Supplemen 1st Author, publication y	study design Patients Study design Patients ear (total n)	studies on therapeutic strategies f	or RA patient in Disease duration o RA (mean)	Disease f activity at baseline (mean (SD)	Minantly non- Non-inflamm HAQ (mean (SD)))	nflammatory co atory complaints a VAS-pain (mean (SD))	omplaints at baseline VAS-fatigur (mean (SD)	e EQ-5D) (mean (SD))	Other	Intervention group Description	n	Comparator Description n	Outcome Description	Time point*1	Number and Number OR Risk Risk percentage and (95% ratio Difference of percent CI) (95% (95% CI) responders ge of CI) in responde	Mean outcome i interventi n group (SD)	Mean Mean n outcome in difference o control (standard group (SD) error, 95% CI)	p-value	Effect size (cohen's d	Other)	Risk of bias^2	Risk of bias of individual studies included in SLR^3
															group control group							
EXERCISE															*rosh							
Function (HA Christie, 200	0) 7 SLR: SLRs 28 NR	RA patients	NR	NR	NR	NR	NR	NR	NA	Joint protection		Alternative intervention/no intervention	Pain and function					Improves function, no difference in pain, high quality benificial effect		High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was found for beneficial effects of herbal therapy (namma-locked) acid and buckwal was therapy.	Low	Moderate- High
										Comprehensive occupation therapy		No intervention	Pain and function					Improves function, no difference in pain, low quality evidence		low-quality evidence was found for the effectiveness of the other interventions.		
										Exercise		No intervention/alternative intervention/different types of exercises	Pain and function					Reduces pain and improves function, no difference in patient global assessment, low quality evidence				
Eversden, 20	107 RCT 115	RA patients	9Y	NR	1.38-1.50, rat of medians	ige 24-26.5, rang of medians	e NR	0.69	NA	Hydrotherapy (30min, 1/W)	57	Similar exercises on land (30min, 58 1/W)	HAQ	6W		1.50 (1.06 1.84), median ((OB)	 1.44 (0.78- 1.84), median (IOR) 	ns			High	
Figen, 2011	RCT 60	RA patients with disease duration >:	1Y 8.5Y	DAS28 5.2	2.8 (intervent 3.9; control 1 p=0.001)	ion NR 5;	NR	NR	NA	Inpatient rehabilitation model (15 sessions during 3W of hospitalisation)	32	Home exercise model (same 28 exercises as intervention group, although at home)	HAQ	NR		1(0.7)	0.7 (0.6)	p=0.001, adjusted for baseline	0.46		High	
Hurkmans, 2009	SLR: RCTs 8 575	RA patients	NR	Low to moderate	NR	NR	NR	NR	NA	Short-term land-based aerobic capacity training and muscl strength training Short-term water-based aerobic capacity training	e 50 (1 study)	NR	Functional ability (HAQ) Functional			0.54 SDs lower	-0.16	Limited evidence for a		Based on the evidence, aerobic capacity training combined with muscle strength training is recommended as routine practice in patients with RA.	Low	Moderate- High
Lee, 2007	SLR: RCTs 2; 382	RA patients	NR	NR	NR	NR	NR	NR	NA	Tai chi	(2	Education plus stretching	ability and aerobic capacity Functional					positive effect Improvement in RCT;		Collectively this evidence is not convincing enough to	Moderate	High
Macedo, 200	Non-RCTs 3 19 RCT 32	RA patients with medium or high	10Y	DAS28 4.55	5 1.38	52.69	NR	0.55	NA	Occupational therapy (6-8 sessions of 30-120min)	studies] 16	exercises/Usual activity Usual care 16	index HAQ-DI	Change from BL		-0.27 (0.4	9) 0.17 (0.51)	No improvement in non-RCT p=0.02	0.88	suggest that tai chi is an effective treatment for RA.	High	
Cartan 2010	CID/0 (10-) 6740	work disability risk on the RA WIS	NO							Median and a simple and size for size to state	1384	United and the same of the sam	Curational	until 6M						fife at a feature state of a state of a state	1 de adarantes	Madamba
Santos, 2019	3LK (8 3LRs) 8740	nu pauents	nn.	NA	NR.	ru	nik.	NR.	nen.	interventions	(#2)	pharmacological or non-surgical interventions	disability	nn.						Circuity in inprovement was small positive energy of Conclusions: Of the included interventions, only multicomponent or single exercise/physical activity interventions, psychosocial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
Siqueira, 201	17 RCT 100	Women with RA	8.5Y	NR	0.7	NR	NR	NR	Right knee flexor muscle strength 43,7 Nm; Left knee flexor muscle strengt 42.5Nm; Right knee extensor muscle strength 88.3Nm; Left knee extensor muscle strength 88.6Nm	Waterbased aerobic: exercise (3/W)	33	Usual care 34	HAQ	16W		0.4 (0.4)	1.3 (1.7)	p=0.002	0.73		High	Γ
										Land-based aerobic exercise (3/W)	33	Usual care 34	HAQ	16W		0.8 (0.6)	1.3 (1.7)	p=0.002	0.39			
Pain (VAS-pa Christie, 200	in) 7 SLR: SLRs 28 NR	RA patients	NR	NR	NR	NR	NR	NR	NA	Joint protection		Alternative intervention/no intervention	Pain and function					Improves function, no difference in pain, high quality benificial effect	ŀ* :	High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was found for beneficial effects of herbal therapy	Low	Moderate- High
										Comprehensive occupation therapy		No intervention	Pain and function					Improves function, no difference in pain, low		(gamma-linolenic acid) and low-level laser therapy, and low-quality evidence was found for the effectiveness of the other interventions.		
										Exercise		No intervention/alternative intervention/different types of exercises	Pain and function					quality evidence Reduces pain and improves function, no difference in patient global assessment, low quality evidence				
Eversden, 20	107 RCT 115	RA patients	9Y	NR	1.38-1.50, rat of medians	ige 24-26.5, rang of medians	je NR	0.69	NA	Hydrotherapy (30min, 1/week)	57	Similar exercises on land (30min, 58 1/W)	VAS-pain	6W		25.5 (11- 41), media (IQR)	27.5 (15- in 58), median (IQR)	ns			High	Γ
Feldthusen, 2016	RCT 70	RA patients with DAS28<3.8, VAS- fatigue >50 (0-100) and disease duration >3Y	10Y	DAS28 3.35	5 0.7	39.8	68.2	NR	NA	Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring health-enhancin physical activity, and balancing life activities)	36 g	Usual physical and social 34 activities	VAS-pain	Change from BL until 12W		-4.8 (18.4	-1.1 (24.6)	p=0.46	0.12		High	
Hurkmans, 2009	SLR: RCTs 8 575	RA patients	NR	low to moderate	NR	NR	NR	NR	NA	Short-term land-based aerobic capacity training		NR	Aerobic capacity						Pooled effect size 0.99 (95%C)	Based on the evidence, aerobic capacity training combined with muscle strength training is recommended as routine I practice in patients with RA.	Low	Moderate- High
										Short-term land-based aerobic capacity training and muscl strength training	e 50 (1 study)	NR	Self-reported pain (VAS 0- 10)	I		0.53 SDs lower	0.9		0.23-1.08)			
Lee, 2007	SLR: RCTs 2; 382 Non-RCTs 3	RA patients	NR	NR	NR	NR	NR	NR	NA	Tai chi	(3 studies)	Education plus stretching exercises/Usual activity	Pain					No significant pain reduction in 2 RCTs; significant pain reduction in pon-PCT		Collectively this evidence is not convincing enough to suggest that tai chi is an effective treatment for RA.	Moderate	High
Macedo, 200	19 RCT 32	RA patients with medium or high work disability risk on the RA WIS	10Y	DAS28 4.55	5 1.38	52.69	NR	0.55	NA	Occupational therapy (6-8 sessions of 30-120min)	16	Usual care 16	VAS-pain	Change from BL until 6M		-25.31 (24.22)	-1.13 (22.98)	p=0.007	1.02		High	

Manning, 2014 RCT 210	RA patients	20M	DAS28 5.1	NR	45.2	47.2	NR		Group session with education, self-management and global upper extremity exercise training (4 times 2/W), then functional daily home exercise regimen	52	Usual care 56	VAS-pain	Change from BL until 12W	-13.0 (-23.0, -2.9), me: (95% CI)	1.7 (-8.2, -14. 11.6), mean (-26 an (95% Cl) -3.2 (95%	.7 p= i.2, t), mean i6Cl)	0.013			High	
Macfarlane, SLR: RCTs 11 672 2012	RA patients receiving complementa therapy	ry NR	NR	NR	NR	NR	NR	NA	Tai chi	10 (1 study)	Stretching and wellness 10 education	Pain				ns			No good evidence of efficacy or effectiveness for the practitioner-based complementary therapies considered	Moderate	Moderate
Santos, 2019 SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Multicomponent or single exercise/physical activity interventions	545 (#2)	Usual care/placebo/other non- #8 pharmacological or non-surgical interventions	Pain	NR						here. Effective improvement with small positive effects; Conclusions: Of the included interventions, only multicomponent or single exercise/physical at civity interventions, proclosocial interventions, and custom orthoges seem to reduce the impact of rheumatoid whether	Moderate	Moderate
Williams, 2018 SUE RCTs 7 841	RA patients	NR	NR	NR	NR	NR	NR	NA	Hand exercises	124 (2 studies) 445 (1 study) 437 (1 study)	No exercise No exercise No exercise	VAS-pain Pain subscale MHQ Pain subscale MHQ	-3M 3-11M 212M	95.58 54.2 55.1	67.6 51.4 51.4				It in meaning whether encicies improves hard functions or the initian the advistment (j) packada/j advisor (j) packada/j advisor function buths: titlerer and difference any pains in the medium advisor (j) packada/j advisor (j) packada/j advisor (j) packada/j advisor gray packada/j advisor (j) packada/j advisor (j) packada/j advisor gray packada/j advisor (j) packada/j advisor (j) packada/j advisor gray packada/j advisor (j) packada/j advisor gray packada/j advisor (j) packada/j advisor gray packada/j advisor (j) packada/j advisor (j) packada/j advisor (j) packada/j advisor (j) packada/j	Low	High
<u>Qol (EQ-5D)</u> Eversden, 2007 RCT 115	RA patients	ЭY	NR	1.38-1.50, rang of medians	ge 24-26.5, range of medians	e NR	0.69	NA.	Hydrotherapy (30min, 1/week)	57	Similar exercises on land (30min, 58 1/W)	EQ-5D	6W	0.69 (0.59 0.78), median (IQR)	 0.68 (0.59- 0.79), median (IQR) 	ns				High	
Lee, 2007 SLR: RCTs 2; 382 Non-RCTs 3	RA patients	NR	NR	NR	NR	NR	NR	NA	Tai chi	(1 study) Education plus stretching exercises	Quality of life				ln vi SF	provement on ality subscale of 36		Collectively this evidence is not convincing enough to suggest that tai chi is an effective treatment for RA.	Moderate	High
Macedo, 2009 RCT 32	RA patients with medium or high work disability risk on the RA WIS	10Y	DAS28 4.55	5 1.38	52.69	NR	0.55	NA	Occupational therapy (6-8 sessions of 30-120min)	16	Usual care 16	EQ-5D	Change from BL until 6M	0.13 (0.29) -0.15 (0.33)	p	0.02	0.90		High	
Fatigue (VAS-fatigue) Feldthusen, RCT 70 2016	RA patients with DAS28<3.8, VAS- fatigue >50 (0-100) and disease	10Y	DAS28 3.35	5 0.7	39.8	68.2	NR	NA	Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring health-enhancing	36 8	Usual physical and social 34 activities	VAS-fatigue	Change from BL until 12W	-23.5 (19.9)	-15.3 (24.6)	p	0.042	0.37		High	
Lee, 2007 SLR: RCTs 2; 382 Non-RCTs 3	duration >3Y RA patients	NR	NR	NR	NR	NR	NR	NA	physical activity, and balancing life activities) Tai chi	(2 studies)	Usual activity NR	Fatigue				Ni RC ef	improvement in T; Suggested fectiveness in non-		Collectively this evidence is not convincing enough to suggest that tai chi is an effective treatment for RA.	Moderate	High
Manning, 2014 RCT 210	RA patients	20M	DAS28 5.1	NR	45.2	47.2	NR	NA	Group session with education, self-management and global upper extremity exercise training (4 times 2/W), then functional daily home exercise regimen	1 52	Usual care 56	VAS-fatigue	Change from BL until 12W	–7.9 (–18. 2.6), meai (95% Cl)	3, 1.2 (-9.2, -9.0 n 11.5), mean 2.9), (95% CI) (95%	R() (-21.0, p= , mean 6 Cl)	0.136			High	
Santos, 2019 SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NP	NB	NR	Multicomponent or single exercise/physical activity	628 (#2)	I kual care/placebo/other pop- #8	Entimum	NB						Effective improvement with small positive effects;	Moderate	Moderate
									Interventions		pharmacological or non-surgical interventions	, angue							Conclusions: Of the included interventions, only multicomponent or single exercise/physical activity interventions, applychosocial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.		
