Supporting information

Efficacy of topical intervention for recurrent aphthous stomatitis: A network meta-analysis

Table S1 Search Strategy

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Chapter S4 Safety outcomes

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Chart S1 “Time-Rank 1 probability” folding line chart

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Figure S2 Risk of bias summary for individual studies

Figure S3 Funnel plot for healing effect

Figure S4 Funnel plot for size-reducing effect

Figure S5 Funnel plot for symptom-reducing effect

Figure S6 Funnel plot for adverse effect

Figure S7 Network structure of sensitivity analysis

Table S1 Search Strategy

Review question	What is the efficacy and safety of various topical interventions in patients with recurrent aphthous stomatitis (all types) in relation to each other or in comparison to placebo?
Population	Clinical or histopathological examination confirms a diagnosis of recurrent aphthous ulcers, with ulcer-like lesions visible anywhere on the oral mucosa. Simple ulcerative lesions of any undetermined cause such as psychological, nutritional and immunological factors, rather than oral manifestations of systemic diseases such as leukoaraiosis, diabetes mellitus, etc., or specific ulcerative lesions due to trauma, radiotherapy, etc. The population enrolled received only local interventions or placebo during the trial and did not receive any other treatment that might alter the RAU prior to or during the trial, such as receiving systemic steroids or immunosuppressants. For studies in patients with multiple oral mucosal diseases, we extracted only RAS data. If this was not possible, we excluded this study.
Subgroups	The following factors will be considered for Subgroups if heterogeneity is present: Heterogeneity of single incorporated articles Treatment course Different RAS types Drug dose Forms of medication
Interventions	• Allicin • Aloe • Amlexanox • Benzydamine • Berberine gelatin • Chitosan • Chlorhexidine • Clobetasol • Cryotherapy • Curcumin • Dexamethasone • Diosmectite • Doxycycline • Glycyrrhiza • Honey • Insulin-liposomal gel • Laser • Minocycline • N-acetylcysteine • Penicillin • Probiotics • Prostaglandin E2 • Quercetin

	• Silver nitrate • Sucralfate • Triamcinolone • Triester Glycerol Oxide • Zinc (Note: all doses, forms and durations will be included)
Comparison	• Placebo • Allicin • Aloe • Amlexanox • Benzydamine • Berberine gelatin • Chitosan • Chlorhexidine • Clobetasol • Cryotherapy • Curcumin • Dexamethasone • Diosmectite • Doxycycline • Glycyrrhiza • Honey • Insulin-liposomal gel • Laser • Minocycline • N-acetylcysteine • Penicillin • Probiotics • Prostaglandin E2 • Quercetin • Silver nitrate • Sucralfate • Triamcinolone • Triester Glycerol Oxide • Zinc
Outcomes	• Healing efficacy Evaluated by healing time, the time elapsed between the start of the intervention and the healing of the ulcerated lesion. • Effect of size reduction Evaluated by the effectiveness index, EI=ulcer reduction area (mm2) / ulcer baseline area (mm2). The cumulative reduction in ulcer size at different examination days over the duration of the trial was counted. • Effect of symptom reduction Evaluated by the effectiveness index, EI=reduction in pain score / baseline ulcer pain

	score. Individual subject's VAS score or decile scale score of pain level on different examination days. The degree of cumulative pain relief was calculated. VAS score: 10 cm horizontal line, marked 0 = no pain to 10 = worst pain. Decile scale: 0 for no pain, 10 for most pain. • Safety outcomes Adverse effect Hematologic values • Relapse
Study design	RCTs
Databases	PubMed, Web of Science (WOS), Cochrane Central Register of Controlled Trials, Embase

Table S2 Final search strategy for PubMed

#ID	Topic or intervention		Query	Records
#1	Recurrent Aphthous Stomatitis		("Stomatitis, Aphthous" [Mesh]) OR ("Oral Ulcer" [Mesh]) OR (((((((((Aphth* [Title/Abstract]) OR Canker sore [Title/Abstract]) OR Oral ulcer* [Title/Abstract]) OR Mouth ulcer* [Title/Abstract]) OR Recurrent aphthous ulcer* [Title/Abstract]) OR Recurrent aphthous stomatitis [Title/Abstract]) OR Aphthous stomatitis [Title/Abstract])	9988
#2	Clobetasol		("Clobetasol" [Mesh]) OR (Clobetasol [Title/Abstract]) OR (Corticosteroid [Title/Abstract]) OR (Clobetasol Propionate [Title/Abstract])	53558
#3	Betamethasone		("Betamethasone" [Mesh]) OR ("Betamethasone Valerate" [Mesh]) OR (Betamethasone [Title/Abstract]) OR (Betasolon [Title/Abstract]) OR (Betamethasone Valerate [Title/Abstract])	9273
#4	Dexamethasone		("Dexamethasone" [Mesh]) OR (Dexamethasone [Title/Abstract]) OR (Dexamucobase [Title/Abstract])	75058
#5	Triamcinolone		("Triamcinolone" [Mesh]) OR ("Triamcinolone Acetonide" [Mesh]) OR (Triamcinolone [Title/Abstract]) OR (Triamcinolone Acetonide [Title/Abstract])	12218
#6	Minocycline		("Minocycline" [Mesh]) OR (Minocycline [Title/Abstract])	9428
#7	Doxycycline		("Doxycycline" [Mesh]) OR (Doxycycline [Title/Abstract])	18183
#8	Penicillin		("Penicillin G"[Mesh]) OR ("Penicillin"[Mesh]) (Penicillin [Title/Abstract]) OR (Penicillin G Potassium [Title/Abstract]) OR (Penicillin G [Title/Abstract])	105884
#9	Benzydamine		("Benzydamine" [Mesh]) OR (Benzydamine [Title/Abstract])	597
#10	Amlexanox		Amlexanox[Title/Abstract]	151
#11	Chlorhexidine		("Chlorhexidine" [Mesh]) OR (Chlorhexidine [Title/Abstract]) OR (Hibitane [Title/Abstract])	13254
#12	Hyaluronic Acid		("Hyaluronic Acid " [Mesh]) OR (Hyaluronic Acid [Title/Abstract])	31587
#13	Laser	CO2	("Laser Therapy"[Mesh]) OR ("Lasers"[Mesh]) OR (Low level laser therapy [Title/Abstract]) OR (Lasertherap* [Title/Abstract]) OR (LLLT* [Title/Abstract]) OR (Laser* [Title/Abstract])	308558
		Nd:YAG		
		diode		
#14	Sodium lauryl sulfate		(Sodium lauryl sulfate dentifrice[Title/Abstract]) OR (Sodium lauryl sulfate toothpaste[Title/Abstract])	104

#15	Probiotics		("probiotics" [Mesh]) OR ("Lactobacillales" [Mesh]) OR ("Lactococcus" [Mesh]) OR ("Bifidobacterium" [Mesh]) OR (probiotic* [Title/Abstract]) OR (lactobacilli [Title/Abstract]) OR (Lactobacillales [Title/Abstract]) OR (Lactococcus [Title/Abstract]) OR (Bifidobacteri* [Title/Abstract])	166173
#16	Insulin-liposomal gel		Insulin-liposomal gel [Title/Abstract]	1
#17	Salicept		Salicept [Title/Abstract]	4
#18	HybenX		HybenX [Title/Abstract]	17
#19	Cryotherapy		("Cryotherapy" [Mesh]) OR (Cryotherapy [Title/Abstract])	31784
#20	Prostaglandin E2		("Dinoprostone" [Mesh]) OR (Prostaglandin E2 [Title/Abstract])	37890
#21	Curcumin		("Curcumin" [Mesh]) OR (Curcumin [Title/Abstract])	17505
#22	Glycyrrhiza		("Glycyrrhiza" [Mesh]) OR (Glycyrrhiza [Title/Abstract])	3809
#23	Quercetin		("Quercetin" [Mesh]) OR (Quercetin [Title/Abstract])	21546
#24	Chitosan		("Chitosan" [Mesh]) OR (Chitosan [Title/Abstract])	33883
#25	Aloe		("Aloe" [Mesh]) OR (“acemannan” [Supplementary Concept]) OR (Aloe [Title/Abstract]) OR (acemannan [Title/Abstract])	3217
#26	Honey		("Honey" [Mesh]) OR (Honey [Title/Abstract])	12937
#27	lavender oil		("lavender oil" [Supplementary Concept]) OR (lavender oil[Title/Abstract])	442
#28	Berberine gelatin		Berberine gelatin [Title/Abstract]	1
#29	Diosmectite		("Smectite" [Supplementary Concept]) OR (Diosmectite [Title/Abstract])	309
#30	Allicin		("allicin" [Supplementary Concept]) OR (Allicin [Title/Abstract])	900
#31	N-acetylcysteine		(" Acetylcysteine" [Mesh]) OR (N-acetylcysteine [Title/Abstract])	19573
#32	Sucralfate		("Sucralfate" [Mesh]) OR (Sucralfate [Title/Abstract])	2082
#33	Triester Glycerol Oxide		Triester Glycerol Oxide [Title/Abstract]	5
#34	Cautery	Silver nitrate	("Cautery" [Mesh]) OR (Silver nitrate [Title/Abstract]) OR (Debacterol [Title/Abstract]) OR (Cautery [Title/Abstract])	20040
		Debacterol		
#35	Zinc		("Zinc" [Mesh]) OR (Zinc [Title/Abstract])	146109
#36	Final query		#1 AND (#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14	902

		OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36)	

Table S3 Final search strategy for Web of Science

#ID	Topic or intervention		Query	Records
#1	Recurrent Aphthous Stomatitis		(TS=(Aphth*) OR TS=(Canker sore) OR TS=(Oral ulcer*) OR TS=(Mouth ulcer*) OR TS=(Recurrent aphthous ulcer*) OR TS=(Recurrent aphthous stomatitis) OR TS=(Aphthous stomatitis))	47159
#2	Clobetasol		(TS=(Clobetasol) OR TS=(Corticosteroid) OR TS=(Clobetasol Propionate))	163969
#3	Betamethasone		(TS=(Betamethasone) OR TS=(Betasolon) OR TS=(Betamethasone Valerate))	10781
#4	Dexamethasone		(TS=(Dexamethasone) OR TS=(Dexamucobase))	112334
#5	Triamcinolone		(TS=(Triamcinolone) OR TS=(Triamcinolone Acetonide))	18064
#6	Minocycline		(TS=(Minocycline))	13720
#7	Doxycycline		(TS=(Doxycycline))	28374
#8	Penicillin		(TS=(Penicillin) OR TS=(Penicillin G Potassium) OR TS=(Penicillin G))	143392
#9	Benzydamine		(TS=(Benzydamine))	803
#10	Amlexanox		(TS=(Amlexanox))	242
#11	Chlorhexidine		(TS=(Chlorhexidine) OR TS=(Hibitane))	18711
#12	Hyaluronic Acid		(TS=(Hyaluronic Acid))	46592
#13	Laser	CO2	(TS=(Laser Therapy) OR TS=(Low level laser therapy) OR TS=(Lasertherap*) OR TS=(LLLT*) OR TS=(Laser*))	924745
		Nd:YAG		
		diode		
#14	Sodium lauryl sulfate		(TS=(Sodium lauryl sulfate dentifrice) OR TS=(Sodium lauryl sulfate toothpaste))	161
#15	Probiotics		(TS=(probiotic*) OR TS=(lactobacilli) OR TS=(Lactobacillales) OR TS=(Lactococcus) OR TS=(Bifidobacteri*))	187354
#16	Insulin-liposomal gel		(TS=(Insulin-liposomal gel))	1
#17	Salicept		(TS=(Salicept))	11
#18	HybenX		(TS=(HybenX))	19
#19	Cryotherapy		(TS=(Cryotherapy))	15196
#20	Prostaglandin E2		(TS=(Prostaglandin E2) OR TS=(Dinoprostone))	51029
#21	Curcumin		(TS=(Curcumin))	30010
#22	Glycyrrhiza		(TS=(Glycyrrhiza))	7474
#23	Quercetin		(TS=(Quercetin))	40563
#24	Chitosan		(TS=(Chitosan))	89698
#25	Aloe		(TS=(Aloe) OR TS=(acemannan))	7631
#26	Honey		(TS=(Honey))	43877
#27	lavender oil		(TS=(lavender oil))	2124
#28	Berberine gelatin		(TS=(Berberine gelatin))	27
#29	Diosmectite		(TS=(Diosmectite))	70

#30	Allicin		(TS=(Allicin))	1998
#31	N-acetylcysteine		(TS=(N-acetylcysteine))	21589
#32	Sucralfate		(TS=(Sucralfate))	2962
#33	Triester Glycerol Oxide		(TS=(Triester Glycerol Oxide))	10
#34	Cautery	Silver nitrate	(TS=(Cautery) OR TS=(Silver nitrate) OR TS=(Debacterol))	21048
		Debacterol		
#35	Zinc		(TS=(Zinc))	509430
#36	Final query		#1 AND (#2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35)	6303

Table S4 Final search strategy for Cochrane Central Register of Controlled Trials

#ID	Topic or intervention	Query	Records
#1	Recurrent Aphthous Stomatitis	MeSH descriptor: [Stomatitis, Aphthous] explode all trees	242
#2		MeSH descriptor: [Oral Ulcer] explode all trees	65
#3		(Aphth*):ti,ab,kw	774
#4		(Canker sore):ti,ab,kw	16
#5		(Oral ulcer*):ti,ab,kw	4827
#6		(Mouth ulcer*):ti,ab,kw	929
#7		(Recurrent aphthous ulcer*):ti,ab,kw	342
#8		(Recurrent aphthous stomatitis):ti,ab,kw	364
#9		(Aphthous stomatitis):ti,ab,kw	555
#10		#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9	5645
#11	Clobetasol	MeSH descriptor: [Clobetasol] explode all trees	382
#12		(Clobetasol):ti,ab,kw OR (Corticosteroid):ti,ab,kw OR (Clobetasol Propionate):ti,ab,kw	23575
#13		#11 OR #12	23575
#14	Betamethasone	MeSH descriptor: [Betamethasone] explode all trees	1492
#15		MeSH descriptor: [Betamethasone Valerate] explode all trees	352
#16		(Betamethasone):ti,ab,kw OR (Betasolon):ti,ab,kw OR (Betamethasone Valerate):ti,ab,kw	2570
#17		#14 OR #15 OR #16	2846
#18	Dexamethasone	MeSH descriptor: [Dexamethasone] explode all trees	4794
#19		(Dexamethasone):ti,ab,kw OR (Dexamucobase):ti,ab,kw	12687
#20		#18 OR #19	12708
#21	Triamcinolone	MeSH descriptor: [Triamcinolone] explode all trees	1448
#22		MeSH descriptor: [Triamcinolone Acetonide] explode all trees	1138
#23		(Triamcinolone):ti,ab,kw OR (Triamcinolone Acetonide):ti,ab,kw	3320
#24		#21 OR #22 OR #23	3320
#25	Minocycline	MeSH descriptor: [Minocycline] explode all trees	544
#26		(Minocycline):ti,ab,kw	1126
#27		#25 OR #26	1126
#28	Doxycycline	MeSH descriptor: [Doxycycline] explode all trees	1089
#29		(Doxycycline):ti,ab,kw	2223
#30		#28 OR #29	2223
#31	Penicillin	MeSH descriptor: [Penicillin G] explode all trees	4719

#32			(Penicillin):ti,ab,kw OR (Penicillin G Potassium):ti,ab,kw OR (penicillin G):ti,ab,kw	3529
#33			#31 OR #32	7005
#34	Benzydamine		MeSH descriptor: [Benzydamine] explode all trees	104
#35			(Benzydamine):ti,ab,kw	258
#36			#34 OR #35	258
#37	Amlexanox		(Amlexanox):ti,ab,kw	27
#38	Chlorhexidine		MeSH descriptor: [Chlorhexidine] explode all trees	2296
#39			(Chlorhexidine):ti,ab,kw OR (Hibitane):ti,ab,kw	5022
#40			#38 OR #39	5022
#41	Hyaluronic Acid		MeSH descriptor: [Hyaluronic Acid] explode all trees	1722
#42			(Hyaluronic Acid):ti,ab,kw	3421
#43			#41 OR #42	3421
#44	Laser	CO2、Nd:YAG、diode	MeSH descriptor: [Laser Therapy] explode all trees	4309
#45			MeSH descriptor: [Lasers] explode all trees	2308
#46			(Low level laser therapy):ti,ab,kw OR (Lasertherap*):ti,ab,kw OR (LLLT*):ti,ab,kw OR (Laser*):ti,ab,kw	20404
#47			#44 OR #45 OR #46	20509
#48	Sodium lauryl sulfate		(Sodium lauryl sulfate dentifrice):ti,ab,kw OR (Sodium lauryl sulfate toothpaste):ti,ab,kw	52
#49	Probiotics		MeSH descriptor: [Probiotics] explode all trees	2208
#50			MeSH descriptor: [Lactobacillales] explode all trees	3480
#51			MeSH descriptor: [Lactococcus] explode all trees	16
#52			MeSH descriptor: [Bifidobacterium] explode all trees	759
#53			(probiotic*):ti,ab,kw OR (lactobacilli):ti,ab,kw OR (Lactobacillales):ti,ab,kw OR (Lactococcus):ti,ab,kw OR (Bifidobacteri*):ti,ab,kw	9131
#54			#49 OR #50 OR #51 OR #52 OR #53	11104
#55	Insulin-liposomal gel		(Insulin-liposomal gel):ti,ab,kw	1
#56	Salicept		(Salicept):ti,ab,kw	2
#57	HybenX		(HybenX):ti,ab,kw	9
#58	Cryotherapy		MeSH descriptor: [Cryotherapy] explode all trees	1669
#59			(Cryotherapy):ti,ab,kw	2291
#60			#58 OR #59	3231
#61	Prostaglandin E2		MeSH descriptor: [Dinoprostone] explode all trees	1164
#62			(Prostaglandin E2):ti,ab,kw	1994
#63			#61 OR #62	2495
#64	Curcumin		MeSH descriptor: [Curcumin] explode all trees	437
#65			(Curcumin):ti,ab,kw	1277

#66			#64 OR #65	1277
#67	Glycyrrhiza		MeSH descriptor: [Glycyrrhiza] explode all trees	105
#68			(Glycyrrhiza):ti,ab,kw	351
#69			#67 OR #68	351
#70	Quercetin		MeSH descriptor: [Quercetin] explode all trees	205
#71			(Quercetin):ti,ab,kw	518
#72			#70 OR #71	518
#73	Chitosan		MeSH descriptor: [Quercetin] explode all trees	205
#74			(Chitosan):ti,ab,kw	480
#75			#73 OR #74	685
#76	Aloe		MeSH descriptor: [Aloe] explode all trees	681
#77			(Aloe):ti,ab,kw OR (acemannan):ti,ab,kw	81
#78			#76 OR #77	681
#79	Honey		MeSH descriptor: [Honey] explode all trees	163
#80			(honey):ti,ab,kw	1129
#81			#79 OR #80	1129
#82	Lavender oil		(lavender oil):ti,ab,kw	524
#83	Berberine gelatin		(Berberine gelatin):ti,ab,kw	1
#84	Diosmectite		(Diosmectite):ti,ab,kw	30
#85	Allicin		(Allicin):ti,ab,kw	50
#86	N-acetylcysteine		MeSH descriptor: [Acetylcysteine] explode all trees	1155
#87			(N-acetylcysteine):ti,ab,kw	1804
#88			#86 OR #87	2144
#89	Sucralfate		MeSH descriptor: [Sucralfate] explode all trees	398
#90			(Sucralfate):ti,ab,kw	798
#91			#89 OR #90	798
#92	Triester Glycerol Oxide		(Triester Glycerol Oxide):ti,ab,kw	6
#93	Cautery	Silver nitrate、Debacterol	MeSH descriptor: [Cautery] explode all trees	805
#94			(Cautery):ti,ab,kw OR (Silver nitrate):ti,ab,kw OR (Debacterol):ti,ab,kw	627
#95			#93 OR #94	1309
#96	Zinc		MeSH descriptor: [Zinc] explode all trees	1677
#97			(Zinc):ti,ab,kw	8083
#98			#96 OR #97	8083
#99	Final query		#10 AND (#13 OR #17 OR #20 OR #24 OR #27 OR #30 OR #33 OR #36 OR #37 OR #40 OR #43 OR #47 OR #48 OR #54 OR #55 OR # 56 OR #57 OR #60 OR #63 OR #66 OR #69 OR #72 OR #75 OR #78 OR #81 OR #82 OR #83 OR #84 OR #85 OR #88 OR #91 OR #92 OR #95 OR #98)	1560
	Cochrane Reviews			69
	Trials			1489

Table S5 Final search strategy for Embase

#ID	Topic or intervention	Query	Records
#1	Recurrent Aphthous Stomatitis	'mouth ulcer'/exp OR 'aphthous stomatitis'/exp	19837
#2		aphth*:ti,ab,kw OR 'canker sore':ti,ab,kw OR 'oral ulcer*':ti,ab,kw OR 'mouth ulcer*':ti,ab,kw OR 'recurrent aphthous ulcer*':ti,ab,kw OR 'recurrent aphthous stomatitis':ti,ab,kw OR 'aphthous stomatitis':ti,ab,kw	11455
#3		#1 OR #2	23211
#4	Clobetasol	'clobetasol'/exp	3164
#5		(Clobetasol):ti,ab,kw OR (Corticosteroid):ti,ab,kw OR (Clobetasol Propionate):ti,ab,kw	78877
#6		#4 AND #5	81186
#7	Betamethasone	'betamethasone'/exp OR 'betamethasone valerate'/exp	21527
#8		betamethasone:ti,ab,kw OR betasolon:ti,ab,kw OR 'betamethasone valerate':ti,ab,kw	7514
#9		#7 OR #8	23136
#10	Dexamethasone	'dexamethasone'/exp	164002
#11		dexamethasone:ti,ab,kw OR dexamucobase:ti,ab,kw	83821
#12		#10 OR #11	175940
#13	Triamcinolone	'triamcinolone'/exp OR 'triamcinolone acetonide'/exp	30533
#14		triamcinolone:ti,ab,kw OR 'triamcinolone acetonide':ti,ab,kw	11046
#15		#13 OR #14	31894
#16	Minocycline	'minocycline'/exp	25639
#17		minocycline:ti,ab,kw	9918
#18		#16 OR #17	26613
#19	Doxycycline	'doxycycline'/exp	57207
#20		doxycycline:ti,ab,kw	21704
#21		#19 OR #20	59886
#22	Penicillin	'penicillin g'/exp	83154
#23		penicillin:ti,ab,kw OR 'penicillin g potassium':ti,ab,kw OR 'penicillin g':ti,ab,kw	62134
#24		#22 OR #23	121598
#25	Benzydamine	'benzydamine'/exp	1564
#26		benzydamine:ti,ab,kw	707
#27		#25 OR #26	1710
#28	Amlexanox	amlexanox:ti,ab,kw	211
#29	Chlorhexidine	'chlorhexidine'/exp	18967
#30		chlorhexidine:ti,ab,kw OR hibitane:ti,ab,kw	13927

#31			#29 OR #30	23175
#32	Hyaluronic Acid		'hyaluronic acid'/exp	46079
#33			'hyaluronic acid':ti,ab,kw	26672
#34			#32 OR #33	50728
#35	Laser	CO2、Nd:YAG、diode	'low level laser therapy'/exp OR 'laser'/exp	172779
#36			'low level laser therapy':ti,ab,kw OR lasertherap*:ti,ab,kw OR lllt*:ti,ab,kw OR laser*:ti,ab,kw	304449
#37			#35 OR #36	335329
#38	Sodium lauryl sulfate		(Sodium lauryl sulfate dentifrice):ti,ab,kw OR (Sodium lauryl sulfate toothpaste):ti,ab,kw	0
#39	Probiotics		'probiotic agent'/exp OR 'lactobacillales'/exp OR 'lactococcus'/exp OR 'bifidobacterium'/exp	272586
#40			probiotic*:ti,ab,kw OR lactobacilli:ti,ab,kw OR lactobacillales:ti,ab,kw OR lactococcus:ti,ab,kw OR bifidobacteri*:ti,ab,kw	59391
#41			#39 OR #40	279556
#42	Insulin-liposomal gel		'insulin-liposomal gel':ti,ab,kw	1
#43	Salicept		salicept:ti,ab,kw	6
#44	HybenX		hybenx:ti,ab,kw	13
#45	Cryotherapy		'cryotherapy'/exp	37910
#46			cryotherapy:ti,ab,kw	11654
#47			#45 OR #46	39784
#48	Prostaglandin E2		'prostaglandin e2'/exp	57910
#49			'prostaglandin e2':ti,ab,kw	10531
#50			#48 OR #49	60453
#51	Curcumin		'curcumin'/exp	28319
#52			curcumin:ti,ab,kw	21431
#53			#51 OR #52	29950
#54	Glycyrrhiza		'glycyrrhiza'/exp	6231
#55			glycyrrhiza:ti,ab,kw	2858
#56			#54 OR #55	7108
#57	Quercetin		'quercetin'/exp	34523
#58			quercetin:ti,ab,kw	25917
#59			#57 OR #58	40873
#60	Chitosan		'chitosan'/exp	36676
#61			chitosan:ti,ab,kw	39460
#62			#60 OR #61	44767
#63	Aloe		'aloe'/exp OR 'acemannan'/exp	4031
#64			aloe:ti,ab,kw OR acemannan:ti,ab,kw	4626
#65			#63 OR #64	5954
#66	Honey		'honey'/exp	8250
#67			honey:ti,ab,kw	14894

#68			#66 OR #67	16060
#69	Lavender oil		'lavender oil'/exp	1259
#70			'lavender oil':ti,ab,kw	456
#71			#69 OR #70	1337
#72	Berberine gelatin		'berberine gelatin':ti,ab,kw	1
#73	Diosmectite		'diosmectite'/exp	44
#74			diosmectite:ti,ab,kw	53
#75			#73 OR #74	76
#76	Allicin		'allicin'/exp	1573
#77			allicin:ti,ab,kw	1144
#78			#76 OR #77	1755
#79	N-acetylcysteine		'acetylcysteine'/exp	38564
#80			'n acetylcysteine':ti,ab,kw	15862
#81			#79 OR #80	40501
#82	Sucralfate		'sucralfate'/exp	7121
#83			sucralfate:ti,ab,kw	2542
#84			#82 OR #83	7373
#85	Triester Glycerol Oxide		'triester glycerol oxide':ti,ab,kw	9
#86	Cautery	Silver nitrate、Debacterol	'cauterization'/exp	15544
#87			cautery:ti,ab,kw OR 'silver nitrate':ti,ab,kw OR debacterol:ti,ab,kw	9652
#88			#86 OR #87	22264
#89	Zinc		'zinc'/exp	125700
#90			zinc:ti,ab,kw	148781
#91			#89 OR #90	206697
#92	Final query		#6 OR #9 OR #12 OR #15 OR #18 OR #21 OR #24 OR #27 OR #28 OR #31 OR #34 OR #37 OR #38 OR #41 OR #42 OR #43 OR #44 OR #47 OR #50 OR #53 OR #56 OR #59 OR #62 OR #65 OR #68 OR #71 OR #72 OR #75 OR #78 OR #81 OR #84 OR #85 OR #88 OR #91	1604834
#93			#3 AND #92	3268

Table S6 Characteristics of included studies

Author Year	Country	Type of study	Type of RAS	Patients		Comparison	
				Male/Female	Age	Intervention (N)	Treatment Course
Huo	China	RCT	minor aphthous ulcer	8/17	Under 40:16 Above 40:9	diode laser 810 nm (25)	once daily for continuous 3 days
2021				9/17	Under 40:13 Above 40:13	triamcinolone acetonide 0.1% (26)	three times a day until the lesion was healed
Aggour (audlt)	Egypt	RCT	minor RAS	11/19	28.82±8.44	ChocBalls (L. acidophilus containing lozenges) (30)	melt in the mouth slowly twice daily for 5 days
2021				10/20	29.38±9.06	Oracure oral gel (30)	melt in the mouth slowly twice daily for 5 days
Aggour (child)	Egypt	RCT	minor RAS	12/18	6.82±2.44	ChocBalls (L. acidophilus containing lozenges) (30)	melt in the mouth slowly twice daily for 5 days
2021				14/16	7.18±1.96	Oracure oral gel (30)	melt in the mouth slowly twice daily for 5 days
Shi	China	RCT	NA	8/12	30.5±26.6	aloe vera fermentation gel (20)	apply a layer of gel on the surface of the ulcer every day after each meal (three times each day) until the ulcer disappeared
2020				4/11	26.07±56.44	chitosan gel (15)	apply a layer of gel on the surface of the ulcer every day after each meal (three times each day) until the ulcer disappeared
Kavita	India	RCT	NA	NA	18-48	0.1% topical triamcinolone acetonide (30)	apply paste on the ulcers three to four times per day for a minimum of 10 min
2020						5% topical amlexanox (30)	apply paste on the ulcers three to four times per day for a minimum of 10 min
Shao	China	RCT	NA	15/19	31.62±8.45	film containing chitosan (34)	twice a day (after breakfast and after dinner). The lasting time of the film is about 1 h. Avoid drinking or eating for 1 h after using the film
2020				17/15	28.72±6.23	polyvinyl alcohol film (32)	twice a day (after breakfast and after dinner). The lasting time of the film is about 1 h. Avoid drinking or eating for 2 h after using the film

