A) Effect of knee taping for patellar medialisation only as adjunct treatment on self-reported pain

	Taping	g + Exer	cise	Exer	cise alo	ne	1	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Arrebola et al. 2020	0.43	0.79	13	1	2.31	16	17.5%	-0.31 [-1.04, 0.43]	-+-
Clark et al. 2000	35.9	28.7	20	30	39.9	20	24.6%	0.17 [-0.45, 0.79]	-
Ghourbanpour et al. 2018	26.77	18.62	15	29.92	27.56	15	18.5%	-0.13 [-0.85, 0.59]	
Günay et al. 2017	23.8	14.23	16	20.5	11.4	27	24.6%	0.26 [-0.36, 0.88]	
Songur et al. 2023	0.8	1.1	12	0.9	1	12	14.8%	-0.09 [-0.89, 0.71]	
Total (95% CI)			76			90	100.0%	0.01 [-0.29, 0.32]	
Heterogeneity: Tau ² = 0.00;	Chi ² = 1.	78, df = 4	4 (P = 0.	.78); I ² =	0%				
Test for overall effect: Z = 0.0	08 (P = 0	.93)							Taping + Exercise Exercise alone

B) Effect of knee taping for patellar medialisation only as adjunct treatment on self-

reported function

	Taping	+ Exer	cise	Exer	cise alo	ne		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Arrebola et al. 2020	-86.43	12.7	13	-83.7	15.09	16	17.6%	-0.19 [-0.92, 0.55]	
Clark et al. 2000	11.5	10.5	20	10	11.8	20	24.6%	0.13 [-0.49, 0.75]	
Ghourbanpour et al. 2018	-63.05	23.76	15	-60.62	23.35	15	18.5%	-0.10 [-0.82, 0.62]	_
Günay et al. 2017	-88.12	5.4	16	-89.15	4.6	27	24.6%	0.21 [-0.41, 0.83]	
Songur et al. 2023	-84.3	6.7	12	-83.5	9.1	12	14.8%	-0.10 [-0.90, 0.70]	
Total (95% CI)			76			90	100.0%	0.02 [-0.29, 0.32]	•
Heterogeneity: Tau ² = 0.00; Test for overall effect: Z = 0.			(P = 0.	91); I² = I	0%				-4 -2 0 2 4 Taping + Exercise Exercise alone

C) Effect of patellar taping as adjunct treatment on self-reported pain

	Taping	g + Exer	cise	Exer	cise ald	ne		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Arrebola et al. 2020	0.43	0.79	13	1	2.31	16	12.0%	-0.31 [-1.04, 0.43]	
Clark et al. 2000	35.9	28.7	20	30	39.9	20	16.8%	0.17 [-0.45, 0.79]	
Ghourbanpour et al. 2018	26.77	18.62	15	29.92	27.56	15	12.7%	-0.13 [-0.85, 0.59]	_ _
Günay et al. 2017	23.8	14.23	16	20.5	11.4	27	16.8%	0.26 [-0.36, 0.88]	
Şahan et al. 2023	2	2.18	14	1.2	1.63	25	14.8%	0.43 [-0.24, 1.09]	+
Songur et al. 2023	0.8	1.1	12	0.9	1	12	10.1%	-0.09 [-0.89, 0.71]	
Tunay et al. 2003	2.7	1.38	20	2.35	1.13	20	16.7%	0.27 [-0.35, 0.89]	
Total (95% CI)			110			135	100.0%	0.12 [-0.14, 0.37]	•
Heterogeneity: Tau ² = 0.00;	Chi ² = 3.	29, df = 6	6 (P = 0	.77); l² =	0%				
Test for overall effect: $Z = 0$.	90 (P = 0	.37)							-4 -2 0 2 4 Taping + Exercise Exercise alone