<u>Disesse activity</u> Feldhusen, RCT 70 2016	RA patients with DAS28<3.8, VAS- fatigue >50 (0-100) and disease	10Y	DAS28 3.35	5 0.7	39.8	68.2	NR	NA	interventions Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring health-enhancing	36	pharmacological or non-surgical interventions Usual physical and social 34 activities	DAS28	Change from BL until 12W	-0.3 (0.9)	-0.3 (1.0)	p	1.00	0	Conclusions: Of the included interventions, only multicomponent or sigle exercicle/physical activity interventions.psychosocial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	High	
Disease activity Feldhusen, RCT 70 2016 Figen, 2011 RCT 60	RA patients with DAS28<3.8, VAS- fatiguer >50 (0-100) and disease duration >37 RA patients with disease duration >	10Y 1Y 8.5Y	DAS28 3.35 DAS28 5.2	5 0.7 2.8 (interventio 3.9; control 1.5; p=0.001)	39.8 2n NR	68.2 NR	NR	NA	Interventions Person-centered physical therapy (a self-care plan was pixtly developed and focused on tailoring heath-erhanoing physical activity, and balancing life activities) impacter ethabilitation model (15 sessions during 3W of hospitalisation)	36 8 32	pharmacological or non-surgical interventions Utual physical and social 34 activities 44 Home exercise model (same 28 exercises as intervention group, athough at home)	DAS28 DAS28	Change from BL until 12W NR	-0.3 (0.9) 4.1 (1.3)	-0.3 (1.0) 4.1 (1.2)	p= p= bz	1.00 0.001, adjusted for seline	0	Canclaion: Of the included interventions, only multicomponent or signle exercised physical activity interventions, psychoaccial interventions and custom orthones seen to reduce the impact of rheumatoid anthres.	High High	
Disease activity Pedebusen, RCT 70 2005 Pigen, 2011 RCT 60 Macedo, 2009 RCT 32	RA patients with DA528<3.8, VAS- fargue-50 (0-100) and disease duration.3? RA patients with disease duration >- RA patients with medium or high work disability risk on the RB WD	10Y 1Y 8.5Y 10Y	DAS28 3.35 DAS28 5.2 DAS28 4.55	5 0.7 2.8 (interventio 3.9; control 1.5; p=0.001) 5 1.38	39.8 2n NR 5; 52.69	68.2 NR NR	NR NR 0.55	NA NA	Interventions Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring heath-erhanoing physical activity, and balanchig life activities) inpatient erhabilitation model (15 sessions during 3W of hospitalisation) Occupational therapy (68 sessions of 30 120min)	36 8 32 16	pharmacological or non-surgical interventions and social address ductivities and social address Home exercise model (same address exercises as intervention group, although at home) 16	DAS28 DAS28 DAS28	Change from BL und 12W NR Change from BL	-0.3 (0.9) 4.1 (1.3) -0.94 (1.3	-0.3 (1.0) 4.1 (1.2) 2) 0.11 (1.21)	p= bz	1.00 0.001, adjusted for seline 0.03	0 0	Canclaion: Of the included interventions, only multicomposent or signle exercised (physical alt-thilly interventions, gay-chaocial interventions and custom orthorises seen to reduce the impact of rheumatoid arthretis.	High High High	
Disesse activity Feldblusen, RCT 70 2016 Figen, 2011 RCT 60 Macedo, 2009 RCT 32 Manning, 2014 RCT 210	R4 patients with DA528-3.8, VA5 R5(up - 50 (0-100) and disease duration -37 R4 patients with disease duration > R4 patients with medium ori high word disability risk on the R4 WI5 R4 patients	10Y 1Y 8.5Y 10Y 20M	DAS28 3.35 DAS28 5.2 DAS28 4.55 DAS28 5.1	5 0.7 2.8 (interventio 3.9; control 1.5; p=0.001) 5 1.38 NR	39.8 20 NR 52.69 45.2	68.2 NR NR 47.2	NR NR 0.55 NR	NA NA NA	Interventions Person-centered physical therapy (a self-care plan was jointly developed and focused on tailong health-enhancing physical tachty, and talancing (ife activities) impairent rehabilitation model (15 sessions during 3W of hospitalisation) Occupational therapy (6-8 sessions of 30-120min) Group session with education, self-management and global upper obtemity exercise tailing (4 sines 2/W) then functional sight new carcins regime	36 g 32 16 52	plaminoclogical or non-surgical interventions and social 44 activities 44 Home exercises intervention group, albuquar home) Usual carre 16 Usual care 56	DAS28 DAS28 DAS28 DAS28 DAS28	Change from BL und 12W RR Change from BL und BM Change from BL und LTW	-0.3 (0.9) 4.1 (1.3) -0.94 (1.3 -0.8 (-1.4 -0.2), me: (95% C1)	-0.3 (1.0) 4.1 (1.2) 2) 0.11 (1.21) , -0.1 (-0.7, 0.7 (95% C) (95%	P= bz (=1.4, p= , mean & CI)	1.00 0.001, adjusted for seline 0.03 0.047	0 0	Canclaion: Of the included interventions, only multicomponent or signle energical (phile) all shifty interventions, apychoacial interventions and custom orbuses seen to induce the impact of rheumatoid arthretis.	High High High	
Disease attivity Peddhusen, RCT 20 Pigen, 2011 RCT 60 Macrodo, 2009 RCT 32 Manning, 2014 RCT 210 Sigueira, 2017 RCT 100	R4 patients with DA528-13, UA5 fatigue >50 (0 X00) and disease duration >17 B4 patients with disease duration > R4 patients with disease duration > R4 patients with disease duration > R4 patients R4 patients R4 patients	10Y 1Y 8.5Y 10Y 20M 8.5Y	DAS28 3.35 DAS28 5.2 DAS28 4.55 DAS28 5.1 NR	5 0.7 2.8 (interventio 3.9; control 1.5; p=0.001) 5 1.38 NR	39.8 2n NR 52.69 45.2 NR	68.2 NR 47.2 NR	NR NR 0.55 NR NR	NA NA NA NA NA NA Right have floor mack strength Right have scheroor mack strength Right have scheroor	Interventions Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring health-erhancing physical activity, and tabarchig life activities) Inpactent rehabilitation model (15 sessions during 3W of heaptalization) Occupational therapy (6-8 sessions during 3W), then functional daily home exercise regimes Waterbased aerobic exercise (3/W)	36 8 32 16 1 52 33	permitadogial ar non-surgical interventions activities model (same exercises ander (same exercises an intervention group, ablough at home) Usual care 16 Usual care 26 Usual care 26	DA528 DA528 DA528 DA528 DA528	Change from BL until 12W NR Change from BL until 6M Change from BL until 12W	-0.3 (0.9) 4.1 (1.3) -0.94 (1.3 -0.8 (-1.4 -0.2), me. (95% Cl) 3.1 (1)	-0.3 (L0) 4.1(1.2) 2) 0.11 (1.21) 4, -0.4 (-0.7, 0.7 (95% C) (95% (95% C) (95%	ף בי אין אין אין אין אין אין אין אין אין אי	1.00 0.001, adjusted for sellne 0.03 0.047	0 0 0.83 1.16	Canclaion: Of the included interventions, only multicomponent or signle exercised (Psixel at Stuthy intervention, gav/bacical interventions and custom onchoses seen to reduce the impact of rhsumatoid antimes.	High High High	
Diseste arthiny Peditosen, RCT 20 2026 Figen, 2011 RCT 60 Macedo, 2009 RCT 32 Manning, 2014 RCT 210 Siqueira, 2017 RCT 100	R4 patients with DA528-13, VA5 fatigue +50 (0 300) and disease duration > 37 R4 patients with disease duration > R4 patients with disease duration > R4 patients with Medium of high work disability risk on the R4 WIS R4 patients Women with R4	10Y 1Y 8.5Y 10Y 20M 8.5Y	DAS28 3.35 DAS28 5.2 DAS28 4.55 DAS28 5.1 NR	5 0.7 2.8 (interventio 3.9; control 1.5 p=0.001) 5 1.38 NR 0.7	39.8 on NR 52.69 45.2 NR	68.2 NR NR 47.2 NR	NR 0.55 NR NR	NA N	Interventions Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring heatth-enhancing physical activity, and batismic field eactivities] Interplanten rehabilisations model (13 sessions during 3W of hospital turknow) Occupation liftering y (e & sessions of 30:120min) Group session with education, self-management and global functional during home senticle regimes Waterbased aerobic exercise (J/W) Lands based aerobic exercise (J/W)	36 8 16 152 33	permetabagial monsurgial interventions diaditifies Home sensise model (anter- esensises intervention prosp. 10 Usual care 16 Usual 16 Usual care 16 Usual 16 Usual 16 Usual 16 Usual 16	DA528 DA528 DA528 DA528 DA528	Obange from BL until 12W NR Obange from BL Until 6M Obange from BL Until 12W	-0.3 (0.9) 4.1 (1.3) -0.94 (1.3 -0.2, me. (955 C1) 3.1 (1) 3.6 (1.2)	-0.3 (1.0) 4.1 (1.2) 2) 0.11 (1.21) 3) -0.1 (-0.7, 0.7 (1 (95% C1) (95% 4.2 (0.9) 4.2 (0.9)	۲۹ ۲۹ ۲۹ ۲۹ ۲۹ ۲۹ ۲۹ ۲۹	1.00 0.001, adjusted for seline 0.03 0.047 0.0001	0 0.83 1.16 0.57	Canclaion: Of the included interventions, only multicomponent single exercised (physical activity interventions, psycholaccial interventions and custom robuses seen to induce the inpact of rheumatoid anthres.	High High High High	
Disease attivity Pedatasen, Pedatasen, Rigen, 2011 RCT 20 Figen, 2011 RCT 21 Manning, 2014 RCT 210 Sippeira, 2017 RCT 100 Other Harkmann, 2009 SUB-RCTs 8 575	R4 patients with DA528-13, UA5 faguer >50 (0 >00) and disase duration >17 R4 patients with disase duration > R4 patients with disase duration > R4 patients R4 patients Women with R4	107 17 8.57 107 2004 8.57 8.57	DAS28 3.35 DAS28 4.55 DAS28 4.55 DAS28 5.1 NR	5 0.7 2.8 (interventio 3.5 control 1.5 pr0.001) 5 1.38 NR 0.7 NR	39.8 20. NR 52.69 45.2 NR	68.2 NR NR 47.2 NR	NR NR 0.55 NR NR	NA A A A A A A A A A A A A A A A A A A	Interventions Person-centered physical therapy (a self-care plan was jointly developed and focused on tailoring health-erhancing physical active, and taburching file activities) (inpatient rehabilitation model (15 sessions during 3W of heaptalitation) Occupational therapy (6-8 sessions during 3W), then functional daily home service regimes Waterbased aerobic exercise (3/W) Land based aerobic exercise (3/W) Short term land-based aerobic capacity training	36 8 16 1 52 33	pamanookgalar noos surgical kucad physical and social kucad physical and social kucad physical and social kucad care a kucad care a kuc	DA528 DA528 DA528 DA528 DA528 DA528 DA528	Change from BL until 12W NR Change from BL until 20W	-0.3 (0.9) 4.1 (1.3) -0.94 (1.3 -0.8 (-1.4 -0.2), me: (95% C) 3.1 (1) 3.6 (1.2)	-0.3 (1.0) 4.1(1.2) 2) 0.11 (1.2) 2) 0.11 (1.2)	p= b b c= c=1.4, p= c= c=1 p= p= p= p=	1.00 0.031, adjusted for seline 0.03 0.047 0.0601	0 0 0.83 1.16 0.57 Paoled effect size 0.99 (593)	Canckains: Of the included interventions, only multicomposent single exercised physical schedule intervention, psychoaccial interventions and custom onhones seen to reduce the impact of theumatoid artification in the evolution of the impact of the impact and the evolution of the impact of the impact of the impact and the evolution of the impact of the impact of the impact and the evolution of the impact of the impact of the impact and the evolution of the impact of the impact of the impact and the evolution of the impact of the impact of the impact and the evolution of the impact of the impact of the impact and the evolution of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact and the impact of the impact of the impact of the impact of the impact and the impact of the impact and the impact of the impact	High High High High	Moderate
Disease attivity Fedebasen, 2036 RCT 20 Rigen, 2011 RCT 20 Macedo, 2009 RCT 21 Manning, 2014 RCT 20 Siqueira, 2017 RCT 100 Diter 100 Markmann, 2009 SLR: RCT>R 575	R4 patients with DA528-13, VA5 https://s010.1001.intof.disease duration > 37 R4 patients with disease duration > R4 patients with disease duration > R4 patients R4 patients R4 patients	107 17 8.57 107 2004 8.57	DAS28.3.3 DAS28.5.2 DAS28.4.55 DAS28.5.1 NR	5 0.7 2.8 (Intervention 1.5, p=0.001) 5 1.38 NR 0.7	39.8 50 NR 52.69 45.2 NR	68.2 NR 47.2 NR	NR NR 0.55 NR NR	NA N	Interventions Person-centered physical therapy (a self-care plan was piority developed and focused on tailong heath-enhancing physical activity, and taisticning life activities) Impaction tabalizations (6.5 session odd) (3.5 session odd) (3.0 voltament) Group session with education, self-management and global gover enteming events training (4 most, V/V), then functional daily home sectors regimen Waterbased aerobic exercise (J/W) Iand based aerobic capacity training and muscle stored training Short term land-based aerobic capacity training and muscle stored training	36 32 16 1 52 33 33	paramatological or non-surgical lucual physical and social al lucual physical and social al lucual chrises model (came exercises model (came exercises in intervention group) lucual care al lucual care	DA528 DA528 DA528 DA528 DA528 DA528 DA528 DA528 DA528 DA528 Acrobic capacity and much	Change from BL until 12W NR Change from BL Until 6M Change from BL Until 12W	-0.3 (0.9) 4.1 (1.3) -0.94 (1.3 -0.2, mean (955c C) 3.1 (1) 3.6 (1.2) 0.4750s	-0.3 (1.0) 4.1(1.2) 2) 0.11(1.21) (95% C1) (95% 4.2 (0.9) 4.2 (0.9) 4.2 (0.9)	دم بع بع ((-1.4, ایه ((-1.4, ایه ((-1.4, ایه) ((-1.4, ایه)) ((-1.4, ایه) ((-1.4, ایه)) ((-1.4, ایه)) ((-1.4, ایه)) ((-1.4, ایه)) ((-1.4, ایه)) ((-1.4, ایه)) ((-1.4, ایه)) ((-1.4, (-1.4, (-1.4))) ((-1.4, (-1.4, (-1.4))) ((-1.4, (-1.4, (-1.4))) ((-1.4, (-1.4))) ((-1.4, (-1.4, (-1.4)))) ((-1.4, (-1.4, (-1.4))))) ((-1.4, (-1.4, (-1.4))))) ((-1.4, (-1.4, (-1.4))))) ((-1.4, (-1.4, (-1.4))))))))))))))))))))))))))))))))))))	1.00 0.01, adjusted for selline 0.03 0.047 0.0001	0 0 0 0 0.83 1.16 0.57 Peoled effect tag 93/(990.02) 0.291/68 0.024/(990.02) 0.04/(900.02) 0.04/(900	Canckains: Of the included interventions, only multicomponent visible entroid/physial activity interventions, psycholaccial interventions and custom onlones seem to include the impact of freumatoid antime.	High High High High	Molenze

									Long-term land-based aerobic capacity and muscle strengt training	h	NR		Aerobic capacity and muscle strength			Moderate eviden for a positive effe	ce ct			
Lau, 2019 RCT 21	RA patients	NR	NR	NR	NR	NR	NR	Weighted RAID 2.99	9 Neural mobilisation exercises (targeting the median, musculocutaneous, femoral and saphenous nerve, as well as entire nervous system, 2/D)	11	Control (gentle joint mobilisation 10 exercises targeting the same joints)	D	Weighted RAID Change from BL until post- treatment		0.79 -0.15	p=0.65			High	
Lee, 2007 SLR: RCTs 2; 382 Non-RCTs 3	RA patients	NR	NR	NR	NR	NR	NR	NA	Taichi	(2 studies) (2	Usual activity Education plus stretching		Range of motion and joint functions Depression and			No improvement		Collectively this evidence is not convincing enough to suggest that tai chi is an effective treatment for RA.	Moderate	e High
Santos, 2019 SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Multicomponent or single exercise/physical activity interentions	studies) 586 (#1)	exercises/Usual activity Usual care/placebo/other non- #8 pharmacological or non-surgical interventions	В	mood Global impact NR Of disease			depression and m	ood	Effective improvement with small positive effects; Conclusions: Of the included interventions, only multicomponent or single exercise/physical activity interventions, prochoscial interventions and custom orthoores seem to reduce the impact of rheumatoid arthritic	Moderate	Moderate
Siqueira, 2017 RCT 100	Women with RA	8.5Y	NR	0.7	NR	NR	NR	Right knee flexor muscle strength 43,7 Nm; Left knee flexor muscle strengt 42.5Nmh; Right knee extensor muscle strength 88.3Nm; Left knee extensor muscle	Waterbased aerobic exercise (3/W)	33	Usual care 34	4	Right Anne 16W Bear musicle Schength		8.8 (11.3) 42.2 (13.1)	p=0.1	0.54	ананы.	High	
								an ingin the original					Left knee flexor 16W muscle	4	4.8 (9.5) 43.1 (13.4)	p=0.64	0.15			
													Right knee 16W extensor musde	5	5.5 (18.2) 86.0 (29.5)	p=0.2	0.39			
													strength Left knee 16W extensor muscle	8	8.5 (16.1) 84.7 (24.1)	p=0.8	0.18			
									Land-based aerobic exercise (3/W)	33	Usual care 34	4	strength Right knee 16W flexor muscle strength	4	3.6 (10.3) 42.2 (13.1)	p=0.1	0.12			
													Left knee flexor 16W muscle strength	4	1.9 (14.9) 43.1 (13.4)	p=0.64	0.01			
													Right knee 16W extensor muscle	٤	6.3 (22.4) 86.0 (29.5)	p=0.2	0.01			
													strength Left knee 16W extensor musde	8	5.3 (26.1) 84.7 (24.1)	p=0.8	0.02			
Williams, 2018 SLR: RCTs 7 841	RA patients	NR	NR	NR	NR	NR	NR	NA	Hand exercises	11 (1 study)	No exercise 13	3	strength Grip function <3M test scale (0- 80)	1	6.1 75			It is uncertain whether exercise improves hand function or pain in the short term. It probably slightly improves function buthas littleor no difference on pain in the medium	Low	High
										449 (1 study) 438 (1	No exercise		MHQ 3-11M MHQ 212M	5	6.4 52.1			and long term. It is uncertain whether exercise improves grip and pinch strength in the shortterm, and probably has little or no difference in the medium and long term. The		
										study)								ACR50 response is unknown. People who received exercis with adherence strategies were probably more adherent in the medium term than who did not receive exercise, but with little or no difference in the long term.		
