

TABLE E-1 Provisional Version (Version 2.0) of SMC PFS (Samsung Medical Center Patellofemoral Score) for Patellofemoral Pain

Patellofemoral Pain*	No Pain	The Higher the Number, the More Painful										Intractable Pain
	0	1	2	3	4	5	6	7	8	9	10	
1. Climbing up stairs												
2. Walking down stairs												
3. Rising from floor												
4. Sitting down on floor												
5. Rising from a chair												
6. Sitting down on a chair												
7. Sitting on a chair for 1 minute												
8. Sitting on a chair for 5 minutes												
9. Sitting on a chair for 10 minutes												
10. Rising from squatting position												
11. Squatting												
12. Squatting for 1 minute												
13. Squatting for 3 minutes												
14. Squatting for 5 minutes												

*The items selected for the final version are marked as bold. The subtotal score was 0 to 140.

TABLE E-2 Provisional Version (Version 2.0) of SMC PFS (Samsung Medical Center Patellofemoral Score) for Patellofemoral Function

Patellofemoral function*	No Difficulty	Mild	Moderate	Severe	Extreme Difficulty
	(0)	(2.5)	(5)	(7.5)	(Unable to Do) (10)
1. Climbing-up stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Walking down stairs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Rising from floor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Sitting down on floor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Rising from a chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Sitting down on a chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Sitting on a chair for 1 minute	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Sitting on a chair for 5 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Sitting on a chair for 10 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Rising from squatting position	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Squatting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Squatting for 1 minute	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Squatting for 3 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Squatting for 5 minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*The items selected for the final version are marked as bold. The subtotal score was 0 to 140.

TABLE E-3 Item Verification of the Provisional SMC PFS (Samsung Medical Center Patellofemoral Score) for Patellofemoral Pain

SMC PFS Pain†	Study Group* (N = 123)				Control Group A* (N = 28)				Control Group B* (N = 28)				P Value	
	Me an	SD	Medi an	IQ R	Me an	SD	Medi an	IQ R	Mea n	SD	Medi an	IQ R	Study vs. Control A	Study vs. Control B
1. Climbing-up stairs	4.8 3	2.5 2	5	4	2.0 7	0.9 8	2	2	0.11	0.3 1	0	0	<0.001	<0.001
2. Walking down stairs	5.3 9	2.5 9	5	4	2.6 4	0.9 5	3	1	0.04	0.1 9	0	0	<0.001	<0.001
3. Rising from floor	4.9 0	2.6 7	5	4	2.5 0	1.1 1	3	1	0.04	0.1 9	0	0	<0.001	<0.001
4. Sitting down on floor	3.9 9	2.6 5	4	4	1.9 6	1.1 7	2	2	0.04	0.1 9	0	0	<0.001	<0.001
5. Rising from a chair	3.2 0	2.3 6	3	4	1.3 6	1.0 3	1	1.5	0.00	0.0 0	0	0	<0.001	<0.001
6. Sitting down on a chair	2.2 5	2.0 7	2	4	1.2 5	1.0 8	1	2	0.00	0.0 0	0	0	0.096	<0.001
7. Sitting on a chair for 1 min‡	2.3 5	2.1 4	2	4	1.2 9	1.0 1	1	1	0.00	0.0 0	0	0	0.381	<0.001
8. Sitting on a chair for 5 min‡	2.7 7	2.3 3	2	4	1.3 2	1.0 2	1	1	0.04	0.1 9	0	0	0.032	<0.001
9. Sitting on a chair for 10 min‡	3.2 3	2.5 7	3	4	1.3 9	1.0 3	1	1	0.11	0.3 1	0	0	0.004	<0.001
10. Rising from squatting position	6.2 0	2.8 2	7	5	2.8 9	1.1 7	3	2	0.11	0.3 1	0	0	<0.001	<0.001
11. Squatting	5.7 2	3.1 1	6	5	2.7 1	1.3 0	3	2	0.00	0.0 0	0	0	<0.001	<0.001
12. Squatting for 1 min‡	5.5 5	3.2 6	6	6	2.7 5	1.1 7	3	2	0.11	0.3 1	0	0	<0.001	<0.001
13. Squatting for 3 min‡	5.9 8	3.1 2	7	6	2.8 6	1.0 4	3	2	0.29	0.4 6	0	1	<0.001	<0.001
14. Squatting for 5 min‡	6.3 8	2.9 1	7	5	3.0 4	1.0 0	3	2	0.50	0.5 8	0	1	<0.001	<0.001

*SD = standard deviation, IQR = interquartile range. †The items selected for the final version are marked as bold. ‡Dunnett test using rank with the Bonferroni correction. The other comparisons were analyzed with the Dunnett test using rank.

TABLE E-4 Item Verification of the Provisional SMC PFS (Samsung Medical Center Patellofemoral Score) for Patellofemoral Function

SMC PFS Function†	Study Group* (N = 123)				Control Group A* (N = 28)				Control Group B* (N = 28)				P Value	
	Mean	SD	Median	IQR*	Mean	SD	Median	IQR†	Mean	SD	Median	IQR†	Study vs. Control A	Study vs. Control B
1. Climbing up stairs	3.86	2.18	2.50	2.50	1.96	1.25	2.50	1.25	0.09	0.47	0	0	<0.001	<0.001
2. Walking down stairs	4.55	2.33	5.00	4	2.77	1.42	2.50	0.00	0.09	0.47	0	0	<0.001	<0.001
3. Rising from floor	4.04	2.36	2.50	2.50	2.41	1.27	2.50	0.00	0.09	0.47	0	0	<0.001	<0.001
4. Sitting down on floor	3.29	2.32	2.50	2.50	2.14	1.48	2.50	1.25	0.00	0.00	0	0	0.026	<0.001
5. Rising from a chair	2.42	2.02	2.50	2.50	0.89	1.22	0.00	2.50	0.09	0.47	0	0	<0.001	<0.001
6. Sitting down on a chair	1.63	1.72	2.50	2.50	0.80	1.19	0.00	2.50	0.00	0.00	0	0	0.027	<0.001
7. Sitting on a chair for 1 min‡	1.89	1.85	2.50	2.50	1.07	1.26	0.00	2.50	0.00	0.00	0	0	0.157	<0.001
8. Sitting on a chair for 5 min‡	2.20	1.94	2.50	2.50	1.25	1.60	0.00	2.50	0.00	0.00	0	0	0.047	<0.001
9. Sitting on a chair for 10 min‡	2.68	2.05	2.50	2.50	1.34	1.73	0.00	2.50	0.09	0.47	0	0	0.002	<0.001
10. Rising from squatting position	5.61	2.85	5.00	5.00	3.21	1.50	2.50	2.50	0.27	0.79	0	0	<0.001	<0.001
11. Squatting	5.10	3.18	5.00	5.00	3.04	1.72	2.50	2.50	0.09	0.47	0	0	0.002	<0.001
12. Squatting for 1 min‡	5.28	3.27	5.00	5.00	3.48	1.42	2.50	2.50	0.18	0.66	0	0	0.041	<0.001
13. Squatting for 3 min‡	5.81	2.91	5.00	5.00	3.48	1.42	2.50	2.50	0.45	0.98	0	0	<0.001	<0.001
14. Squatting for 5 min‡	6.24	2.74	5.00	2.50	3.66	1.27	2.50	2.50	1.07	1.26	0	2.50	<0.001	<0.001

*SD = standard deviation, IQR = interquartile range. †The items selected for the final version are marked as bold. ‡Dunnnett test using rank with the Bonferroni correction. The other comparisons were analyzed with the Dunnnett test using rank.