D) Effect of patellar taping as adjunct treatment on self-reported function

	Taping	+ Exer	cise	Exer	cise alo	ne	:	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% CI
Arrebola et al. 2020	-86.43	12.7	13	-83.7	15.09	16	12.0%	-0.19 [-0.92, 0.55]	
Clark et al. 2000	11.5	10.5	20	10	11.8	20	16.8%	0.13 [-0.49, 0.75]	
Ghourbanpour et al. 2018	-63.05	23.76	15	-60.62	23.35	15	12.6%	-0.10 [-0.82, 0.62]	
Günay et al. 2017	-88.12	5.4	16	-89.15	4.6	27	16.9%	0.21 [-0.41, 0.83]	
Lee et al. 2023	-68.3	9.3	20	-69.9	7.4	19	16.4%	0.19 [-0.44, 0.82]	
Şahan et al. 2023	-82.21	10.82	14	-81.03	12.76	25	15.1%	-0.10 [-0.75, 0.56]	_
Songur et al. 2023	-84.3	6.7	12	-83.5	9.1	12	10.1%	-0.10 [-0.90, 0.70]	
Total (95% CI)			110			134	100.0%	0.03 [-0.23, 0.28]	
Heterogeneity: Tau ² = 0.00;	$Chi^2 = 1.3$	5, df = 6	i (P = 0.	97); l² = l	0%				
Test for overall effect: Z = 0.	21 (P = 0.	83)							-4 -2 U 2 4 Taping + Exercise Exercise alone

E) Effect of knee kinesio taping as adjunct treatment on self-reported pain

	Taping) + Exer	cise	Exerc	ise alo	one	:	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Akbaş et al. 2011	1.71	1.67	15	0.81	1.16	16	22.5%	0.61 [-0.11, 1.34]	
Arrebola et al. 2020	0.43	0.79	13	1	2.31	16	21.8%	-0.31 [-1.04, 0.43]	
Günay et al. 2017	23.8	14.23	16	20.5	11.4	27	29.3%	0.26 [-0.36, 0.88]	- =
Şahan et al. 2023	2	2.18	14	1.2	1.63	25	26.3%	0.43 [-0.24, 1.09]	+
Total (95% CI)			58			84	100.0%	0.26 [-0.11, 0.62]	•
Heterogeneity: Tau ² = Test for overall effect:				(P = 0.3	3); I² =	13%			-4 -2 0 2 4 Taping + Exercise Exercise alone

F) Effect of knee kinesio taping as adjunct treatment on self-reported function

Taping	+ Exer	cise	Exerc	cise alo	ne		Std. Mean Difference	Std. Mean Difference
Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
-82.13	4.91	15	-81.69	9.54	16	17.8%	-0.06 [-0.76, 0.65]	_
-86.43	12.7	13	-83.7	15.09	16	16.4%	-0.19 [-0.92, 0.55]	
-88.12	5.4	16	-89.15	4.6	27	23.0%	0.21 [-0.41, 0.83]	_ _
-68.3	9.3	20	-69.9	7.4	19	22.3%	0.19 [-0.44, 0.82]	-
-82.21	10.82	14	-81.03	12.76	25	20.6%	-0.10 [-0.75, 0.56]	
		78			103	100.0%	0.03 [-0.27, 0.33]	◆
0.00; Ch	i ² = 1.08	df = 4	(P = 0.90); I [≥] = 0	%			
Z = 0.19	(P = 0.85	5)						-4 -2 U 2 4 Taping + Exercise Exercise alone
	Mean -82.13 -86.43 -88.12 -68.3 -82.21 0.00; Ch	Mean SD -82.13 4.91 -86.43 12.7 -88.12 5.4 -68.3 9.3 -82.21 10.82 0.00; Chi ^a = 1.08	-82.13 4.91 15 -86.43 12.7 13 -88.12 5.4 16 -68.3 9.3 20 -82.21 10.82 14	Mean SD Total Mean -82.13 4.91 15 -81.69 -86.43 12.7 13 -83.7 -88.12 5.4 16 -89.15 -68.3 9.3 20 -69.9 -82.21 10.82 14 -81.03 78 0.00; Chi ^p = 1.08, df= 4 (P = 0.90	Mean SD Total Mean SD -82.13 4.91 15 -81.69 9.54 -86.43 12.7 13 -83.7 15.09 9.54 -86.43 12.7 13 -83.7 15.09 9.54 -88.12 5.4 16 -89.15 4.6 -68.3 9.3 20 -69.9 7.4 -82.21 10.82 14 -81.03 12.76 78 0.00; Chi ^µ = 1.08, df = 4 (P = 0.90); P = 0	Mean SD Total Mean SD Total -82.13 4.91 15 -81.69 9.54 16 -86.43 12.7 13 -83.7 15.09 16 -88.12 5.4 16 -89.15 4.6 27 -68.3 9.3 20 -69.9 7.4 19 -82.21 10.82 14 -81.03 12.76 25 78 103 0.00; Chi ^µ = 1.08, df = 4 (P = 0.90); I ^µ = 0% 103	Mean SD Total Mean SD Total Weight -82.13 4.91 15 -81.69 9.54 16 17.8% -86.43 12.7 13 -83.7 15.09 16 16.4% -88.12 54 16 -89.15 4.6 27 23.0% -68.3 9.3 20 -69.9 7.4 19 22.3% -82.21 10.82 14 -81.03 12.76 25 20.6% 78 103 100.0% 0.00; Chi ^µ = 1.08, df= 4 (P = 0.90); ^µ = 0.% 100 100	Mean SD Total Mean SD Total Weight W, Random, 95% CI -82.13 4.91 15 -81.69 9.54 16 17.8% -0.06 [-0.76, 0.65] -86.43 12.7 13 -83.7 15.09 16 16.4% -0.019 [-0.92, 0.55] -88.12 54 16 -89.15 4.6 27 23.0% 0.21 [-0.41, 0.83] -68.3 9.3 20 -69.9 7.4 19 22.3% 0.19 [-0.44, 0.82] -82.21 10.82 14 -81.03 12.76 25 20.6% -0.10 [-0.75, 0.56] 78 103 100.0% 0.03 [-0.27, 0.33] 0.00; Chi ^p = 1.08, df= 4 (P = 0.90); I ^p = 0% 54 16 16.4%