Pedersen	Denmark	RCT	minor or major	2/8	22.7 (18-28)	test lozenges contained a mix of two probiotic strains, Lactobacillus reuteri DSM17938 and ATCC PTA 5289 (10)	take two lozenges per day (morning and evening) for 90 days
2020				5/5	24.8 (22-30)	placebo lozenges without bacteria (10)	take two lozenges per day (morning and evening) for 90 days
Ghorbani	Iran	RCT	minor aphthous ulcers	10/13	38.66±21.60	mucoadhesive tablet with zinc sulfate (23)	3 times a day. The duration of the intervention was 7 days
2020				9/14	41.28±24.37	placebo without zinc sulfate (23)	3 times a day. The duration of the intervention was 7 days
Ibrahim	Egypt	RCT	NA	6/14	36.60±11.50	Kenalog in Orabase contained triamcinolone acetonide (20)	two times per day, once in the morning and the other at bed time, after meals for 1 or 2 weeks according to patient's clinical response
2020				8/12	35.10±13.00	lactic acid 5% mouth wash (20)	three times daily before meals and leave the solution in their mouth for 3-5 minutes, then spit it. They used the mouth wash for 1-2 weeks according to patient's clinical response
Kia	Iran	RCT	NA	20/9	43.72±9.62	5% curcumin (29)	three times a day for 10 days
2020				16/13	45.05±8.90	0.1% triamcinolone (29)	three times a day for 10 days
Owlia	Iran	RCT	acute-onset oral aphthae with diameter ≥5 mm	12/13	29.92 (15-45)	Penicillin (25)	four times a day for a week
2020				14/11	31.32 (15-45)	placebo (25)	four times a day for a week
Seyyedi	Iran	RCT	Minor aphthous stomatitis	2/13	34.54±14.93	pulsed carbon dioxide laser (5)	NA
2020						continuous carbon dioxide laser (5)	NA
						0.1% triamcinolone acetonide (5)	NA
Raman	India	RCT	minor aphthous ulcer	11/19	21.3	curcumin (30)	three times daily until your pain completely

							subsides
2020				8/22	21.6	triamcinolone acetonide (30)	three times daily until your pain completely subsides
Bardellini	Italia	RCT	MiRAS	12/18	8.9±2.2	diode laser (30)	Laser therapy was administered on day 1 (T0) for three consecutive days
2020				11/19	8.4±2.1	Sham treatment (30)	Laser therapy was administered on day 1 (T0) for three consecutive days
Nirmala	India	RCT	NA	NA	NA	Bacillus Clausii probiotic for local application (20)	twice daily for 1 week
2019						triamicinolone paste for local application (20)	twice daily
Soliman	Egypt	RCT	MiRAS	6/4	30.1±6.9	diode laser treatment (10)	performed in the first visit only
2019				7/3	28.1±5.8	placebo (10)	rinse a diluted sodium bicarbonate oral 4 times/day
Tavangar	Iran	RCT	minor RAS	24/36	18-50	triamcinolone muco-adhesive paste (20)	three times a day, until the ulcer healed completely
2019						Placebo (20)	three times a day, until the ulcer healed completely
Halboub	Saudi Arabia	RCT	Minor:51 Major:7	16/22	30.13±16.62	N-acetyl cysteine (NAC) (200 mg dissolved in water, n = 38)	mouthwashes for 30 seconds
2019				9/11	25.50±6.86	0.12% chlorhexidine digluconate (CHX, n = 20)	mouthwashes for 30 seconds
El-Wakeel	Egypt	RCT	minor aphthous ulcers	19/21	28.9	insulin-liposomal gel (40)	once daily for 6 days
2019				20/20		placebo gel (40)	once daily for 6 days
Rahmani	Iran	RCT	minor recurrent aphthous stomatitis	8/12	35.15±9.8	0.5% Chitosan mouthwash (20)	keep 5 cc mouthwash for 4 minutes in the mouth and then spit it out 3 times a day after each meal
2018						0.5% Triamcinolone mouthwash (20)	keep 5 cc mouthwash for 4 minutes in the mouth and then spit it out 3 times a day after each meal

Sharma	India	RCT	minor aphthous ulcers	NA	26.5	0.1%Triamcinolone acetonide (10)	4 times a day, preferably following oral hygiene after breakfast, lunch, dinner and at bedtime
2018					26.7	20% Benzocaine gel (10)	4 times a day, preferably following oral hygiene after breakfast, lunch, dinner and at bedtime
					28.7	100 mg Doxycycline hyclate (10)	The powdered doxycycline hyclate was mixed with denture adhesive and normal saline with 20:2:1 ratio and was directly placed over the ulcer using a plastic instrument
					28.4	placebo (10)	4 times a day, preferably following oral hygiene after breakfast, lunch, dinner and at bedtime
Ofluoglu	Turkey	RCT	NA	78/82	38.76±13.03	TA pomade contains 0.1% triamcinolon acetonide (53)	rinse their mouth with tap water prior to the administration of the agent and apply the agent to the ulcer 4 times per day (after meals and before bed time) for 7 days
2017						TGO gel contains 92.67% triester glycerol oxide (56)	rinse their mouth with tap water prior to the administration of the agent and apply the agent to the ulcer 4 times per day (after meals and before bed time) for 7 days
						placebo gel (51)	rinse their mouth with tap water prior to the administration of the agent and apply the agent to the ulcer 4 times per day (after meals and before bed time) for 7 days
Zeini	Egypt	RCT	minor RAS	8/6	34.6	CO2 laser (14)	single session treatment
2017				4/6	30.2	placebo (10)	sham laser
Rodríguez-Archilla	Spain	RCT	minor	8/17	33±11	cauterization with silver nitrate (25)	single treatment

2017				8/17	31±14	propolis (25)	Spray 3 times a day and avoid application after eating or drinking
				11/14	30±11	placebo (25)	Spray 3 times a day and avoid application after eating or drinking
Pandya	India	RCT	minor aphthous ulcers	14/6	25.1±13.79	a gel containing approximately 2% quercetin (20)	applied topically on the ulcers TID for total of 7 days and were restrained from eating, drinking, or rinsing the mouth for 30 minutes after each application
2017				12/8	27±13.29	0.15% benzydamine hydrochloride mouthwash (20)	rinsed for 30 seconds and then expelled out, approximately 15 minutes before meals TID for 7 days
Yilmaz 2017	Turkey	RCT	minor RAS	24/16	26±9.2	Er,Cr:YSGG laser (40)	only at the first visit
						placebo (40)	only at the first visit
Nasry	Egypt	RCT	NA	23/37	28.5	herbal combination of Acacia nilotica and Licorice (15)	apply the medication on the lesion q.i.d. after drying it with a small sterile cotton pad and refrain from eating at least for 30 min after the drug application
2016						Amlexanox 5% (15)	apply the medication on the lesion q.i.d. after drying it with a small sterile cotton pad and refrain from eating at least for 30 min after the drug application
						diode laser (15)	single treatment, 2nd or a 3rd laser pass was occasionally needed to decrease the pain
						placebo adhesive tablet (15)	apply the medication on the lesion q.i.d. after drying it with a small sterile cotton pad and refrain from eating at least for 30 min after the

							drug application
Abbasi	Iran	RCT	minor aphthous ulcers	18/22	36.2±3.36	Adcortyl 0.1% (20)	four times daily for 7 days
2016						5% Amlexanox (20)	four times daily for 7 days
Andishe Tadbir	Iran	RCT	minor aphthous stomata	5/10	28.93±7.29	placebo (Orabase alone) (15)	four times a day, after eating and performing oral hygiene and to continue till complete resolution
2015				9/5	30.86±4.79	triamcinolone in Orabase (14)	four times a day, after eating and performing oral hygiene and to continue till complete resolution
Raeesi	Iran	RCT	major ulcer were excluded	2/18	26.8	paste containing 5% of licorice extract (20)	Three times after meal and one time before sleeping for 5 days
2015				4/16	24.45	paste without licorice extract (20)	Three times after meal and one time before sleeping for 5 days
Aggarwal	India	RCT	NA	18/12	NA	diode laser (30)	single treatment
2014						Sham treatment (30)	single treatment
Mansour	Saudi Arabia	RCT	minor RAS	38/52	31.7±8.4	mucoadhesive gel with aloe vera as active ingredient (30)	apply the drug to the ulcer four times a day (after meals and before bedtime) for 5 days using finger or cotton tip applicator and to refrain from eating and drinking for 30 min after application
2014						plain mucoadhesive gel (placebo) (30)	apply the drug to the ulcer four times a day (after meals and before bedtime) for 5 days using finger or cotton tip applicator and to refrain from eating and drinking for 30 min after application
Deshmukh	India	RCT	minor RAS	31/29	32.51±11.80	Curcumin gel (30)	apply the gel three times a day on each ulcer after meals and not to consume food or water for half an hour after application of the gel
2014						Triamcinolone Acetonide gel (30)	apply the gel three times a day on each ulcer

							after meals and not to consume food or water for half an hour after application of the gel
El-Haddad 2014	Kingdom of Saudi Arabia	RCT	minor RAS	54/126	<20y: 7 20-29y: 41 ≥30y: 19	topical commercial honey (67)	three times a day (after meals) for 8 days
					<20y: 6 20-29y: 21 ≥30y: 30	0.1% triamcinolone acetonide (57)	three times a day (after meals) for 8 days
					<20y: 8 20-29y: 31 ≥30y: 17	Orabase (56)	three times a day (after meals) for 8 days
Albrektson 2014	Sweden	RCT	minor RAS	5/15	22.5±16.7	low-level laser therapy (LLLT) (20)	3 occasions, with a 1-day interval.
				11/9	27.5±25.0	Placebo without any laser power (20)	3 occasions, with a 1-day interval.
Soylu 2014	Turkey	RCT	NA	19/16	25.1 15-40	Silver nitrate sticks (35)	r nitrate stick was gently held over the ulcer for a few seconds until the lesion turned to white, after the procedure, the oral cavity was rinsed with water for 5 min.
				30/17	23.5 16-35	placebo sticks (30)	the empty sticks were held over the ulcer, after the procedure, the oral cavity was rinsed with water for 5 min.
Soylu and Okuyucu 2014	Turkey	RCT	recurrent oral aphthous ulcers less than 1 cm	17/18	38.31±5.40	Sucralfate suspension (35)	4 times a day 5 mL as an oral rinse for 1 to 2 minutes after routine mouth care and before sleep for one week
				19/16	38.97±5.14	chlorhexidine oral rinse (35)	4 times a day as an oral rinse for 1 to 2 minutes after routine mouth care and before sleep for one week

Bhat	India	RCT	less than 5 mm	37/13	27	5% Lexanox oral paste (50)	4 times a day, squeeze out approximately ¼ inch (0.5 cm) of the paste from the tube on a clean fingertip and apply to the site of the ulcer
2013				26/14		placebo paste (50)	4 times a day, squeeze out approximately ¼ inch (0.5 cm) of the paste from the tube on a clean fingertip and apply to the site of the ulcer
Bhalang	Thailand	RCT	MiRAU	NA	NA	0.1% triamcinolone acetonide (60)	3 times/day for 7 days
2013						0.5% acemannan extracted from Aloe vera (60)	3 times/day for 7 days
						placebo (60)	3 times/day for 7 days
Halim	Malaysia	RCT	size < 10 mm	NA	NA	turmeric (10)	twice a day for five consecutive days
2013						triamcinolone (10)	twice a day for five consecutive days
Jiang and Yang	China	RCT	MiRAS	11/24	33.03±3.28	Diosmectite paste (35)	apply the paste to the appointed ulcer 4 times per day (after meals and before bedtime) for 5 days (day 1 to day 5)
2013				11/19	34.50±4.85	placebo paste (30)	apply the paste to the appointed ulcer 4 times per day (after meals and before bedtime) for 5 days (day 1 to day 5)
Jiang and Zhu	China	RCT	MiRAS	14/28	30.86±7.53	gelatin containing berberine (42)	4 times per day for 5 days
2013				10/32	31.19±6.00	vehicle (42)	4 times per day for 5 days
Prasad	India	RCT	miRAU	NA	27.48±6.82	CO2 laser (25)	single
2013						placebo (25)	single
Vijayabala	India	RCT	minor RAS	30/20	25.14 16-65	powdered doxycycline hyclate tablet topically whereas (25)	A single application of the medicament or placebo was done during the patient's initial visit
2013						powdered placebo tablet (25)	A single application of the medicament or placebo was done during the patient's initial visit
Sattayut	Thailand	RCT	minor RAS	NA	21 19-23	CO2 laser (7)	single, 5 seconds

2013					23 18-39	sham laser (7)	single, 5 seconds
Jiang	China	RCT	10 mm- 2 mm	36/62	37	5 mg allicin adhesive tablets (48)	apply 1 adhesive tablet to the appointed ulcer 4 times a day (after meals and before bedtime) for 5 days
2012						vehicle only (48)	apply 1 adhesive tablet to the appointed ulcer 4 times a day (after meals and before bedtime) for 5 days
Manifar	Iran	RCT	not greater than 6 mm	15/13	36.1±9.6	2% curcumin (28)	twice per day for a two week
2012				17/12	33.3 ±9.5	placebo gel (29)	twice per day for a two week
Liu	China	RCT	<10 mm	50/70	32.29±11.25	dexamethasone ointment (120)	3 times a day (after meals) for 5 days
2012				52/68	31.67±12.04	placebo (120)	3 times a day (after meals) for 5 days
Babaee	Iran	RCT	minor RAS	10/10	27.95±7.96	Aloe vera gel (20)	thraee-times a day for at least ten days
2012				8/12	29.25±7.48	placebo (20)	thraee-times a day for at least ten days
Zand	Iran	RCT	minor aphthous ulcers	1/9	35.6 22-56	non-ablative CO2 laser therapy (NACLT) (10)	single
2012						placebo (10)	single
Galal	Egypt	RCT	NA	NA	18-35	Licorice (10)	four times on the lesions
2012						control (10)	four times on the lesions
Trinchieri	Italy	RCT	minor aphthous stomatitis	7/8	8-36	lozenge containing Lactobacillus brevis CD2 (15)	4 times daily for a total period of 7 days
2011				8/7	7-35	placebo (15)	4 times daily for a total period of 7 days
Meng	China	RCT	Minor Recurrent aphthous ulceration	44/64	29.82±10.44	amlexanox adhesive pellicles (108)	4 times a day (after meals and before bedtime) for 5 days
2009				37/71	30.18±11.06	placebo (105)	4 times a day (after meals and before bedtime) for 5 days

Tezel	Turkey	RCT	NA	4/6	29.7±7.4	(triamcinolone acetonide 0.1%	three times a day for 1 wk (10)
2009				3/7	34.3±7.7	Nd:YAG laser	single (10)
Skulason	Iceland	RCT	minor recurrent oral ulceration	7/18	NA	Doxy-Gel, a gel containing a low dose of doxycycline (25)	four times a day
2009				10/14		placebo (24)	four times a day
Zand	Iran	RCT	miRAS	2/13	37.9±10.9	CO2 laser (15)	single
2009						placebo (15)	single
Moghadamnia	Iran	RCT	minor RAS	10/5	26.27±4.28	bioadhesive with licorice (15)	q.i.d. for 5 days
2009						bioadhesive without licorice (15)	q.i.d. for 5 days
Gorsky	Israel	RCT	RAS minor	9/9	37 (16-66)	0.2% aqueous solution of minocycline as a mouthwash (18)	four times a day, avoiding any food or drink for 1 hour after rinsing. Therapy continued up to 10 days following the onset of the lesion or until resolution of pain
2008				4/11	38 (17-71)	aqueous placebo mouthwash (15)	four times a day, avoiding any food or drink for 1 hour after rinsing. Therapy continued up to 10 days following the onset of the lesion or until resolution of pain
Rodríguez	Colombia	RCT	NA	14/34	30.6±9.0	0.05% clobetasol propionate oral paste (48)	s four times per day for 5 days
2007				30/18	34.5±13.7	5% amlexanox oral paste (48)	s four times per day for 5 days
Arikan	Turkey	RCT	NA	11/9	30.9 (18-47)	cryotherapy (20)	NA
2006						hydrogel (20)	NA
Liu	China	RCT	minor aphthous ulcerations	101/111	34	amlexanox tablets (104)	4 times a day (after meals and before bedtime) for 5 days
2006						vehicle tablets (108)	4 times a day (after meals and before bedtime) for 5 days
Garnick	USA	RCT	aphthous stomatitis	35 (19-56)	NA	Carrier gel (4)	NA

			minor				
1998						Aloe vera (3)	NA
Khandwala 1	USA	RCT	minor ulcers	NA	NA	Vehicle (512)	four times a day until ulcers healed or for the duration of the study
1997						5% Amlexanox (579)	four times a day until ulcers healed or for the duration of the study
Ylikontiola	Finland	RCT	minor aphthae	4/27	woman: 38 (23-63) man:32 (28-45)	doxymycine (15)	Medications were covered by isobutyl cyanoacrylate (Iso-Dent). Application was made only once during the recurrent aphthous ulcer episode
1997						calcii gluconase as placebo (16)	Medications were covered by isobutyl cyanoacrylate (Iso-Dent). Application was made only once during the recurrent aphthous ulcer episode
Greer Jr	USA	RCT	NA	NA	18-70	5% amlexanox paste (18)	twice daily for 3 days and once on day 4
1993						vehicle paste (14)	twice daily for 3 days and once on day 4
Miles	USA	RCT	NA	NA	NA	0.025% triamcinolone acetonide (6)	The patient returned to the clinic each time a new lesion appeared for reapplication of their assigned treatment
1993						0.12% chlorhexidine digluconate (6)	The patient returned to the clinic each time a new lesion appeared for reapplication of their assigned treatment
Taylor	UK	RCT	minor aphthous ulceration	7/11	32.6 (20-57)	PGE2 gel (18)	twice daily for 10 days or untel healing
1993				6/9		placebo (15)	twice daily for 10 days or untel healing
Hunter	UK	RCT	minor aphthous	12/29	27.4 (17-61)	0.2% chlorhexidine gluconate (38)	3 times daily for 6 weeks

			ulceration				
1987						placebo mouthwash (38)	3 times daily for 6 weeks
Matthews	UK	RCT	minor RAS	NA	NA	Benzydamine hydrochloride 0.15% mouthwash (18)	2 minutes every 4 hours for 3 mouths
1987						0.2% aqueous chlorhexidine gluconate mouthwash (18)	2 minutes every 4 hours for 3 mouths
						Placebo (18)	2 minutes every 4 hours for 3 mouths
Yeoman	UK	RCT	minor aphthous ulcers	9/12	35 (17-63)	betamethasone valerate aerosol (10)	NA
1978						placebo aerosol (10)	NA
Addy	UK	RCT	NA	NA	NA	Chlorhexidine gel (20)	3 times a day after meals for 35 days
1976						Placebo gel (20)	3 times a day after meals for 35 days
Addy	UK	RCT	NA	11/15	17-60	Asringent (Zine Sulphate and Zine Chloride 0.5ml) (12)	3 times daily after meals for 5 weeks
1974						Control (12)	3 times daily after meals for 5 weeks
Browne	UK	RCT	severe recurrent aphthous stomatitis	9/17	29.6 (10-53)	Orabase (26)	three times a day
1968						0.1% triamcinolone acetonide in orabase (26)	three times a day

Table S7 Outcomes of included studies

Author Year	Clinical response assessment	Symptom assessment	Adverse effect	Hematologic values	Relapse
	size/healing time	VAS/NRS/0-10			
Huo 2021	healing time	VAS	NA	NA	NA
Aggour (audlt) 2021	Size	VAS	NA	NA	Outbreak frequency/6 months Probiotics: 3.33 (0.64) Placebo: 3.65 (0.32)
Aggour (child) 2021	Size	VAS	NA	NA	Outbreak frequency/6 months Probiotics: 2.65 (0.54) Placebo: 3.65 (0.62)
Shi 2020	healing time	NA	NA	NA	NA
Kavita 2020	Size	VAS	NA	NA	NA
Shao 2020	Size	VAS	No adverse effects were observed during the study	NA	NA
Pedersen 2020	NA	VAS	No side effects or adverse events were reported by the patients during the intervention period	NA	NA
Ghorbani 2020	Size	VAS	No adverse effect was observed in the two groups during the study	NA	NA
Ibrahim 2020	Size and healing time	NA	No side effects were reported in both groups	NA	NA
Kia 2020	Size	VAS	No burning sensation, the abnormal change in the mucosa, or taste sense malfunction was observed	NA	NA

Owlia 2020	Size and healing time	NA	three patients just complained of minor burning sensation after application of drug	NA	NA
Seyyedi 2020	Size	NA	NA	NA	NA
Raman 2020	Size and healing time	NA	There were no major adverse effects reported in both the groups during the study period	NA	NA
Bardellini 2020	Size	VAS	NA	NA	NA
Nirmala 2019	Size	NA	NA	NA	NA
Soliman 2019	Size	VAS	NA	NA	NA
Tavangar 2019	Size and healing time	VAS	NA		NA
Halboub 2019	Size and healing time	VAS	NA	NA	NA
El-Wakeel 2019	healing time	VAS	NA	NA	NA
Rahmani 2018	Size and healing time	VAS	one patient (5%) felt mild throat sore after applying Chitosan mouthwash and bad taste 20 minutes	NA	NA
Sharma 2018	Size	VAS	None of the patients reported any allergy to any therapy	NA	NA
Ofluoglu 2017	Size	VAS	All patients tolerated the agents and no side effect were reported during the study	NA	NA
Zeini 2017	healing time	VAS	NA	NA	NA

Rodríguez-Archilla 2017	healing time	NA	No patient reported adverse effects related to the treatment received	NA	NA
Pandya 2017	Size	VAS	NA	NA	NA
Yilmaz 2017	NA	VAS	No complications or adverse reactions were observed	NA	NA
Nasry 2016	Size	VAS	NA	NA	NA
Abbasi 2016	Size	VAS	NA	NA	NA
Andishe Tadbir 2015	Size and healing time	VAS	NA	NA	NA
Raeesi 2015	Size and healing time	VAS	without side effect	NA	NA
Aggarwal 2014	healing time	NA	NA	NA	NA
Mansour 2014	Size	VAS	No adverse effects were reported regarding all used mucoadhesive gels	NA	NA
Deshmukh 2014	Size and healing time	VAS	No patient suffered from any allergic reaction to the gels used in the study for treatment of minor RAS	NA	NA
El-Haddad 2014	Size and healing time	VAS	No systemic side effects	NA	NA
Albrektson 2014	NA	VAS	Twenty patients in each group completed the study, with no reported adverse events	NA	NA
Soylu 2014	healing time	VAS	No side effects were recorded in either of the groups.	NA	NA

Soylu and Okuyucu 2014	healing time	VAS	No side effects were recorded in either of the groups	NA	NA
Bhat 2013	Size	VAS	8 patients belonging to the amlexanox group who complained of adverse events during the study. 3 patients complained of a transient "stinging" at the application site, which was considered to be mild in severity and probably related to the studied medications. 2 patients complained of a metallic taste in the oral cavity soon after application of the paste. 3 other patients complained of a "cooling" sensation at the application site following which they felt slight discomfort for a few minutes. None of these 8 cases discontinued the trial due to the adverse events	NA	NA
Bhalang 2013	Size	VAS	No subjects exhibited allergic reactions or side-effects to acemannan	There were no significant differences between the blood test values before and after 7 days of acemannan application	NA
Halim 2013	Size	VAS	NA	NA	NA
Jiang and Yang 2013	Size	VAS	no obvious adverse side effects	NA	NA
Jiang and Zhu 2013	Size	VAS	without obvious side effects	NA	NA
Prasad 2013	healing time	0-10 score	NA	NA	NA
Vijayabala 2013	healing time	VAS	8 report transient bitter sensation	NA	NA
Sattayut	Size	VAS	NA	NA	NA

2013					
Jiang 2012	Size	VAS	No minor or major adverse side effects	None of the hematologic values at day 6 were considered clinically abnormal	NA
Manifar 2012	Size	NA	No adverse drug reaction to a treatment was reported	NA	NA
Liu 2012	Size and healing time	NRS	Twelve cases (4 in the treatment group and 8 in the control group) reported slight adverse reactions	the concentration of dexamethasone in the serum after using the dexamethasone ointment was <0.502 ng/mL	NA
Babaee 2012	Size	VAS	NA	NA	NA
Zand 2012	healing time	NA	The patients reported no warmth in their lesions during laser treatment	NA	NA
Galal 2012	Size	VAS	NA	NA	NA
Trinchieri 2011	Size	0-10 score	complete absence of side effects	NA	NA
Meng 2009	Size	VAS	None of the patients in the study was observed or reported to have any adverse reactions	None of the hematologic values were considered clinically abnormal	NA
Tezel 2009	NA	VAS	there were no reported adverse events	NA	NA
Skulason 2009	NA	0-10 score	One subject reported a short burning sensation from the ulcer after application of the gel	NA	NA
Zand 2009	NA	VAS	None of the patients reported pain or warmth in their lesions during laser therapy	NA	NA

Moghadamnia 2009	Size and healing time	VAS	NA	NA	NA
Gorsky 2008	NA	VAS	no tooth discoloration or other side effects were reported	NA	NA
Rodríguez 2007	NA	VAS	There were no adverse effects reported in any of the treatment groups by the patients or the examiners	NA	NA
Arikan 2006	Size	NA	NA	NA	NA
Liu 2006	Size	VAS	There were 2 adverse events reported in the study, One was in the amlexanox group presented as local,transient “stinging”, Another happened in the vehicle-control group as edema of the fingers.	NA	NA
Garnick 1998	healing time	VAS	NA	NA	NA
Khandwala 1997	Size and healing time	VAS	NA	NA	NA
Ylikontiola 1997	NA	VAS	NA	NA	NA
Greer Jr 1993	Size	NA	None of the patients in the study was observed to have or reported any adverse experience	NA	NA
Miles 1993	healing time	VAS	NA	NA	NA
Taylor 1993	healing time	VAS	NA	NA	NA
Hunter 1987	healing time	NA	NA	NA	Total ulcer numbers (6 weeks): Chlorhexidine: 7.54±6.52 Placebo: 8.32±5.52

					Interval between ulcers (6 weeks): Chlorhexidine: 7.26±8.61 Placebo:3.86±2.05
Matthews 1987	NA	NA	NA	NA	No. of new ulcers (3 months) Benzydamine: 7 (2-33) Chlorhexidine: 6.5 (3-20) Placebo: 8 (2-20)
Yeoman 1978	healing time	NA	NA	NA	NA
Addy 1976	healing time	NA	NA	NA	NA
Addy 1974	healing time	NA	NA	NA	NA
Browne 1968	healing time	NA	NA	NA	No. of new ulcers (8 months) Placebo: 7.81 Triamcinolone acetonide in orabase : 7.00 Triamcinolone acetonide in watery base : 6.42

Table S8 Details information of studies for each outcome in network meta-analysis (1)

Author Year	Treatment	Size-reducing effect (judged by Effectiveness index, EI=ulcer reduction area (mm2) / ulcer baseline area (mm2))																	
		Total	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days
Huo	Laser	NA																	
2021	Triamcinolone	NA																	
Aggour (audlt)	Probiotics	30	44.55	20.79	3	70.03	15.17	5											
2021	Placebo	30	31.66	24.86	3	62.76	18.24	5											
Aggour (child)	Probiotics	30	51.64	18.66	3	76.85	14.13	5											
2021	Placebo	30	37.98	27.13	3	62.45	22.68	5											
Shi	Aloe	NA																	
2020	Chitosan	NA																	
Kavita	Triamcinolone	30	33.70	3.31	3	90.83	2.07	5											
2020	Amlexanox	30	22.95	8.03	3	82.80	6.89	5											
Shao	Chitosan	34	1.12	85.85	2	20.07	85.85	4	56.26	80.35	6								
2020	Placebo	32	-11.35	131.35	2	1.20	150.42	4	23.11	152.56	6								
Pedersen	Probiotics	NA																	
2020	Placebo	NA																	
Ghorbani	Zinc	23	78.23	28.31	3	98.51	31.60	5	100.00	0.00	7								
2020	Placebo	23	-7.03	40.95	3	55.65	37.23	5	93.96	39.44	7								
Ibrahim	Triamcinolone	20	89.54	55.10	7	98.93	58.48	14											
2020	Probiotics	20	97.95	52.23	7	100.00	0.00	14											
Kia	Curcumin	29	16.44	22.50	1	50.49	20.96	4	74.90	20.17	7	90.03	19.89	10					
2020	Triamcinolone	29	17.78	17.59	1	52.77	16.34	4	75.61	15.46	7	91.68	15.12	10					
Owlia	Penicillin	25	59.58	NA	3	91.23	NA	6	100.00	NA	8								
2020	Placebo	25	-31.18	NA	3	-4.79	NA	6	-8.28	NA	8								