DIET																				
Pain (VAS-pain) Cameron, 2011 SLR: RCTs 22 1278	RA patients	NR	DAS28 40- (range)	-62 NR	NR	NR	NR	NA	Gamma linolenic acid (GLA) from evening primrose oil, borage seed oil, or blackcurrent seed oil	11 studies	Placebo		Pain intensity (score 0-100)		-32.83 56.25- 9.42)			Moderate evidence that oils containing gamma linolenic acid and tripterygium wilfordii products may offer some benefit in relieving symptoms. Oral use of the latter may be associated with several side effects.	Low	Low- Moderate
Christie, 2007 SLR: SLRs 28 NR	RA patients	NR	NR	NR	NR	NR	NR	NA	Herbal therapy (gamma-linolenic acid)		Placebo/alternative herbal intervention					Reduces pain and patient global assessment, mod quality benificial e	erate	High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was found for beneficial effects of herbal therapy (gamma-linolenic acid) and low-level laser therapy, and	Low	Moderate- High
									Diets		Control/usual diet		Pain			Reduces pain, low quality evidence		low-quality evidence was found for the effectiveness of the other interventions.		
Disease activity Cameron, 2011 SLR: RCTs 22 1278	RA patients	NR	DAS28 40- (range)	-62 NR	NR.	NR	NR	NA	Tripteryglum wilfordii (thunder god vine)	4 studie:	s Placebo/sulfasalazine		Disease activity			Improvement in s outcomes regardi disease activity; s effects in one stur with oral use Proc sponting lim	ome ng ide iv	Moderate evidence that oils containing gamma linclenic acid and triptergitum wilfordi products may offer some benefit in relieving symptoms. Oral use of the latter may be associated with several side effects.	Low	Low- Moderate
REVENOLOGICAL																data extraction				
Hunckion (HAQ) Hewlett, 2019 RCT 333	RA patients with fatigue severity of 26 (0-10, BRAF-NRS)	f 10Y, median	DA\$28 4.2	22 mHAQ 0.75	VAS-pain 5.6	54		Fatigue impact (BRAF-NRS, score 0- 10): 7.16	RAFT-Cognitive behaviour fatigue self-management programme delivered to groups of 5-7 RA patients in sk 2- hour sessions (weeks 3-6) and a 1-hour consolidation session (week 1-0) sy a pair of foot Heumatology nune specialists and/or occupational therapists	156	Usual care: brief discussion of a 15 RA fatigue self-management booklet with the research nurse.	52	mHAQ 26W		.70 (0.54) 0.71 (0.51) Adjust 0.02 (+ 0.10, p=0.67	d: 0.06-	0.02	Adjusted for baseline level and centre	High	

Santos, 2019	SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Psychosocial interventions	1180 (#1)	Usual care/placebo/other non- #8 pharmacological or non-surgical interventions	Functional disability	NR						Effective improvement with small positive effects; Conclusions: Of the included interventions, only multicomponent or single exercicle (physical activity interventions, psychosocial interventions and custom orthoose seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
Pain (VAS-pain) Dison, 2007	SLE: RCT : 27 3409 18 RA, 7 OA, 2 mixed)	Al and DA patients in whom psychologial approaches to arthritis hard management and pain related outcomes were invitived.	NR	NR	NR	NR	NR	NR	NA	Psychological interventions (Cognitive Behavioral therapy (23 abded), intera management (5 studes), psycholymanic intervention (1 studes), psycholymanic intervention (1 abded), psycholymanic intervention (1 study), hyperosis (1 study) study), emotional disclosure (1 study), hyperosis (1 study)	NR	Control (usual care (14 studes), NR education/information control (9 estudes), and the student of the student studies), attendies control (2 studies), receiving only study medication (1 study)	Pain (15 studies)						Effect size 0.177 (95% Cl 0.094- 0.259), p=0.01, favours treatment; Effect sizes were similar when studies were separated into those conducted with RA vs OA patients	These findings indicate that psychosocial interventions in may have significant effects an pain and other outcomes in the significant effects and pain and other outcomes in the significant effects over and above that of standard medical care was found.	Moderate	Low
Ferwerda, 2017	RCT 133	RA patients with elevated levels of distress as measured by heighteneo scores of the negative mood and anxiety scales of the IRGL	NR J	NR	NR	NR	NR	NR	Depressed mood (BDI) 12.49; Negative mood (IRGL) 4.77; Anxiety (IRGL) 21.12; Pain (IRGL) 15.30; Fatigue (CIS) 37.17	Tailored guided internet-based cognitive-behavioral treatment during 9-65W (depending on individual withes)	62	Usual care 71	Pain (IRGL)	Post intervention (9-65W)	14.36 (4.68)	15.79 (4.13)		p=0.35	0.32		High	
Hewlett, 2019	RCT 333	RA patients with fatigue seventy of 26 (0-10, BRAF-NRS)	10Y, median	DA528 4.2	2 mHAQ 0.75	VAS-pain 5.4	64		Fatigue impact (BRAF-NRS, score 0- 10): 7.16	RAFT- Cognitive behaviour fatigue self-management programme delivered to groups of 5–7 RA patients in six 2 hour sessions (weeks 1–6) and a 1-hour consolidation session (week 14) by a pair of local rheumatology nurse specialists and/or occupational therapists	156	Usual care: brief discussion of a 152 RA fatigue self-management booklet with the research nurse.	VAS-pain	26W	5.47 (2.3	2) 5.24 (2.41)	Adjusted: 0.16 (-0.33- 0.65, p=0.51)		0.10	Adjusted for baseline level and centre	High	
Proberc, 2018	SUR 9548 10782	RA pasterets	NR	NR	NR	NR	NR	NR	NA	Psychological interventions	#5 SLRs, 49 studies	, Wał-ła/usal card/atention NE placebo/education	Pain	NR						Remma et al. (2003)(fond that conselling and behaviour charge interventions(did cit city)(family index pair, however, a tend fanouring behaviour charge interventions was observed. Like (Cherk Statistication deflect tasses (Cherk, 1977), for reviews by Asian et al. interventions. And interventions are hard for the interventions. Attist and effects are an intervention participation of the statistication part intervention. Attist et al. (2002) Head to the supervisional was reduced to mo-significance. Campo al. (2003)(our hard a cost of statistication to the significant effects for pair. Needermann et al. (2003)(statistications are related to a cost of statistication of the al. (2003)(statistication) and all costs of the statistication of the statistication of the statistication of the significant effects for pair. Needermann et al. (2003)(statistication a programs/www.stering of pairs in follow-up (6) months) are related to all systems more significant potal interventions and at 12-month follow-up (6) months) and the statistication statist in mall to moderate improvements in biopsychoscial customes for patients washed customes have related to patients who were identified, includy information statist in mall provide statistications who were identified, includy information statistication of patients in provements in biopsychoscial customes the participation is determined in the statistication statistication of the statistication of t	Low	Low- moderate
Santos, 2019	SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Psychosocial interventions	1316 (#1)	Usual care/placebo/other non- #8 pharmacological or non-surgical interventions	Pain	NR						Effective improvement with small positive effects; Conclusions: Of the included interventions, only multicomponent or angle exercice/physical activity interventions, psychosocial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
Fatigue (FACIT-F, Ferwerda, 2017	VAS-fatigue) RCT 133	RA patients with elevated levels of distress as measured by heightenec scores of the negative mood and anxiety scales of the IRGL	NR J	NR	NR	NR	NR	NR	Depressed mood (BDI) 12.49; Negative mood (IRGL) 4.77; Amiety (IRGL) 21.12; Pain (IRGL) 15.30; Fatigue (CIS) 37, 17	Tailored-guided internet-based cognitive-behavioral treatment during 9-65W (depending on individual withes)	62	Usual care 71	Fatigue (CIS	Post intervention (9-65W)	32.38 (13.42)	34.45 (12.43)		p=0.06	0.16		High	
Hewlett, 2019	RCT 333	RA patients with fatigue severity of 26 (0-10, BRAF-NRS)	10Y, median	DA528 4.2	2 mHAQ 0.75	VAS-pain 5.	64		Fatigue impact (BRAF-NRS, score 0- 10): 7.16	RAFT-Cognitive behaviour fatigue self-management programme delivered to groups of 5–7 RA patients in six 2 hour resisions (weeks 1–6) and a 1-hour consolidation session (week 14) by a pair of local rheumatology nurse specialists and/or occupational therapitis	156	Usual care: brief discussion of a 152 RA fatigue self-management booklet with the research nurse.	Fatigue imp (BRAF-NRS, 10)	ict Change from BL - until 26W	-1.36	-0.88	Adjusted: '- 0.59 (-1.11- -0.06, p=0.03)			Adjusted for baseline level and centre	High	
Prothero, 2018	SLR: 9 SLR: 10782	RA patients	NR	NR	NR	NR	NR	NR	NA	Psychological interventions	#1 SLR, 13 studies	Wah-Ist/usal.caru/attention NR placebo/education	Fatigue	NR						One review (Camp et al., 2021) reported mets-analysis (or fargue based ondings from 13 studies. The authorsfound hat psychoscoil interventions reduced fargue domostratism symal effect. The impact of the psychoscoil interventions on faligue atfoliose-up was not small for moderate importements in biopsychoscial doctment/or patient with houmstoil admitted in addition to those achieved by standard care. Several proteits for functivenessa, the conditiones, Several proteits for coast effectiveness of non sychologically trained healthprofestionak delevening psychological interventions.	Low	Low- moderate

Santos, 2019 SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Psychosocial interventions	1556 (#1)	Usual care/placebo/other non- pharmacological or non-surgical interventions	#8	Fatigue	NR			Effective improvement with small positive effects; Corclusions: Of the included interventions, only multicomponent or single exercise (<i>physical activity</i> interventions, <i>pay</i> chosocial interventions and custom orthoose seem to reduce the impact of theumatoid arthritis.	Moderate Moderate
<u>Disase zch/hy</u> Profere, 2018 S.K.: 9 S.Nr. 10722	RA patients	NR	NR	NR	NR	NR	NR	NA	Psychological interventions	#1 SLR, 3 studies	Walt-list/uoail.care/attention placebo/education	NR	Disease activity	NR.			Nysen et al. (2016) found that sequessive writing showed no significant effects positerevention ($d=-0.02$; 5%	Low Low- moderate
Dinar Disamyake, SUR RCTs 34 2021 2011	RA patients in which any type of psychological intervention was use	NR d	NR	NR	NR	NR	NR	NA	Disclosure therapy Cagative behaviouri therapy - maintenance therapy transplant the follow-up period: 5 Cagative behavioural therapy - long (>6wk): 5 Biofeesback: 2 Cancelling: 3 Cancelling: 3	300 887 322 86 313 95	Wait list, standard medical care, active control	NR	Efficacy as defined in individual studies			Consistent supportive evidence Consistent supportive evidence Supportive evidence in the short term bat conflicting evidence for is long term efficary Some supportive evidence Conflicting evidence Conflicting evidence	This review shows consistent supportive evidence for the use of disclosure therapy, and GTWth maintenance therapy as alguing therapic in patients with RL Isho lightlight methodogical limitations in the current literature and the need for future research in this area.	Moderate Low- Moderate
Ferwerda, RCT 133 2017	RA patients with elevated levels of distress as measured by heightene scores of the negative mood and anxiety scales of the IRGL	. NR d	NR	NR	NR	NR	NR	Depressed mood (BDI) 12.49; Negative mood (IRGL) 47; Amiety (IRGL) 21.12; Pain (IRGL) 15.30; Fatigue (CIS) 37.17	Mediation and initial/tenss 2 Cognitive behavious theory - short (-diwk): 6 Relaxation therapy: 2 Relaxed therapy: 2 Relaxed therapy of the short organitive behavioral treatment during 9-63W (depending on individual withen)	207 148 114 62	Usual care	71	Depressed mood (BDI) Negative mood (IRGL) Ansiety (IRGL)	Post intervention (9-65W) Post intervention (9-65W) Post intervention (9-65W)	8.16 (5.67) 12.27 (5.97) 2.93 (3.25) 4.54 (3.71) 18.31 20.06 (5.44) (5.78)	Contraining evidence Carellicting evidence Limited evidence Umited evidence 0.71 p=0.01; larger 0.46 improvement in improvement in improvement in improvement in intervention group		High
EDUCATION Function (MAC) Christie, 2007 SUR: SUR: 28 NR	RA patients	NR	NR	NR	NR	NR.	NR	NA	Patient education		No intervention/usual care/other educational intervention/waiting list controls		Function and patient global assessment			Improves function and patient global assessment, high- quality benificial effect	High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was found for beneficial effects of herait hency (gamma-indenic acid) and low-level laser therapy, and low-quality evidence was found for the effectiveness of the other interventions.	Low Moderate- High
EDUCATION Function (MAG) Owner, 2007 SUR-SUR-28 NR Path (VAS-sain) Manning, 2014 RCT 210	RA patients RA patients	NR 20M	NR DAS28 5.1	NR . NR	NR 45.2	NR 47.2	NR	NA	Patient education Group session with education, self-management and global upper externity exercise training (4 times 2/W), then functional daily home exercise regimen	al 52	No intervention/usual care/other educational intervention/waiting list controls Usual care	56	Function and patient global assessment VAS-pain	Change from BL until 12W	-13.0 1.7 (-8.2, -14.7 (-23.0, 11.6), nean (-26.2, -2.5), nean (5%.C) -3.7), nea (5%.C) (5%.C)	Improves function and patient global assessment, high- quality benificial effect p= 0.013	High-quality evidence was found for breeficial effects of joint protection and patient education, moderate-quality evidence was found for breeficial effects of herital heraps (genoma indexier call) and low level bare theraps, and low-quality evidence was found for the effectiveness of the other intervention.	Low Moderate- High