G) Effect of untailored knee taping for patellar medialisation only as adjunct treatment

on self-reported pain

	Taping) + Exer	cise	Exer	cise alo	ne	:	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Arrebola et al. 2020	0.43	0.79	13	1	2.31	16	23.2%	-0.31 [-1.04, 0.43]	
Ghourbanpour et al. 2018	26.77	18.62	15	29.92	27.56	15	24.5%	-0.13 [-0.85, 0.59]	_ _
Günay et al. 2017	23.8	14.23	16	20.5	11.4	27	32.6%	0.26 [-0.36, 0.88]	
Songur et al. 2023	0.8	1.1	12	0.9	1	12	19.6%	-0.09 [-0.89, 0.71]	
Fotal (95% CI)			56			70	100.0%	-0.04 [-0.39, 0.32]	•
Heterogeneity: Tau² = 0.00; Test for overall effect: Z = 0.			3 (P = 0	.69); I² =	0%				-4 -2 0 2 4 Taping + Exercise Exercise alone

H) Effect of untailored knee taping for patellar medialisation only as adjunct treatment

on self-reported function

	Taping	+ Exer	cise	Exer	cise alo	ne	1	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Arrebola et al. 2020	-86.43	12.7	13	-83.7	15.09	16	23.3%	-0.19 [-0.92, 0.55]	
Ghourbanpour et al. 2018	-63.05	23.76	15	-60.62	23.35	15	24.5%	-0.10 [-0.82, 0.62]	
Günay et al. 2017	-88.12	5.4	16	-89.15	4.6	27	32.6%	0.21 [-0.41, 0.83]	-
Songur et al. 2023	-84.3	6.7	12	-83.5	9.1	12	19.6%	-0.10 [-0.90, 0.70]	
Total (95% CI)			56			70	100.0%	-0.02 [-0.37, 0.33]	
Heterogeneity: Tau ² = 0.00; Test for overall effect: Z = 0.			3 (P = 0.	85); I² = I	0%				-4 -2 0 2 4 Taping + Exercise Exercise alone

I) Effect of untailored patellar taping as adjunct treatment on self-reported pain