Seyyedi	Laser	5	7.99	40.44	3	66.30	40.73	5	92.16	41.76	7								
2020	Laser	5	9.97	53.60	3	87.10	46.40	5	97.65	50.67	7								
	Triamcinolone	5	37.65	29.28	3	95.59	20.19	5	100.00	0.00	7								
Raman	Curcumin	30	-72.75	61.24	2	-190.45	99.72	3	-254.49	150.84	4	-151.97	140.45	5	-62.08	125.00	6	71.91	36.80	7
2020	Triamcinolone	30	-67.84	44.59	2	-175.08	60.66	3	-144.26	44.59	4	-57.05	82	5	16.72	44	6	28.19	59	7
Bardellini	Laser	30	68.61	20.05	4	87.62	21.12	7												
2020	Placebo	30	42.92	24.72	4	74.52	26.15	7												
Nirmala	Probiotics	20	58.15	44.05	5	83.70	49.78	10												
2019	Triamcinolone	20	41.41	42.73	5	95.59	44.05	10												
Soliman	Laser	10	62.80	41.92	4	97.41	44.97	6												
2019	Placebo	10	4.92	50.82	4	52.46	45.25	6												
Tavangar	Triamcinolone	20	37.50	NA	3	82.29	NA	5												
2019	Placebo	20	11.11	NA	3	55.56	NA	5												
Halboub	N-acetylcysteine	38	3.08	5.57	2	25.20	22.12	4	59.52	49.6.	6									
2019	Chlorhexidine	20	1.14	2.79	2	20.44	17.60	4	47.21	33.71	6									
El-Wakeel	Insulin-liposomal gel	NA																		
2019	Placebo	NA																		
Rahmani	Chitosan	20	-77.49	NA	3	24.22	NA	5	76.92	NA	7	100.00	NA	10						
2018	Triamcinolone	20	-19.13	NA	3	33.33	NA	5	89.28	NA	7	100.00	NA	10						
Sharma	Triamcinolone	10	82.76	30.39	4	100.00	0.20	8	100.00	0.00	10									
2018	Benzydamine	10	51.60	28.90	4	98.80	30.52	8	99.58	31.13	10									
	Doxycycline	10	73.79	23.79	4	99.86	27.13	8	100.00	0.00	10									
	Placebo	10	-21.52	35.26	4	65.24	31.41	8	78.73	32.50	10									
Ofluoglu	Triamcinolone	53	14.51	5.06	2	37.78	8.09	4	70.11	9.46	6									
2017	Triester Glycerol	56	16.71	4.19	2	46.39	8.28	4	77.80	8.08	6									
	Oxide																			

	Placebo	51	12.61	5.86	2	34.88	8.64	4	65.94	8.88	6
Zeini	Laser	NA									
2017	Placebo	NA									
Rodríguez-Archilla	Silver nitrate	NA									
2017	Honey	NA									
	Placebo	NA									
Pandya	Quercetin	20	44.25	20.96	2	75.40	20.64	4	95.40	21.17	7
2017	Benzydamine	20	22.22	27.04	2	53.54	25.89	4	80.13	25.69	7
Yilmaz	Laser	NA									
2017	Placebo	NA									
Nasry	Glycyrrhiza	15	42.00	11.50	2	63.00	20.50	5			
2016	Amlexanox	15	48.10	16.50	2	77.80	28.70	5			
	Laser	15	52.70	19.80	2	85.10	22.00	5			
	Placebo	15	7.10	5.30	2	10.00	7.30	5			
Abbasi	Dexamethasone	20	53.46	1.01	3	80.77	22.69	5	100.00	0.00	7
2016	Amlexanox	20	48.31	44.92	3	71.69	39.08	5	92.31	43.69	7
Andishe Tadbir	Placebo	15	-23.6	32.34	3	61.71	31.64	6			
2015	Triamcinolone	14	78.46	38.14	3	99.41	40.51	6			
Raeesi	Glycyrrhiza	20	36.65	33.65	1	96.14	37.11	3	99.95	38.26	5
2015	Placebo	20	6.87	26.74	1	70.10	24.90	3	91.73	26.45	5
Aggarwal	Laser	NA									
2014	Placebo	NA									
Mansour	Aloe	30	35.17	NA	4	59.48	24.64	6			
2014	Placebo	30	16.80	NA	4	31.48	31.48	6			
Deshmukh	Curcumin	30	93.03	25.49	3	99.96	28.40	5	100.00	0.00	7
2014	Triamcinolone	30	91.16	37.67	3	99.90	41.12	5	100.00	0.00	7

El-Haddad	Honey	67	85.38	NA	1	98.95	NA	2	99.98	NA	3	100.00	NA	4	100.00	NA	5	100.00	NA	6
2014	Triamcinolone	57	24.36	NA	1	51.75	NA	2	72.33	NA	3	90.67	NA	4	97.24	NA	5	99.72	NA	6
	Placebo	56	23.42	NA	1	47.99	NA	2	64.35	NA	3	78.56	NA	4	89.50	NA	5	96.23	NA	6
			100.00	NA	7	100.00	NA	8												
			99.97	NA	7	100.00	NA	8												
			99.12	NA	7	99.95	NA	8												
Albrektson	Laser	NA																		
2014	Placebo	NA																		
Soylu	Silver nitrate	NA																		
2014	Placebo	NA																		
Soylu and Okuyucu	Sucralfate	NA																		
2014	Chlorhexidine	NA																		
Bhat	Amlexanox	50	47.01	49.91	4	93.10	53.54	6												
2013	Placebo	50	-27.92	37.67	4	12.05	34.99	6												
Bhalang	Triamcinolone	60	10.00	10.00	2	45.00	10.34	5	70.00	10.00	7									
2013	Aloe	60	10.00	9.43	2	30.00	8.85	5	60.00	9.08	7									
	Placebo	60	5.00	10.00	2	10.00	10.00	5	30.00	10.00	7									
Halim	Curcumin	10	48.31	76.03	5															
2013	Triamcinolone	10	69.72	84.51	5															
Jiang and Yang	Diosmectite	35	1.65	20.82	2	28.81	21.40	4	70.37	18.60	6									
2013	Placebo	30	4.78	18.13	2	27.09	18.69	4	54.98	14.22	6									
Jiang and Zhu	Berberine gelatin	42	35.63	18.28	2	54.07	11.98	4	70.56	11.84	6									
2013	Placebo	42	14.14	20.74	2	37.66	18.33	4	54.35	16.40	6									
Prasad	Laser	NA																		
2013	Placebo	NA																		

Vijayabala	Doxycycline	NA														
2013	Placebo	NA														
Sattayut	Laser	7	-18.75	216.25	1	-31.25	198.75	2	-75.00	124.75	3	-12.5	86	5	50.00	72	7
2013	Placebo	7	-31.58	47.79	1	-26.32	48.63	2	5.26	97.89	3	47.37	78	5	78.95	55	7
Jiang	Allicin	48	28.20	32.68	2	57.30	34.30	4	72.50	38.72	6						
2012	Placebo	48	9.80	31.66	2	36.50	39.66	4	55.10	35.32	6						
Manifar	Curcumin	28	68.58	14.99	4	97.47	16.31	7									
2012	Placebo	29	59.04	14.06	4	95.52	13.91	7									
Liu	Dexamethasone	114	88.70	78.47	6±2												
2012	Placebo	117	56.64	92.06	6±2												
Babaee	Aloe	20	22.91	24.50	3	73.90	22.51	7	100.00	0.00	10						
2012	Placebo	20	37.75	28.49	3	94.92	28.49	7	100.00	0.00	10						
Zand	Laser	NA															
2012	Placebo	NA															
Galal	Glycyrrhiza	10	66.25	22.31	2	87.65	23.08	5									
2012	Placebo	10	13.78	16.56	2	19.00	16.79	5									
Trinchieri	Probiotics	15	99.93	NA	7												
2011	Placebo	15	80.11	NA	7												
Meng	Amlexanox	108	42.08	82.22	4	60.21	83.63	6									
2009	Placebo	105	19.67	78.39	4	41.28	91.51	6									
Tezel	Triamcinolone	NA															
2009	Laser	NA															
Skulason	Doxycycline	NA															
2009	Placebo	NA															
Zand	Laser	NA															
2009	Placebo	NA															

Moghadamnia	Glycyrrhiza	15	18.41	30.32	3	42.24	35.38	5			
2009	Placebo	15	18.02	33.05	3	33.91	41.63	5			
Gorsky	Minocycline	NA									
2008	Placebo	NA									
Rodríguez	Clobetasol	NA									
2007	Amlexanox	NA									
Arikan	Cryotherapy	10	43.75	38.40	3	89.44	39.66	7	100.00	0.00	10
2006	Placebo	10	20.99	42.19	3	80.25	39.74	7	98.77	43.26	10
Liu	Amlexanox	104	39.37	76.95	4	67.37	76.65	6			
2006	Placebo	108	6.44	97.34	4	37.68	92.02	6			
Garnick	Placebo	NA									
1998	Aloe	NA									
Khandwala	Placebo	512	-0.03	0.06	3	0.84	0.50	4	4.54	1.14	5
1997	Amlexanox	579	2.98	0.67	3	10.35	2.10	4	26.66	2.56	5
Ylikontiola	Doxycycline	NA									
1997	Placebo	NA									
Greer Jr	Amlexanox	18	4.61	NA	2	15.70	NA	3	31.06	NA	4
1993	Placebo	14	-10.91	NA	2	-17.11	NA	3	8.56	NA	4
Miles	Triamcinolone	NA									
1993	Chlorhexidine	NA									
Taylor	Prostaglandin E2	NA									
1993	Placebo	NA									
Hunter	Chlorhexidine	NA									
1987	Placebo	NA									
Matthews	Benzydamine	NA									
1987	Chlorhexidine	NA									

Yeoman	Betamethasone	NA
1978	Placebo	NA
Addy	Chlorhexidine	NA
1976	Placebo	NA
Addy	Zinc	NA
1974	Placebo	NA
Browne	Placebo	NA
1968	Triamcinolone	NA

Table S9 Details information of studies for each outcome in network meta-analysis (2)

Author Year	Treatment	Symptom-reducing effect (judged by Effectiveness index, EI=reduction in pain score / baseline ulcer pain score)																	
		Total	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days	Mean (%)	SD	days
Huo	Laser	25	60.16	10.94	1	88.28	10.74	3	100.00	0.00	7									
2021	Triamcinolone	26	14.76	7.56	1	47.28	7.91	3	94.55	7.03	7									
Aggour (audlt)	Probiotics	30	50.30	18.85	3	55.77	26.13	5												
2021	Placebo	30	40.67	25.82	3	44.51	26.03	5												
Aggour (child)	Probiotics	30	37.90	20.97	3	55.26	25.62	5												
2021	Placebo	30	32.15	23.68	3	51.73	22.56	5												
Shi	Aloe	NA																		
2020	Chitosan	NA																		
Kavita	Triamcinolone	30	44.64	3.04	3	80.36	1.79	5												
2020	Amlexanox	30	7.14	8.57	3	38.10	6.19	5												
Shao	Chitosan	34	12.95	50.52	2	47.67	51.81	4	80.31	45.85	6									
2020	Placebo	32	1.03	50.90	2	37.73	56.33	4	71.32	51.42	6									
Pedersen	Probiotics	10	56.30	73.90	90															
2020	Placebo	10	65.00	99.10	90															
Ghorbani	Zinc	23	38.98	26.89	2	77.30	25.79	3	93.09	24.57	4	100.00	25.85	5	100.00	0.00	6	100.00	0.00	7
2020	Placebo	23	3.87	23.78	2	16.19	25.25	3	28.65	25.25	4	47.28	26.55	5	65.76	24.69	6	86.53	21.54	7
Ibrahim	Triamcinolone	NA																		
2020	Probiotics	NA																		
Kia	Curcumin	29	5.45	22.73	1	38.18	30.55	4	63.64	28.00	7	81.82	29.27	10						
2020	Triamcinolone	29	7.14	25.89	1	37.50	30.54	4	51.79	31.79	7	73.21	37.32	10						
Owlia	Penicillin	NA																		
2020	Placebo	NA																		

Seyyedi	Laser	5	77.05	11.40	0	73.70	6.70	0.5	77.05	6.70	1	56.95	15.58	2	73.70	18.09	3			
2020	Laser	5	79.72	16.98	0	58.93	16.12	0.5	58.93	16.12	1	69.32	18.20	2	83.19	6.59	3			
	Triamcinolone	5	36.22	9.86	0	48.29	20.72	0.5	52.31	19.72	1	68.41	28.17	2	80.48	26.16	3			
Raman	Curcumin	NA																		
2020	Triamcinolone	NA																		
Bardellini	Laser	30	75.00	41.50	4	75.00	46.00	7												
2020	Placebo	30	25.00	45.75	4	75.00	45.00	7												
Nirmala	Probiotics	NA																		
2019	Triamcinolone	NA																		
Soliman	Laser	10	50.00	87.00	2	59.00	86.50	3	91.82	18.34	4	100.00	0.00	6						
2019	Placebo	10	0.00	0.00	2	8.00	14.00	3	8.00	13.98	4	48.00	31.55	6						
Tavangar	Triamcinolone	20	0.00	NA	1	5.00	NA	2	25.00	NA	3	45.00	NA	4	70.00	NA	5	100.00	NA	6
2019	Placebo	20	0.00	NA	1	0.00	NA	2	5.00	NA	3	30.00	NA	4	50.00	NA	5	90.00	NA	6
			100.00	NA	7															
			100.00	NA	7															
Halboub	N-acetylcysteine	38	47.47	32.28	2	78.64	40.66	4	89.87	37.34	6									
2019	Chlorhexidine	20	31.82	35.27	2	62.73	49.82	4	80.91	39.27	6									
El-Wakeel	Insulin-liposomal gel	40	62.50	24.50	1	75.00	24.50	2	100.00	0.00	3	100.00	0.00	4	100.00	0.00	6			
2019	Placebo	40	0.00	0.00	1	12.50	18.50	2	25.00	18.50	3	62.50	27.75	4	50.00	18.50	6			
Rahmani	Chitosan	20	-17.15	NA	3	57.85	NA	5	80.81	NA	7	100.00	NA	10						
2018	Triamcinolone	20	39.73	NA	3	88.36	NA	5	97.26	NA	7	100.00	NA	10						
Sharma	Triamcinolone	10	59.72	16.25	4	88.89	9.44	8	100.00	0.00	10									
2018	Benzydamine	10	49.18	18.69	4	100.00	10.98	8	100.00	0.00	10									
	Doxycycline	10	64.29	16.86	4	100.00	9.14	8	100.00	0.00	10									
	Placebo	10	38.81	17.46	4	100.00	11.04	8	88.06	9.55	10									
Ofluoglu	Triamcinolone	53	14.34	5.42	2	32.61	6.43	4	63.96	10.59	6									

2017	Triester Glycerol Oxide	56	23.18	5.47	2	42.85	9.19	4	72.86	11.30	6								
	Placebo	51	9.03	6.76	2	28.63	8.12	4	61.21	10.40	6								
Zeini	Laser	14	1.71	3.02	0														
2017	Placebo	10	1.00	2.30	0														
Rodríguez-Archilla	Silver nitrate	NA																	
2017	Honey	NA																	
	Placebo	NA																	
Pandya	Quercetin	20	45.79	33.27	2	85.98	30.65	4	98.13	31.03	7								
2017	Benzydamine	20	34.34	36.57	2	67.68	39.39	4	90.91	30.51	7								
Yilmaz	Laser	40	97.59	22.89	0	90.36	22.53	1	95.18	24.22	3	98.80	23.73	7	100.00	0.00	10		
2017	Placebo	40	3.7.	27.90	0	8.64	26.67	1	41.98	26.17	3	86.42	26.17	7	100.00	0.00	10		
Nasry	Glycyrrhiza	15	22.20	10.50	2	43.40	15.80	5											
2016	Amlexanox	15	29.80	11.30	2	61.90	24.50	5											
	Laser	15	43.30	20.00	2	67.80	21.50	5											
	Placebo	15	4.10	0.50	2	6.20	1.60	5											
Abbasi	Dexamethasone	20	61.83	33.02	3	88.36	33.97	5	100.00	0.00	7								
2016	Amlexanox	20	65.73	36.89	3	80.52	37.21	5	100.00	0.00	7								
Andishe Tadbir	Placebo	15	-17.63	48.68	3	36.84	48.95	6											
2015	Triamcinolone	14	58.70	28.26	3	89.61	28.50	6											
Raeesi	Glycyrrhiza	20	55.43	11.88	1	92.96	10.26	3	100.00	0.00	5								
2015	Placebo	20	17.42	13.53	1	41.37	13.37	3	62.21	13.69	5								
Aggarwal	Laser	NA																	
2014	Placebo	NA																	
Mansour	Aloe	30	56.10	NA	4	76.45	45.61	6											
2014	Placebo	30	30.74	NA	4	63.20	56.71	6											
Deshmukh	Curcumin	30	29.79	32.34	1	55.32	33.19	2	76.60	30.21	3	91.49	28.30	4	98.72	30.64	5	100.00	0.00	6

2014	Triamcinolone	30	26.67	34.89	1	53.33	35.78	2	75.56	33.11	3	88.89	28.67	4	95.56	27.56	5	98.67	29.33	6
			100.00	0.00	7														
			100.00	0.00	7														
El-Haddad	Honey	67	99.33	NA	1	100.00	NA	2	100.00	NA	3	100.00	NA	4	100.00	NA	5	100.00	NA	6
2014	Triamcinolone	57	25.81	NA	1	56.86	NA	2	90.79	NA	3	100.00	NA	4	100.00	NA	5	100.00	NA	6
	Placebo	56	3.57	NA	1	13.01	NA	2	23.53	NA	3	64.35	NA	4	83.78	NA	5	85.92	NA	6
			100.00	NA	7	100.00	NA	8											
			100.00	NA	7	100.00	NA	8											
			95.19	NA	7	100.00	NA	8											
Albrektson	Laser	20	33.65	NA	1	62.81	NA	2											
2014	Placebo	20	1.22	NA	1	6.85	NA	2											
Soylu	Silver nitrate	35	23.65	9.39	1	55.80	8.84	3	94.70	8.18	7								
2014	Placebo	30	7.61	7.61	1	35.22	8.70	3	68.48	8.70	7								
Soylu and Okuyucu	Sucralfate	35	27.95	8.64	1	50.39	9.99	3	94.95	8.31	7								
2014	Chlorhexidine	35	16.00	9.06	1	31.32	9.73	3	88.81	11.86	7								
Bhat	Amlexanox	50	60.72	16.80	4	89.66	12.02	6											
2013	Placebo	50	9.31	15.82	4	22.07	17.69	6											
Bhalang	Triamcinolone	60	12.43	3.93	0	29.72	3.62	2	49.49	3.80	3	64.97	4.14	4	78.19	3.62	5	87.80	3.73	6
2013	Aloe	60	14.80	3.73	0	24.97	3.73	2	32.09	4.14	3	44.41	3.93	4	56.61	3.62	5	69.15	3.93	6
	Placebo	60	10.62	4.14	0	18.98	4.14	2	29.15	4.30	3	40.23	3.93	4	51.53	3.93	5	64.07	4.14	6
			93.11	4.14	7														
			82.37	3.93	7														
			75.48	3.93	7														
Halim	Curcumin	10	80.70	36.32	5														
2013	Triamcinolone	10	81.82	72.04	5														
Jiang and Yang	Diosmectite	35	9.75	16.10	2	24.39	21.99	3	42.68	23.74	4	51.22	17.20	5	56.10	16.13	6		

2013	Placebo	30	5.13	21.92	2	14.10	23.08	3	24.36	25.77	4	35.90	22.69	5	38.46	21.28	6			
Jiang and Zhu	Berberine gelatin	42	16.10	16.71	2	44.57	17.20	4	76.65	16.83	6									
2013	Placebo	42	6.56	12.57	2	22.60	15.09	4	60.87	13.53	6									
Prasad	Laser	25	91.98	7.90	0	96.70	7.55	1												
2013	Placebo	25	1.49	9.65	0	8.17	9.78	1												
Vijayabala	Doxycycline	25	42.19	29.69	1	64.06	28.13	2	85.94	29.69	3	93.75	34.38	4	98.44	37.50	5	98.44	37.50	6
2013	Placebo	25	11.86	16.95	1	23.73	25.42	2	47.46	37.29	3	67.80	35.59	4	84.75	32.20	5	96.61	35.59	6
			98.44	35.94	7	100.00	3	8	100.00	0	9	100.00	0	10						
			100.00	0.00	7	100.00	0	8	100.00	0	9	100.00	0	10						
Sattayut	Laser	7	20.51	35.67	0	22.08	39.37	1	49.73	39.07	2									
2013	Placebo	7	41.99	38.61	0	25.37	35.16	1	38.47	41.04	2									
Jiang	Allicin	48	20.10	22.79	2	56.30	17.83	4	75.70	16.62	6									
2012	Placebo	48	13.90	29.37	2	33.60	28.42	4	52.00	23.22	6									
Manifar	Curcumin	NA																		
2012	Placebo	NA																		
Liu	Dexamethasone	114	95.09	33.16	6±2															
2012	Placebo	117	82.19	37.27	6±2															
Babaee	Aloe	20	19.33	NA	2	44.15	NA	3	64.36	NA	4	74.47	NA	5	79.61	NA	6	82.62	NA	7
2012	Placebo	20	13.11	NA	2	34.65	NA	3	44.34	NA	4	59.61	NA	5	69.66	NA	6	77.20	NA	7
Zand	Laser	NA																		
2012	Placebo	NA																		
Galal	Glycyrrhiza	10	14.60	10.20	2	22.90	40.30	5												
2012	Placebo	10	4.00	0.70	2	6.00	1.20	5												
Trinchieri	Probiotics	15	96.82	NA	7															
2011	Placebo	15	47.14	NA	7															
Meng	Amlexanox	108	56.12	43.88	4	80.97	43.31	6												

2009	Placebo	105	38.75	45.20	4	66.61	43.91	6											
Tezel	Triamcinolone	10	19.82	9.33	1	51.94	8.81	4	93.01	8.29	7								
2009	Laser	10	82.97	9.78	1	97.71	8.77	4	100.00	0.00	7								
Skulason	Doxycycline	25	23.53	48.04	2	43.14	53.33	3											
2009	Placebo	24	9.43	48.11	2	24.53	51.32	3											
Zand	Laser	15	98.87	19.03	0	92.74	19.35	4h	90.32	18.55	8h	90	18.87	12h	92.10	19.03	24h	91.61	18.55	48h
2009	Placebo	15	3.33	21.48	0	-0.37	21.30	4h	0.00	21.48	8h	0.37	21.30	12h	-3.15	20.93	24h	12.96	20.93	48h
			95.97	19.19	72h	96.29	19.35	96h											
			25.19	21.11	72h	42.04	20.93	96h											
Moghadamnia	Glycyrrhiza	15	-86.44	24.29	1	-97.74	23.16	2	-40.11	24.29	3	18.64	23.16	4	57.06	23.16	5			
2009	Placebo	15	-52.78	17.06	1	-42.46	16.67	2	-15.08	16.67	3	25.40	17.06	4	48.81	17.06	5			
Gorsky	Minocycline	18	20.41	NA	1	55.51	NA	2	69.39	NA	3	73.47	NA	4	79.59	NA	5	79.59	NA	6
2008	Placebo	15	-2.78	NA	1	-38.89	NA	2	-55.56	NA	3	-66.67	NA	4	-66.67	NA	5	-61.11	NA	6
			79.59	NA	7	79.59	NA	8	79.59	NA	9	79.59	NA	10						
			-50	NA	7	-22.22	NA	8	-8.33	NA	9	16.67	NA	10						
Rodríguez	Clobetasol	48	50.29	NA	2	84.35	NA	5											
2007	Amlexanox	48	45.95	NA	2	74.16	NA	5											
Arikan	Cryotherapy	NA																	
2006	Placebo	NA																	
Liu	Amlexanox	104	58.00	44.89	4	90.00	39.33	6											
2006	Placebo	108	43.00	48.77	4	76.54	43.21	6											
Garnick	Placebo	NA																	
1998	Aloe	NA																	
Khandwala	Placebo	512	36.63	3.02	3	49.88	3.25	4	65.66	3.48	5								
1997	Amlexanox	579	42.08	2.72	3	66.09	3.22	4	81.93	2.97	5								
Ylikontiola	Doxycycline	15	38.00	14.40	1	61.60	10.00	2	76.60	5.80	3	82.60	3.60	4	84.40	5.20	5	90.00	5.20	6

1997	Placebo	16	16.00	13.00	1	22.00	9.20	2	27.40	10.40	3	39.40	10.40	4	57.80	9.20	5	71.20	8.20	6
			95.20	3.00	7	94.80	2.60	8	98.40	1.60	9	99.60	0.60	10						
			80.40	7.00	7	94.40	4.40	8	98.80	1.20	9	100.00	0.00	10						
Greer Jr	Amlexanox	NA																		
1993	Placebo	NA																		
Miles	Triamcinolone	6	32.79	21.31	2	48.91	21.86	3	74.59	21.31	4	77.60	21.04	5	86.34	21.58	6	95.36	22.95	7
1993	Chlorhexidine	6	38.67	20.26	2	78.27	18.23	3	84.71	18.23	4	86.56	18.05	5	90.24	18.05	6	90.42	18.05	7
			98.36	23.77	8	99.73	24.32	9	100.00	0	10									
			100.00	0.00	8	100.00	0.00	9	100.00	0	10									
Taylor	Prostaglandin E2	18	-4.86	NA	2	-0.4	NA	3	-10.53	NA	4	19.84	NA	5	50.61	NA	6	68.42	NA	7
1993	Placebo	15	-16.67	NA	2	-14.78	NA	3	10.38	NA	4	22.96	NA	5	42.45	NA	6	63.52	NA	7
			78.95	NA	8	87.85	NA	9	89.96	NA	10									
			64.47	NA	8	83.96	NA	9	88.36	NA	10									
Hunter	Chlorhexidine	NA																		
1987	Placebo	NA																		
Matthews	Benzydamine	NA																		
1987	Chlorhexidine	NA																		
Yeoman	Betamethasone	NA																		
1978	Placebo	NA																		
Addy	Chlorhexidine	NA																		
1976	Placebo	NA																		
Addy	Zinc	NA																		
1974	Placebo	NA																		
Browne	Placebo	NA																		
1968	Triamcinolone	NA																		

Table S10 Details information of studies for each outcome in network meta-analysis (3)

Author Year	Treatment	Healing effect (days)			Adverse event occurrence	
		Mean	SD	Total	Events	Total
Huo	Laser	6.60	0.29	25	NA	
2021	Triamcinolone	7.77	0.52	26	NA	
Aggour (audlt)	Probiotics	NA			NA	
2021	Placebo	NA			NA	
Aggour (child)	Probiotics	NA			NA	
2021	Placebo	NA			NA	
Shi	Aloe	7.40	1.85	20	NA	
2020	Chitosan	7.93	1.84	15	NA	
Kavita	Triamcinolone	NA			NA	
2020	Amlexanox	NA			NA	
Shao	Chitosan	NA			0	34
2020	Placebo	NA			0	32
Pedersen	Probiotics	NA			0	10
2020	Placebo	NA			0	10
Ghorbani	Zinc	NA			0	23
2020	Placebo	NA			0	23
Ibrahim	Triamcinolone	7.75	2.88	20	0	20
2020	Probiotics	5.40	1.40	20	0	20
Kia	Curcumin	NA			0	29
2020	Triamcinolone	NA			0	29
Owlia	Penicillin	2.79	0.16	14	3	25
2020	Placebo	5.90	0.93	12	0	25

Seyyedi	Laser	NA			NA	
2020	Laser	NA			NA	
	Triamcinolone	NA			NA	
Raman	Curcumin	7.21	0.08	30	0	30
2020	Triamcinolone	6.77	0.08	30	0	30
Bardellini	Laser	NA			NA	
2020	Placebo	NA			NA	
Nirmala	Probiotics	NA			NA	
2019	Triamcinolone	NA			NA	
Soliman	Laser	NA			NA	
2019	Placebo	NA			NA	
Tavangar	Triamcinolone	5.75	1.08	20	NA	
2019	Placebo	6.50	1.05	20	NA	
Halboub	N-acetylcysteine	4.87	2.46	38	NA	
2019	Chlorhexidine	5.40	2.82	20	NA	
El-Wakeel	Insulin-liposomal gel	4.20	0.60	40	NA	
2019	Placebo	8.10	1.00	40	NA	
Rahmani	Chitosan	6.20	1.82	20	1	20
2018	Triamcinolone	5.15	1.42	20	0	20
Sharma	Triamcinolone	NA			0	10
2018	Benzydamine	NA			0	10
	Doxycycline	NA			0	10
	Placebo	NA			0	10
Ofluoglu	Triamcinolone	NA			0	53
2017	Triester Glycerol Oxide	NA			0	56
	Placebo	NA			0	51

Zeini	Laser	7.21	4.20	14	NA	
2017	Placebo	6.40	1.83	10	NA	
Rodríguez-Archilla	Silver nitrate	7.32	0.99	25	0	25
2017	Honey	6.80	0.71	25	0	25
	Placebo	8.96	0.89	25	0	25
Pandya	Quercetin	NA			NA	
2017	Benzydamine	NA			NA	
Yilmaz	Laser	NA			0	40
2017	Placebo	NA			0	40
Nasry	Glycyrrhiza	NA			NA	
2016	Amlexanox	NA			NA	
	Laser	NA			NA	
	Placebo	NA			NA	
Abbasi	Dexamethasone	NA			NA	
2016	Amlexanox	NA			NA	
Andishe Tadbir	Placebo	6.58	NA	15	NA	
2015	Triamcinolone	4.22	NA	14	NA	
Raeesi	Glycyrrhiza	4.20	1.30	20	0	20
2015	Placebo	7.45	1.30	20	0	20
Aggarwal	Laser	3.05	1.10	30	NA	
2014	Placebo	8.90	2.45	30	NA	
Mansour	Aloe	NA			0	30
2014	Placebo	NA			0	30
Deshmukh	Curcumin	3.90	1.18	30	0	30
2014	Triamcinolone	4.10	1.18	30	0	30
El-Haddad	Honey	2.73	0.57	67	0	67