EDUCATION Function (MAQ) Ohriste, 2007 SUR-3183-28 NR Pain (VAS-pain) Manning, 2014 RCT 210 Fatigue (VAS-fatigue) Manning, 2014 RCT 210	RA patients RA patients RA patients	NR 20M 20M	NR DA528 5.1 DA528 5.1	NR . NR	NR 45.2 45.2	NR 47.2 47.2	NR	NA NA	Patient education Group session with education, self-management and global upper extremity exercise training (4 times 2/W), then functional daily home exercise regimen Group session with education, self-management and global upper externity exercise training (4 times 2/W), then functional daily home exercise regimen	al 52 al 52	No intervention/usual care/other educational intervention/waiting in controls Usual care	56	Function and patient global assessment VAS-pain VAS-fatigue	Change from RL until 12W Change from RL until 12W	-12.0 1.7 (-8.2, -14.7 (-23.0, max) (95.0,) -1.2, max (955.0) (95.0,) (95.0,) -7.3 (-8.3, 1.2 (-8.1, -9.0) (-2.1, -1.2), max (955.0,) (95.0,) (955.0) (955.0)	Improver function and patient global assessment, high- quality benificial effect p= 0.013	High-quality evidence was found for breeficial effects of point protection and pattern education, moderate-quality evidence was found for breeficial effects of brealth theory gamma-inducine call and only were later theory, and low-quality evidence was found for the effectiveness of the other intervention.	Low Moderate- High
Euclose (MAG) Percise (MAG) Obriste, 2007 SUR-SUR-28 Pain (VAS-pain) Manning, 2014 R.CT Painy (VAS-fatigue) Manning, 2014 R.CT Disease atticity Manning, 2014 R.CT	RA patients RA patients RA patients	NR 20M 20M	NR DAS28 5.1 DAS28 5.1 DAS28 5.1	NR . NR . NR	NR 45.2 45.2	NR 47.2 47.2	NR NR NR	NA NA NA	Patient education Group session with education, self-management and global upper educinity exercise training (4 simes 2/W), then functional daily home exercise regimen Corpor session with education, self-management and global upper externity exercise training (4 simes 2/W), then functional daily home exercise regimen Corpor essenting exercise regimen	al 52 al 52 al 52	No intervention/usual care/other educational untervention/waiting lot controls Usual care	56 56	Function and patient global assessment VAS-pain VAS-fatigue DAS28	Change from BL until 12W Change from BL until 12W Change from BL until 12W	-110 17(42, -14.7 (-310, 110,mem (-345, - -3,mem (995 C) -13,mem (995 C) (995 C) (995 C), (995 C) (995 C) (995 C) (995 C) -0.8(-14, -0.1(-0.7, 0.7(-14, -0.2,mem 0.0,mem 0.0,mem (955 C) (955 C) (955 C)	Improve function and pattern global assessment, high- quality benchical effect p= 0.013 p= 0.136	High-quality evidence was found for beneficial effects of pint protection and patient education, moderate-quality evidence was found for beneficial effects of herital herap, gamma include: call and low level later therap, and low-quality evidence was found for the effectiveness of the other interventions.	Low Moderato- High High High High High High High High
EBUGATION Frection (MAG) Christe, 2007 SUR-SUB-28 NR Path (VAS-path) Manning, 2014 RCT 210 Patient (VAS-fritten) Manning, 2014 RCT 210 Other Grandang, SUR-RCT-22 2000 2016	R4 patients R4 patients R4 patients R4 patients R4 patients R4 patients	NR 20M 20M	NR DA528.5.1 DA528.5.1 DA528.5.1	NR . NR . NR	NR 45.2 45.2 NR	NR 47.2 47.2 47.2 NR	NR NR NR	NA NA NA	Patient education Group session with education, self-management and global upper extremely exercise training (4 times 2/W), then functional daily home exercise regimen Group session with education, self-management and global upper extremely exercise training (4 times 2/W), then functional daily home exercise regimen Group session with education, self-management and global upper extermity exercise training (4 times 2/W), then functional daily home exercise regimen Desease education, pain management, psychosocial intervention, for protection and energy conservation, combination of educational techniques	n 52 52 31 52	No intervention/usual care/other educational intervention/waiting loc controls	56 56	Function and patient global assessment VAS-pain VAS-fatigue DAS28 Coping skills for symptoms such as pain and fatigue Positive affact Most other measured constructs	Change from BL until 12W Change from BL until 12W Change from BL until 12W	-11.0 1.7(-12, -14.7 (-21.0, 11.6),mean (-52. -2.3),mean (95.0) (-55.0) (95.0) (95.0) -7.3 (-18.1, 12(-4.1, -4.0)(-21. 24),mean (13),mean 23),mean (95.0) (95.0) (95.0) (95.0) -0.8(-1.4, -0.1(-0.7, 0.7(-1.4, -4.3),mean 0.4),mean 0.4),mean (955.0) (95.0) (95.0)	Increases Increa	High-quality evidence was found for beneficial effects of pair protection and patient education, moderate-quality evidence was found for beneficial effects of the head heavy gamma induced and and only well easier theory, and low-quality evidence was found for the effectiveness of the other intervention.	Low High High High Moderate Low High
EGUCATION Paction (MAG) Ornine, 2007 SIR. SUB. 28 NR Patr (VAS. satis) Manong, 2014 RCT 210 Falsone (VAS-fright) Manoning, 2014 RCT 210 Difference activity 210 210 210 Others activity 210 210 210 Difference activity SUB-RCT: 22 200 215	AA patients: AA patients AA patients AA patients of BA aptients, studies using symptom of BA aptients, studies using symptom	NR 20M 20M 20M s NR	NR DAS2851 DAS2851 NR	NR . NR . NR . NR	NR 45.2 45.2 NR	NR 47.2 47.2 47.2 47.2	NR NR NR	NA NA NA	Patient education Group session with education, self-management and global upper entemply exercise training (4 kines 2/W), then functional daily home exercise regimes Group session with education, self-management and global upper entemply exercise training (4 kines 2/W), then functional daily home exercise regimes Disease education, pair management, psychosocial intervention, joint protection and energy conservation, combination of education laterhingues	al 52 al 52	No intervention/unal cam/other educational Intervention/waiting list controls	56 56	Function and patient global assessment VAS-pain VAS-fatigue DAS28 Coping akills for such as pain and fatigue Positive affact measured constructs	Change from BL until 12W Change from BL until 12W	-13.0 17(-42, -14.7 (-23.0, 11.6),men (-26.2, -3.5),men (950, -1.2),men (955 C) (950 C) (950 C) -7.3 (-18.3, 1.2(-3.2, -9.6)(-21.2, 2.6),mean 1.13),mean 2.3),mean (955 C) (950 C) (950 C) -0.8(-1.4, -0.1(-6.7, 0.7(-1.4, -0.2),mean 0.4),mean 0.0),mean (955 C) (950 C) (950 C)	Improves function and assessment, high- quality benficial effect p = 0.013 c = 0.013 p = 0.047 Increases	High-quality evidence was found for beneficial effects of pint protection and patient education, moderate-quality evidence was found for beneficial effects of herital heraps, germain-indexic exits and only only earliest theory, and low-quality evidence was found for the effectiveness of the other intervention.	Low Industrie Industrie High High High Moderate Low-High

Baxter, 2016	RCT	33	RA patients	NR	7.01Y	1.1	NR	NR	15.0	NA	Walking: instructions on a walking route with three loops, to 11 be completed 3-4 times a week	Nutrition education se	ssion 22	HAQ	Change from BL	0.0 (0.6) <0.01	. (0.6)	p=0.62	0.0		High	
Hammond, 2004	RCT	328	RA patients	NR	9.5M	1.13	42.16	NR	NR	NA	Occupational therapy: Five sessions: four 1h individual 162 treatments and one 2h group arthritis education program, with additional sessions if needed, within 6-8W.	Usual care	164	HAQ	Change from BL until 12M	-0.11 -0.16 (95%CI - (95% 0.180.03) 0.25-	CI - -0.07)	p=0.39			High	
Iversen, 2010	SLR: 30 RC	Ts 731 (#5, R patients)	 Patients with RA, OA, fibromyaliga and other types of inflammatory arthritis. 	NR	NR	NR	NR	NR	NR	NA	Self-management interventions: educational, behavioural 45 and cognitive approaches to influence health knowledge, attitutes, belief and behaviouris to poment independence, maintain or adjust life roles, and address the psychological impact of diseases	Same intervention wit partner/Usual care/In booklets/Ufestyle ma for arthritis programm guide only	thout NR formation nagement ve/Self-help	Pain, function, fatigue, disease status	NR					Short-term benefits were found in four studies. Three had longer term follow-up at 12 months, but only two showed benefits; Conclusion: Of the 30 studies identified, only 14 had follow-ups of 12 months or longer, seven of which (two df the same SMART SAMP) led to sustained benefits in pain and/or function. Little is known about benefit is beyond 12 months a only two had longer-term follow-ups, although both showed some continuing benefits.	Moderate	Low- moderate
Knittle, 2015	RCT	78	RA patients	NR	NR	1.12	NR	NR	NR	NA	Education session plus a motivational interview from a 38 physical therapist and two self-regulation coaching sessions from a rheumatology nurse	Group-based education led by a physical thera	n session 40 apist	HAQ (post- intervention)	8W	0.99 (0.70) 1.28 ((0.58)		0.45	Effect size (Cohen's d): 0.03; p=0.530 (main effects of group × time interaction based on repeated measures mixed ANOVAs adjusted for age, gender, and baseline level of fixease activity.	High	
Mollard, 2018	I RCT	36	RA patients	NR	NR	0.58	2.78	NR	NR	NA	Usage of the LiveWR3Arthrise mobile app (supports off management behaviourus with features to monitor and manage the variables associated with MA, e.g. gan, treatment, diver (Breyls and environmenti data. App can provide reports that might help to identify aspect of patient flexity that marks their arthritis better ownoor and its patients compare effectiveness of different treatment strategies).	Usual care	15	HAQ-II	Change from BL until 6M	0.02 0.05		p=0.83		, ,	High	
Srikesavan, 2019	SLR: 6 RCT	\$ 567	RA patients (1 study mixed populati with patients with OA and fibromyalgia)	on NR	NR	NR	NR	NR	NR	NA	Web-based rehabilitation 86	Waiting list/usual care	e NR	Pain, function and quality of life	NR.					Conclusion: The effects of web-based enhabilitation interventions on pair, function, quilty of left, self-efficary, theramotid arthritis-knowledge, and physical activity are uncertain because of the very-low quilty of evidence mostly from small single tails. Adverse effects were not reported. Large, well designed tails are needed to evaluate the clinical and cost effectiveness of web based enhabilitation interventions in theumatoid arthritis.	Low	High
Albano, 2010	SLR: 7 SLR 10 RCTs, 2 nRCTs	;, 9955)	RA patients	NR	NR	NR	NR	NR	NR	NA	Educational programs (aiming at increasing knowledge and 49 impoving performance) and psycho-educational programs (combining sachist intervention activities to improve coping and change behaviour)	NR	NR	Pain	NR					Improvement in all 9 studies; Conclusion: Our study confirms that therapeutic patient education in hieranatologie, delivered throughetecticational or psycho- educational programs, is effective in terms of acquired knowledge, competencies and psychological improvement, whereas it brings fewer changes in health status and social well-being. The positive results are more frequently observed inshort-term than in long-term.	Moderate	High
Anvar, 2018	RCT	76	Older women with RA	NR	NR	NR	NR	NR	NR	NA.	Self-management program: Participants in these classes 39 followed a six week, multidisciplinary, group rehabilitation program as well as a pere education program, consisting of exercise and educational components (six weekly sessions et a 1 th	Control: NR	37	VAS-pain (score 0-100, higher score reflects more	6W			p=0.498			High	
DiRenzo, 2018	SLR: 5 RCT	\$ 399	RA patients	NR	NR	NR	NR	NR	NR	NA	or 1-1-309- Mindfulness/vitality training program 93 (#3	 Wait-list/cognitive bel therapy/education 	havioural 95	VAS-pain	Post-intervention		-0.58 (-1.2 0.10)	16-		>0 favours control; Conclusion: There are few trials evaluating the effect of mindfuness-based interventions on outcomes in patients with RA. Preliminary findings suggest that mindfulness-based interventions may be a useful stategy to improve psychological distress in those with RA.	Low	Moderate- High
El Miedany, 2012	RCT	147	RA patients	NR	11.3Υ	NR	9.3	NR	NR	NA	After 6 moths of usual rare: discussion of treatment goals 74 based on PKOM-calcustion, joint filters argumm (for patients aiming to 3) give patients strategies and both receivanty to make skill decisions to cope with their discusses () obtacker the patients about how to assess the mana-artithus counce measures: regisally of their arthritis, c) help the patients to dentify and manage the impact of their muccles and gives fits (for health care of postsonial aiming to 3) review the effects of patient education on several actomous; (j) leading the of patient education how to imperiment PROMs in management, g) leading the or of patient education as complementary.	Usual care	73	VAS-pain	Change from B. until 3M	1.44 (0.9) 1.41 (0.9)	p=0.788	0.03		High	
