =0.042
Postoperative ROM ^c	121.9 (13.3)	0.03	<i>p</i> =0.625	0.14	<i>p</i> =0.016	-0.15	<i>p</i> =0.008
Noise	3.1 (1.3)	0.28	<i>P</i> <0.001	0.20	<i>P</i> <0.001	****	****

^a S.D.: Standard Deviation, ^b BMI: Body mass index, ^c ROM: Range of motion

Table 6 ANOVA in FJS-12, KSS 2011, Postoperative ROM, Noise by mechanism of TKA

		BCS ^a n=24	CR ^b n=78	CS ^c n=102	PS ^d n=91	F-statistic	p-value	Power to Detect	Significant difference pair in Steel-Dwass
Age	Mean (S.E. [§])	71.8 (1.5)	72.6 (0.8)	74.3 (0.7)	70.9 (0.8)	3.51	0.0155	0.78	PS ^d – CS ^c
BMI ^e	Mean (S.E. [§])	26.0 (1.0)	25.6 (0.5)	26.0 (0.5)	27.0 (0.5)	1.05	0.3726	0.28	
Preoperative ROM ^f	Mean (S.E. [§])	117.7 (4.1)	111.7 (2.3)	104.9 (2.0)	109.9 (2.1)	3.49	0.0161	0.78	
Postoperative ROM ^f	Mean (S.E. [§])	129.0 (2.6)	122.3 (1.4)	117.4 (1.3)	124.6 (1.3)	8.21	<0.001	0.99	PS ^d – CS ^c CS ^c – BCS ^a
FJS-12	Mean (S.E. [§])	57.2 (5.7)	55.6 (3.2)	51.2 (2.8)	41.3 (2.9)	4.58	0.0038	0.89	PS ^d – CR ^b
KSS 2011	Mean (S.E. [§])	140.3 (6.4)	124.9 (3.6)	120.1 (3.1)	108.0 (3.3)	8.43	<0.001	0.99	PS ^d – BCS ^a PS ^d – CR ^b CS ^c – BCS ^a
Noise	Mean (S.E. [§])	2.7 (0.2)	3.3 (0.1)	3.2 (0.1)	2.9 (0.1)	3.12	0.0269	0.72	

^a BCS: Bi-Cruciate Stabilized, ^b CR: Cruciate Retaining, ^c CS: Cruciate Sacrificed,

^d PS: Posterior Stabilized, ^e BMI: Body Mass Index, ^f ROM: Range of Motion, [§] S.E.: Standard Error