2014	Triamcinolone	5.91	0.91	57	0	57
	Placebo	7.14	0.92	56	0	56
Albrektson	Laser	NA			0	20
2014	Placebo	NA			0	20
Soylu	Silver nitrate	2.70	1.48	35	0	35
2014	Placebo	5.50	2.22	30	0	30
Soylu and Okuyucu	Sucralfate	1.97	1.56	23	0	35
2014	Chlorhexidine	2.80	3.00	19	0	35
Bhat	Amlexanox	NA			8	50
2013	Placebo	NA			0	50
Bhalang	Triamcinolone	NA			0	60
2013	Aloe	NA			0	60
	Placebo	NA			0	60
Halim	Curcumin	NA			NA	
2013	Triamcinolone	NA			NA	
Jiang and Yang	Diosmectite	NA			0	35
2013	Placebo	NA			0	30
Jiang and Zhu	Berberine gelatin	NA			0	42
2013	Placebo	NA			0	42
Prasad	Laser	4.08	0.81	25	NA	
2013	Placebo	7.84	0.90	25	NA	
Vijayabala	Doxycycline	3.70	1.30	25	8	25
2013	Placebo	5.30	1.20	25	0	25
Sattayut	Laser	NA			NA	
2013	Placebo	NA			NA	
Jiang	Allicin	NA			0	48

2012	Placebo	NA			0	48
Manifar	Curcumin	NA			0	28
2012	Placebo	NA			0	29
Liu	Dexamethasone	6.00	NA	114	4	120
2012	Placebo	7.00	NA	117	8	120
Babaee	Aloe	NA			NA	
2012	Placebo	NA			NA	
Zand	Laser	4.80	2.40	10	0	10
2012	Placebo	7.60	2.50	10	0	10
Galal	Glycyrrhiza	NA			NA	
2012	Placebo	NA			NA	
Trinchieri	Probiotics	NA			0	15
2011	Placebo	NA			0	15
Meng	Amlexanox	NA			0	108
2009	Placebo	NA			0	105
Tezel	Triamcinolone	NA			0	10
2009	Laser	NA			0	10
Skulason	Doxycycline	NA			1	25
2009	Placebo	NA			0	24
Zand	Laser	NA			0	15
2009	Placebo	NA			0	15
Moghadamnia	Glycyrrhiza	8.46	1.55	15	NA	
2009	Placebo	8.60	1.68	15	NA	
Gorsky	Minocycline	NA			0	18
2008	Placebo	NA			0	15
Rodríguez	Clobetasol	NA			0	48

2007	Amlexanox	NA			0	48
Arikan	Cryotherapy	NA			NA	
2006	Placebo	NA			NA	
Liu	Amlexanox	NA			1	104
2006	Placebo	NA			1	108
Garnick	Placebo	9.01	1.32	4	NA	
1998	Aloe	6.38	0.73	3	NA	
Khandwala	Placebo	4.90	NA	512	NA	
1997	Amlexanox	5.60	NA	579	NA	
Ylikontiola	Doxycycline	NA			NA	
1997	Placebo	NA			NA	
Greer Jr	Amlexanox	NA			0	18
1993	Placebo	NA			0	14
Miles	Triamcinolone	5.93	NA	6	NA	
1993	Chlorhexidine	5.38	NA	6	NA	
Taylor	Prostaglandin E2	7.78	2.44	18	NA	
1993	Placebo	8.27	1.87	15	NA	
Hunter	Chlorhexidine	5.02	2.41	38	NA	
1987	Placebo	5.78	2.74	38	NA	
Matthews	Benzydamine	NA			NA	
1987	Chlorhexidine	NA			NA	
Yeoman	Betamethasone	8.50	NA	10	NA	
1978	Placebo	15.00	NA	10	NA	
Addy	Chlorhexidine	4.80	2.90	20	NA	
1976	Placebo	7.80	2.90	20	NA	
Addy	Zinc	21.80	11.50	12	NA	

1974	Placebo	16.80	6.20	12	NA
Browne	Placebo	8.21	NA	26	NA
1968	Triamcinolone	7.53	NA	26	NA

Chapter S1 Healing effect

1.Consistency Model

Summary estimates for Healing effect

The estimate values for healing effect are given as mean difference (MD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Aloe	1.15 (-2.06, 4.38)	0.21 (-4.14, 4.50)	0.79 (-3.48, 5.19)	0.38 (-4.64, 5.29)	0.20 (-3.88, 4.46)	-1.56 (-5.60, 2.45)	-1.93 (-6.87, 2.94)	-1.10 (-4.70, 2.63)	-0.36 (-6.18, 5.29)
-1.15 (-4.38, 2.06)	Chitosan	-0.94 (-5.43, 3.33)	-0.36 (-4.43, 3.80)	-0.79 (-6.01, 4.21)	-0.93 (-5.30, 3.34)	-2.70 (-6.76, 1.25)	-3.08 (-8.15, 1.92)	-2.24 (-5.96, 1.57)	-1.47 (-7.32, 4.24)
-0.21 (-4.50, 4.14)	0.94 (-3.33, 5.43)	Chlorhexidine	0.63 (-3.62, 4.87)	0.18 (-4.45, 4.76)	0.01 (-3.87, 3.94)	-1.74 (-5.37, 1.95)	-2.12 (-6.75, 2.49)	-1.30 (-4.43, 2.14)	-0.55 (-4.36, 3.35)
-0.79 (-5.19, 3.48)	0.36 (-3.80, 4.43)	-0.63 (-4.87, 3.62)	Curcumin	-0.43 (-5.49, 4.45)	-0.61 (-4.75, 3.64)	-2.36 (-6.18, 1.49)	-2.75 (-7.78, 2.06)	-1.92 (-5.25, 1.57)	-1.13 (-6.99, 4.46)
-0.38 (-5.29, 4.64)	0.79 (-4.21, 6.01)	-0.18 (-4.76, 4.45)	0.43 (-4.45, 5.49)	Doxycycline	-0.16 (-4.73, 4.45)	-1.95 (-6.28, 2.51)	-2.29 (-7.47, 2.94)	-1.47 (-5.41, 2.81)	-0.67 (-6.72, 5.38)
-0.20 (-4.46, 3.88)	0.93 (-3.34, 5.30)	-0.01 (-3.94, 3.87)	0.61 (-3.64, 4.75)	0.16 (-4.45, 4.73)	Glycyrrhiza	-1.77 (-5.38, 1.84)	-2.14 (-6.74, 2.50)	-1.31 (-4.43, 1.94)	-0.57 (-6.14, 4.91)
1.56 (-2.45, 5.60)	2.70 (-1.25, 6.76)	1.74 (-1.95, 5.37)	2.36 (-1.49, 6.18)	1.95 (-2.51, 6.28)	1.77 (-1.84, 5.38)	Honey	-0.37 (-4.82, 3.92)	0.46 (-2.32, 3.32)	1.24 (-4.02, 6.50)
1.93 (-2.94, 6.87)	3.08 (-1.92, 8.15)	2.12 (-2.49, 6.75)	2.75 (-2.06, 7.78)	2.29 (-2.94, 7.47)	2.14 (-2.50, 6.74)	0.37 (-3.92, 4.82)	Insulin-liposomal gel	0.82 (-3.11, 4.93)	1.58 (-4.51, 7.69)
1.10 (-2.63, 4.70)	2.24 (-1.57, 5.96)	1.30 (-2.14, 4.43)	1.92 (-1.57, 5.25)	1.47 (-2.81, 5.41)	1.31 (-1.94, 4.43)	-0.46 (-3.32, 2.32)	-0.82 (-4.93, 3.11)	Laser	0.77 (-4.38, 5.84)
0.36 (-5.29, 6.18)	1.47 (-4.24, 7.32)	0.55 (-3.35, 4.36)	1.13 (-4.46, 6.99)	0.67 (-5.38, 6.72)	0.57 (-4.91, 6.14)	-1.24 (-6.50, 4.02)	-1.58 (-7.69, 4.51)	-0.77 (-5.84, 4.38)	N-acetylcysteine
1.12 (-3.82, 6.23)	2.27 (-2.72, 7.35)	1.31 (-3.30, 5.97)	1.95 (-2.97, 6.92)	1.51 (-3.82, 6.78)	1.33 (-3.13, 5.97)	-0.45 (-4.63, 4.00)	-0.78 (-5.92, 4.55)	0.01 (-3.88, 4.28)	0.78 (-5.31, 6.83)
-1.96 (-5.26, 1.29)	-0.85 (-4.23, 2.65)	-1.78 (-4.55, 0.96)	-1.16 (-4.38, 2.07)	-1.60 (-5.39, 2.06)	-1.75 (-4.38, 0.95)	-3.55 (-5.90, -1.13)	-3.90 (-7.53, -0.23)	-3.08 (-4.81, -1.19)	-2.31 (-7.06, 2.40)
1.70 (-3.59, 6.82)	2.82 (-2.30, 7.67)	1.88 (-3.37, 6.94)	2.47 (-2.23, 7.04)	2.02 (-3.97, 7.74)	1.89 (-3.38, 6.76)	0.12 (-4.71, 4.75)	-0.26 (-6.18, 5.33)	0.57 (-4.06, 5.03)	1.38 (-5.27, 7.60)
-1.47 (-6.57, 3.69)	-0.34 (-5.49, 5.04)	-1.31 (-6.05, 3.49)	-0.65 (-5.68, 4.54)	-1.11 (-6.61, 4.20)	-1.28 (-6.00, 3.52)	-3.04 (-7.53, 1.59)	-3.43 (-8.70, 1.96)	-2.60 (-6.76, 1.85)	-1.80 (-7.90, 4.26)
0.54 (-3.51, 4.72)	1.72 (-2.48, 5.90)	0.74 (-3.06, 4.41)	1.35 (-2.59, 5.44)	0.89 (-3.57, 5.42)	0.75 (-2.98, 4.50)	-1.02 (-3.92, 1.93)	-1.37 (-5.98, 3.04)	-0.55 (-3.56, 2.54)	0.21 (-5.02, 5.52)
0.67 (-5.08, 6.39)	1.81 (-3.99, 7.76)	0.84 (-3.10, 4.76)	1.48 (-4.27, 7.29)	1.01 (-5.18, 7.04)	0.91 (-4.67, 6.33)	-0.89 (-6.24, 4.47)	-1.25 (-7.35, 4.75)	-0.46 (-5.53, 4.78)	0.29 (-5.17, 5.84)
-0.69 (-4.20, 2.70)	0.44 (-2.75, 3.60)	-0.51 (-3.97, 2.88)	0.11 (-2.45, 2.64)	-0.33 (-4.66, 3.92)	-0.51 (-3.77, 2.84)	-2.25 (-5.07, 0.47)	-2.63 (-6.94, 1.52)	-1.80 (-4.03, 0.52)	-1.02 (-6.29, 4.13)
-7.24 (-15.78, 1.88)	-6.08 (-14.87, 3.27)	-7.01 (-15.71, 1.92)	-6.39 (-15.05, 2.90)	-6.88 (-15.68, 2.53)	-7.00 (-15.57, 2.03)	-8.82 (-17.19, 0.14)	-9.16 (-18.13, 0.15)	-8.32 (-16.60, 0.64)	-7.49 (-17.12, 2.25)

-1.12 (-6.23, 3.82)	1.96 (-1.29, 5.26)	-1.70 (-6.82, 3.59)	1.47 (-3.69, 6.57)	-0.54 (-4.72, 3.51)	-0.67 (-6.39, 5.08)	0.69 (-2.70, 4.20)	7.24 (-1.88, 15.78)
-2.27 (-7.35, 2.72)	0.85 (-2.65, 4.23)	-2.82 (-7.67, 2.30)	0.34 (-5.04, 5.49)	-1.72 (-5.90, 2.48)	-1.81 (-7.76, 3.99)	-0.44 (-3.60, 2.75)	6.08 (-3.27, 14.87)
-1.31 (-5.97, 3.30)	1.78 (-0.96, 4.55)	-1.88 (-6.94, 3.37)	1.31 (-3.49, 6.05)	-0.74 (-4.41, 3.06)	-0.84 (-4.76, 3.10)	0.51 (-2.88, 3.97)	7.01 (-1.92, 15.71)
-1.95 (-6.92, 2.97)	1.16 (-2.07, 4.38)	-2.47 (-7.04, 2.23)	0.65 (-4.54, 5.68)	-1.35 (-5.44, 2.59)	-1.48 (-7.29, 4.27)	-0.11 (-2.64, 2.45)	6.39 (-2.90, 15.05)
-1.51 (-6.78, 3.82)	1.60 (-2.06, 5.39)	-2.02 (-7.74, 3.97)	1.11 (-4.20, 6.61)	-0.89 (-5.42, 3.57)	-1.01 (-7.04, 5.18)	0.33 (-3.92, 4.66)	6.88 (-2.53, 15.68)
-1.33 (-5.97, 3.13)	1.75 (-0.95, 4.38)	-1.89 (-6.76, 3.38)	1.28 (-3.52, 6.00)	-0.75 (-4.50, 2.98)	-0.91 (-6.33, 4.67)	0.51 (-2.84, 3.77)	7.00 (-2.03, 15.57)
0.45 (-4.00, 4.63)	3.55 (1.13, 5.90)	-0.12 (-4.75, 4.71)	3.04 (-1.59, 7.53)	1.02 (-1.93, 3.92)	0.89 (-4.47, 6.24)	2.25 (-0.47, 5.07)	8.82 (-0.14, 17.19)
0.78 (-4.55, 5.92)	3.90 (0.23, 7.53)	0.26 (-5.33, 6.18)	3.43 (-1.96, 8.70)	1.37 (-3.04, 5.98)	1.25 (-4.75, 7.35)	2.63 (-1.52, 6.94)	9.16 (-0.15, 18.13)
-0.01 (-4.28, 3.88)	3.08 (1.19, 4.81)	-0.57 (-5.03, 4.06)	2.60 (-1.85, 6.76)	0.55 (-2.54, 3.56)	0.46 (-4.78, 5.53)	1.80 (-0.52, 4.03)	8.32 (-0.64, 16.60)
-0.78 (-6.83, 5.31)	2.31 (-2.40, 7.06)	-1.38 (-7.60, 5.27)	1.80 (-4.26, 7.90)	-0.21 (-5.52, 5.02)	-0.29 (-5.84, 5.17)	1.02 (-4.13, 6.29)	7.49 (-2.25, 17.12)
Penicillin	3.09 (-0.59, 6.84)	-0.55 (-6.18, 5.34)	2.63 (-2.93, 7.93)	0.58 (-3.91, 5.01)	0.47 (-5.53, 6.50)	1.84 (-2.31, 6.11)	8.34 (-1.08, 17.23)
-3.09 (-6.84, 0.59)	Placebo	-3.65 (-7.85, 0.89)	-0.47 (-4.45, 3.37)	-2.53 (-5.05, 0.08)	-2.63 (-7.39, 2.20)	-1.28 (-3.26, 0.77)	5.23 (-3.48, 13.40)
0.55 (-5.34, 6.18)	3.65 (-0.89, 7.85)	Probiotics	3.11 (-2.90, 8.88)	1.11 (-4.06, 6.09)	1.01 (-5.54, 7.36)	2.38 (-1.61, 6.18)	8.88 (-1.03, 18.07)
-2.63 (-7.93, 2.93)	0.47 (-3.37, 4.45)	-3.11 (-8.88, 2.90)	Prostaglandin E2	-2.03 (-6.67, 2.76)	-2.16 (-8.41, 4.01)	-0.78 (-5.12, 3.72)	5.71 (-3.54, 14.75)
-0.58 (-5.01, 3.91)	2.53 (-0.08, 5.05)	-1.11 (-6.09, 4.06)	2.03 (-2.76, 6.67)	Silver nitrate	-0.09 (-5.57, 5.37)	1.23 (-1.87, 4.41)	7.82 (-1.24, 16.25)
-0.47 (-6.50, 5.53)	2.63 (-2.20, 7.39)	-1.01 (-7.36, 5.54)	2.16 (-4.01, 8.41)	0.09 (-5.37, 5.57)	Sucralfate	1.39 (-3.86, 6.65)	7.89 (-2.04, 17.34)
-1.84 (-6.11, 2.31)	1.28 (-0.77, 3.26)	-2.38 (-6.18, 1.61)	0.78 (-3.72, 5.12)	-1.23 (-4.41, 1.87)	-1.39 (-6.65, 3.86)	Triamcinolone	6.49 (-2.44, 14.86)
-8.34 (-17.23, 1.08)	-5.23 (-13.40, 3.48)	-8.88 (-18.07, 1.03)	-5.71 (-14.75, 3.54)	-7.82 (-16.25, 1.24)	-7.89 (-17.34, 2.04)	-6.49 (-14.86, 2.44)	Zinc

Rank probability

Rank 1 is worst, rank N is best.

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17	Rank 18
Aloe	0	0.03	0.05	0.05	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.07	0.06	0.05	0.05	0.04	0.02
Chitosan	0.03	0.14	0.11	0.11	0.1	0.09	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.02	0.02	0.01	0.01	0
Chlorhexidine	0	0.02	0.04	0.06	0.07	0.08	0.09	0.09	0.1	0.09	0.09	0.08	0.06	0.05	0.04	0.02	0.01	0
Curcumin	0.02	0.08	0.09	0.09	0.09	0.1	0.1	0.08	0.07	0.06	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0
Doxycycline	0.02	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.03	0.02
Glycyrrhiza	0.01	0.03	0.04	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01
Honey	0	0	0	0	0	0.01	0.01	0.02	0.03	0.04	0.06	0.07	0.09	0.12	0.14	0.17	0.15	0.09
Insulin-liposomal gel	0	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.09	0.12	0.17	0.24
Laser	0	0	0	0	0	0.01	0.02	0.03	0.04	0.06	0.08	0.11	0.14	0.15	0.15	0.11	0.07	0.03
N-acetylcysteine	0.02	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.06	0.05	0.06	0.06	0.07	0.08	0.09
Penicillin	0	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.07	0.08	0.08	0.09	0.1	0.12	0.11
Placebo	0.02	0.2	0.28	0.23	0.14	0.08	0.03	0.02	0.01	0	0	0	0	0	0	0	0	0
Probiotics	0	0.01	0.02	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.08	0.1	0.14	0.23
Prostaglandin E2	0.05	0.22	0.12	0.09	0.08	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.01	0.01
Silver nitrate	0	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.09	0.11	0.11	0.1	0.08	0.06	0.04	0.02
Sucralfate	0.01	0.05	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.05	0.06	0.06	0.07	0.07	0.1	0.12
Triamcinolone	0	0.01	0.04	0.08	0.12	0.14	0.15	0.13	0.11	0.08	0.06	0.03	0.02	0.01	0	0	0	0
Zinc	0.81	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0	0	0.01	0.01	0.01	0.01

Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	1.66 (1.01, 2.96)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Aloe.Chitosan	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Chlorhexidine.Sucralfate	1.00
d.Placebo.Aloe	1.00
d.Placebo.Chlorhexidine	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Honey	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Laser	1.00
d.Placebo.Penicillin	1.00
d.Placebo.ProstaglandinE2	1.00
d,Placebo.Silvernitrate	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Probiotics	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor : 2.5

2.Inconsistency Model

Summary estimates for Healing effect

The estimate values for healing effect are given as mean difference (MD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Aloe	1.01 (-2.48, 4.58)	-0.16 (-5.29, 4.88)	0.62 (-4.33, 5.44)	0.13 (-5.71, 5.88)	-0.04 (-5.19, 4.80)	-1.80 (-6.56, 2.80)	-2.21 (-8.00, 3.27)	-1.49 (-6.10, 3.13)	-0.63 (-7.18, 5.97)
-1.01 (-4.58, 2.48)	Chitosan	-1.17 (-6.08, 3.81)	-0.44 (-4.95, 3.95)	-0.88 (-6.57, 4.47)	-1.12 (-5.94, 3.65)	-2.82 (-7.32, 1.45)	-3.25 (-8.70, 2.17)	-2.54 (-6.76, 1.81)	-1.66 (-8.04, 4.76)
0.16 (-4.88, 5.29)	1.17 (-3.81, 6.08)	Chlorhexidine	0.74 (-3.96, 5.56)	0.25 (-4.67, 5.10)	0.04 (-3.99, 4.10)	-1.68 (-5.60, 2.27)	-2.11 (-6.95, 2.89)	-1.37 (-4.94, 2.37)	-0.50 (-4.47, 3.64)
-0.62 (-5.44, 4.33)	0.44 (-3.95, 4.95)	-0.74 (-5.56, 3.96)	Curcumin	-0.48 (-6.01, 4.91)	-0.70 (-5.18, 3.99)	-2.39 (-6.55, 1.70)	-2.83 (-8.25, 2.57)	-2.09 (-6.01, 1.88)	-1.21 (-7.62, 4.97)
-0.13 (-5.88, 5.71)	0.88 (-4.47, 6.57)	-0.25 (-5.10, 4.67)	0.48 (-4.91, 6.01)	Doxycycline	-0.19 (-4.95, 4.73)	-1.94 (-6.58, 2.79)	-2.35 (-7.71, 3.25)	-1.63 (-5.91, 2.97)	-0.75 (-7.05, 5.68)
0.04 (-4.80, 5.19)	1.12 (-3.65, 5.94)	-0.04 (-4.10, 3.99)	0.70 (-3.99, 5.18)	0.19 (-4.73, 4.95)	Glycyrrhiza	-1.73 (-5.51, 2.04)	-2.18 (-6.81, 2.58)	-1.42 (-4.84, 2.01)	-0.52 (-6.24, 5.17)
1.80 (-2.80, 6.56)	2.82 (-1.45, 7.32)	1.68 (-2.27, 5.60)	2.39 (-1.70, 6.55)	1.94 (-2.79, 6.58)	1.73 (-2.04, 5.51)	Honey	-0.42 (-5.11, 4.27)	0.32 (-2.74, 3.59)	1.24 (-4.52, 6.85)
2.21 (-3.27, 8.00)	3.25 (-2.17, 8.70)	2.11 (-2.89, 6.95)	2.83 (-2.57, 8.25)	2.35 (-3.25, 7.71)	2.18 (-2.58, 6.81)	0.42 (-4.27, 5.11)	Insulin liposomal gel	0.73 (-3.55, 5.11)	1.61 (-4.74, 8.01)
1.49 (-3.13, 6.10)	2.54 (-1.81, 6.76)	1.37 (-2.37, 4.94)	2.09 (-1.88, 6.01)	1.63 (-2.97, 5.91)	1.42 (-2.01, 4.84)	-0.32 (-3.59, 2.74)	-0.73 (-5.11, 3.55)	Laser	0.89 (-4.64, 6.24)
0.63 (-5.97, 7.18)	1.66 (-4.76, 8.04)	0.50 (-3.64, 4.47)	1.21 (-4.97, 7.62)	0.75 (-5.68, 7.05)	0.52 (-5.17, 6.24)	-1.24 (-6.85, 4.52)	-1.61 (-8.01, 4.74)	-0.89 (-6.24, 4.64)	N-acetylcysteine
1.44 (-4.20, 7.28)	2.49 (-2.97, 8.09)	1.33 (-3.47, 6.25)	2.07 (-3.35, 7.47)	1.61 (-3.91, 7.06)	1.40 (-3.32, 6.20)	-0.34 (-4.97, 4.22)	-0.79 (-6.21, 4.75)	-0.04 (-4.22, 4.43)	0.84 (-5.51, 7.12)
-2.05 (-5.66, 1.47)	-0.64 (-4.50, 3.29)	-1.80 (-4.70, 1.17)	-1.06 (-4.74, 2.72)	-1.54 (-5.48, 2.33)	-1.74 (-4.54, 1.09)	-3.48 (-6.00, -0.85)	-3.90 (-7.65, -0.07)	-3.16 (-5.05, -1.09)	-2.25 (-7.30, 2.73)
1.87 (-3.96, 7.77)	2.93 (-2.49, 8.33)	1.76 (-3.74, 7.53)	2.49 (-2.33, 7.47)	2.02 (-4.25, 8.24)	1.80 (-3.61, 7.68)	0.09 (-4.95, 5.30)	-0.35 (-6.58, 5.89)	0.39 (-4.51, 5.67)	1.26 (-5.59, 8.35)
-1.18 (-6.94, 4.79)	-0.14 (-5.85, 5.61)	-1.28 (-6.38, 3.74)	-0.58 (-6.08, 4.86)	-1.05 (-6.71, 4.56)	-1.23 (-6.14, 3.76)	-2.97 (-7.87, 1.87)	-3.43 (-9.00, 2.24)	-2.67 (-7.17, 2.01)	-1.81 (-8.29, 4.73)
0.90 (-4.07, 6.28)	1.94 (-2.94, 6.95)	0.81 (-3.41, 5.02)	1.52 (-3.14, 6.34)	1.03 (-4.03, 5.99)	0.85 (-3.37, 5.01)	-1.03 (-4.27, 2.26)	-1.32 (-6.18, 3.72)	-0.58 (-4.15, 3.15)	0.30 (-5.63, 6.20)
0.97 (-5.58, 7.65)	2.01 (-4.55, 8.46)	0.83 (-3.37, 5.04)	1.60 (-4.93, 7.75)	1.09 (-5.48, 7.55)	0.87 (-4.97, 6.76)	-0.85 (-6.70, 4.87)	-1.28 (-7.87, 5.15)	-0.55 (-6.17, 5.07)	0.34 (-5.51, 6.14)
-0.47 (-4.47, 3.66)	0.56 (-2.90, 4.01)	-0.60 (-4.46, 3.35)	0.15 (-2.63, 2.89)	-0.34 (-5.14, 4.24)	-0.53 (-4.21, 3.22)	-2.26 (-5.35, 0.76)	-2.69 (-7.26, 1.88)	-1.66 (-4.45, 1.36)	-1.08 (-6.78, 4.59)
-6.82 (-16.07, 2.44)	-5.79 (-14.87, 3.19)	-6.95 (-15.84, 1.71)	-6.22 (-15.20, 2.77)	-6.70 (-15.91, 2.23)	-6.87 (-15.65, 1.76)	-8.62 (-17.39, -0.01)	-9.10 (-18.19, -0.05)	-8.31 (-16.94, 0.06)	-7.44 (-17.34, 2.22)

-1.44 (-7.28, 4.20)	2.05 (-1.47, 5.66)	-1.87 (-7.77, 3.96)	1.18 (-4.79, 6.94)	-0.90 (-6.28, 4.07)	-0.97 (-7.65, 5.58)	0.47 (-3.66, 4.47)	6.82 (-2.44, 16.07)		
-2.49 (-8.09, 2.97)	0.64 (-3.29, 4.50)	-2.93 (-8.33, 2.49)	0.14 (-5.61, 5.85)	-1.94 (-6.95, 2.94)	-2.01 (-8.46, 4.55)	-0.56 (-4.01, 2.90)	5.79 (-3.19, 14.87)		
-1.33 (-6.25, 3.47)	1.80 (-1.17, 4.70)	-1.76 (-7.53, 3.74)	1.28 (-3.74, 6.38)	-0.81 (-5.02, 3.41)	-0.83 (-5.04, 3.37)	0.60 (-3.35, 4.46)	6.95 (-1.71, 15.84)		
-2.07 (-7.47, 3.35)	1.06 (-2.72, 4.74)	-2.49 (-7.47, 2.33)	0.58 (-4.86, 6.08)	-1.52 (-6.34, 3.14)	-1.60 (-7.75, 4.93)	-0.15 (-2.89, 2.63)	6.22 (-2.77, 15.20)		
-1.61 (-7.06, 3.91)	1.54 (-2.33, 5.48)	-2.02 (-8.24, 4.25)	1.05 (-4.56, 6.71)	-1.03 (-5.99, 4.03)	-1.09 (-7.55, 5.48)	0.34 (-4.24, 5.14)	6.70 (-2.23, 15.91)		
-1.40 (-6.20, 3.32)	1.74 (-1.09, 4.54)	-1.80 (-7.68, 3.61)	1.23 (-3.76, 6.14)	-0.85 (-5.01, 3.37)	-0.87 (-6.76, 4.97)	0.53 (-3.22, 4.21)	6.87 (-1.76, 15.65)		
0.34 (-4.22, 4.97)	3.48 (0.85, 6.00)	-0.09 (-5.30, 4.95)	2.97 (-1.87, 7.87)	1.03 (-2.26, 4.27)	0.85 (-4.87, 6.70)	2.26 (-0.76, 5.35)	8.62 (0.01, 17.39)		
0.79 (-4.75, 6.21)	3.90 (0.07, 7.65)	0.35 (-5.89, 6.58)	3.43 (-2.24, 9.00)	1.32 (-3.72, 6.18)	1.28 (-5.15, 7.87)	2.69 (-1.88, 7.26)	9.10 (0.05, 18.19)		
0.04 (-4.43, 4.22)	3.16 (1.09, 5.05)	-0.39 (-5.67, 4.51)	2.67 (-2.01, 7.17)	0.58 (-3.15, 4.15)	0.55 (-5.07, 6.17)	1.66 (-1.36, 4.45)	8.31 (-0.06, 16.94)		
-0.84 (-7.12, 5.51)	2.25 (-2.73, 7.30)	-1.26 (-8.35, 5.59)	1.81 (-4.73, 8.29)	-0.30 (-6.20, 5.63)	-0.34 (-6.14, 5.51)	1.08 (-4.59, 6.78)	7.44 (-2.22, 17.34)		
Penicillin	3.13 (-0.73, 7.08)	-0.43 (-6.74, 5.76)	2.62 (-3.02, 8.24)	0.53 (-4.36, 5.56)	0.51 (-5.92, 7.07)	1.94 (-2.73, 6.65)	8.32 (-0.74, 17.43)		
-3.13 (-7.08, 0.73)	Placebo	-3.55 (-8.51, 1.21)	-0.51 (-4.55, 3.63)	-2.59 (-5.64, 0.48)	-2.62 (-7.70, 2.69)	-1.07 (-3.76, 1.93)	5.13 (-2.97, 13.59)		
0.43 (-5.76, 6.74)	3.55 (-1.21, 8.51)	Probiotics	3.09 (-3.28, 9.52)	0.96 (-4.51, 6.63)	0.94 (-6.02, 8.11)	2.35 (-1.73, 6.49)	8.72 (-0.63, 18.29)		
-2.62 (-8.24, 3.02)	0.51 (-3.63, 4.55)	-3.09 (-9.52, 3.28)	Prostaglandin E2	-2.11 (-7.19, 3.13)	-2.12 (-8.71, 4.56)	-0.69 (-5.45, 3.98)	5.59 (-3.31, 15.02)		
-0.53 (-5.56, 4.36)	2.59 (-0.48, 5.64)	-0.96 (-6.63, 4.51)	2.11 (-3.13, 7.19)	Silver nitrate	-0.02 (-6.06, 5.97)	1.38 (-2.49, 5.29)	7.75 (-0.99, 16.60)		
-0.51 (-7.07, 5.92)	2.62 (-2.69, 7.70)	-0.94 (-8.11, 6.02)	2.12 (-4.56, 8.71)	0.02 (-5.97, 6.06)	Sucralfate	1.46 (-4.55, 7.00)	7.71 (-1.86, 17.68)		
-1.94 (-6.65, 2.73)	1.07 (-1.93, 3.76)	-2.35 (-6.49, 1.73)	0.69 (-3.98, 5.45)	-1.38 (-5.29, 2.49)	-1.46 (-7.00, 4.55)	Triamcinolone	6.33 (-2.30, 15.11)		
-8.32 (-17.43, 0.74)	-5.13 (-13.59, 2.97)	-8.72 (-18.29, 0.63)	-5.59 (-15.02, 3.31)	-7.75 (-16.60, 0.99)	-7.71 (-17.68, 1.86)	-6.33 (-15.11, 2.30)	Zinc		

Inconsistency Factors

Cycle	Median (95% CI)
Aloe, Chitosan, Honey, Placebo, Triamcinolone	-0.13 (-4.40, 2.70)
Honey, Laser, Placebo, Triamcinolone	-0.12 (-3.53, 2.49)
Honey, Placebo, Silver nitrate	-0.05 (-3.19, 2.66)
Honey, Placebo, Triamcinolone	0.07 (-2.51, 3.12)

Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	1.74 (1.04, 3.19)
Inconsistency Standard Deviation	1.25 (0.06, 4.94)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Aloe.Chitosan	1.00
d.Chitosan.Triamcinolone	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Chlorhexidine.Sucralfate	1.00
d.Honey.Placebo	1.00
d.Placebo.Chlorhexidine	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Laser	1.00
d.Placebo.Penicilin	1.00
d.Placebo.ProstaglandinE2	1.00
d.Placebo.Silvernitrate	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Honey	1.00
d.Triamcinolone.Probiotics	1.00
w.Aloe.Chitosan.Triamcinolone.Honey.Placebo	1.00
w.Honey.Placebo.Laser.Triamcinolone	1.00
w.Honey.Placebo.Sivernitrate	1.00
w.Honey.Placebo.Triamcinolone	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor : 2.5

3. Node-splitting analysis

Node-splitting analysis of inconsistency

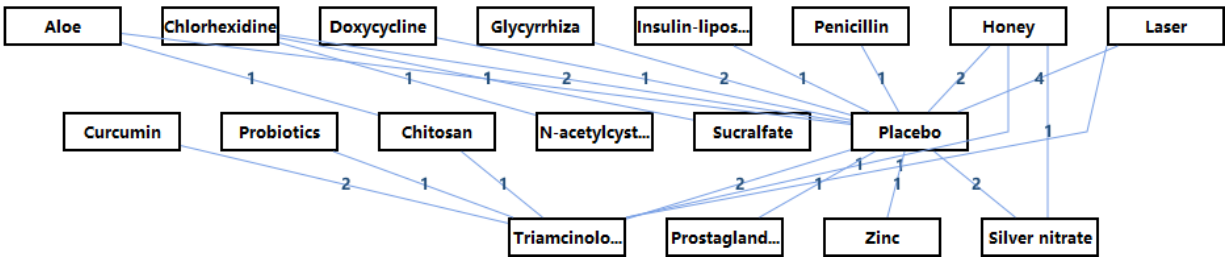
Inconsistency between direct and indirect estimates was estimated in the Node-Splitting Model. When P values is above 0.05 in a comparison, there is evidence of statistical inconsistency.