Feldthusen, 2016	RCT	70	RA patients with DAS28<3.8, VAS- fatigue >50 and disease duration >3	DAS28 3.4	1 12.9Y	NR	39.8	68.2	NR	NA	Tailored health-enhancing physical activity and balancing 36 Ife activities to guide participants in managing their fatgue: tating with induital person centered meeting during which a self-care plan was developed, then follow up meetings/phore contacks according to each participant's preferences with a physical therapist, who supported and coached each articipant	Usual care	34	VAS-pain (posi intervention)	t: Change from BL until 12W	-4.8 (18.4) -1.1 (24.6)	p=0.46	0.17		High	
Hammond, 2004	RCT	328	RA patients	NR	9.5M	1.13	42.16	NR	NR	NA	Occupational therapy: Five sessions: four 1h individual 162 treatments and one 2h group arthritis education program, with additional sessions if needed	Usual care	164	VAS-pain	Change from BL until 6M	-4.46 -1.54 (95%CI (95% '8.44 6.51-	0 - 3.44)	p=0.37			High	
Iversen, 2010	SLR: 30 RC	Ts 731 (#5, R patients)	 Patients with RA, OA, fibromyaliga and other types of inflammatory arthritis. 	NR	NR	NR	NR	NR	NR	NA	Self-management interventions: educational, behavioural #5 and cognitive approaches to influence health knowledge, attitudes, belief and behaviouris to pornet independence, maintain or adjust life roles, and address the psychological impact of diseases	Same intervention wit partner/Usual care/In booklets/Lifestyle ma for arthritis programm guide only	thout NR formation nagement ve/Self-help	Pain, function, fatigue, disease status	NR	u-ny				Short-term benefits were found in four studies. Three had longer term follow-up at 12 months, but only two showed benefits; Conclusion: Of the 30 studies identified, only 14 had follow-ups of 12 months or longer, seven of which (two of the same SMART SAMP) led to sustained benefits in pain and/or function. Little is known about benefit is beyond 12 months as only two had longer term follow ups, although both showed some continuing benefits.	Moderate	Low- moderate
Mollard, 2018	RCT	36	RA patients	NR	NR	0.58	2.78	NR	NR	NA	Usage of the LiveWithArthrite mobile app (supports self- management behaviours with statures to monitor and manage the variables associated with Nk e.g. pain, treatment, other lifestyle and environmental data. App can provide reports that might help to simply spaced opatient lifestyle that make their arthritis better or worse and lets patients compare effectiveness of different treatment strategies).	Usual care	15	VAS-pain (score 0-10)	Change from BL until 6M	-0.61 0.18		p=0.38			High	

Srikesavan, 2019	SLR: 6 RCTs 567	RA patients (1 study mixed population with patients with OA and fibromyalgia)	n NR	NR	NR	NR	NR	NR	NA	Web-based rehabilitation	#6	Waiting list/usual care	NR	Pain, function and quality of life	NR					Conclusion: The effects of web based rehabilitation interventions on pain, function, quality of life, self-efficary, thermatoid arthvits howeledge, and physical activity are uncertain because of the very low-quality of evidence mostly from small single tails. Adverse effects were not reported, large, weld-edigend tails are needed to evaluate the clinical and cost-effectswenses of web based exhabilitation interventions in thermatoid arthritis.	Low	High
QoL (EQ-5D) Baxter, 2016	RCT 33	RA patients	NR	7.01Y	1.1	NR	NR	15.0	NA	Walking: instructions on a walking route with three loops, t	to 11	Nutrition education session	22	EQ-5D	Change from BL	5.0 (4.8) -0.1 (5.6)		p=0.71	0.98		High	
Srikesavan, 2019	SLR: 6 RCTs 567	RA patients (1 study mixed population with patients with OA and fibromyalgia)	n NR	NR	NR	NR	NR	NR	NA	be completed 3-4 times a week Web-based inhabitation	#6	Walting list/usual care	NR	Pain and quality of life	until 6V NR					Conclusion: The effects of web-based inhabilitation interventions on pain, function, quality of file, self-efficacy, heumatoid antition. Knowledge, and physical schwa are uncertain because of the very low quality devidence monity from small angle bits. Advence efficiency ensore envirable the physical and conselficiencement of web based exhaultitation interventions in fleximated arthritis.	Low	High
Fatigue (VAS- Albano, 2010	- <u>fatigue)</u> SLR: 7 SLRs, 9955 10 RCTs, 20 nRCTs	RA patients	NR	NR	NR	NR	NR	NR	NA	Educational programs. (Jaiming at increasing knowledge and improving performance) and provide-educational programs (combining teaching intervention activities to improve coping and change behaviour)	d #4 s	NR	NR	Fatigue	NR					Improvement in all 4 studies; Conclusion: Our study confirms that therapeutic patient education in hekmatologi, Adviered througheducational or psycho- educational programs, is effective in terms of acquired knowledge; competencies and psychological improvement, whereas throings fewer changes in health status and social well-being. The possible results are more frequently observed inshort-term than in long term.	Moderat	e High
DiRenzo, 2018	8 SLR: 5 RCTs 399	RA patients	NR	NR	NR	NR	NR	NR	NA	Mindfulness/vitality training program	(#2)	Wait-list/cognitive behavioural therapy/education	NR	Fatigue	Post-intervention					Significant treatment effect favouring mindfuness/visiti training program; Concluion: There are few trials evaluating the effect of mindfuness-based interventions on outcomes in patients with RM. Preliminary findings suggest thatmindfuness-based interventions may be a useful stategy to improve psychological distress in those with RA.	Low	Moderate- High
Feldthusen, 2016	RCT 70	RA patients with DAS28<3.8, VAS- fatigue >50 and disease duration >3Y	DAS28 3.4	4 12.9Y	NR	39.8	68.2	NR	NA	Tallored health-enhancing physical activity and balancing life activities to guidele participants in managing their fatigue starting within self-care pian was developed, then follow-up meetings/phone contacts according to each participant's preferences with a physical therapist, who supported and coached each participant	36 r:	Usual care	34	VAS-fatigue (post- intervention)	Change from BL until 12W	-23.5 (19.9) -15.3 (24.4	a	p=0.042	0.37		High	
Iversen, 2010	0 SLR: 30 RCTs 731 (#5, R patients)	A Patients with RA, OA, fibromyaliga and other types of inflammatory anthritis.	NR	NR	NR	NR	NR	NR	NA	Self-margement intervention: educational, behavioual, and cognitve approaches to influence health includege, attitudes, beliefs and behaviours to promote independence maintain or adjuit for exist, and address the psychological impact of diseases	#5 r,	Same intervention without partner/Usual care/Information bookiets/Ufersyle managemen for anthritis programme/Self-he guide only	NR t Ip	Pain, function, fatigue, disease status	NR.					Short stem benefits were found in faur studies. There had longer term follow ap 12 months, bach only two showed benefits, Canclasias: Of the 30 studies identifiel, any 14 that follow-ups of 12 months or longer, second which (two of the same SMART ASMP) feld to sustained benefits in pain and/or function. Utile is known about benefit to beyond 12 months as only two bad longer term follow-up, athough both showed some continuing benefits.	Moderat o	e Low- moderate
<u>Disease activi</u> Albano, 2010	ity SLR: 7 SLRs, 9955 10 RCTs, 20 nRCTs	RA patients	NR	NR	NR	NR	NR	NR	NA	Educational programs (alming at increasing knowledge and imporving performance) and psycho-educational programs (combinitg teaching intervention activities to improve coping and change behaviour)	d #1 s	NR	NR	Disease activity score	NR					Improvement in 1 of 1 studies; Conclusion: Our study confirms that therapeutic patient education in theumatology, delivered througheducational or psycho- educational gragmam, is effective in terms of acquired knowledge, competencies and psychological improvement, whemas it bings fewer changes in health status and social wiel-beings. The possible results are more frequently observed inshort term than in long term.	Moderat	e High
DiRenzo, 2018	8 SLR: 5 RCTs 399	RA patients	NR	NR	NR	NR	NR	NR	NA	Mindfulness/vitality training program	59 (#2)	Wait-list/cognitive behavioural therapy/education	61	DAS28-CRP	Post-Intervention		-0.44 (-0. 0.12)	99-		>O favours control; Conclusion: There are few trials evaluating the effect of mindfulness-based interventions on outcomes in patients with RA. Preliminary findings suggest thatmindfulness-based interventions may be a useful strategy to improve psychological distress in those with RA.	Low	Moderate- High
Feldthusen, 2016	RCT 70	RA patients with DAS28<3.8, VAS- fatigue >50 and disease duration >3Y	12.9Y	DA\$28 3.4	I NR	39.8	68.2	NR	NA	Tailored health-enhancing physical activity and balancing life activities to guide participants in managing their fatigue starting with induitab peron-centered meeting during which a self-care plan was developed, then follow-up meetings/phone contacts according to each participants perferences with a physical therapist, who supported and coached each participant.	36 e:	Usual care	34	DAS28 (post- intervention)	Change from BL until 12W	-0.3 (0.9) -0.3 (1.0)		p=1.00	0.0		High	
ALTERNATIVE Pain (VAS-pair	E MEDICNE																					
Gok Metin, 2016	RCT 51	RA patients with pain (VAS ≥4) and fatigue (FSS ≥4)	10.7Y	DAS28 2.8 (0.88)	32 NR	6.02 (0-10)	NR	NR	Fatigue (FSS) 5.60	Aromatherapy (3/W for 3M on both knees, at home)	17	Usual care	17	VAS-pain	6W	1.59 (1.17) 4.29 (2.38		p=0.001	1.44		High	
Lee, 2014	SLR: RCTs 1 80	RA patients	7.3-9.2Y	NR	NR	NR	NR	NR	NA.	Reflexology (1/W for 40min on both feet, at home) Bee venom acupuncture (ashi points, acupoints near the inflammation point, 2/W)	17 37	Usual care Acupuncture with placebo	17 37	VAS-pain VAS-pain	6W 2M	0.56 (1.14) 4.29 (2.38	-18.10 (-, 23.71 12.49)	p=0.001 p<0.05	2.00	Low-quality evidence that bee venom acupuncture can significantly reduce pain, morning stiffness, tender joint counts, swollen joint counts and improve QoL.	Low	High
Macfarlane, 2012	SLR: RCTs 11 672	RA patients receiving complementary therapy	y NR	NR	NR	NR	NR	NR	NA.	Acupuncture (traditional Chinese acupuncture, electrical current acupuncture, single-point acupuncture or undefined acupuncture) (Mindfulness) meditation	119 (3 d studies) 79 (2	Sham acupuncture Waitlist controls or cognitive	65 128	Pain reduction Pain				ns ns		No good evidence of efficacy or effectiveness for the practitioner-based complementary therapies considered here.	Moderat	æ Moderate
											studies]	behavioural therapy for pain education										
										Autogenic training	18 (1 study)	Auncular acupuncture	16	rain				ns				
										Healing therapy	15 (1 study)	Usual care	14	Pain				ns				
										Progressive muscle relaxation	44 (1 study)	Cognitive behavioural therapy	124	Pain				ns				

											Static magnets	38 (1 study)	Low magnetic strength control 34	5 Pa	in				ns				
Gok Metin,	RCT	51	RA patients with pain (VAS \geq 4) and	10.7Y	DAS28 2.82	NR	6.02 (0-10)	NR	NR	Fatigue (FSS) 5.60	Aromatherapy (3/W for 3M on both knees, at home)	17	Usual care 1	Fa	tigue (FSS)	6W	2.94 (1.13)	4.41 (1.79)	p=0.001	0.98		High	
2016			fatigue (FSS ≥4)		(0.88)						Reflexplogy (1/W for 40min on both feet. at home)	17	Usual care 1	Fa	tique (FSS)	6W	1.88(1.18)	4.41 (1.79)	p=0.001	1.67			
Other Jiang, 2018	RCT	60	RA patients with unilateral elbow stiffness	NR	NR	NR	NR	NR	NR	Maximum angle of active extension position of elbow.	Acupotomy loosing (tender point in lateral elbow joint was taken as treatment point, $1/W)$	20	Usual care 21) M an ex	aximum gle of active tension	4W	7.01 (4.85)	32.87 (10.24)	p<0.05	3.23		High	
										mean: 37.2;				po	sition of								
										active flexion				M	aximum	4W	112.14	90.87	p<0.05	1.69			
										position of elbow, mean: 89-1:				an fie	gle of active vion position		(9.14)	(15.25)					
										Maximum angle of				of	elbow								
										active flexion position of elbow.				Ra	nge of stion	4W	105.13 (15.84)	58.00	p<0.05	3.81			
										mean 51.9	Acupotomy loosing (tender point in lateral elbow joint was	20	Electroacupuncture (Acuepoint of 2)	м	aximum	4W	7.01 (4.85)	112.14	p<0.05	14.37			
											taken as treatment point, 1/w)		treatment point, 6/W)	ex	gie of active tension			(9.14)					
														po	sition of								
														м	aximum	4W	112.14	98.50	p<0.05	1.06			
														an fle	gle of active xion position		(9.14)	(15.67)					
														of	elbow nan of	aw	105 12	90.97	~0.05	0.92			
														m	otion		(15.84)	(15.25)	places	0.52			
											Electroacupuncture (Acuepoint of Tianzhu was selected as treatment point, 6/W)	20	Usual care 2) M an	aximum gle of active	4W	112.14 (9.14)	32.87 (10.24)	p<0.05	8.17			
														ex	tension								
														elt	sition of cow								
														M	aximum ale of active	4W	98.50 (15.67)	90.87	p<0.05	0.49			
														fle	xion position								
														Ra	nge of	4W	90.87	58.00	p<0.05	2.74			
lee. 2014	SLR: RCTs	1 80	R4 patients	7 3-9 2Y	NR	NR	NR	NR	NR	NA	Ree venom acupuncture (ashi points acupoints near the	37	Placebo 3	mi 7 M	otion	2M	(15.25)	(7.45)	- pc0.05		low-quality evidence that bee venom acununcture can	low Hi	zh
Marfarlane	SLR- RCTs	11 672	R4 patients receiving complementan	V NR	NR	NR	NR	NR	NR	NA	inflammation point, 2/W) Acumuncture (traditional Chinese acumuncture, electrical	119/3	Sham acupuncture 6	sti	ffness			2.00 - 0	60)		significantly reduce pain, morning stiffness, tender joint counts, swollen joint counts and improve QoL.	Moderate M	nderate
2012			therapy	,							current acupuncture, single-point acupuncture or undefined acupuncture)	studies)	11	35	sessment						practitioner-based complementary therapies considered here.		