18.62	al Mean 3 1 5 29.92	2.31	Total 16	Weight 14.4%	V, Random, 95% Cl -0.31 [-1.04, 0.43]	IV, Random, 95% Cl
18.62			16	14.4%	-0.31 [-1.04_0.43]	
	5 29.92				0.01 [1.04, 0.40]	_
		27.56	15	15.2%	-0.13 [-0.85, 0.59]	
14.23 1	6 20.5	11.4	27	20.3%	0.26 [-0.36, 0.88]	
2.18 1	4 1.2	1.63	25	17.8%	0.43 [-0.24, 1.09]	+
1.1 1	2 0.9	1	12	12.2%	-0.09 [-0.89, 0.71]	
1.38 2	0 2.35	1.13	20	20.1%	0.27 [-0.35, 0.89]	
9	0		115	100.0%	0.11 [-0.17, 0.39]	•
:6, df = 5 (P = 45)	0.66); l² :	= 0%				-4 -2 0 2 4 Taping + Exercise Exercise alone
1	2.18 1 1.1 1 1.38 2 9 6, df = 5 (P =	14.23 16 20.5 2.18 14 1.2 1.1 12 0.9 1.38 20 2.35 90 6, df = 5 (P = 0.66); P =	14.23 16 20.5 11.4 2.18 14 1.2 1.63 1.1 12 0.9 1 1.38 20 2.35 1.13 90 6, df = 5 (P = 0.66); P = 0%			14.23 16 20.5 11.4 27 20.3% 0.26 [-0.36, 0.88] 2.18 14 1.2 1.63 25 17.8% 0.43 [-0.24, 1.09] 1.1 12 0.9 1 12 12.2% -0.09 [-0.86, 0.71] 1.38 20 2.35 1.13 20 20.1% 0.27 [-0.35, 0.89] 90 15 100.0% 0.11 [-0.17, 0.39] 6, df = 5 (P = 0.66); P = 0% 15

J) Effect of untailored patellar taping as adjunct treatment on self-reported function

	Taping) + Exer	cise	Exerc	cise alo	ne	9	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl
Arrebola et al. 2020	-86.43	12.7	13	-83.7	15.09	16	14.5%	-0.19 [-0.92, 0.55]	
Ghourbanpour et al. 2018	-63.05	23.76	15	-60.62	23.35	15	15.2%	-0.10 [-0.82, 0.62]	_ _
Günay et al. 2017	-88.12	5.4	16	-89.15	4.6	27	20.3%	0.21 [-0.41, 0.83]	
Lee et al. 2023	-68.3	9.3	20	-69.9	7.4	19	19.7%	0.19 [-0.44, 0.82]	
Şahan et al. 2023	-82.21	10.82	14	-81.03	12.76	25	18.2%	-0.10 [-0.75, 0.56]	
Songur et al. 2023	-84.3	6.7	12	-83.5	9.1	12	12.2%	-0.10 [-0.90, 0.70]	
Total (95% CI)			90			114	100.0%	0.01 [-0.27, 0.29]	. ◆
Heterogeneity: Tau ² = 0.00;	Chi ² = 1.2	22, df = 5	(P = 0.	94); I ^z = I	0%				- <u>t t t t</u>
Test for overall effect: $Z = 0$.	05 (P = 0.	.96)							-4 -2 0 2 4 Taping + Exercise Exercise alone

Figure 1. Effects of knee taping for patellar medialisation combined with exercise therapy (A, B), patellar taping combined with exercise therapy (C, D), knee kinesio taping combined with exercise therapy (\mathbf{E}, \mathbf{F}) , untailored knee taping for patellar medialisation combined with exercise therapy (I, J) and untailored patellar taping combined with exercise therapy (K, L) compared with exercise therapy alone for self-reported pain and function at short-term. (SD, standard deviation; IV, inverse variance; Std., standard mean difference). The self-reported function values were inverted to negative to ensure consistent reporting. Akbaş et al. 2011, Clark et al. 2000, Ghourbanpour et al. 2018, Günay et al. 2017, Şahan et al. 2023, Songur et al. 2023 and Tunay et al 2003 assessed the self-reported measure of pain using the Visual Analogue Scale (VAS) while Arrebola et al. 2020 assessed it using the Numerical Pain Rating Scale (NPRS). Akbaş et al. 2011, Arrebola et al. 2020, Günay et al. 2017, Lee et al. 2023, Şahan et al. 2023 and Songur et al. 2023 assessed the self-reported measure of function using the Anterior Knee Pain Scale (AKPS), while Clark et al. 2020 and Ghourbanpour et al. 2018 assessed it using the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) and the Knee Injury and Osteoarthritis Outcome Score - Activities of Daily Living (KOOS-ADL), respectively.