Name	Direct Effect	Indirect Effect	Overall	P-Value
Aloe, Chitosan	0.53 (-3.52, 4.64)	2.55 (-3.37, 8.80)	1.15 (-2.06, 4.38)	0.55
Aloe, Placebo	2.63 (-1.46, 6.74)	0.61 (-5.66, 6.72)	1.96 (-1.29, 5.26)	0.56
Chitosan, Triamcinolone	-1.12 (-5.09, 2.87)	0.98 (-5.10, 7.03)	-0.44 (-3.60, 2.75)	0.55
Honey, Silver nitrate	0.52 (-3.45, 4.52)	0.64 (-4.23, 5.67)	1.02 (-1.93, 3.92)	0.96
Honey, Triamcinolone	3.17 (-0.67, 7.09)	1.73 (-2.02, 5.56)	2.25 (-0.47, 5.07)	0.55
Laser, Placebo	3.28 (1.01, 5.26)	2.20 (-2.39, 6.89)	3.08 (1.19, 4.81)	0.64
Laser, Triamcinolone	1.11 (-2.81, 4.98)	2.26 (-1.19, 5.37)	1.80 (-0.52, 4.03)	0.62
Placebo, Triamcinolone	-1.02 (-3.67, 1.63)	-2.41 (-6.00, 1.23)	-1.28 (-3.26, 0.77)	0.49

4. Network structure

Network structure of sensitivity analysis

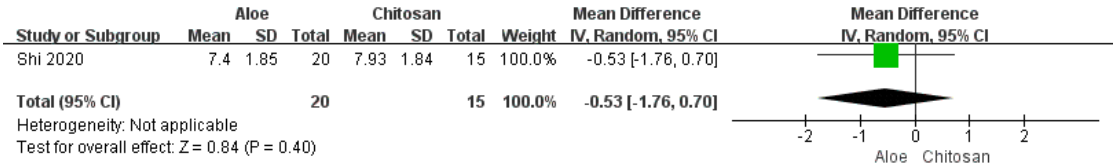
26 RCTs involving 18 local interventions were included in the sensitivity analysis considering the healing effect.

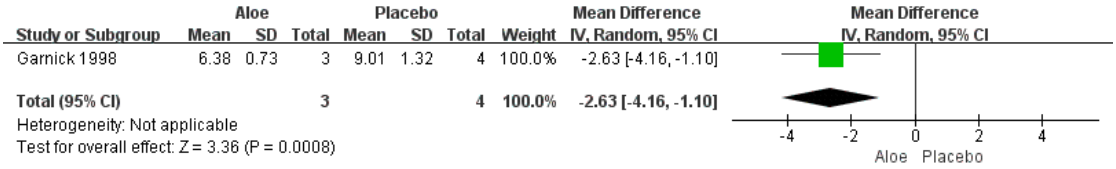


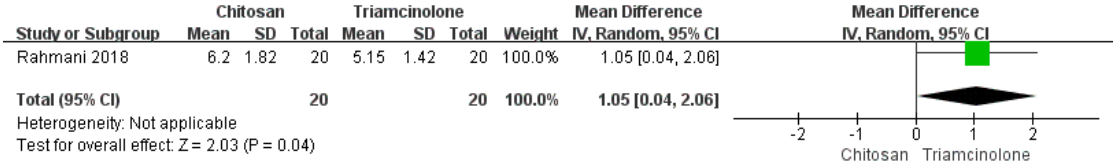
5. Pairwise meta-analysis

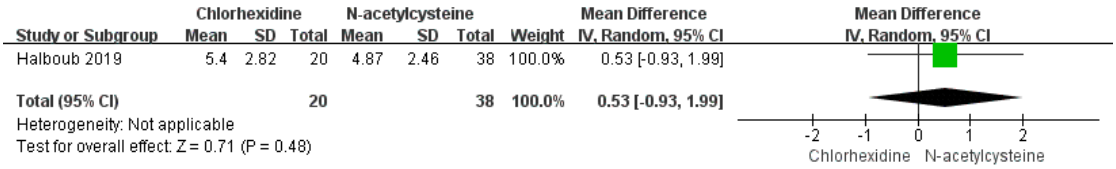
Pairwise meta-analysis of healing effect

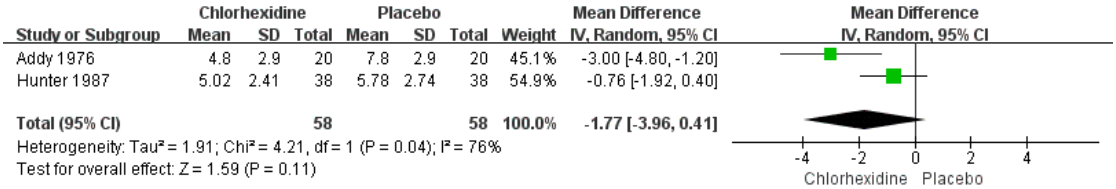
Healing effect were measured by mean difference (MD) and 95% confidence interval (CI).

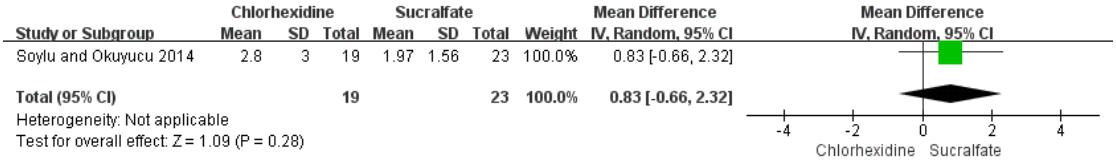


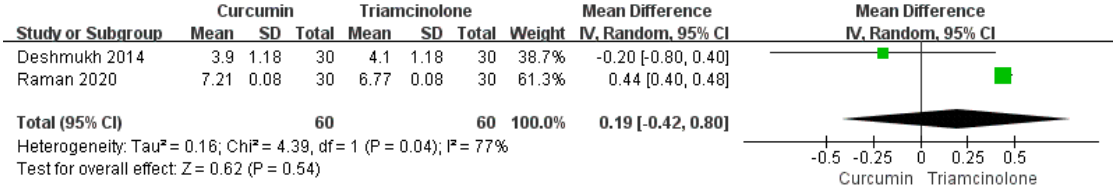


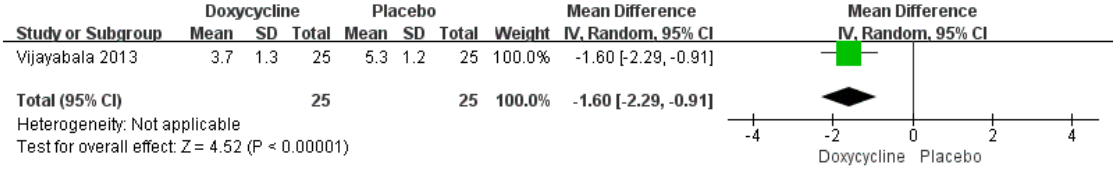


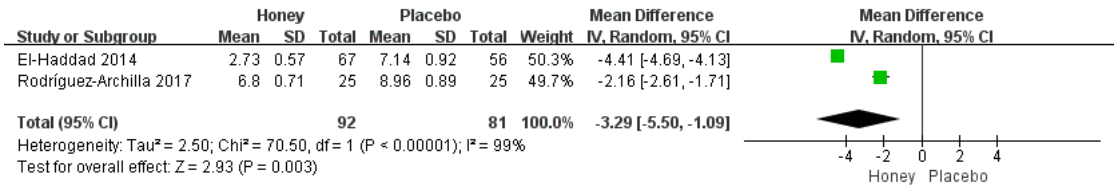


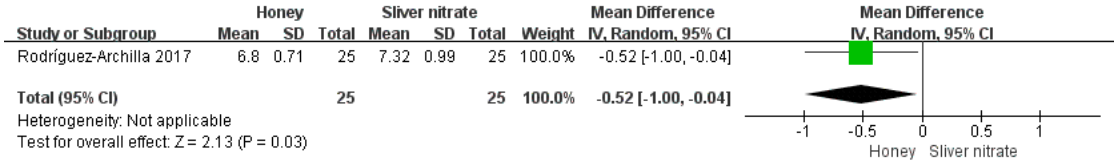


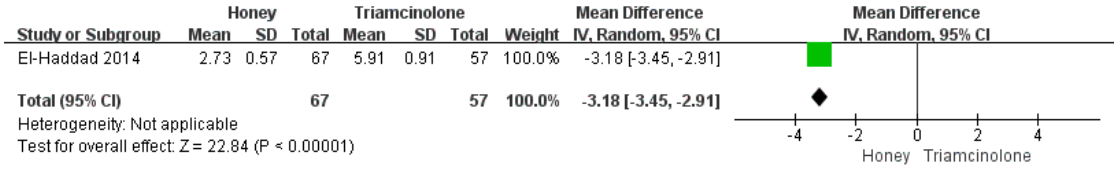


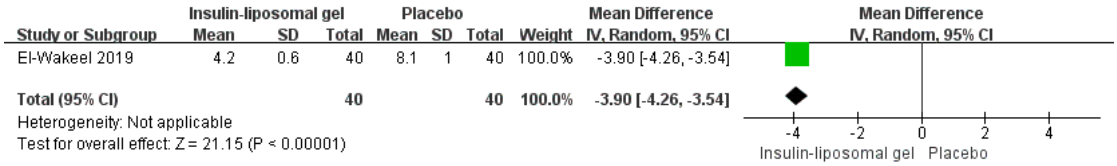


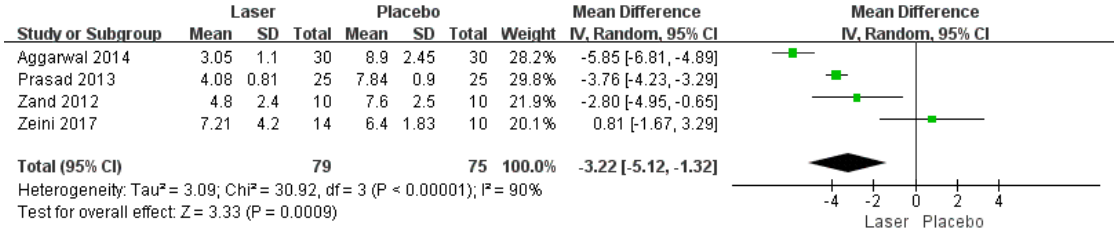


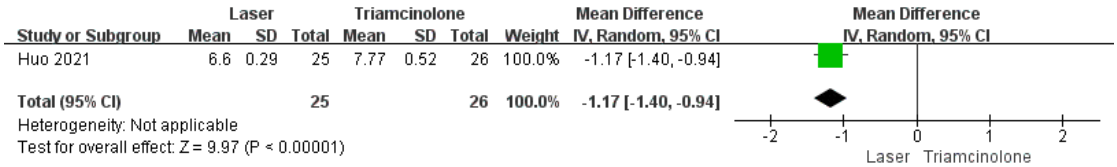

Honey
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
El-Haddad 2014 2.73 0.57 67 7.14 0.92 56 50.3% -4.41 [-4.69, -4.13]
Rodríguez-Archilla 2017 6.8 0.71 25 8.96 0.89 25 49.7% -2.16 [-2.61, -1.71]
Total (95% CI) 92 81 100.0% -3.29 [-5.50, -1.09]
Heterogeneity: Tau² = 2.50; Chi² = 70.50, df = 1 (P < 0.00001); I² = 99%
Test for overall effect: Z = 2.93 (P = 0.003)
-4 -2 0 2 4
Honey Placebo

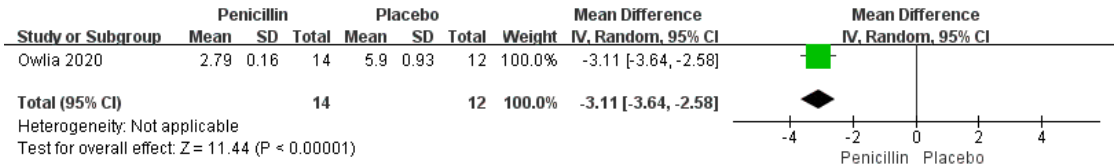

Honey
Sliver nitrate
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Rodríguez-Archilla 2017 6.8 0.71 25 7.32 0.99 25 100.0% -0.52 [-1.00, -0.04]
Total (95% CI) 25 25 100.0% -0.52 [-1.00, -0.04]
Heterogeneity: Not applicable
Test for overall effect: Z = 2.13 (P = 0.03)
-1 -0.5 0 0.5 1
Honey Sliver nitrate

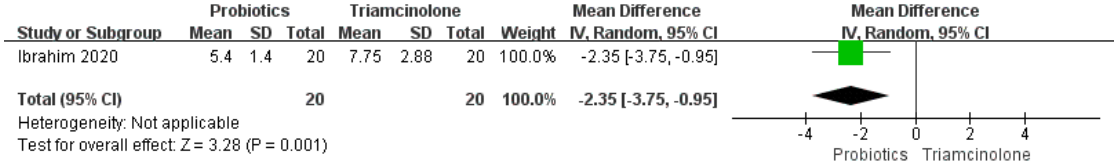

Honey
Triamcinolone
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
El-Haddad 2014 2.73 0.57 67 5.91 0.91 57 100.0% -3.18 [-3.45, -2.91]
Total (95% CI) 67 57 100.0% -3.18 [-3.45, -2.91]
Heterogeneity: Not applicable
Test for overall effect: Z = 22.84 (P < 0.00001)
-4 -2 0 2 4
Honey Triamcinolone

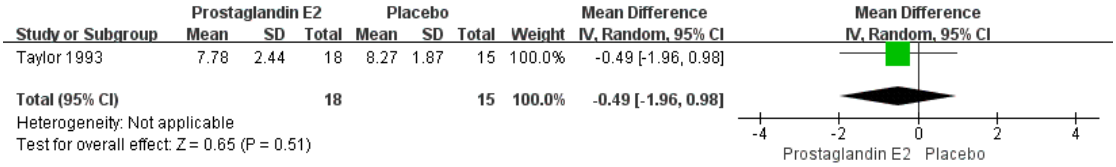

Insulin-liposomal gel
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
El-Wakeel 2019 4.2 0.6 40 8.1 1 40 100.0% -3.90 [-4.26, -3.54]
Total (95% CI) 40 40 100.0% -3.90 [-4.26, -3.54]
Heterogeneity: Not applicable
Test for overall effect: Z = 21.15 (P < 0.00001)
-4 -2 0 2 4
Insulin-liposomal gel Placebo

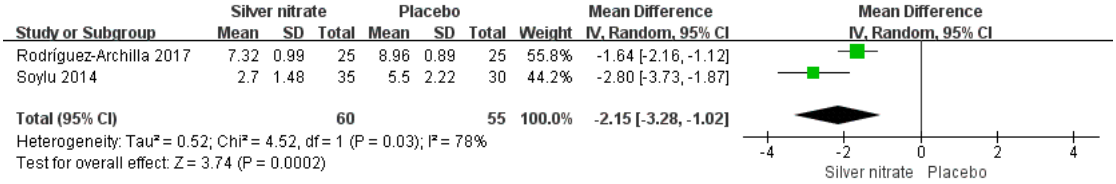

Laser
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Aggarwal 2014 3.05 1.1 30 8.9 2.45 30 28.2% -5.85 [-6.81, -4.89]
Prasad 2013 4.08 0.81 25 7.84 0.9 25 29.8% -3.76 [-4.23, -3.29]
Zand 2012 4.8 2.4 10 7.6 2.5 10 21.9% -2.80 [-4.95, -0.65]
Zeini 2017 7.21 4.2 14 6.4 1.83 10 20.1% 0.81 [-1.67, 3.29]
Total (95% CI) 79 75 100.0% -3.22 [-5.12, -1.32]
Heterogeneity: Tau² = 3.09; Chi² = 30.92, df = 3 (P < 0.00001); I² = 90%
Test for overall effect: Z = 3.33 (P = 0.0009)
-4 -2 0 2 4
Laser Placebo

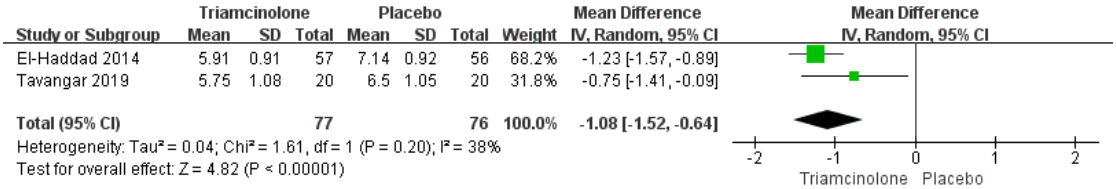

Laser
Triamcinolone
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Huo 2021 6.6 0.29 25 7.77 0.52 26 100.0% -1.17 [-1.40, -0.94]
Total (95% CI) 25 26 100.0% -1.17 [-1.40, -0.94]
Heterogeneity: Not applicable
Test for overall effect: Z = 9.97 (P < 0.00001)
-2 -1 0 1 2
Laser Triamcinolone

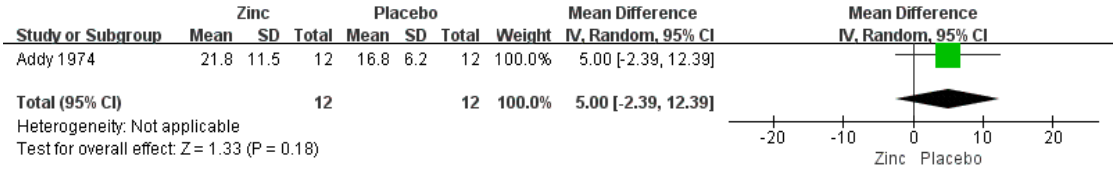

Penicillin
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Owlia 2020 2.79 0.16 14 5.9 0.93 12 100.0% -3.11 [-3.64, -2.58]
Total (95% CI) 14 12 100.0% -3.11 [-3.64, -2.58]
Heterogeneity: Not applicable
Test for overall effect: Z = 11.44 (P < 0.00001)
-4 -2 0 2 4
Penicillin Placebo


Probiotics
Triamcinolone
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Ibrahim 2020 5.4 1.4 20 7.75 2.88 20 100.0% -2.35 [-3.75, -0.95]
Total (95% CI) 20 20 100.0% -2.35 [-3.75, -0.95]
Heterogeneity: Not applicable
Test for overall effect: Z = 3.28 (P = 0.001)
-4 -2 0 2 4
Probiotics Triamcinolone


Prostaglandin E2
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Taylor 1993 7.78 2.44 18 8.27 1.87 15 100.0% -0.49 [-1.96, 0.98]
Total (95% CI) 18 15 100.0% -0.49 [-1.96, 0.98]
Heterogeneity: Not applicable
Test for overall effect: Z = 0.65 (P = 0.51)
-4 -2 0 2 4
Prostaglandin E2 Placebo


Silver nitrate
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Rodríguez-Archilla 2017 7.32 0.99 25 8.96 0.89 25 55.8% -1.64 [-2.16, -1.12]
Soylu 2014 2.7 1.48 35 5.5 2.22 30 44.2% -2.80 [-3.73, -1.87]
Total (95% CI) 60 55 100.0% -2.15 [-3.28, -1.02]
Heterogeneity: Tau² = 0.52; Chi² = 4.52, df = 1 (P = 0.03); I² = 78%
Test for overall effect: Z = 3.74 (P = 0.0002)
-4 -2 0 2 4
Silver nitrate Placebo


Triamcinolone
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
El-Haddad 2014 5.91 0.91 57 7.14 0.92 56 68.2% -1.23 [-1.57, -0.89]
Tavangar 2019 5.75 1.08 20 6.5 1.05 20 31.8% -0.75 [-1.41, -0.09]
Total (95% CI) 77 76 100.0% -1.08 [-1.52, -0.64]
Heterogeneity: Tau² = 0.04; Chi² = 1.61, df = 1 (P = 0.20); I² = 38%
Test for overall effect: Z = 4.82 (P < 0.00001)
-2 -1 0 1 2
Triamcinolone Placebo


Zinc
Placebo
Mean Difference
Mean Difference
Study or Subgroup Mean SD Total Mean SD Total Weight IV, Random, 95% CI
IV, Random, 95% CI
Addy 1974 21.8 11.5 12 16.8 6.2 12 100.0% 5.00 [-2.39, 12.39]
Total (95% CI) 12 12 100.0% 5.00 [-2.39, 12.39]
Heterogeneity: Not applicable
Test for overall effect: Z = 1.33 (P = 0.18)
-20 -10 0 10 20
Zinc Placebo

Comparison	NO. of included study	Heterogeneity (I^2)	Combined effect [MD (95%CI)]
Aloe vs			
Placebo	1	NA	-2.63 (-4.16, -1.10)
Chitosan	1	NA	-0.53 (-1.76, 0.70)
Chitosan vs			
Triamcinolone	1	NA	1.05 (0.04, 2.06)
Chlorhexidine vs			
Placebo	2	76%	-1.77 (-3.96, 0.41)
Sucralfate	1	NA	0.83 (-0.66, 2.32)
N-acetylcysteine	1	NA	0.53 (-0.93, 1.99)
Curcumin vs			
Triamcinolone	2	77%	0.19 (-0.42, 0.80)
Doxycycline vs			
Placebo	1	NA	-1.60 (-2.29, -0.91)
Glycyrrhiza vs			
Placebo	2	95%	-1.72 (-4.77, 1.32)
Honey vs			
Placebo	2	99%	-3.29 (-5.50, -1.09)
Triamcinolone	1	NA	-3.18 (-3.45, -2.91)
Sliver nitrate	1	NA	-0.52 (-1.00, -0.04)
Insulin-liposomal gel vs			
Placebo	1	NA	-3.90 (-4.26, -3.54)
Laser vs			
Placebo	4	90%	-3.22 (-5.12, -1.32)
Triamcinolone	1	NA	-1.17 (-1.40, -0.94)
Penicillin vs			
Placebo	1	NA	-3.11 (-3.64, -2.58)
Probiotics vs			
Triamcinolone	1	NA	-2.35 (-3.75, -0.95)
Prostaglandin E2 vs			
Placebo	1	NA	-0.49 (-1.96, 0.98)
Sliver nitrate vs			
Placebo	2	78%	-2.15 (-3.28, -1.02)
Triamcinolone vs			
Placebo	2	38%	-1.08 (-1.52, -0.64)
Zinc vs			
Placebo	1	NA	5.00 (-2.39, 12.39)

MD, mean difference; CI, confidence interval; NA, not applicable.