											Healing ulerapy	study)	usual care 1	as	sessment				impiovement				
											Static magnets	38 (1 study)	Low magnetic strength control 3	i Pa as	tient global sessment				Improvement				
CRYOTHERAD	PV .																						_
Function (HAQ	<u>ਰ)</u>																						
Gizinska, 2015	5 Non-RCT	44	Postmenopauzal women with RA	10.9Y	DAS28 5.14	2.21 (Intervention: 1.82; Control 2.72)	57.00	NR	NR	NA	Whole-body cryotherapy (5/W for 3min)	25	Traditional rehabilitation 1	э ни	iQ.	12W	1.64 (1.19)	2.12 (1.30)	p=0.0116	0.39		High	
Jastrząbek, 2013	RCT	40	RA patients	13.55Y	DAS28 6.15	1.2	66.5	63.4	NR	NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, -160 °C, 1/D knee joints and 1/D joints of both	20	Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/D knee) на	Q-DI	10D	0.9 (0.6)	0.9 (0.3)	p= 0.0787	0.0		High	
											hands)		joints and 1/D joints of both hands)										
Pain (VAS-pair	in)																						
Gizinska, 2015	5 Non-RCT	44	Postmenopauzal women with RA	10.9Y	DAS28 5.14	2.21 (Intervention: 1.82: Control	57.00	NR	NR	NA	Whole-body cryotherapy (5/W for 3min)	25	Traditional rehabilitation 19	9 V/	IS-pain	12W	40.80 (17.93)	52.95 (16.36)	p=0.7581	0.71		High	
lastrzabek	RCT					2.72)																High	
2013	1061	40	PA patients	12 SSV	DA\$28.6.15	12	66.5	62.4	NP	NA	Nitronen vanour treatment (2 min liquid nitronen flow	20	Cold air treatment (2 min cool air 2)	S-main	100	22 5 (20 2)	40.1 (24.2)	n= 0.4999	0.24			
		40	RA patients	13.55Y	DAS28 6.15	1.2	66.5	63.4	NR	NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, -160 °C, 1/D knee joints and 1/D joints of both	20	Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/D knee) VA	(S-pain	100	32.5 (20.3)	40.1 (24.3)	p= 0.4989	0.34			
		40	RA patients	13.55Y	DAS28 6.15	1.2	66.5	63.4	NR	NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, -160 °C, 1/D knee joints and 1/D joints of both hands)	20	Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/D knee joints and 1/D joints of both hands)) V#	lS-pain	100	32.5 (20.3)	40.1 (24.3)	p= 0.4989	0.34			
Entirue (VAS.f	fatimus)	40	RA patients	13.55Y	DAS28 6.15	1.2	66.5	63.4	NR	NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, $-160~^{\circ}C$ 1/D knee joints and 1/D joints of both hands)	20	Cold air treatment (3 min cool air $2i$ flow treatment, -30 °C, $1/D$ knee joints and $1/D$ joints of both hands)) V4	(S-pain	100	32.5 (20.3)	40.1 (24.3)	p= 0.4989	0.34			
Fatigue (VAS-f Jastrząbek,	-fatigue) RCT	40	RA patients RA patients	13.55Y 13.55Y	DAS28 6.15 DAS28 6.15	1.2	66.5	63.4	NR NR	NA NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, – 160 °C, 1/D knee joints and 1/D joints of both hands) Nitrogen vapour treatment (3 min liquid nitrogen flow	20 20	Cold air treatment (3 min cool air 2) flow treatment, - 30 °C, 1/D knee joints and 1/D joints of both hands) Cold air treatment (3 min cool air 2)) VA	S-pain S-fatigue	100	32.5 (20.3) 36.5 (23.1)	40.1 (24.3) 34.4 (22.1)	p= 0.4989 p= 0.1478	0.34		High	
<u>Fatigue (VAS-f</u> Jastrząbek, 2013	-fatigue) RCT	40	RA patients RA patients	13.55Y 13.55Y	DAS28 6.15 DAS28 6.15	1.2	66.5	63.4	NR NR	NA	Nitrogen vapour treatment (3 min legul nitrogen flow treatment, -160° C J/D knee joints and J/D joints of both hands) Nitrogen vapour treatment (3 min legul nitrogen flow treatment, -160° C J/D knee joints and J/D joints of both hands)	20 20	Cold air treatment (3 min cool air 20 flow treatment, -30 °C, 1/D knee joints and 1/D joints of both hands) Cold air treatment (3 min cool air 20 flow treatment, -30 °C, 1/D knee joints and 1/D joints of both	0 VA	G-pain G-fatigue	100	32.5 (20.3) 36.5 (23.1)	40.1 (24.3) 34.4 (22.1)	p= 0.4989 p= 0.1478	0.34		High	
<u>Fatigue (VAS-f</u> Jastrząbek, 2013	-fatigue) RCT	40	RA patients RA patients	13.55Y 13.55Y	DAS28 6.15 DAS28 6.15	1.2	66.5	63.4	NR	NA NA	Mongon exposure resumment () min liquid nihragen flow transment, $-160^\circ\mathrm{C}$ $1/0$ knee points and $1/0$ points of both kands) . Minogen vapour treatment () min liquid nihragen flow treatment, $-160^\circ\mathrm{C}$ $1/0$ knee points and $1/0$ points of both hands)	20	Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/D knee joints and 3/D joints of both hands) Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/D knee joints and 3/D joints of both hands)	0 VA	G-pain G-fatigue	100	32.5 (20.3) 36.5 (23.1)	40.1 (24.3) 34.4 (22.1)	p= 0.4989 p= 0.1478	0.34		High	
Fatigue (VAS-f Jastrząbek, 2013 Disease activit	-fatigue) RCT	40	RA patients	13.55Y 13.55Y	DAS28 6.15	1.2	66.5	63.4	NR NR	NA NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, -160 °C, $1/0$ knee joints and $1/0$ joints of both hand) Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, -160 °C, $1/0$ knee joints and $1/0$ joints of both hands)	20	Cold air treatment (3 mìn cool air 2 flow treatment, -30 °C, 1/0 knee joints and 1/D joints of both hands) Cold air treatment (3 mìn cool air 2 flow treatment, -30 °C, 1/0 knee joints and 1/D joints of both hands)) V2	G-pain G-fatigue	100	32.5 (20.3) 36.5 (23.1)	40.1 (24.3) 34.4 (22.1)	p= 0.4989 p= 0.1478	0.34		High	
Fatigue (VAS-f Jastrząbek, 2013 <u>Disease activit</u> Jastrząbek, 2013	-fatigue) RCT İty RCT	40	RA patients RA patients	13.55Y 13.55Y 13.55Y	DAS28 6.15 DAS28 6.15 DAS28 6.15	1.2	66.5 66.5	63.4 63.4 63.4	NR NR	NA NA	Nitrogen vapour treatment (3 min liquid nitrogen flow treatment, -160 °C, $1/2$ lones joints and $1/2$ joints of both hands) Nitrogen vapour treatment (1 min liquid nitrogen flow treatment, -160 °C, $1/2$ lones joints and $1/2$ joints of both hands)	20 20 20	Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/0 knee joints and 1/D joints of both hands) Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/0 knee joints and 1/D joints of both hands) Cold air treatment (3 min cool air 2) flow treatment, -30 °C, 1/0 knee	4V (1	(S-pain (S-fatigue	100	32.5 (20.3) 36.5 (23.1) 4.96 (1.07)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04)	p= 0.4989 p= 0.1478 p= 0.6849	0.34		High High	
<u>Fatigue (VAS-f</u> Jastrapbek, 2013 <u>Disease activit</u> Jastrapbek, 2013	-fatigue) RCT Ity RCT	40 40 40	RA patients RA patients RA patients	13.55Y 13.55Y 13.55Y	DAS28 6.15 DAS28 6.15 DAS28 6.15	1.2	66.5 66.5	63.4 63.4 63.4	NR NR	NA NA	Mangano vagour transmers () min liquid nitrogen flow transmers. -160° C, $1/0$ know joints and $1/0$ joints of both hands) . Nongeno vagour transmers () min liquid nitrogen flow transmerst. -160° C, $1/0$ know joints and $1/0$ joints of both hands) . Nongeno vagour transmerst () min liquid nitrogen flow transmerst. -160° C, $1/0$ know joints and $1/0$ joints of both hands)	20 20 20	Cold air treatment, 13 min cool air 2 flow treatment, -30 °C, 1/D knee pinist, and 1/D pinist of both hands) Cold air treatment (1 min cool air 2 flow treatment, -30 °C, 1/D knee pinist, and 1/D pinist of both hands) Cold air treatment (1 min cool air 2 Cold air treatment (1 min cool air 2 Cold air treatment (1 min cool air 2 flow treatment, -30 °C, 1/D knee pinist and 1/D pinist of both hands)	4v (4v (IS-pain IS-fatigue	100	32.5 (20.3) 36.5 (23.1) 4.96 (1.07)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04)	p= 0.4989 p= 0.1478 p= 0.6849	0.34		High	
Fatigue (VAS-f Jastrapbek, 2013 Disease activit Jastrapbek, 2013 BALNEOTPHER	-fatigue) RCT ity RCT RAPY	40	RA patients RA patients	13.55Y 13.55Y 13.55Y	DAS28 6.15 DAS28 6.15 DAS28 6.15	1.2	66.5	63.4 63.4 63.4	NR NR	NA NA	Nongen vagour treatment () min liquid nitragen flow traitment, -160° C, $1/0$ knee joins and $1/0$ joins of both hands) Nongen vagour treatment () min liquid nitragen flow treatment, -160° C, $1/0$ knee joins and $1/0$ joins of both hands) Nongen vagour treatment () min liquid nitragen flow treatment, -160° C, $1/0$ knee joins and $1/0$ joins of both hands)	20 20 20	Cold air treatment (1 min cool air 2 floor treatment, -30 °C, 1/5 lice point, and 1/2 piets of both hands) Cold air treatment (1 min cool air 2 floor treatment, -30 °C, 1/0 licee point, and 1/2 piets of both hands) Cold air treatment, -30 °C, 1/0 licee point, and 1/2 piets of both hands)	4V (1	IS-pain IS-fatigue	100	32.5 (20.3) 36.5 (23.1) 4.96 (1.07)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04)	p= 0.4989 p= 0.1478 p= 0.6849	0.34		High	
Fatigue (VAS-f Jastrapbek, 2013 Disease activit Jastrapbek, 2013 BALNEOTHER Function (HAQ)	rfatigue) RCT ity RCT RAPY Q1 RAPY	40	RA patients RA patients	13.55Y 13.55Y 13.55Y	DAS28 6.15 DAS28 6.15 DAS28 6.15	1.2	66.5	63.4 63.4 63.4	NR NR NR	NA NA NA	Nitrogen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/D kone joints and 1/D joints of both hand) Nitrogen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/D kone joints and 1/D joints of both hands)	20 20 20	Cold air treatment (3 min cool air 2 filow treatment, -30 °C, 1/D isse prists and 1/D joints of both hands) Cold air treatment (3 min cool air 2 filow treatment, -30 °C, 1/D isse joints and 1/D joints of both hands)	4V (1	(S-pain (S-fatigue	100	32.5 (20.3) 36.5 (23.1) 4.96 (1.07)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04)	p= 0.4989 p= 0.1478 p= 0.6849	0.34		High High	
Fatigue (VAS-f Jastrząbek, 2013 Disease activit Jastrząbek, 2013 BALNEOTHER Function (HAQ Annegret, 201	-fatigue) RCT ity RCT RCT RCT RAPY Q1 116 RCT	40 40 40 98	RA patients RA patients RA patients	13.55Y 13.55Y 13.55Y NR	DAS28 6.15 DAS28 6.15 DAS28 6.15 DAS28 6.15	1.2 1.2 1.2 0.94 (0.57)	66.5 66.5 66.5 5.45	63.4 63.4 63.4 NR	NR NR NR	NA NA NA	$\label{eq:restrict} \begin{split} & \text{Mengen expansion} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \end{split} \\ & \text{Nengen separat treatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Nengen separat treatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Nengen separat treatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands) \\ & \text{Redon spat threatment} (I am Induct altergen flow treatment; -160 °C, 1/0 knee jorts and 1/0 jorts of both hands and 1/0 jorts o$	20 20 20 50	Cold air treatment (3 min cool air 2 filow teatment, -30 °C, 1/D knee prins and 1/D pains of both hands) Cold air treatment (3 min cool air 2 Kon teatment, -30 °C, 1/D knee prins and 1/D pains of both hands) Cold air treatment (3 min cool air 2 prins and 1/D pains of both hands) Tage water bash (prevery 2-3D for 40 min)	4V (4V (40 (40 (40 (40 (40 (40 (40 (40	IS-pain IS-fatigue IS28	100 100 100 Change from BL urdl 260	32.5 (20.3) 36.5 (23.1) 4.96 (1.07) 0.08 (0.39)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04) 0.10 (0.29)	p= 0.4989 p= 0.1478 p= 0.6849	0.34		High High	
