

Additional File 2: Brief description of home training exercises for patients with knee OA.

Table 1: Description of phase 1 exercises for patients with knee OA (exercises for postural control are not included in the table).

Type ¹ / No	Exercise	Position	M-Plane ²	RoI ³	Muscles	Tools ⁴
Week 1						
MM1 (K)	Mobilization	Supine	S	Knee/Ankle		
MM2 (K)	Mobilization	Supine	S	Hip/Knee		
MM3 (K)	Stretching	Supine	S	Ankle	Calf	
MM4 (H)	Motor learning	Supine	C/T	Hip	Adductors	EB
MM5 (H)	Motor learning	Supine	S	Hip/Knee	Hip extensors Knee flexors	EB
MM6 (K)	Mobilization	Seated	S	Hip/Knee		
MM7 (H)	Motor learning	Seated	S	Hip	Core	
MM8 (H)	Motor learning	Seated	S	Hip/Knee/Ankle	Hip flexors/Calf	
MM9 (K)	Mobilization	Seated	T	Knee		
MM10 (K)	Mobilization	Seated	S	Knee		
Week 2						
MM11 (H)	Motor learning	Seated	S	Contact area foot	Lower extremity	
MM12 (H)	Motor learning	Seated	T	Contact area foot	Lower extremity	
MM13 (H)	Stretching	Seated	S	Hip/Knee/Ankle	Hamstrings/Calf	
MM14 (H)	Motor learning	Standing		Contact area foot	Lower extremity	
MM15 (H)	Motor learning	Standing	F	Contact area foot	Lower extremity	
MM16 (H)	Motor learning	Standing	F	Contact area foot	Lower extremity	
MM17 (K)	Mobilization	Standing	S	Hip/Knee		Stick
MM18 (H)	Motor learning	Standing	S	Hip/Knee/Ankle	Core Lower extremity	
MM19 (H)	Stretching	Standing	S	Hip/Knee	Hip flexors Knee extensors	RB
MM20 (H)	Stretching	Standing	S	Hip/Knee	Hamstrings/Calf	
Week 3						
MM21 (K)	Motor learning	Supine	S	Hip/Knee	Extensors	EB
MM22 (K)	Motor learning	Supine	S	Knee	Extensors	
MM23 (H)	Motor learning	Supine	S	Hip/Knee	Hamstrings	
MM24 (K)	Stretching	Supine	S	Hip/Knee	Hamstrings/Calf	
MM25 (K)	Motor learning	Prone	S	Knee	Hamstrings	
MM26 (K)	Motor learning	Prone	S	Hip/Knee	Lower extremity	
MM27 (H)	Motor learning	Step position		Contact area foot	Lower extremity	
MM28 (H)	Motor learning	Step position		Contact area foot	Lower extremity	
MM29 (H)	Motor learning	Step position		Contact area foot	Lower extremity	
MM30 (H)	Mobilization	Step position	S	Hip/Knee	Flexors	

¹ MM: Motor learning and mobilization | S: Strengthening | H: Hip specific (numbers correspond to exercise book) | K: Knee specific (numbers correspond to additional exercise leaflet)

² M-Plane (Movement plane): S: Sagittal plane | F: Coronal plane | T: Transverse plane

³ RoI: Region of interest

⁴ EB: Exercise balls | RB: Elastic rubber bands | WC: Weight cuff

Table 2: Description of phase 2 exercises for patients with knee OA (exercises for postural control are not included in the table).

Type ¹ / No	Exercise	Position	M-Plane ²	RoI ³	Muscles	Tools ⁴
Week 4						
S1 (H)	Strengthening	Supine	S	Hip	Extensors	
S2 (H)	Strengthening	Supine	S	Hip	Flexors	
S3 (K)	Strengthening	Prone	S	Knee	Flexors	
S4 (K)	Strengthening	Supine	S	Knee	Extensors	EB
Week 5						
S5 (H)	Strengthening	Standing	S	Hip	Extensors	
S6 (H)	Strengthening	Seated	S	Hip	Flexors	
S7 (K)	Strengthening	Standing	S	Knee	Flexors	Sticks
S8 (K)	Strengthening	Seated	S	Knee	Extensors	
Week 6						
First home training session according to week 4, second home training session according to week 5.						
Week 7						
One of the exercises S1-S8 for each muscle group (hip extensors, hip flexors, knee extensors, knee flexors). Type of exercise can be chosen according to personal preferences - 4 exercises in total.						

Table 3: Description of phase 3 exercises for patients with knee OA (exercises for postural control are not included in the table).

Type ¹ / No	Exercise	Position	M-Plane ²	RoI ³	Muscles	Tools ⁴
Week 8-11: First home training session						
S11 (K)	Strengthening	Prone	S	Knee	Flexors	WC
S12 (K)	Strengthening	Supine	S	Knee	Extensors	WC/EB
S13 (K)	Strengthening	Standing	S	Knee	Flexors	Sticks/ WC
S14 (K)	Strengthening	Seated	S	Knee	Extensors	WC
Week 8-11: Second home training session						
S17 (H)	Strengthening	Standing	S	Hip	Extensors	EB
S18 (H)	Strengthening	Standing	S	Hip	Flexors	EB
S19 (K)	Strengthening	Standing	S	Knee	Extensors	Sticks
S20 (K)	Strengthening	Standing	S	Hip/Knee	Extensors	Sticks