Chapter S2 Size-reducing effect

1.Consistency Model

Summary estimates for Size-reducing effect

The estimate values for size-reducing effect are given as mean difference (MD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Allign	-0.03(-57.26, 57.97)	17.88(-36.40, 72.91)	7.17(-65.84, 76.66)	-1.23(-72.44, 68.54)	15.67(-75.07, 105.97)	-29.80(-101.72, 43.30)	9.18(-47.48, 67.26)	19.40(-44.75, 82.51)	-1.83(-72.19, 69.65)
0.03(-57.97, 57.26)	Aloe	17.79(-16.04, 50.64)	6.70(-50.76, 61.35)	-1.27(-58.06, 54.29)	15.01(-62.84, 95.68)	-29.71(-87.27, 29.15)	9.32(-28.39, 47.25)	19.65(-28.00, 65.65)	-1.21(-58.77, 53.84)
-17.88(-72.91, 36.40)	-17.79(-50.64, 16.04)	Amlexanox	-11.00(-64.44, 41.05)	-19.10(-71.55, 33.01)	-2.77(-79.47, 75.75)	-47.40(-102.47, 9.24)	-8.85(-41.13, 24.48)	1.26(-35.76, 38.69)	-19.26(-72.62, 32.21)
-7.17(-76.66, 65.84)	-6.70(-61.35, 50.76)	11.00(-41.05, 64.44)	Benzydamine	-7.90(-76.61, 63.20)	8.49(-80.50, 100.94)	-36.37(-106.70, 36.92)	2.65(-52.23, 58.94)	12.94(-49.24, 75.73)	-8.24(-77.25, 63.11)
1.23(-68.54, 72.44)	1.27(-54.29, 58.06)	19.10(-33.01, 71.55)	7.90(-63.20, 76.61)	Berberine gelatin	16.72(-70.83, 107.87)	-28.49(-98.74, 44.52)	10.67(-45.76, 68.56)	20.52(-41.00, 82.58)	-0.45(-69.16, 69.34)
-15.67(-105.97, 75.07)	-15.01(-95.68, 62.84)	-2.77(-75.75, 79.47)	-8.49(-100.94, 80.50)	-16.72(-107.87, 70.83)	Chitosan	-45.29(-135.67, 46.81)	-6.10(-87.56, 73.60)	4.17(-80.39, 86.73)	-16.54(-107.13, 72.53)
29.80(-43.30, 101.72)	29.71(-29.15, 87.27)	47.40(-9.24, 102.47)	36.37(-36.92, 106.70)	28.49(-44.52, 98.74)	45.29(-46.81, 135.67)	Cryotherapy	38.75(-19.39, 97.28)	49.17(-14.20, 109.45)	28.28(-44.82, 97.76)
-9.18(-67.26, 47.48)	-9.32(-47.25, 28.39)	8.85(-24.48, 41.13)	-2.65(-58.94, 52.23)	-10.67(-68.56, 45.76)	6.10(-73.60, 87.56)	-38.75(-97.28, 19.39)	Curcumin	10.05(-37.03, 56.45)	-10.53(-67.41, 44.51)
-19.40(-82.51, 44.75)	-19.65(-65.65, 28.00)	-1.26(-38.69, 35.76)	-12.94(-75.73, 49.24)	-20.52(-82.58, 41.00)	-4.17(-86.73, 80.39)	-49.17(-109.45, 14.20)	-10.05(-56.45, 37.03)	Dexamethasone	-21.23(-81.51, 40.77)
1.81(-69.65, 72.19)	1.21(-53.84, 58.77)	19.26(-32.21, 72.62)	8.24(-63.11, 77.25)	0.45(-69.34, 69.16)	16.54(-72.53, 107.13)	-28.28(-97.76, 44.82)	10.53(-44.51, 67.41)	21.23(-40.77, 81.51)	Doxmectite
-6.87(-72.82, 61.31)	-7.41(-57.15, 46.00)	10.42(-35.54, 59.21)	-0.60(-52.36, 52.29)	-8.58(-73.71, 58.65)	7.99(-76.67, 96.50)	-36.67(-105.40, 34.67)	1.79(-46.73, 54.19)	11.92(-44.60, 70.89)	-8.70(-74.11, 56.76)
-11.60(-68.85, 45.73)	-12.06(-47.94, 25.67)	5.83(-23.74, 37.06)	-5.04(-61.23, 49.17)	-13.43(-69.33, 41.77)	3.40(-75.63, 83.83)	-41.42(-98.62, 18.48)	-2.65(-39.55, 35.11)	7.39(-37.22, 52.40)	-13.49(-68.04, 42.64)
-10.02(-66.29, 51.38)	-10.43(-46.21, 31.07)	7.47(-22.72, 41.98)	-3.58(-57.20, 51.59)	-11.63(-66.41, 48.12)	5.04(-74.15, 87.39)	-39.94(-96.48, 22.29)	-1.30(-36.36, 41.11)	8.85(-34.43, 58.31)	-11.87(-66.00, 47.10)
17.22(-33.32, 67.83)	17.23(-9.23, 45.09)	35.29(15.53, 54.72)	23.99(-26.19, 73.07)	16.12(-32.96, 64.10)	32.51(-42.22, 107.67)	-12.25(-63.50, 40.49)	26.41(-1.26, 54.91)	36.62(-1.39, 74.85)	15.97(-33.50, 63.58)
2.25(-56.96, 60.28)	2.16(-35.90, 39.89)	20.01(-13.33, 52.44)	8.80(-48.03, 63.31)	0.68(-55.89, 56.08)	17.01(-62.51, 99.12)	-27.49(-84.85, 31.68)	11.23(-25.47, 47.35)	21.62(-25.03, 67.18)	0.82(-55.85, 55.23)
-21.38(-109.18, 66.60)	-21.72(-96.44, 57.46)	-3.90(-75.60, 72.00)	-14.18(-86.32, 56.53)	-22.48(-107.41, 64.74)	-6.42(-109.67, 101.42)	-51.12(-139.16, 38.60)	-12.42(-86.55, 65.13)	-1.97(-83.33, 81.20)	-23.31(-110.56, 65.25)
-8.47(-63.29, 44.61)	-8.38(-40.18, 21.59)	9.29(-16.84, 33.32)	-2.15(-54.59, 47.05)	-9.71(-63.45, 41.50)	6.19(-71.31, 85.16)	-38.42(-92.95, 16.63)	0.59(-24.02, 24.70)	10.77(-31.50, 52.17)	-10.33(-63.31, 41.22)
-5.64(-71.49, 60.98)	-5.12(-55.35, 45.43)	12.50(-33.97, 57.97)	1.12(-64.27, 65.56)	-6.54(-73.34, 57.64)	10.30(-77.01, 97.23)	-34.93(-103.23, 32.98)	3.78(-44.44, 53.68)	13.82(-42.48, 70.77)	-7.19(-71.97, 58.25)
5.73(-67.81, 77.73)	5.43(-52.30, 64.10)	23.68(-32.84, 78.05)	11.95(-61.04, 84.36)	4.75(-68.54, 74.30)	20.72(-67.66, 111.97)	-24.90(-99.17, 52.62)	14.51(-43.67, 72.64)	25.16(-42.26, 89.87)	3.81(-67.65, 75.79)

6.87 (-61.31, 72.82)	11.60 (-45.73, 68.85)	10.02 (-51.38, 66.29)	-17.22 (-67.83, 33.32)	-2.25 (-60.28, 56.96)	21.38 (-66.60, 109.18)	8.47 (-44.61, 63.29)	5.64 (-60.98, 71.49)	-5.73 (-77.73, 67.81)
7.41 (-46.00, 57.15)	12.06 (-25.67, 47.94)	10.43 (-31.07, 46.21)	-17.23 (-45.09, 9.23)	-2.16 (-39.89, 35.90)	21.72 (-57.46, 96.44)	8.38 (-21.59, 40.18)	5.12 (-45.43, 55.35)	-5.43 (-64.10, 52.30)
-10.42 (-59.21, 35.54)	-5.83 (-37.06, 23.74)	-7.47 (-41.98, 22.72)	-35.29 (-54.72, -15.53)	-20.01 (-52.44, 13.33)	3.90 (-72.00, 75.60)	-9.29 (-33.32, 16.84)	-12.50 (-57.97, 33.97)	-23.68 (-78.05, 32.84)
0.60 (-52.29, 52.36)	5.04 (-49.17, 61.23)	3.58 (-51.59, 57.20)	-23.99 (-73.07, 26.19)	-8.80 (-63.31, 48.03)	14.18 (-36.53, 66.32)	2.15 (-47.05, 54.59)	-1.12 (-65.66, 64.27)	-11.95 (-84.36, 61.04)
8.58 (-58.65, 73.71)	13.43 (-41.77, 69.33)	11.63 (-48.12, 66.41)	-16.12 (-64.10, 32.96)	-0.68 (-56.08, 55.89)	22.48 (-64.74, 107.41)	9.71 (-41.50, 63.45)	6.54 (-57.64, 73.34)	-4.75 (-74.30, 68.54)
-7.99 (-96.50, 76.67)	-3.40 (-83.83, 75.63)	-5.04 (-87.39, 74.15)	-32.51 (-107.67, 42.22)	-17.01 (-99.12, 62.51)	6.42 (-101.42, 109.67)	-6.19 (-85.16, 71.31)	-10.30 (-97.23, 77.01)	-20.72 (-111.97, 67.66)
36.67 (-34.67, 105.40)	41.42 (-18.48, 98.62)	39.94 (-22.29, 96.48)	12.25 (-40.49, 63.50)	27.49 (-31.68, 84.85)	51.12 (-38.60, 139.16)	38.42 (-16.63, 92.95)	34.93 (-32.98, 103.23)	24.90 (-52.62, 99.17)
-1.79 (-54.19, 46.73)	2.65 (-35.11, 39.55)	1.30 (-41.11, 36.36)	-26.41 (-54.91, 1.26)	-11.23 (-47.35, 25.47)	12.42 (-65.13, 86.55)	-0.59 (-24.70, 24.02)	-3.78 (-53.68, 44.44)	-14.51 (-72.64, 43.67)
-11.92 (-70.89, 44.60)	-7.39 (-52.40, 37.22)	-8.85 (-58.31, 34.43)	-36.62 (-74.85, 1.39)	-21.62 (-67.18, 25.03)	1.97 (-81.20, 83.33)	-10.77 (-52.17, 31.50)	-13.82 (-70.77, 42.48)	-25.16 (-89.87, 42.26)
8.70 (-56.76, 74.11)	13.49 (-42.64, 68.04)	11.87 (-47.10, 66.00)	-15.97 (-63.58, 33.50)	-0.82 (-55.23, 55.85)	23.31 (-65.25, 110.56)	10.33 (-41.22, 63.31)	7.19 (-58.25, 71.97)	-3.81 (-75.79, 67.65)
Doxycycline	4.57 (-45.18, 55.58)	3.16 (-47.74, 51.14)	-24.55 (-67.34, 21.10)	-9.32 (-59.09, 41.92)	13.83 (-59.86, 87.61)	1.41 (-41.91, 47.89)	-2.31 (-60.63, 60.18)	-12.99 (-81.42, 58.31)
-4.57 (-55.58, 45.18)	Glycyrrhiza	-1.50 (-38.92, 30.74)	-29.07 (-54.49, -3.58)	-13.87 (-50.56, 23.48)	9.81 (-67.43, 85.69)	-3.31 (-33.43, 28.03)	-6.61 (-55.50, 43.81)	-16.90 (-73.88, 40.25)
-3.16 (-51.14, 47.74)	1.50 (-30.74, 38.92)	Laser	-27.74 (-53.44, 3.04)	-12.15 (-48.57, 28.98)	11.28 (-63.83, 87.14)	-1.95 (-31.42, 34.44)	-4.86 (-52.98, 49.09)	-15.47 (-72.58, 45.54)
24.55 (-21.10, 67.34)	29.07 (3.58, 54.49)	27.74 (-3.04, 53.44)	Placebo	15.25 (-12.19, 43.58)	39.02 (-34.93, 109.89)	25.83 (7.91, 45.48)	22.69 (-20.03, 66.50)	11.96 (-39.02, 63.84)
9.32 (-41.92, 59.09)	13.87 (-23.48, 50.56)	12.15 (-28.98, 48.57)	-15.25 (-43.58, 12.19)	Probiotics	23.97 (-53.41, 98.41)	10.59 (-16.93, 39.27)	7.80 (-43.32, 57.67)	-2.98 (-62.39, 54.98)
-13.83 (-87.61, 59.86)	-9.81 (-85.69, 67.43)	-11.28 (-87.14, 63.83)	-39.02 (-109.89, 34.93)	-23.97 (-98.41, 53.41)	Quercetin	-13.34 (-83.61, 62.27)	-15.69 (-99.68, 67.09)	-26.73 (-114.36, 63.38)
-1.41 (-47.89, 41.91)	3.31 (-28.03, 33.43)	1.95 (-34.44, 31.42)	-25.83 (-45.48, -7.91)	-10.59 (-39.27, 16.93)	13.34 (-62.27, 83.61)	Triamcinolone	-3.21 (-46.73, 40.25)	-14.20 (-69.92, 40.97)
2.31 (-60.18, 60.63)	6.61 (-43.81, 55.50)	4.86 (-49.09, 52.98)	-22.69 (-66.50, 20.03)	-7.80 (-57.67, 43.32)	15.69 (-67.09, 99.68)	3.21 (-40.25, 46.73)	Triester Glycerol Oxide	-10.67 (-78.70, 56.04)
12.99 (-58.31, 81.42)	16.90 (-40.25, 73.88)	15.47 (-45.54, 72.58)	-11.96 (-63.84, 39.02)	2.98 (-54.98, 62.39)	26.73 (-63.38, 114.36)	14.20 (-40.97, 69.92)	10.67 (-56.04, 78.70)	Zinc

Rank probability

Rank 1 is best, rank N is worst.

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17	Rank 18	Rank 19
Allicin	0.05	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.06	0.06	0.06	0.06	0.07	0.09	0.07
Aloe	0	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.09	0.1	0.1	0.09	0.07	0.04	0.03	0.01
Amlexanox	0.03	0.08	0.13	0.14	0.13	0.12	0.1	0.08	0.06	0.04	0.03	0.02	0.01	0.01	0	0	0	0	0
Benzydamine	0.02	0.09	0.08	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.03
Berberine gelatin	0.04	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.06	0.06	0.07	0.09	0.07
Chitosan	0.24	0.1	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.04	0.04	0.04	0.06	0.07
Cryotherapy	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.05	0.06	0.08	0.16	0.43
Curcumin	0.02	0.04	0.06	0.07	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.07	0.06	0.05	0.03	0.02	0.01	0.01	0
Dexamethasone	0.12	0.14	0.11	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0
Diosmectite	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.05	0.06	0.07	0.06	0.07	0.09	0.07
Doxycycline	0.04	0.06	0.07	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.02
Glycyrrhiza	0.02	0.05	0.07	0.08	0.09	0.09	0.09	0.09	0.08	0.08	0.07	0.06	0.05	0.03	0.03	0.01	0.01	0	0
Laser	0.02	0.05	0.06	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.01	0.01	0
Placebo	0	0	0	0	0	0	0	0	0	0	0	0.01	0.04	0.08	0.17	0.25	0.26	0.15	0.03
Probiotics	0	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.09	0.1	0.1	0.11	0.09	0.08	0.06	0.03	0.01
Quercetin	0.27	0.12	0.07	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
Triamcinolone	0	0.01	0.02	0.04	0.07	0.1	0.11	0.13	0.13	0.13	0.1	0.08	0.05	0.03	0.01	0	0	0	0
Triester Glycerol Oxide	0.05	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.03
Zinc	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.07	0.07	0.06	0.08	0.11	0.11

Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	23.49 (16.60, 34.97)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Benzydamine.Doxycycline	1.01
d.Benzydamine.Placebo	1.06
d.Benzydamine.Quercetin	1.01
d.Benzydamine.Triamcinolone	1.08
d.Placebo.Allicin	1.00
d.Placebo.Aloe	1.01
d.Placebo.Amlexanox	1.01
d.Placebo.Berberinegelatin	1.01
d.Placebo.Chitosan	1.00
d.Placebo.Cryotherapy	1.10
d.Placebo.Curcumin	1.02
d.Placebo.Dexamethasone	1.04
d.Placebo.Diosmectite	1.00
d.Placebo.Glycyrrhiza	1.01
d.Placebo.Laser	1.33
d.Placebo.Probiotics	1.01
d.Placebo.TriesterGlycerolOxide	1.00
d.Placebo.Zinc	1.14
sd.d	1.24

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor : 2.5

2.Inconsistency Model

Summary estimates for Size-reducing effect

The estimate values for size-reducing effect are given as mean difference (MD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Allicin	-0.72(-53.32, 52.17)	13.97(-38.57, 67.58)	-4.00(-82.92, 88.12)	-1.49(-66.21, 64.92)	13.99(-73.57, 102.29)	-16.49(-86.54, 53.17)	10.11(-46.69, 65.05)	21.81(-45.81, 85.28)	-2.17(-66.45, 63.22)
0.72(-52.17, 53.32)	Abe	14.75(-19.36, 49.47)	-2.22(-68.76, 56.12)	-0.62(-51.40, 49.27)	15.17(-62.27, 92.42)	-15.41(-72.96, 40.51)	10.90(-25.82, 46.30)	22.32(-30.67, 73.20)	-0.97(-51.84, 50.41)
-13.97(-67.58, 38.57)	-14.75(-49.47, 19.36)	Anlexanox	-16.29(-85.45, 41.75)	-15.33(-67.01, 34.12)	0.20(-79.63, 76.88)	-30.45(-89.12, 25.55)	-4.27(-40.04, 32.93)	8.37(-39.60, 50.89)	-15.77(-67.22, 35.56)
4.00(-68.12, 82.92)	2.22(-56.12, 68.76)	16.29(-41.75, 85.45)	Bentydamine	1.53(-68.55, 79.55)	18.53(-75.86, 114.12)	-12.86(-90.59, 68.23)	13.25(-42.68, 76.36)	25.60(-37.75, 89.40)	2.32(-70.73, 78.55)
1.49(-64.92, 66.21)	0.62(-49.27, 51.40)	15.33(-34.12, 67.01)	-1.53(-79.55, 68.55)	Berteme gelatin	15.70(-72.21, 103.11)	-15.09(-83.95, 52.93)	11.09(-42.90, 64.83)	22.75(-41.25, 84.49)	-0.63(-61.79, 63.22)
-13.99(-102.29, 73.57)	-15.17(-92.42, 62.27)	-0.20(-76.88, 79.63)	-18.53(-114.12, 75.86)	-15.70(-103.11, 72.21)	Chitosan	-30.59(-123.11, 60.34)	-4.21(-84.42, 76.10)	7.25(-79.95, 94.01)	-15.89(-101.03, 69.84)
16.49(-53.17, 86.54)	15.41(-40.51, 72.96)	30.45(-25.55, 89.12)	12.86(-68.23, 90.59)	15.09(-52.93, 83.95)	30.59(-60.34, 123.11)	Cryotherapy	26.62(-32.47, 84.89)	38.05(-32.19, 108.23)	14.73(-52.32, 83.80)
-10.11(-65.05, 46.69)	-10.90(-46.30, 25.82)	4.27(-32.93, 40.04)	-13.25(-76.36, 42.68)	-11.09(-64.83, 42.90)	4.21(-76.10, 84.42)	-26.62(-84.89, 32.47)	Curcumin	12.32(-43.12, 62.14)	-11.91(-66.25, 43.24)
-21.81(-85.28, 45.81)	-22.32(-73.20, 30.67)	-8.37(-50.89, 39.60)	-25.60(-89.40, 37.75)	-22.75(-84.49, 41.25)	-7.25(-94.01, 79.95)	-38.05(-106.23, 32.19)	-12.32(-62.14, 43.12)	Dexamethasone	-23.49(-86.16, 42.48)
2.17(-63.22, 66.45)	0.97(-50.41, 51.84)	15.77(-35.56, 67.22)	-2.32(-78.55, 70.73)	0.63(-63.22, 61.79)	15.89(-69.84, 101.03)	-14.73(-83.80, 52.32)	11.91(-43.24, 66.25)	23.49(-42.48, 86.16)	Diosmectite
-7.59(-70.14, 58.01)	-8.23(-56.81, 41.96)	6.34(-41.55, 55.82)	-10.62(-71.71, 43.48)	-8.98(-71.77, 54.58)	6.85(-79.70, 93.21)	-24.20(-92.15, 44.32)	2.93(-44.16, 49.12)	14.47(-49.72, 75.95)	-9.09(-71.17, 54.84)
-3.50(-61.45, 53.69)	-4.99(-44.59, 38.94)	10.27(-23.42, 44.26)	-6.84(-80.34, 58.73)	-5.07(-60.41, 51.41)	11.13(-71.06, 90.56)	-20.69(-81.19, 41.15)	5.64(-36.57, 55.18)	18.05(-34.98, 71.08)	-5.35(-60.46, 52.08)
-18.87(-73.86, 37.19)	-19.41(-56.96, 18.51)	-4.54(-37.60, 27.47)	-21.43(-92.77, 39.82)	-20.12(-73.05, 32.44)	-4.36(-84.73, 73.58)	-35.70(-93.94, 23.44)	-9.19(-47.36, 31.63)	3.85(-51.16, 54.13)	-20.15(-73.98, 32.27)
17.40(-29.12, 63.89)	16.73(-8.12, 41.34)	35.38(14.93, 55.89)	12.66(-55.83, 73.59)	16.03(-28.51, 59.58)	31.75(-42.37, 105.33)	0.99(-51.00, 52.44)	18.86(-16.14, 50.56)	37.20(-4.07, 78.36)	15.75(-28.80, 60.26)
1.15(-54.11, 57.76)	0.28(-38.28, 38.39)	15.54(-24.09, 52.81)	-1.98(-68.18, 56.45)	-0.39(-54.70, 55.28)	15.25(-65.14, 95.36)	-15.40(-76.57, 44.71)	11.12(-25.07, 46.82)	23.07(-33.56, 77.06)	-0.50(-55.21, 54.20)
-11.18(-97.67, 80.56)	-11.98(-89.29, 66.31)	2.71(-75.09, 83.81)	-15.44(-82.03, 30.84)	-12.90(-97.73, 74.35)	2.93(-103.10, 109.37)	-27.28(-119.68, 63.81)	-1.37(-76.30, 75.72)	11.36(-69.59, 88.80)	-13.18(-100.32, 76.15)
-7.32(-58.14, 45.30)	-8.08(-36.67, 22.32)	7.08(-22.76, 36.15)	-10.30(-68.71, 40.01)	-8.57(-57.37, 41.16)	7.04(-69.55, 84.39)	-23.58(-79.30, 31.64)	2.99(-20.73, 25.98)	15.06(-36.04, 61.44)	-8.87(-58.77, 41.32)
-7.07(-69.48, 57.71)	-8.01(-56.13, 41.71)	7.12(-41.70, 55.88)	-10.39(-80.76, 53.48)	-8.44(-70.35, 54.89)	7.04(-79.11, 92.55)	-23.28(-91.76, 44.16)	2.96(-43.34, 49.10)	15.00(-47.54, 75.59)	-8.61(-71.15, 53.57)
8.96(-55.01, 72.96)	7.83(-43.63, 57.80)	22.42(-28.82, 74.99)	4.31(-66.98, 72.63)	7.27(-56.29, 70.06)	23.10(-62.63, 109.07)	-7.44(-77.90, 60.34)	18.19(-34.76, 72.21)	29.78(-31.86, 91.42)	6.51(-56.24, 70.80)

7.59 (-58.01, 70.14)	3.50 (-53.69, 61.45)	18.87 (-37.19, 73.86)	-17.40 (-63.69, 29.12)	-1.15 (-57.76, 54.11)	11.18 (-80.56, 97.67)	7.32 (-45.30, 58.14)	7.07 (-57.71, 69.48)	-8.96 (-72.96, 55.01)
8.23 (-41.96, 56.81)	4.99 (-38.94, 44.59)	19.41 (-18.51, 56.96)	-16.73 (-41.34, 8.12)	-0.28 (-38.39, 38.28)	11.98 (-66.31, 89.29)	8.08 (-22.32, 36.67)	8.01 (-41.71, 56.13)	-7.83 (-57.80, 43.63)
-6.34 (-55.82, 41.55)	-10.27 (-44.26, 23.42)	4.54 (-27.47, 37.60)	-35.38 (-55.89, -14.93)	-15.54 (-52.81, 24.09)	-2.71 (-83.81, 75.09)	-7.08 (-36.15, 22.76)	-7.12 (-55.88, 41.70)	-22.42 (-74.99, 28.82)
10.62 (-43.48, 71.71)	6.84 (-58.73, 80.34)	21.43 (-39.82, 92.77)	-12.66 (-73.59, 55.83)	1.98 (-56.45, 68.18)	15.44 (-30.84, 62.03)	10.30 (-40.01, 68.71)	10.39 (-53.48, 80.76)	-4.31 (-72.63, 66.98)
8.98 (-54.58, 71.77)	5.07 (-51.41, 60.41)	20.12 (-32.44, 73.05)	-16.03 (-59.58, 28.51)	0.39 (-55.28, 54.70)	12.90 (-74.35, 97.73)	8.57 (-41.16, 57.37)	8.44 (-54.89, 70.35)	-7.27 (-70.06, 56.29)
-6.85 (-93.21, 79.70)	-11.13 (-90.56, 71.06)	4.36 (-73.58, 84.73)	-31.75 (-105.33, 42.37)	-15.25 (-95.36, 65.14)	-2.93 (-109.37, 103.10)	-7.04 (-84.39, 69.55)	-7.04 (-92.55, 79.11)	-23.10 (-109.07, 62.63)
24.20 (-44.32, 92.15)	20.69 (-41.15, 81.19)	35.70 (-23.44, 93.94)	-0.99 (-52.44, 51.00)	15.40 (-44.71, 76.57)	27.28 (-63.81, 119.68)	23.58 (-31.64, 79.30)	23.28 (-44.16, 91.76)	7.44 (-60.34, 77.90)
-2.50 (-49.12, 44.16)	-5.64 (-55.18, 36.57)	9.19 (-31.63, 47.36)	-18.86 (-50.56, 16.14)	-11.12 (-46.82, 25.07)	1.37 (-75.72, 76.30)	-2.99 (-25.98, 20.73)	-2.96 (-49.10, 43.34)	-18.19 (-72.21, 34.76)
-14.47 (-75.95, 49.72)	-18.05 (-71.08, 34.98)	-3.85 (-54.13, 51.16)	-37.20 (-78.36, 4.07)	-23.07 (-77.06, 33.56)	-11.36 (-88.80, 69.59)	-15.06 (-61.44, 36.04)	-15.00 (-75.59, 47.54)	-29.78 (-91.42, 31.86)
9.09 (-54.84, 71.17)	5.35 (-52.08, 60.46)	20.15 (-32.27, 73.98)	-15.75 (-60.26, 28.80)	0.50 (-54.20, 55.21)	13.18 (-76.15, 100.32)	8.87 (-41.32, 58.77)	8.61 (-53.57, 71.15)	-6.51 (-70.80, 56.24)
Doxycycline	-3.84 (-60.83, 51.16)	11.26 (-40.84, 62.13)	-23.54 (-76.44, 27.93)	-8.94 (-56.69, 40.59)	3.53 (-72.08, 78.69)	-0.38 (-40.07, 39.80)	-0.26 (-55.73, 53.23)	-16.20 (-77.95, 47.11)
3.84 (-51.16, 60.83)	Glycyrrhiza	14.79 (-22.09, 52.53)	-32.90 (-55.66, -8.77)	-5.96 (-48.55, 44.75)	7.62 (-77.50, 88.96)	2.68 (-33.79, 46.23)	2.91 (-51.19, 59.04)	-12.17 (-69.11, 44.90)
-11.26 (-62.13, 40.84)	-14.79 (-52.53, 22.09)	Laser	-28.03 (-55.09, 1.66)	-20.20 (-59.67, 22.52)	-7.33 (-90.43, 73.07)	-13.67 (-48.48, 20.01)	-12.21 (-61.63, 39.20)	-27.31 (-80.58, 26.99)
23.54 (-27.93, 76.44)	32.90 (8.77, 55.66)	28.03 (-1.66, 55.09)	Placebo	13.37 (-14.41, 39.67)	28.82 (-48.71, 103.16)	22.58 (-13.00, 61.29)	22.62 (-27.95, 74.79)	8.92 (-35.87, 52.90)
8.94 (-40.59, 56.69)	5.96 (-44.75, 48.55)	20.20 (-22.52, 59.67)	-13.37 (-39.67, 14.41)	Probiotics	12.76 (-65.58, 88.53)	8.20 (-20.54, 37.16)	7.88 (-40.76, 56.42)	-7.20 (-61.90, 46.09)
-3.53 (-78.69, 72.08)	-7.62 (-88.96, 77.50)	7.33 (-73.07, 90.43)	-28.82 (-103.16, 48.71)	-12.76 (-88.53, 65.58)	Quercetin	-4.19 (-76.07, 69.39)	-4.33 (-84.26, 78.74)	-19.23 (-105.10, 65.19)
0.38 (-39.80, 40.07)	-2.68 (-46.23, 33.79)	13.67 (-20.01, 48.48)	-22.58 (-61.29, 13.00)	-8.20 (-37.16, 20.54)	4.19 (-69.39, 76.07)	Triamcinolone	-0.11 (-40.90, 41.00)	-15.55 (-65.31, 33.96)
0.26 (-53.23, 55.73)	-2.91 (-59.04, 51.19)	12.21 (-39.20, 61.63)	-22.62 (-74.79, 27.95)	-7.88 (-56.42, 40.76)	4.33 (-78.74, 84.26)	0.11 (-41.00, 40.90)	Triester Glycerol Oxide	-15.73 (-77.69, 47.32)
16.20 (-47.11, 77.95)	12.17 (-44.90, 69.11)	27.31 (-26.99, 80.58)	-8.92 (-52.90, 35.87)	7.20 (-46.09, 61.90)	19.23 (-65.19, 105.10)	15.55 (-33.96, 65.31)	15.73 (-47.32, 77.69)	Zinc

Inconsistency Factors

Cycle	Median (95% CI)
Aloe, Amlexanox, Placebo, Triamcinolone	2.20 (-18.83, 32.03)
Aloe, Curcumin, Placebo, Triamcinolone	-5.03 (-48.66, 15.75)
Aloe, Amlexanox, Dexamethasone, Placebo, Triamcinolone	-0.77 (-35.63, 31.63)
Aloe, Amlexanox, Glycyrrhiza, Placebo, Triamcinolone	8.03 (-10.93, 48.21)
Aloe, Amlexanox, Laser, Placebo, Triamcinolone	-5.38 (-43.79, 16.27)
Aloe, Placebo, Probiotics, Triamcinolone	-1.52 (-34.62, 23.45)
Aloe, Placebo, Triamcinolone	-0.68 (-36.74, 31.29)
Aloe, Placebo, Triamcinolone	-0.68 (-36.74, 31.29)
Aloe, Placebo, Triamcinolone	-0.68 (-36.74, 31.29)
Amlexanox, Laser, Triamcinolone	-0.81 (-37.48, 25.92)

Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	21.14 (14.27, 31.66)
Inconsistency Standard Deviation	12.81 (1.61, 45.29)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Allicin.Placebo	1.00
d.Aloe.Triamcinolone	1.00
d.Amlexanox.Dexamethasone	1.53
d.Amlexanox.Glycyrrhiza	1.01
d.Benzydamine.Doxycycline	1.72
d.Benzydamine.Quercetin	1.00
d.Glycyrrhiza.Laser	1.01
d.Placebo.Aloe	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Cryotherapy	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Zinc	103
d.Triamcinolone.Amlexanox	1.02
d.Triamcinolone.Benzydamine	1.80
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Probiotics	1.00
d.Triamcinolone.TriesterGlycerolOxide	1.00
w.Aloe.Placebo.Amlexanox.Triamcinolone	1.01
w.Aloe.Placebo.Curcumin.Triamcinolone	1.00
w.Aloe.Placebo.Dexamethasone.Amlexanox.Triamcinolone	1.06
w.Aloe.Placebo.Glycyrrhiza.Amlexanox.Triamcinolone	1.00
w.Aloe.Placebo.Laser.Amlexanox.Triamcinolone	1.01
w.Aloe.Placebo.Prpbiotics.Triamcinolone	1.00
w.Aloe.Placebo.Triamcinolone	1.01
w.Aloe.Placebo.Triamcinolone	1.01
w.Aloe.Placebo.Triamcinolone	1.01
w.Amlexanox.Laser.Triamcinolone	1.03
sd.d	1.00
sd.w	1.01

Number of chains	: 4
Tuning iterations	: 20,000
Simulation iterations	: 50,000
Thinning interval	: 10
Inference samples	: 10,000
Variance scaling factor	: 2.5

3. Node-splitting analysis

Node-splitting analysis of inconsistency

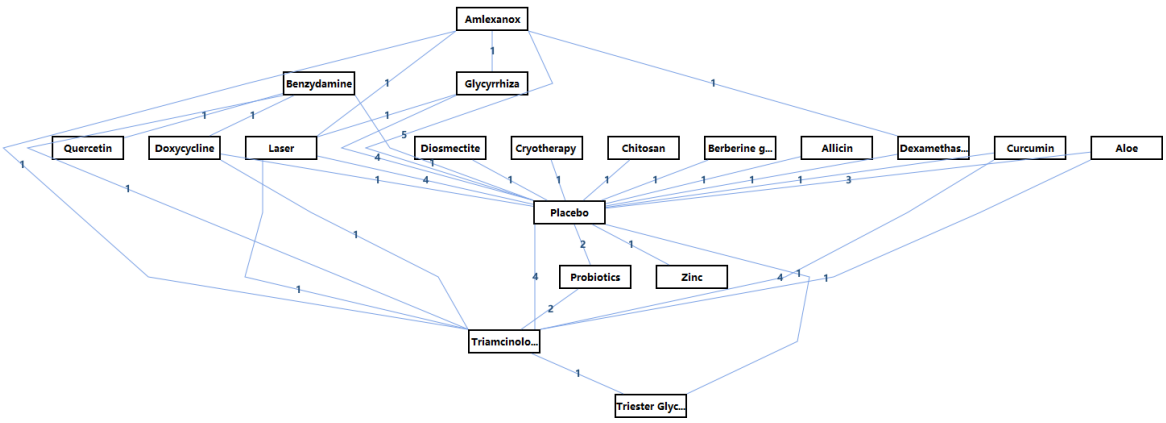
Inconsistency between direct and indirect estimates was estimated in the Node-Splitting Model. When P values is above 0.05 in a comparison, there is evidence of statistical inconsistency.