Fatigue (VAS-f Jastrajbek, 2013 Disease activit Jastrajbek, 2013 BALNEOTHER Function (HAQ Annegret, 2016	-fatigue) RCT ity RCT RCT RAPY Q1 16 RCT RCT	40 40 40 98 44	RA patients RA patients RA patients Al BA patients RA patients	13.55Y 13.55Y 13.55Y 13.55Y NR	DAS28 6.15 DAS28 6.15 DAS28 6.15 DAS28 6.15	1.2 1.2 1.2 0.94 (0.57) 1.42 (0.72)	66.5 66.5 5.45 48.07 (26.48)	63.4 63.4 63.4 NR 56.36 (28.70)	NR NR NR NR	NA NA NA VAS-QDL 47.05 (21.74)	Mangan vagavu treatment () min laudi nihogen flow treatment: -160°C, 1/0 knee jonts and 1/0 jonts of both hands) Nihogen vagavu treatment () min laudi nihogen flow treatment: -160°C 1/0 knee jonts and 1/0 jonts of both hands) Nihogen vagavu treatment () min laudi nihogen flow treatment; -160°C, 1/0 knee jonts and 1/0 jonts of both hands) Radon spa therapy (every 2-30 for 20min) Spa therapy (kulphur bath treatment; 1/0)	20 20 20 50 22	Cold air treatment (1 min cool air 2 Did air treatment - 30 °C, 1/3 Unest and 1/0 prints of the bit should) Cold air treatment (1 min cool air 2 Cold air treatment (1 min cool air 2 Cold air treatment (-30 °C, 1/3 Unest 2 Top onto the bit (-30 °C, 1/3 Unest 2 Top onto the bit (-30 °C, 1/3 Unest 2 Data air treatment (-30 °C, 1/3 Unest 2 Data air treatment (-30 °C, 1/3 Unest 2	2 V C 2 V C 2 DA 2 HA 2 HA	IS-pain IS-fatigue IS-28 IS-28	100 100 100 00 00 00 00 00 00 00 00 00 0	32.5 (20.3) 36.5 (23.1) 4.96 (1.07) 0.08 (0.39)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04) 0.10 (0.29) +0.37 (f) .6.64)	p= 0.4989 p= 0.1478 p= 0.6849	0.34	Adjusted for baseline	High High High	_
Fatigue (VAS-14 Jastrząbek, 2013 Dicease activity Jastrząbek, 2013 BALNEOTHER Function (HAQ Armegret, 201 Santos, 2016 Santos, 2019	-fatigue) RCT ity RCT RAPY Q1 16 RCT RCT RCT SLR (8 SLR	40 40 40 98 44 ≈) 6740	RA patients RA patients RA patients RA patients RA patients RA patients RA patients	13.55Y 13.55Y 13.55Y NR NR NR	DAS28 6.15 DAS28 6.15 DAS28 6.15 DAS28 6.15 DAS28 4.73 (1.53) NR	1.2 1.2 1.2 0.94 (0.57) 1.42 (0.72) NR	66.5 66.5 66.5 48.07 (26.48) Nr	63.4 63.4 63.4 NR 56.36 (28.70) NR	NR NR NR NR NR	NA NA NA VAS-QOL 47.05 (22.74) NR	Ningen vapour treatment () min liquid ningen flow treatment, -160°C, 1/0 knee ports and 1/0 parts of both hands) Ningen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/D knee ports and 1/D ports of both hands) Ningen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/D knee ports and 1/D ports of both hand)	20 20 20 50 22 998 (#2)	Cold air treatment (1 min cool air 2 min cool air 2 min and 1/2 piets of both hands) Cold air treatment (- min cool air 2 min	0 V.2 0 V.4 0 D.4 8 H.4 8 H.4 8 H.4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S-pain S-fatigue S28 بر بر بر بر المالي	100 100 Change from BL 212 NR	32.5 (20.3) 36.5 (23.1) 4.96 (1.07) 0.08 (0.39)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04) 0.10 (0.29) +0.37 (0.64)	p= 0.4989 p= 0.1478 p= 0.6849	0.34	Adjusted for baseline Note of fifth and empirical to a control the administ is Constaining of The Included informations cals	High High High Moderate M	aderate
Fatigue (VAS-4 Jastrząbek, 2013 Disease actilwi Jastrząbek, 2013 BALNEOTHER Function (MAQ Armegre, 201 Santos, 2019	Fatigue) RCT RCT RCT RAPY <u>01</u> 16 RCT RCT SLR (8 SLR	40 40 40 98 44 84 6740	RA patients RA patients RA patients RA patients RA patients RA patients	13.55Y 13.55Y 13.55Y NR NR NR	DAS28 6.15 DAS28 6.15 DAS28 6.15 DAS28 6.15 DAS28 4.73 (1.53) NR	1.2 1.2 1.2 0.94 (0.57) 1.42 (0.72) NR	66.5 66.5 6.5 48.07 (26.48) Nr	63.4 63.4 63.4 NR 56.36 (28.70) NR	NR NR NR NR NR	NA NA NA VA5 QCI 47.05 (21.24)	Nongen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/0 knee ports and 1/0 ports of both hands) Nongen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/0 knee ports and 1/0 ports of both hands) Nongen vapour treatment () min liquid nitrogen flow treatment, -160°C, 1/0 knee ports and 1/0 ports of both hands)	20 20 20 50 22 998 (#2)	Cidd air treatment (Jimin cool air 2 min cool ai	2 V. (0 2 V. (0 3 D. (0 4 D. (S-pain S-fatigue S28 KQ KQ-DI nctional ability	100 100 00 Ounge from BL 210 NR	32.5 (20.3) 36.5 (23.1) 4.96 (1.07) 0.08 (0.39)	40.1 (24.3) 34.4 (22.1) 5.10 (1.04) 0.10 (0.29) 0.64)	p= 0.4989 p= 0.1478 p= 0.6849	0.34	Adjusted for tasseline No effect or difference compared to a control restruction Conficemponent or high energical physical ad solving interventiona, physical interventions and custom	High High High Moderate M	oderate

Pain (VAS-pain)

A	llam, 2018	RCT	30	All RA patients	NR	NR	NR	42.1	NR	NR	NA	Siwan therapy (sand bathing and massage with olive oil for 7D)	15	Traditional exercise program (3 sessions a week for 2M)	15	VAS-pain	NR	37	7.1(18.1) 5	1.1 (13.3)	a	0.005	0.88		High	
s	antos, 2016	RCT	44	RA patients	NR	DAS28 4.73 (1.53)	1.42 (0.72)	48.07 (26.48)	56.36 (28.70)	NR	VAS-QoL 47.05 (21.74)	Spa therapy (Sulphur bath treatments, 1/D)	22	Usual care	22	VAS-pain	21D			+10 3.47	.19 (- p 7-23.86)	=0.140		Adjusted for baseline	High	
s	antos, 2019	SLR (8 SLRs)	6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Hydrotherapy/balneotherapy	998 (#2	Usual care/placebo/other non- pharmacological or non-surgical interventions	#8	Pain	NR							No effect or difference compared to a control treatment; Conclusions: Of the included interventions, only multicomponent or single exercise/physical activity intervention, gov/concol interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
<u>c</u> s	oL (EQ-5D) antos, 2016	RCT	44	RA patients	NR	DAS28 4.73 (1.53)	1.42 (0.72)	48.07 (26.48)	56.36 (28.70)	NR	VAS-QoL 47.05 (21.74)	Spa therapy (Sulphur bath treatments, 1/D)	22	Usual care	22	VAS-QoL	21D			+6.5 9.11	53 (-, - p 1-21.18)	=0.372		Adjusted for baseline	High	
<u>F</u> S	atigue (VAS-fz antos, 2016	RCT	44	RA patients	NR	DAS28 4.73 (1.53)	1.42 (0.72)	48.07 (26.48)	56.36 (28.70)	NR	VAS-QoL 47.05 (21.74)	Spa therapy (Sulphur bath treatments, 1/D)	22	Usual care	22	VAS-fatigue	21D			+2.8 13.4 19.2	89 (-, - p 48- 26)	= 0.723		Adjusted for baseline	High	
s	isease activity antos, 2016	RCT	44	RA patients	NR	DAS28 4.73 (1.53)	1.42 (0.72)	48.07 (26.48)	56.36 (28.70)	NR	VAS-QoL 47.05 (21.74)	Spa therapy (Sulphur bath treatments, $1\!/\!D)$	22	Usual care	22	DAS28	21D			+0.2	21 (-, p 5-0.68)	=0.368		Adjusted for baseline	High	
s	<u>ther</u> antos, 2019	SLR (8 SLRs)	6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Hydrotherapy/balneotherapy	491 (#1	Usual care/placebo/other non- pharmacological or non-surgical interventions	#8	Global impact of disease	NR							No effect or difference compared to a control treatment; Conclusion: Of the included interventions, only multicomponent or single exercise/physical activity interventions,paychoaccial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
1	TENSIFICATI	ON OF PATIES	NT CARE																							
2	e Thurah, D18	RCT	294	RA patients with disease duration >2	Y DAS28 2.07	7 11-12Y, range of medians	NR	NR	NR	NR	NA	Patient-reported outcome based tele-health follow-up carried out by a nurse	88	Conventional outpatient followup by physicians	94	HAQ (ITT analysis)	Change from BL until 52W	0.	0.05 (95%C) 0 0.02-0.12) 0	.08 (95%Cl -0.0 .02-0.14) (90% 0.13	13 p 16C1 - 3-0.06)	=0.47			High	
												ratient-reported outcome based tele-nearth follow-up carried out by a rheumatologist	93	by physicians	94	analysis)	until 52W	-0	0.03-0.09) 0	.08 (95%CI -0.0 .02-0.14) (90% 0.14	ю р КСІ - \$-0.04)	3=0.26				
٢	ewlett, 2005	RCT	209	RA patients	NR	7.0-10.0Y, range of medians	1.30	3.04	NR	NR	NA	Direct access to hospital review (rheumatologist, physiotherapist, occupational therapist) by patients with RA through a nurse-led telephone helpline for 2Y	68	Usual care (review initiated by rheumatologists)	52	HAQ (long- term follow-up	Change from BL p) until 6Y	0. 0. 0. m	19(- 0 125- 0 175), r nedian (. 25 (0- . 75), nedian QR)	P	s=0.39			High	
F	lunoz- ernandez,	Non-RCT	393 (RA 302)	All RA patients	10.0Y	DAS28 (RA) 2.9	0.8 (RA patients) NR	NR	0.7	NA	Nursing clinics in rheumatology	181 (RA 142)	No nursing clinic	212 (RA 160)	HAQ (RA)	12M	ů.	.7 (0.7) 0	.9 (0.7)	P	=0.023	0.29		High	
T	jhuis, 2002	RCT	210	RA patients with increasing difficulty in performing activities of daily living over the previous 6 weeks.	1.9Y	DAS28 5.63 (Nurse specialist patients 5.32;	1.40 (Nurse specialist patients 1.17; Inpatients 1.49; Day patients	NR	NR	NR	NA	Clinical nurse specialist (clinical nurse specialist provided information about RA and prescribed, in consultation with the rheumatologist, joint splints, adaptive equipment, and house adaptations if needed)	71	Inpatient team care (9 treatment days within 2-3W, admitted to the hospital for 12 consecutive days, including the weekend)	71	HAQ	Change from BL until 6W	0. 0. (9	1.09 (-0.02, 0 1.20), mean 0 95% CI) (. 19 (0.08, . 29), mean 95% CI)	p a b	0.05, adjusted for age and difference at baseline			High	
						5.72; Day patients 5.85; p<0.05)	1.54, protory							Day patient team care (9 treatment days, 3/W, from 10AM until 4PM with a fixed period of 1.5 hours of bed rest)	71	HAQ	Change from BL until 6W	0. 0. (9	1.09 (-0.02, 0 1.20), mean 0 95% CI) (.27 (0.16, .37), mean 95% CI)	P a b	<0.05, adjusted for age and difference at paseline				
F	ain (VAS-pain) ewlett, 2005	RCT	209	RA patients	7.0-10.0Y, range of medians	NR	1.30	3.04	NR	NR	NA	Direct access to hospital review (rheumatologist, physiotherapist, occupational therapist) by patients with RA through a nurse-led telephone helpline for 2Y	68	Usual care (review initiated by rheumatologists)	52	VAS-pain (lon term follow-up	g- Change from BL p) until 6Y	1. 3. m	.25 (-0.40- 1 .25), 3 nedian r	.1 (-1.00- .60), nedian	P	=0.91			High	
v	/ang, 2017	RCT	220	RA patients	8.8Y	DAS28 4.37	NR	NR	43.14	NR	NA	Nurse-led care	110	Rheumatologist-led care	110	VAS-pain	12M	25	9.21 2	6.03	P	×0.001			High	1
2 2	<u>oL (EQ-5D)</u> e Thurah, 018	RCT	294	RA patients with disease duration >2	Y DAS28 2.07	7 11-12Y, range of medians	NR	NR	NR	NR	NA	Patient-reported outcome based tele-health follow-up carried out by a nurse Patient-reported outcome based tele-health follow-up	88 93	Conventional outpatient followup by physicians Conventional outpatient followup	94 94	EQ-SD (ITT analysis) EQ-SD (ITT	Change from BL until 52W Change from BL	-0 (9 0. 0-	0.02 - 95%Cl - (1.06-0.03) 0 0.02 -	0.01 -0.0 95%Cl - (90) .06-0.05) 0.09 0.01 -0.0	11 р КСІ - Э-0.05) 11 р	=0.83 =0.75			High	
H	ewiett, 2005	RCT	209	RA patients	NR	7.0-10.0Y,	1.30	3.04	NR	NR	NA	carried out by a rheumatologist Direct access to hospital review (rheumatologist,	68	by physicians Usual care (review initiated by	52	analysis) QoL (SF-36)	until 52W Change from BL	(9 0.	95%CI - (1.07-0.04) C	95%CI - (901 .06-0.05) 0.05	%С1- Э-0.07) п	15			High	
	lunoz-	Non-RCT	393 (RA	All RA patients	10.0Y	range of medians DAS28 (RA)	0.8 (RA patients) NR	NB	0.7	NA	physiotherapist, occupational therapist) by patients with RA through a nurse-led telephone helpline for 2Y Nursing clinics in rheumatology	181 (RA	rheumatologists) No nursing clinic	212 (RA	(long-term follow-up) EQ-5D tariff	until 6Y	n	.7 (0.2)	.7 (0.2)		=0.069	0.0		High	
F 2	ernandez, D16		302)		10.01	2.9	2.0 (res pasients	,		<i>a.a</i>			142)	contracting contractions	160)			u.			٢					l.