Name	Direct Effect	Indirect Effect	Overall	P-Value
Aloe, Triamcinolone	10.21 (-40.60, 60.46)	4.55 (-31.80, 43.91)	8.38 (-21.59, 40.18)	0.85
Amlexanox, Dexamethasone	12.53 (-43.51, 79.80)	-3.44 (-62.35, 53.60)	1.26 (-35.76, 38.69)	0.67
Amlexanox, Glycyrrhiza	-13.76 (-68.65, 39.83)	-4.21 (-44.62, 35.59)	-5.83 (-37.06, 23.74)	0.76
Amlexanox, Laser	10.51 (-40.36, 60.36)	-24.58 (-72.00, 13.79)	-7.47 (-41.98, 22.72)	0.26
Amlexanox, Placebo	-43.87 (-67.14, -20.94)	-19.63 (-51.37, 13.55)	-35.29 (-54.72, -15.53)	0.2
Amlexanox, Triamcinolone	8.63 (-39.59, 55.83)	-18.98 (-47.01, 10.06)	-9.29 (-33.32, 16.84)	0.32
Benzydamine, Placebo	-20.20 (-76.55, 34.13)	-24.22 (-78.47, 32.21)	-23.99 (-73.07, 26.19)	0.92
Benzydamine, Triamcinolone	5.34 (-63.88, 65.60)	2.60 (-81.48, 67.53)	2.15 (-47.05, 54.59)	0.85
Curcumin, Placebo	-2.16 (-49.56, 44.59)	-36.72 (-69.53, -4.83)	-26.41 (-54.91, 1.26)	0.22
Curcumin, Triamcinolone	-8.02 (-35.04, 19.46)	27.96 (-25.49, 81.28)	-0.59 (-24.70, 24.02)	0.23
Dexamethasone, Placebo	-32.35 (-87.66, 24.74)	-37.62 (-94.74, 21.31)	-36.62 (-74.85, 1.39)	0.9
Glycyrrhiza, Laser	22.88 (-23.37, 69.23)	-18.36 (-55.30, 18.14)	-1.50 (-38.92, 30.74)	0.16
Laser, Placebo	-36.29 (-63.60, -7.19)	-34.32 (-72.05, 3.79)	-27.74 (-53.44, 3.04)	0.92
Laser, Triamcinolone	6.70 (-52.76, 63.20)	-9.90 (-43.36, 25.94)	-1.95 (-31.42, 34.44)	0.69
Placebo, Probiotics	10.48 (-24.65, 45.32)	18.10 (-37.81, 65.62)	15.25 (-12.19, 43.58)	0.81
Placebo, Triamcinolone	30.78 (1.50, 61.86)	26.78 (-4.03, 57.58)	25.83 (7.91, 45.48)	0.84
Probiotics, Triamcinolone	5.09 (-33.75, 44.69)	9.61 (-30.68, 49.79)	10.59 (-16.93, 39.27)	0.87

4. Network structure

Network structure of sensitivity analysis

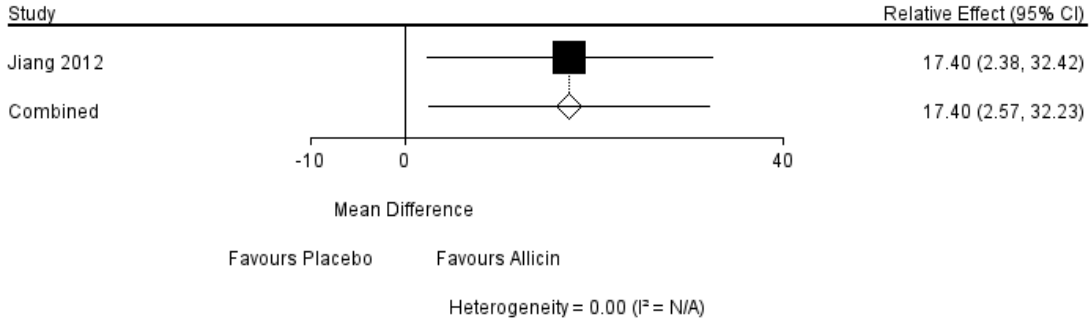
37 RCTs involving 19 local interventions were included in the sensitivity analysis considering the size-reducing effect.

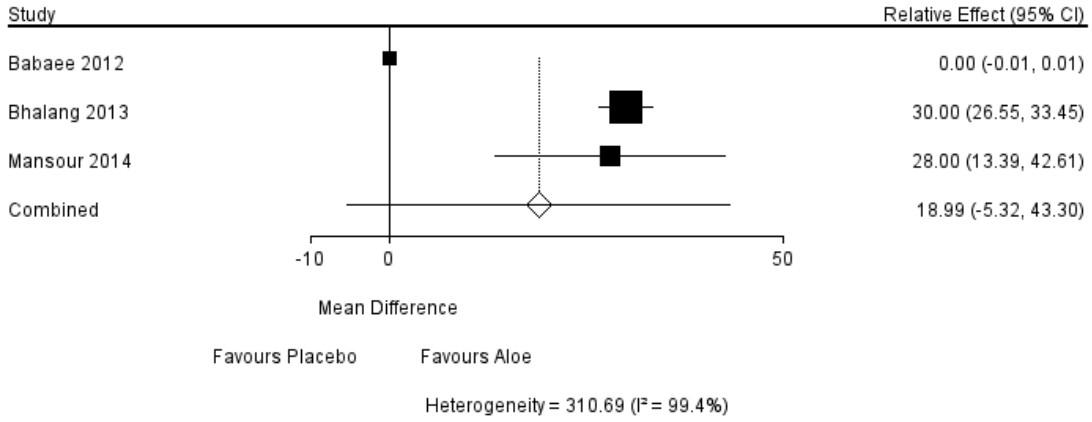


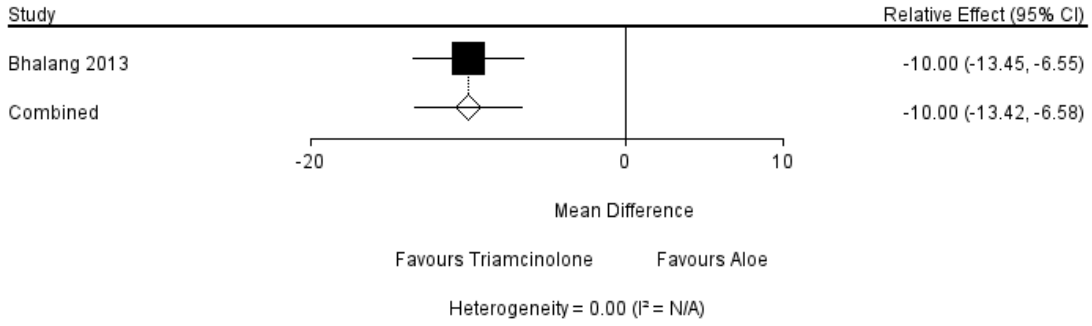
5. Pairwise meta-analysis

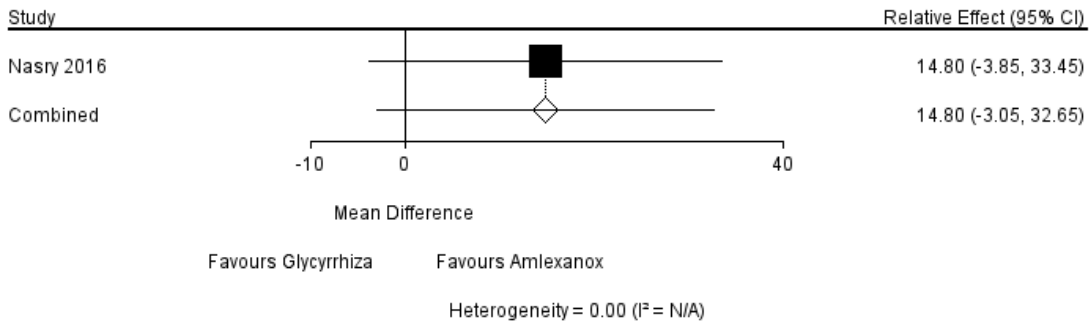
Pairwise meta-analysis of size-reducing effect

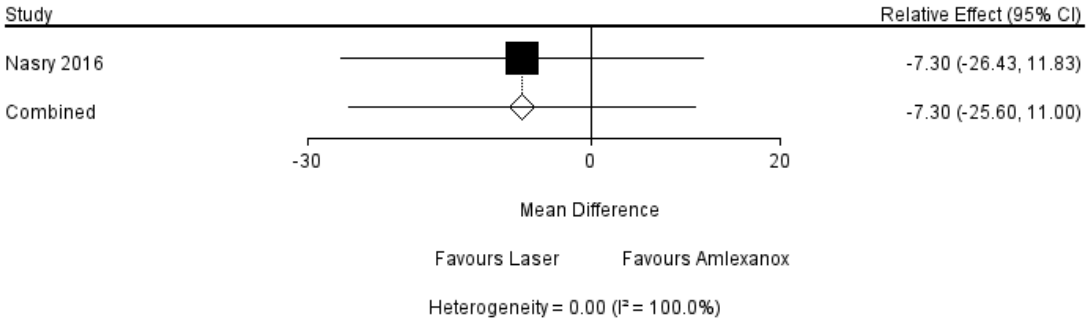
Size-reducing effect were measured by mean difference (MD) and 95% confidence interval (CI).

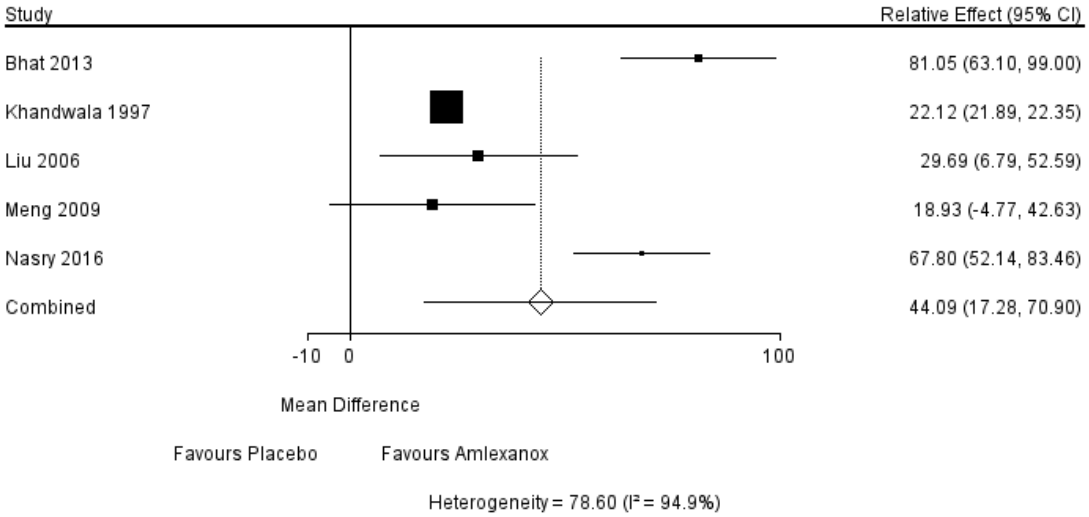


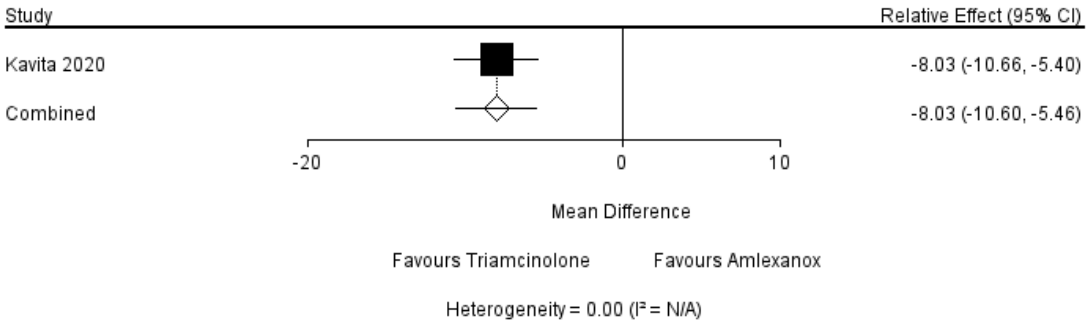


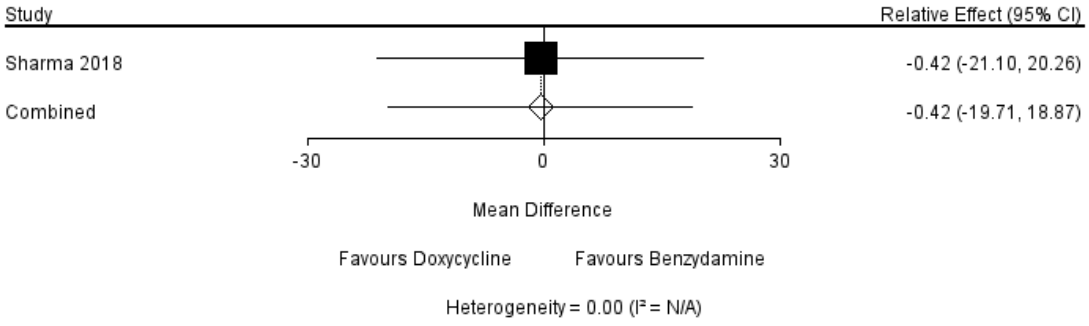


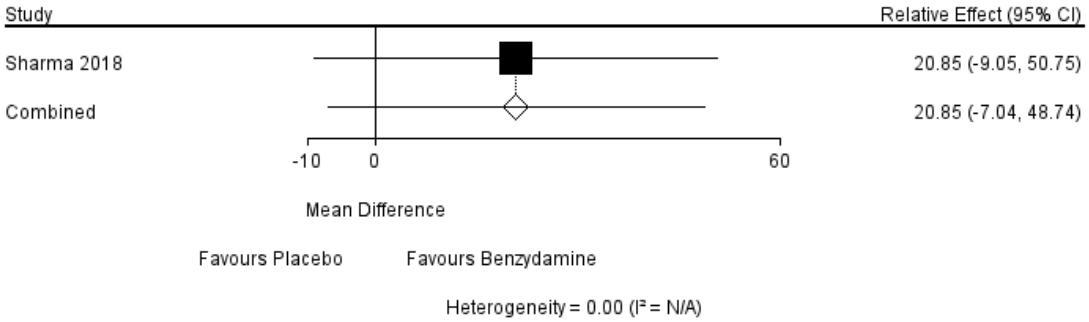


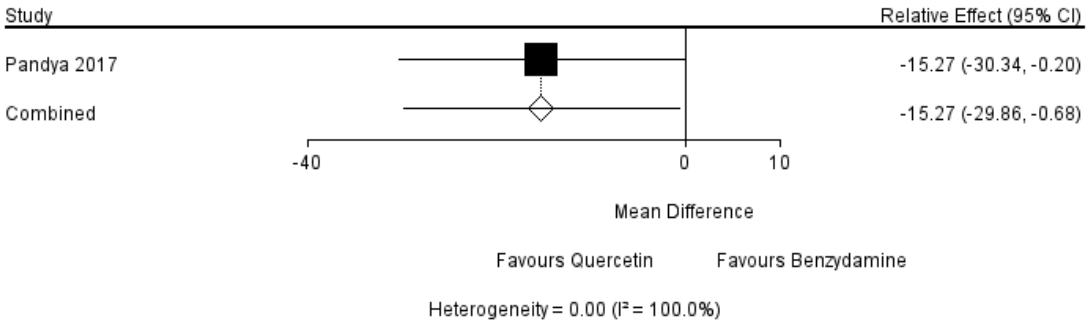

Study
Relative Effect (95% CI)
Nasry 2016
-7.30 (-26.43, 11.83)
Combined
-7.30 (-25.60, 11.00)
-30
0
20
Mean Difference
Favours Laser
Favours Amlexanox
Heterogeneity = 0.00 (I² = 100.0%)

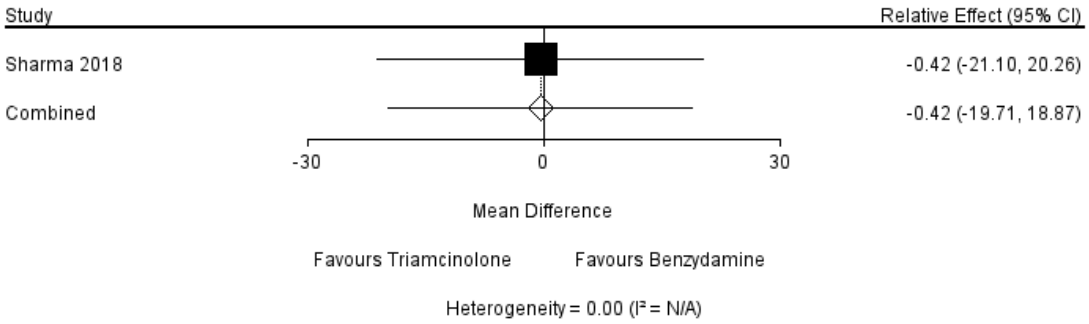

Study
Relative Effect (95% CI)
Bhat 2013
81.05 (63.10, 99.00)
Khandwala 1997
22.12 (21.89, 22.35)
Liu 2006
29.69 (6.79, 52.59)
Meng 2009
18.93 (-4.77, 42.63)
Nasry 2016
67.80 (52.14, 83.46)
Combined
44.09 (17.28, 70.90)
-10
0
100
Mean Difference
Favours Placebo
Favours Amlexanox
Heterogeneity = 78.60 (I² = 94.9%)

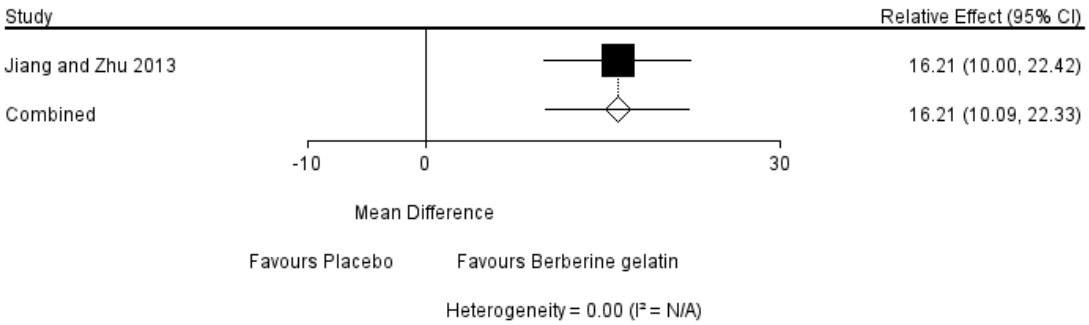

Study
Relative Effect (95% CI)
Kavita 2020
-8.03 (-10.66, -5.40)
Combined
-8.03 (-10.60, -5.46)
-20
0
10
Mean Difference
Favours Triamcinolone
Favours Amlexanox
Heterogeneity = 0.00 (I² = N/A)

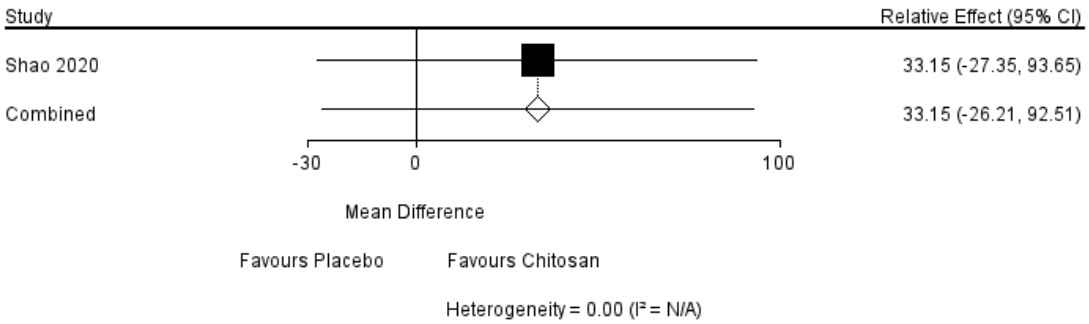

Study
Relative Effect (95% CI)
Sharma 2018
-0.42 (-21.10, 20.26)
Combined
-0.42 (-19.71, 18.87)
-30
0
30
Mean Difference
Favours Doxycycline
Favours Benzydamine
Heterogeneity = 0.00 (I² = N/A)

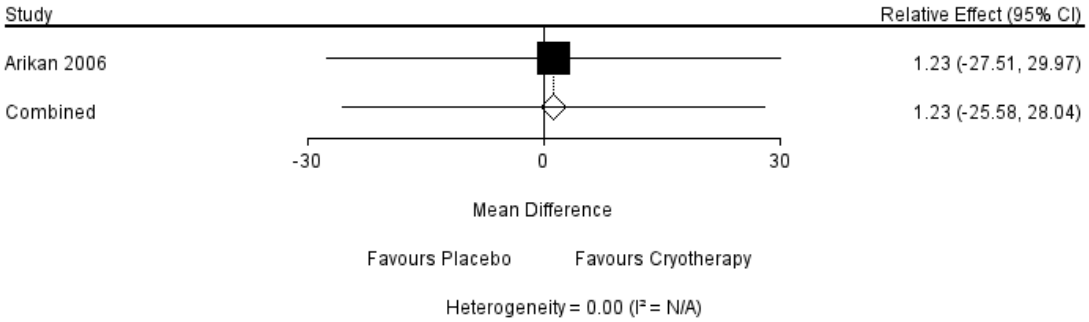

Study
Relative Effect (95% CI)
Sharma 2018
20.85 (-9.05, 50.75)
Combined
20.85 (-7.04, 48.74)
-10
0
60
Mean Difference
Favours Placebo
Favours Benzydamine
Heterogeneity = 0.00 (I² = N/A)

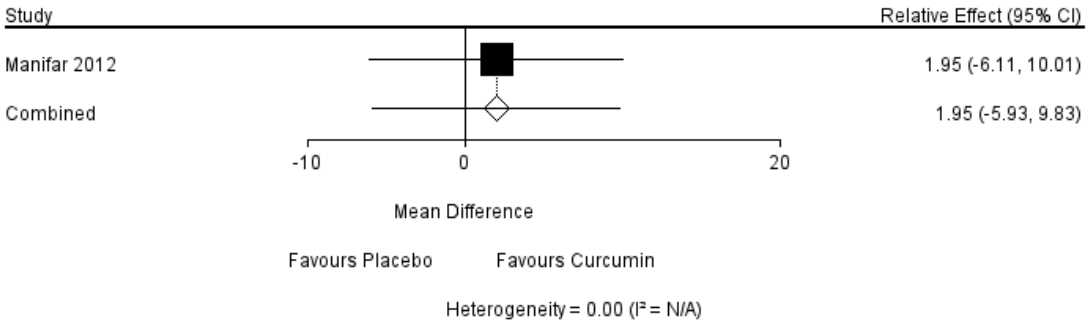

Study
Relative Effect (95% CI)
Pandya 2017
-15.27 (-30.34, -0.20)
Combined
-15.27 (-29.86, -0.68)
-40
0
10
Mean Difference
Favours Quercetin
Favours Benzydamine
Heterogeneity = 0.00 (I² = 100.0%)

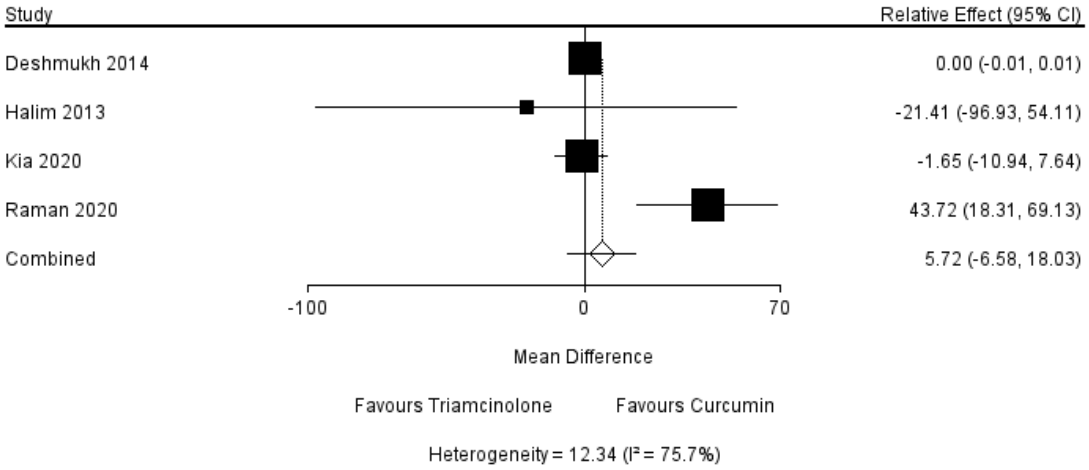

Study
Relative Effect (95% CI)
Sharma 2018
-0.42 (-21.10, 20.26)
Combined
-0.42 (-19.71, 18.87)
-30
0
30
Mean Difference
Favours Triamcinolone
Favours Benzydamine
Heterogeneity = 0.00 (I² = N/A)

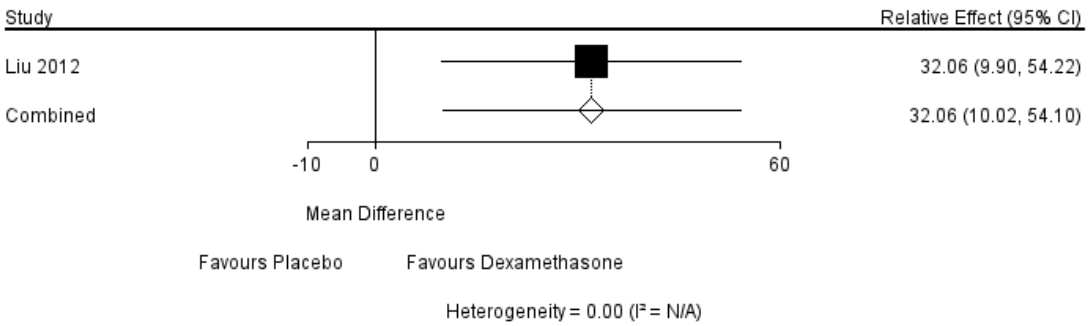

Study
Relative Effect (95% CI)
Jiang and Zhu 2013
16.21 (10.00, 22.42)
Combined
16.21 (10.09, 22.33)
-10
0
30
Mean Difference
Favours Placebo
Favours Berberine gelatin
Heterogeneity = 0.00 (I² = N/A)