<u>F</u> d	atigue (VAS-fa e Thurah, 017	tigue) SLR: 7 RCTs	548 (#5, only RA patients)	RA patients	NR	NR	NR	NR	NR	NR	NA	Nurse-led follow-up in managing disease control	183	Physician-led follow-up	182	Fatigue	14			-4.1 1.68	3 (-9.94- 8)			>0 favours physician led follow-up; Conclusion: After 1yea o difference in disease activity; indicated by DAS-28, wer found between embedded nurse-led follow-up; DAS-28, were found between embedded nurse-led follow-up; IRA patients with low disease activity or emission.	Low	Moderate
v	/ang, 2017	RCT	220	RA patients	8.8Y	DAS28 4.37	NR	NR	43.14	NR	NA	Nurse-led care	110	Rheumatologist-led care	110	VAS-fatigue	12M	45	9.41 4	4.03	P	×0.001			High	
<u>c</u>	isease activity																									

de Thurah, 2017	SLR: 7 RCTs	548 (#5, only RA patients)	RA patients	NR	NR	NR	NR	NR	NR	NA	Nune-led follow up in managing disease control	263	Physician-led follow-up	271	Disease activity	14					-0.07 (-0.23 0.09)			x0 favous physician led follow-up; Conclusion: After 1 years no difference in disease activity, indicated by Qu-23, were finded between enhanced anale sheld follow-up, in AB patters with conventional physician led Glow-up. In AB patters found in patters a statication after 1 years (standard mean farmer (SMI)—107 (SMI C-1) 2000; hierease a difference (SMI)—107 (SMI C-1) 2000; hierease a difference (SMI)—107 (SMI C-1) 2000; hierease a difference (SMI)—108 years (SMI C-0) 2000; hierease address-up applicant difference in forward of parts led difference (SMI)—108 years (SMI C-0) 2000; hierease a 1 2000.	Low	Moderate
de Thurah, 2018	RCT	294	RA patients with disease duration >:	2Y DAS28 2.0	17 11-12Y, range of medians	NR	NR	NR	NR	NA	Patient-reported outcome based tele-health follow-up carried out by a nurse	88	Conventional outpatient follows by physicians	ip 94	DAS28 (ITT analysis)	Change from BL until 52W			-0.26 (95%Cl - 0.440.07)	-0.06 (95%Cl - 0.23-0.12)	-0.19 (90%Cl - 0.41-0.02)	p=0.15			High	
											Patient-reported outcome based tele-health follow-up carried out by a rheumatologist	93	Conventional outpatient follows by physicians	ip 94	DAS28 (ITT analysis)	Change from BL until 52W			-0.16 (95%Cl -	-0.06 (95%Cl -	-0.10 (95%Cl -	p=0.45				
Munoz- Fernandez,	Non-RCT	393 (RA 302)	All RA patients	10.0Y	DAS28 (RA) 2.9	0.8 (RA patient	ts) NR	NR	0.7	NA	Nursing clinics in rheumatology	181 (RA 142)	No nursing clinic	212 (RA 160)	DAS28 (RA)	12M			2.7 (1.1)	2.8(1.1)	0.50-0.15)	p=0.274	0.09		High	
2016 Wang, 2017	RCT	220	RA patients	8.8Y	DAS28 4.37	NR	NR	43.14	NR	NA	Nurse-led care	110	Rheumatologist-led care	110	DAS28	12M			1.02 (1.32)	0.98 (1.06)		p<0.001	0.03		High	
Function (HAI	OGICAL <u>2)</u> SLR: RCTs 1	623	R4 patients with pain	NR	NB	NR	NB	NR	NR	NA	Oninids	243 (2	Placebo		Functional				0.1 lower					There is limited evidence that weak oral opinids may be	Low	High
			re process eno pan									studies]	The cost		status (HAQ)				(0.33 lower- 0.13 higher)					These outsides a set state of the set of the		
<u>Pain (VAS-pai</u> Kawai, 2010	n) RCT	676	RA patients with systemic disease control but persistent wrist pain	NR	NR	NR	NR	NR	NR	Wrist joint pain (VAS score 0-100): 50.0;	6 Ketoprofen patch (20mg/D, cutaneous)	338	Placebo	338	VAS-pain of the wrist	Change from BL until 2W			15.7 (16.0)	13.2 (16.4)		p=0.026	0.15		Moderate	
Lee, 2016	RCT	41	RA patients with widespread pain	11.4Y	DA528-CRP 3.28	NR	NR	NR	NR	Pain intensity (BPI short form) 6.0	Milnacipran (50mg 2/D, oral)	41	Placebo (cross-over after 3W wash-out period)	41	Pain intensity (BPI short form)	Change from BL until 6W					-0.39 (-, - 1.27-0.49)	p=0.37; Adjusted by treatment group, study period and			Moderate	
Fidahic, 2017	SLR: RCTs 8	3988	RA patients	9.2Y	NR	NR	NR	NR	NR	NA	Celecoxib	873 (2 studies)	Placebo		VAS-pain	Improvement from BL until 12W					11% (-, 8- 14)	sequence		Celecosib may improve clinical symptoms, alleviate pain and contribute to little or no difference in physical function compared to placebo. Celecosib may slightly improve clinical symptoms compared with NSAIDs; results for reduced pain and improved physical function were	Low	Low- Moderate
Fitzcharles, 2016	SLR: RCTs 4	201 (RA 58	 Patients with RA, OA or fibromyalgi 	a NR	NR	NR	NR	NR	NR	NA	Cannabinoids (nabiximols, nabilione 0,5-1mg, or PF- 04457845 (irreversible fatty acid amide hydrolase-1 inhibitor))	NR	Placebo, a mitriptyline or naproxen	NR	Pain	2-8W						Improved in 2 studies		uncertain. Pain relief and effect on sleep may have some potential therapeutic benefit, but with considerable mild to moderate adverse events. There is currently insufficent evidence to recommend cannabinoid treatment.	Moderate	High
Richards, 201	1 SLR: RCTs 8	652	RA patients	NR	NR	NR	NR	NR	NR	NA	Tricyclic antidepressant	30 (1 study)	Control		VAS-pain	<1W			10 higher (worse)	34		Noeffect		There is currently insufficient evidence to support the routine prescription of antidepressants as analgesics in	Low	High
												482 (7 studies)			VAS-pain	1-6W						Conflicting results		patients with RA as no reliable conclusions about their efficacy can be drawn from eight placebo RCTs. The use of		
												studies)			vAS-pain	>6W						connicting results		which are generally mild and do not lead to cessation of treatment		
Whittle, 2011	SLR: RCTs 1	623	RA patients with pain	NR	NR	NR	NR	NR	NR	NA	Codeine (30mg) with paracetamol (500mg)	60 (1 study)	Diclofenac (50mg)		VAS-pain							ns		There is limited evidence that weak crai opioids may be effective anigesis for some patients with RA, but adverse effects are common and may offset the benefits of this class of medications. There is insufficient evidence to draw conclusions regarding the use of weak opioids for longer than six weeks, or the role of strong opioids	Low	High
QoL (EQ-5D) Fidahic, 2017	SLR: RCTs 8	3988	RA patients	9.2Y	NR	NR	NR	NR	NR	NA	Celecoxib	873 (2	Placebo		HAQ	Improvement					-0.10 (-,			Celecoxib may improve clinical symptoms, alleviate pain	Low	Low-
												studies]				from BL until 12W					0.29-0.1)			and contribute to little or no difference in physical function compared to placebo. Celecoxib may slightly improve clinical symptoms compared with tNSAIDs; results for reduced pain and improved physical function were uncertain		Moderate
Fitzcharles, 2016	SLR: RCTs 4	201 (RA 58	 Patients with RA, OA or fibromyalgi 	a NR	NR	NR	NR	NR	NR	NA	Cannabinoids (nabiximols, nabilone 0,5-1mg, or PF- 04457845 (irreversible fatty acid amide hydrolase-1 inhibitor))	NR	Placebo, amitriptyline or naproxen	NR	QaL	2-8W						Improved in 1 study		Pain relief and effect on sleep may have some potential therapeutic benefit, but with considerable mild to moderate adverse events. There is currently insufficent evidence to recommend cannabinoid treatment.	Moderate	High
Disease activi Fidahic, 2017	SLR: RCTs 8	3988	RA patients	9.2Y	NR	NR	NR	NR	NR	NA	Celecoxib	873 (2 studies)	Placebo		ACR20 response	4-12W	1.5 (1.3 1.8	53 25- 36, -			15% (-, 7- 25)			Celecoxib may improve clinical symptoms, alleviate pain and contribute to little or no difference in physical function compared to placebo. Celecoxib may slightly improve	Low	Low- Moderate
											Calecotib	2930 (7 studies)	tNSAIDs (amtolmetin guacyl, diclofenac, ibuprofen, meloxicar nabumetone, naproxen, pelubiprofen)	n,	ACR20 response) 1.1 (0.1 1.2	10 99- 23)			4% (0, 0-8)			clinical symptoms compared with NSAIDs; results for reduced pain and improved physical function were uncertain.		
Other Whittle, 2011	SLR: RCTs 1	623	RA patients with pain	NR	NR	NR	NR	NR	NR	NA.	Opiotis	324 (3 studies)	Placebo		Patient reported globa impression of clinical change 'good' or 'very good'	573/1000	398/1000 1.44 18 (1.03-18, 2.03,-)	(1-						There is limited evidence that weak oral opiads may be effective analysis: for some patients with NA, but adverse effects are common any offert the benefits of this class of medications. There is inclificant evidence to daw conclusions regardles the use of weak opiads for larger than six weeks, or the role of storag opiads.	Low	High

Custom orthoses Function (HAQ)

Santos, 2019 SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Custom orthoses 34	0 (#1) Usual care/placebo/other non- #8 pharmacological or non-surgical interventions	Pain	NR		Effective improvement with moderate positive effects; Conclusions: Of the included interventions, only multicomponent or single exercise(physical activity interventions,psychosocial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
rantos, 2019 SLR (8 SLRs) 6740	RA patients	NR	NR	NR	Nr	NR	NR	NR	Custom orthoses 22	0 (#1) Usual care/placebo/other non- #8 pharmacological or non-surgical interventions	Functional disability	NR.		Effective improvement with small positive effects; Conclusions: Of the included interventions, only multicomponent or single exercise(physical activity interventions, psychosocial interventions and custom orthoses seem to reduce the impact of rheumatoid arthritis.	Moderate	Moderate
Other interventions vs alternative interv	ention or placebo															
Function (HAQ) Christie, 2007 SLR: SLRs 28 NR	RA patients	NR	NR	NR	NR	NR	NR	NA	Low-level laser therapy	Alternative intervention/placebo	Pain and function		Reduces pain and improves function, low quality evidence	High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was found for beneficial effects of herbal therapy	Low	Moderate- High
									Therapeutic ultrasound	Placebo/alternative intervention	Pain and function		Reduces pain and improves function, low quality evidence	(gamma-linolenic acid) and low-level laser therapy, and low-quality evidence was found for the effectiveness of the other interventions.		
<u>rantuvas paini</u> Christie, 2007 SLR: SLR: S28 NR	RA patients	NR	NR	NR	NR	NR	NR	NA.	Low-level laser therapy	Alternative intervention/placebo	Pain and function		Reduces pain and improves function, low quality evidence	High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was solured for beneficial effects of herbat Iberapy (gamma-indenci acid) and low-level laser therapy, and low-quality evidence was found for the effectiveness of the other interventions.	Low	Moderate- High
									Therapeutic ultrasound	Alternative intervention/placebo	Pain and function		Reduces pain and improves function, low quality evidence			
Electrical stimulation band/foot orthosis	thermotherapy or transcutageous el	ectrical perve	ctimulation vs	control												
Other																
Christle, 2007 SLR: SLRs 28 NR	RA patients	NR	NR	NR	NR	NR	NR	NA.	Other interventions: Acquincture, balneotherapy, electrical stimulation, occupational therapy (basides joint protection and comprehensive occupation therapy), hand/foot orthosis, thermotherapy, transcutaneous electrical nerve stimulation	All types of controls	Efficacy		Moderate effect and low quality evidence	High-quality evidence was found for beneficial effects of joint protection and patient education, moderate-quality evidence was found for beneficial effects of herstal therapy (gamma-indenci scid) and low-level laser therapy, and low-quality evidence was found for the effectiveness of the other interventions.	Low	Moderate- High

AC American Calego of Reamosings, ADOVA: analysis of evidence, BDI: Bed Depression Internative Science 4:26, higher score reflect higher level of parptorsion; Science 4:26, higher score reflect higher level of parptorsion; BL: baseline; BPI: Bed Paint Internative Science 4:20, higher score reflect higher level of parptorsion; Science 4:26, higher score reflect higher level of parptorsion; Science 4:26, higher score reflect higher level of parptorsion; BL: baseline; BPI: Bed Paint Internative Science 4:20, higher score reflect higher level of parptorsion; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsion; BL: baseline; BPI: Bed Paint Internative Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Analysis of participant; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorsin; HAL F: Functional Association Science 4:26, higher score reflect higher level of parptorscience 4:26, higher score reflect higher level of