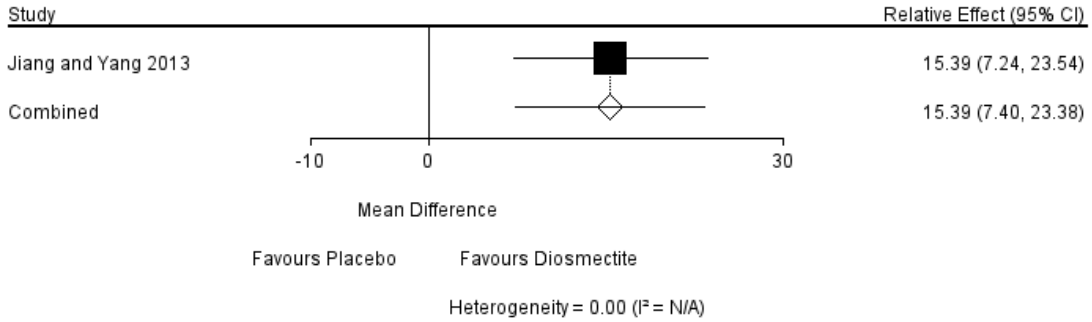

Study
Relative Effect (95% CI)
Shao 2020
33.15 (-27.35, 93.65)
Combined
33.15 (-26.21, 92.51)
-30
0
100
Mean Difference
Favours Placebo
Favours Chitosan
Heterogeneity = 0.00 (I² = N/A)

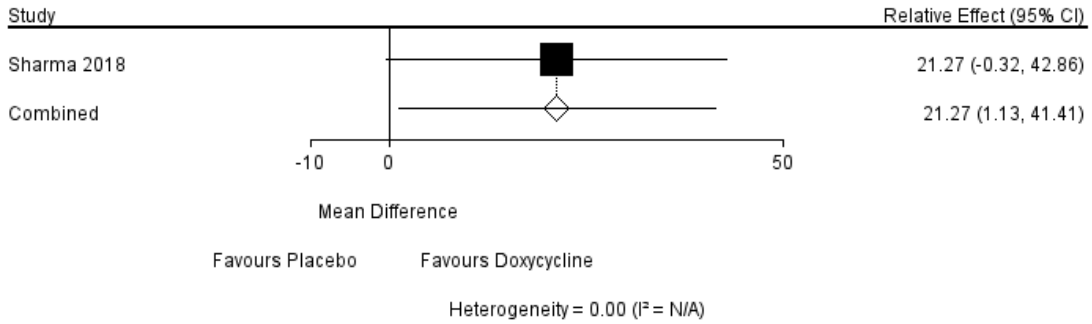

Study
Relative Effect (95% CI)
Arikan 2006
1.23 (-27.51, 29.97)
Combined
1.23 (-25.58, 28.04)
-30
0
30
Mean Difference
Favours Placebo
Favours Cryotherapy
Heterogeneity = 0.00 (I² = N/A)

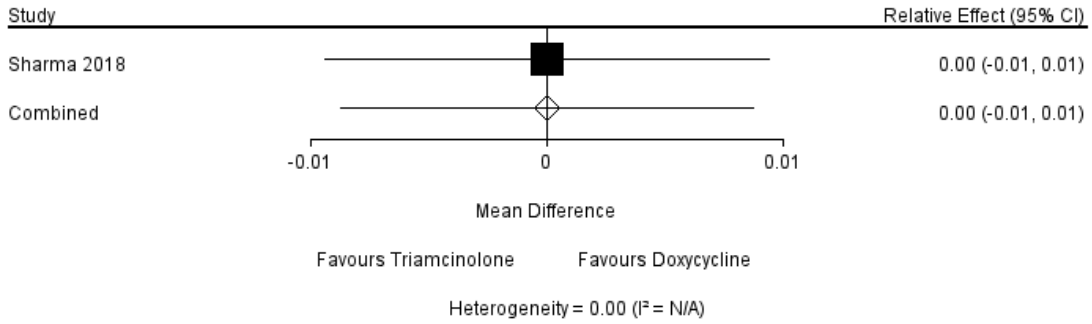

Study
Relative Effect (95% CI)
Manifar 2012
1.95 (-6.11, 10.01)
Combined
1.95 (-5.93, 9.83)
-10
0
20
Mean Difference
Favours Placebo
Favours Curcumin
Heterogeneity = 0.00 (I² = N/A)

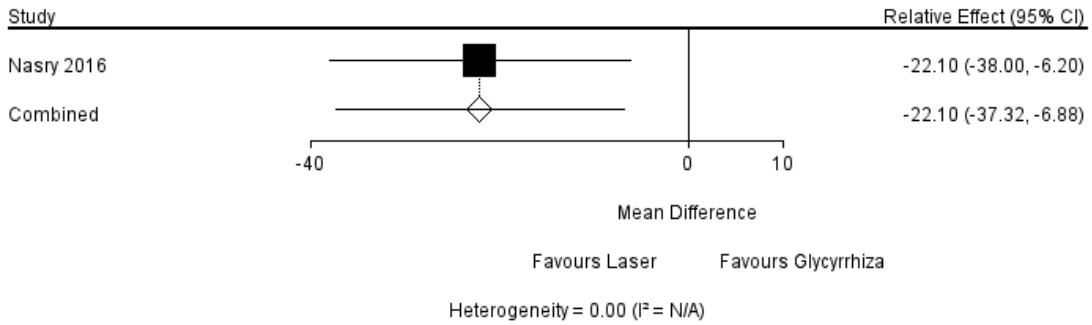

Study
Relative Effect (95% CI)
Deshmukh 2014
0.00 (-0.01, 0.01)
Halim 2013
-21.41 (-96.93, 54.11)
Kia 2020
-1.65 (-10.94, 7.64)
Raman 2020
43.72 (18.31, 69.13)
Combined
5.72 (-6.58, 18.03)
-100
0
70
Mean Difference
Favours Triamcinolone
Favours Curcumin
Heterogeneity = 12.34 (I² = 75.7%)

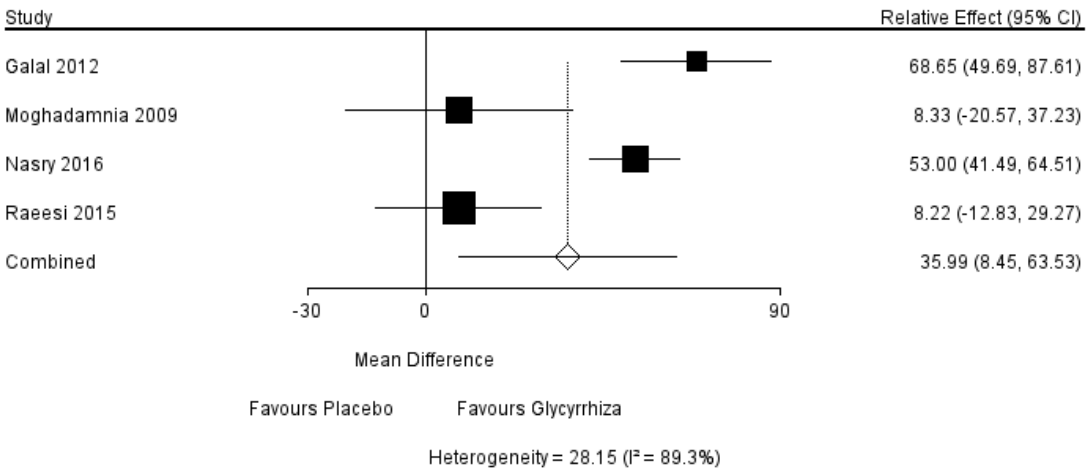

Study
Relative Effect (95% CI)
Liu 2012
32.06 (9.90, 54.22)
Combined
32.06 (10.02, 54.10)
-10
0
60
Mean Difference
Favours Placebo
Favours Dexamethasone
Heterogeneity = 0.00 (I² = N/A)

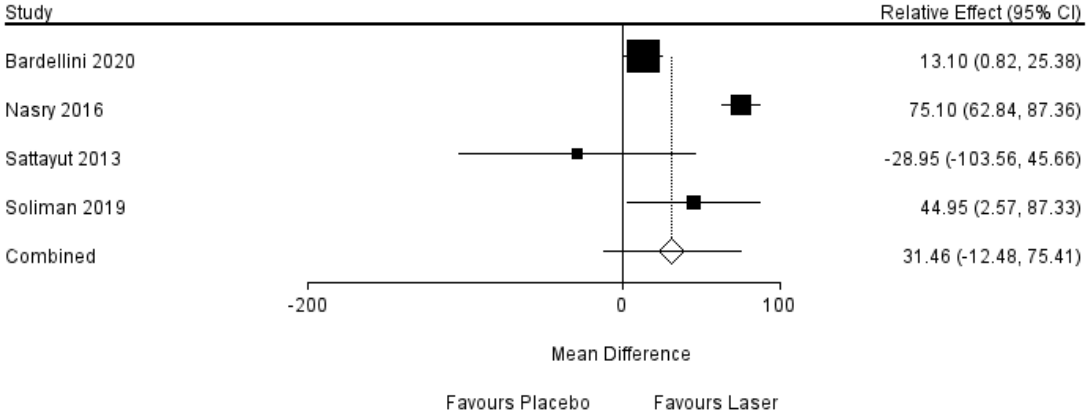

Study
Relative Effect (95% CI)
Jiang and Yang 2013
15.39 (7.24, 23.54)
Combined
15.39 (7.40, 23.38)
-10
0
30
Mean Difference
Favours Placebo
Favours Diosmectite
Heterogeneity = 0.00 (I² = N/A)

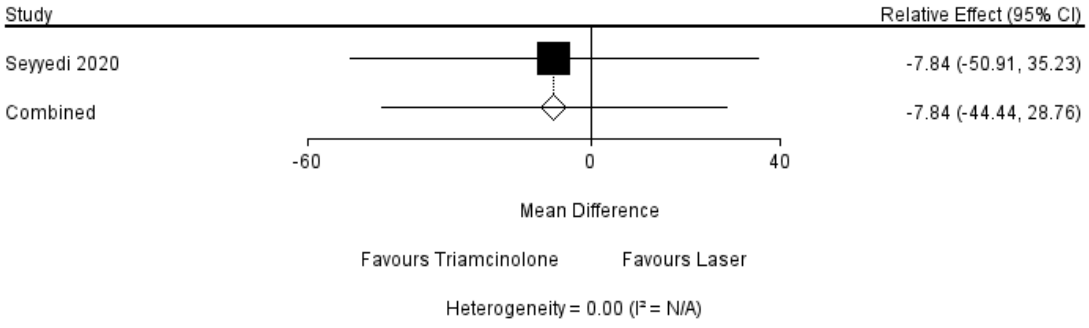

Study
Relative Effect (95% CI)
Sharma 2018
21.27 (-0.32, 42.86)
Combined
21.27 (1.13, 41.41)
-10
0
50
Mean Difference
Favours Placebo
Favours Doxycycline
Heterogeneity = 0.00 (I² = N/A)

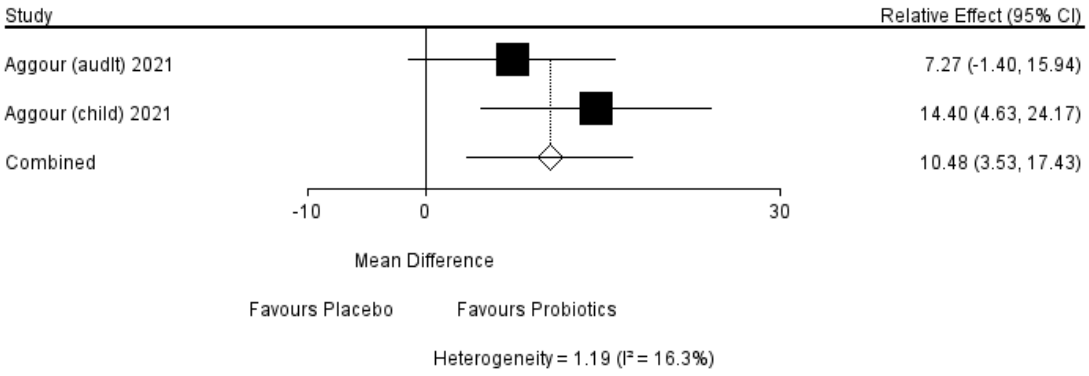

Study
Relative Effect (95% CI)
Sharma 2018
0.00 (-0.01, 0.01)
Combined
0.00 (-0.01, 0.01)
-0.01
0
0.01
Mean Difference
Favours Triamcinolone
Favours Doxycycline
Heterogeneity = 0.00 (I² = N/A)

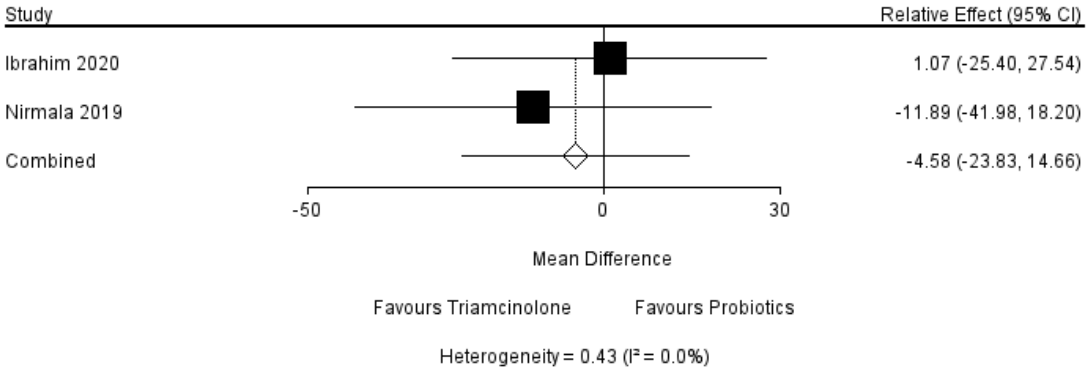

Study
Relative Effect (95% CI)
Nasry 2016
-22.10 (-38.00, -6.20)
Combined
-22.10 (-37.32, -6.88)
-40
0
10
Mean Difference
Favours Laser
Favours Glycyrrhiza
Heterogeneity = 0.00 (I² = N/A)

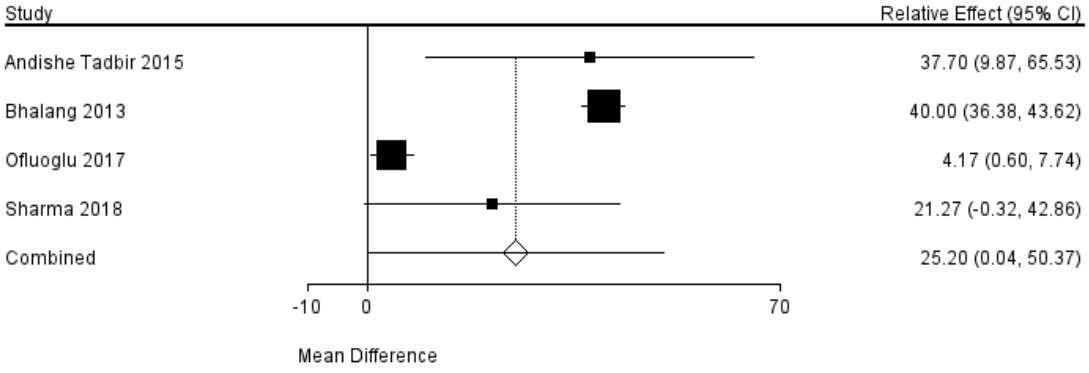

Study
Relative Effect (95% CI)
Galal 2012
68.65 (49.69, 87.61)
Moghadamnia 2009
8.33 (-20.57, 37.23)
Nasry 2016
53.00 (41.49, 64.51)
Raeesi 2015
8.22 (-12.83, 29.27)
Combined
35.99 (8.45, 63.53)
-30
0
90
Mean Difference
Favours Placebo
Favours Glycyrrhiza
Heterogeneity = 28.15 (I² = 89.3%)

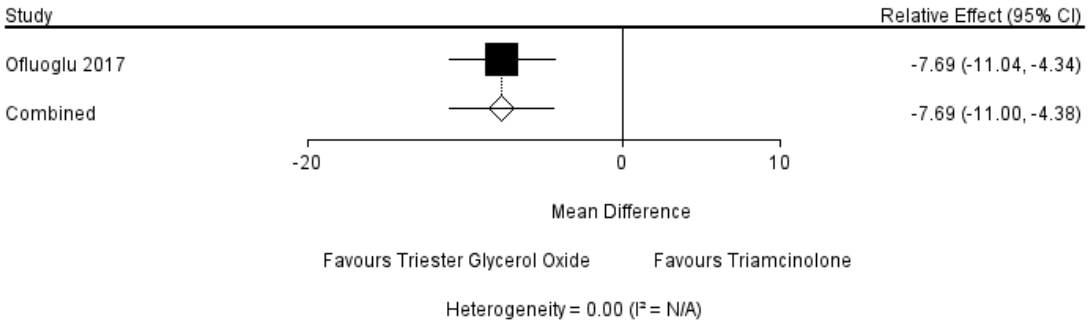

Study
Relative Effect (95% CI)
Bardellini 2020
13.10 (0.82, 25.38)
Nasry 2016
75.10 (62.84, 87.36)
Sattayut 2013
-28.95 (-103.56, 45.66)
Soliman 2019
44.95 (2.57, 87.33)
Combined
31.46 (-12.48, 75.41)
-200
0
100
Mean Difference
Favours Placebo
Favours Laser
Heterogeneity = 56.89 (I² = 94.7%)

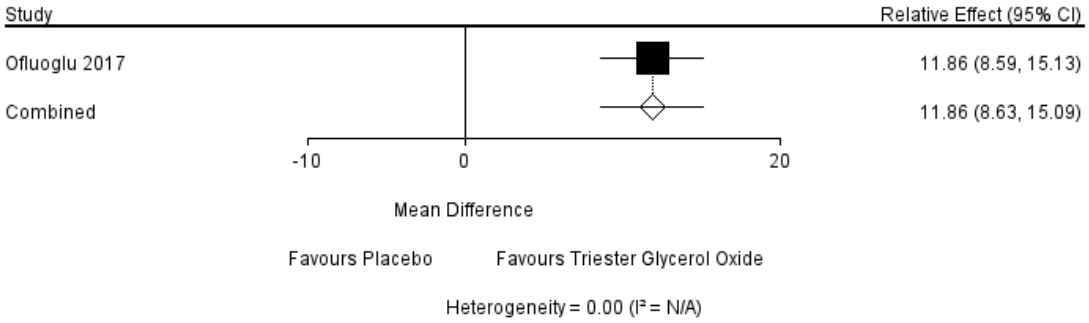

Study
Relative Effect (95% CI)
Seyyedi 2020
-7.84 (-50.91, 35.23)
Combined
-7.84 (-44.44, 28.76)
-60
0
40
Mean Difference
Favours Triamcinolone
Favours Laser
Heterogeneity = 0.00 (I² = N/A)

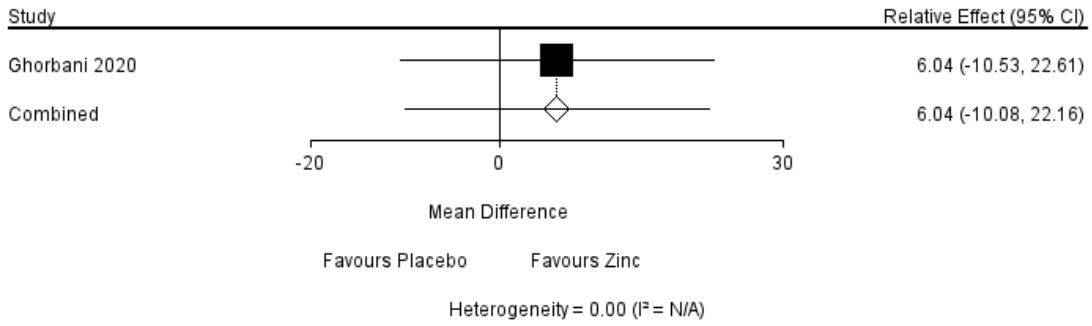

Study
Relative Effect (95% CI)
Aggour (audlt) 2021
7.27 (-1.40, 15.94)
Aggour (child) 2021
14.40 (4.63, 24.17)
Combined
10.48 (3.53, 17.43)
-10
0
30
Mean Difference
Favours Placebo
Favours Probiotics
Heterogeneity = 1.19 (I² = 16.3%)


Study
Relative Effect (95% CI)
Ibrahim 2020
1.07 (-25.40, 27.54)
Nirmala 2019
-11.89 (-41.98, 18.20)
Combined
-4.58 (-23.83, 14.66)
-50
0
30
Mean Difference
Favours Triamcinolone
Favours Probiotics
Heterogeneity = 0.43 (I² = 0.0%)


Study
Relative Effect (95% CI)
Andishe Tadbir 2015
37.70 (9.87, 65.53)
Bhalang 2013
40.00 (36.38, 43.62)
Ofluoglu 2017
4.17 (0.60, 7.74)
Sharma 2018
21.27 (-0.32, 42.86)
Combined
25.20 (0.04, 50.37)
-10
0
70
Mean Difference
Favours Placebo
Favours Triamcinolone
Heterogeneity = 196.82 (I² = 98.5%)


Study
Relative Effect (95% CI)
Ofluoglu 2017
-7.69 (-11.04, -4.34)
Combined
-7.69 (-11.00, -4.38)
-20
0
10
Mean Difference
Favours Triester Glycerol Oxide
Favours Triamcinolone
Heterogeneity = 0.00 (I² = N/A)


Study
Relative Effect (95% CI)
Ofluoglu 2017
11.86 (8.59, 15.13)
Combined
11.86 (8.63, 15.09)
-10
0
20
Mean Difference
Favours Placebo
Favours Triester Glycerol Oxide
Heterogeneity = 0.00 (I² = N/A)


Study
Relative Effect (95% CI)
Ghorbani 2020
6.04 (-10.53, 22.61)
Combined
6.04 (-10.08, 22.16)
-20
0
30
Mean Difference
Favours Placebo
Favours Zinc
Heterogeneity = 0.00 (I² = N/A)

Comparison	NO. of included study	Heterogeneity (I^2)	Combined effect [MD (95%CI)]
Allicin vs			
Placebo	1	NA	17.40 (2.57, 32.23)
Aloe vs			
Placebo	3	99.4%	18.99 (-5.32, 43.30)
Triamcinolone	1	NA	-10.00 (-13.42, -6.58)
Amlexanox vs			
Glycyrrhiza	1	NA	14.80 (-3.05, 32.65)
Laser	1	NA	-7.30 (-25.60, 11.00)
Placebo	5	95%	44.09 (17.28, 70.90)
Triamcinolone	1	NA	-8.03 (-10.60, -5.46)
Benzydamine vs			
Placebo	1	NA	20.85 (-7.04, 48.74)
Triamcinolone	1	NA	-0.42 (-19.71, 18.87)
Quercetin	1	NA	-15.27 (-29.86, -0.68)
Doxycycline	1	NA	-0.42 (-19.71, 18.87)
Berberine gelatin vs			
Placebo	1	NA	16.21 (10.09, 22.33)
Chitosan vs			
Placebo	1	NA	33.15 (-26.21, 92.51)
Cryotherapy vs			
Placebo	1	NA	1.23 (-25.58, 28.04)
Curcumin vs			
Placebo	1	NA	1.95 (-5.93, 9.83)
Triamcinolone	4	75.7%	5.72 (-6.58, 18.03)
Dexamethasone vs			
Placebo	1	NA	32.06 (10.02, 54.10)
Diosmectite vs			
Placebo	1	NA	15.39 (7.40, 23.38)
Doxycycline vs			
Placebo	1	NA	21.27 (1.13, 41.41)
Triamcinolone	1	NA	0 (-0.01, 0.01)
Glycyrrhiza vs			
Laser	1	NA	-22.10 (-37.32, -6.88)
Placebo	4	89.3%	35.99 (8.45, 63.53)
Laser vs			
Placebo	4	94.7%	31.46 (-12.48, 75.41)
Triamcinolone	1	NA	-7.84 (-44.44, 28.76)
Probiotics vs			
Triamcinolone	2	0%	-4.58 (-23.83, 14.66)
Placebo	2	16.3%	10.48 (3.53, 17.43)
Triamcinolone vs			
Triester Glycerol Oxide	1	NA	-7.69 (-11.00, -4.38)
Placebo	4	98.5%	25.20 (0.04, 50.37)
Triester Glycerol Oxide vs			
Placebo	1	NA	11.86 (8.63, 15.09)
Zinc vs			
Placebo	1	NA	6.04 (-10.08, 22.16)

MD, mean difference; CI, confidence interval; NA, not applicable.

6. Subgroup Discussion

The 51 RCTs studied for the size-reducing effect had different durations of local intervention and were examined at different times during the trial. The size-reducing effect is discussed separately according to the different examination times.

Day 1

1. Consistency Model

1.1 Summary estimates

Glycyrrhiza	-14.16 (-176.75, 151.03)	-30.05 (-70.88, 13.06)
14.16 (-151.03, 176.75)	Laser	-16.19 (-175.48, 143.23)
30.05 (-13.06, 70.88)	16.19 (-143.23, 175.48)	Placebo

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3
Glycyrrhiza	0.54	0.42	0.04
Laser	0.44	0.14	0.42
Placebo	0.03	0.44	0.53

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	14.87 (0.80, 28.99)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Laser	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2. Inconsistency Model

2.1 Summary estimates

Glycyrrhiza	-20.64 (-189.90, 145.55)	-30.03 (-70.13, 10.42)
20.64 (-145.55, 189.90)	Laser	-8.58 (-173.98, 152.25)
30.03 (-10.42, 70.13)	8.58 (-152.25, 173.98)	Placebo

2.2Variance Calculation

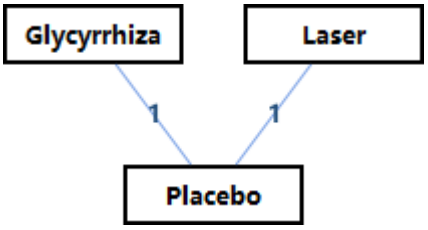
Parameter	Median (95% CI)
Random Effects Standard Deviation	14.83 (1.06, 29.05)
Inconsistency Standard Deviation	14.67 (0.65, 29.11)

2.3Convergence Diagnostics

Parameter	PSRF
d.Glycyrrhiza.Placebo	1.00
d.Placebo.Laser	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Network structure



Day 2

1. Consistency Model

1.1 Summary estimates

Allicin	-13.70 (-63.05, 33.47)	24.39 (-24.56, 76.19)	3.46 (-50.45, 52.71)	-3.42 (-74.82, 66.63)	-19.44 (-77.92, 41.05)
13.70 (-33.47, 63.05)	Aloe	38.04 (-7.69, 86.27)	17.32 (-33.58, 66.82)	11.16 (-58.87, 78.60)	-5.23 (-58.69, 47.65)
-24.39 (-76.19, 24.56)	-38.04 (-86.27, 7.69)	Amlexanox	-20.67 (-74.21, 25.80)	-27.46 (-99.55, 39.81)	-43.54 (-105.04, 13.31)
-3.46 (-52.71, 50.45)	-17.32 (-66.82, 33.58)	20.67 (-25.80, 74.21)	Berberine gelatin	-6.51 (-75.23, 62.83)	-22.27 (-80.93, 39.89)
3.42 (-66.63, 74.82)	-11.16 (-78.60, 58.87)	27.46 (-39.81, 99.55)	6.51 (-62.83, 75.23)	Chitosan	-15.23 (-96.40, 64.14)
19.44 (-41.05, 77.92)	5.23 (-47.65, 58.69)	43.54 (-13.31, 105.04)	22.27 (-39.89, 80.93)	15.23 (-64.14, 96.40)	Curcumin
20.43 (-29.62, 72.96)	7.17 (-41.92, 55.98)	45.37 (-3.54, 98.77)	24.13 (-29.14, 74.88)	18.08 (-53.83, 86.75)	2.04 (-59.84, 62.81)
-21.65 (-68.28, 20.45)	-35.11 (-81.73, 3.81)	2.64 (-32.71, 36.02)	-17.98 (-68.83, 23.22)	-25.38 (-93.64, 40.83)	-41.14 (-101.38, 13.73)
-28.90 (-75.72, 22.05)	-42.53 (-89.37, 6.20)	-4.37 (-38.90, 35.59)	-25.72 (-75.87, 23.78)	-31.30 (-102.46, 37.53)	-48.00 (-106.99, 12.56)
17.72 (-16.34, 53.85)	4.05 (-29.23, 37.89)	42.46 (9.55, 77.85)	21.24 (-15.04, 56.95)	14.57 (-46.97, 77.06)	-0.93 (-50.49, 47.71)
14.27 (-30.08, 60.43)	0.78 (-33.48, 34.08)	38.95 (-1.04, 82.97)	17.93 (-27.47, 60.98)	11.33 (-55.84, 77.97)	-4.35 (-47.24, 37.64)
12.96 (-36.22, 62.11)	-0.75 (-44.57, 43.22)	37.34 (-8.80, 86.25)	16.58 (-32.09, 63.26)	10.08 (-59.02, 78.82)	-5.51 (-62.29, 46.12)

-20.43 (-72.96, 29.62)	21.65 (-20.45, 68.28)	28.90 (-22.05, 75.72)	-17.72 (-53.85, 16.34)	-14.27 (-60.43, 30.08)	-12.96 (-62.11, 36.22)
-7.17 (-55.98, 41.92)	35.11 (-3.81, 81.73)	42.53 (-6.20, 89.37)	-4.05 (-37.89, 29.23)	-0.78 (-34.08, 33.48)	0.75 (-43.22, 44.57)
-45.37 (-98.77, 3.54)	-2.64 (-36.02, 32.71)	4.37 (-35.59, 38.90)	-42.46 (-77.85, -9.55)	-38.95 (-82.97, 1.04)	-37.34 (-86.25, 8.80)
-24.13 (-74.88, 29.14)	17.98 (-23.22, 68.83)	25.72 (-23.78, 75.87)	-21.24 (-56.95, 15.04)	-17.93 (-60.98, 27.47)	-16.58 (-63.26, 32.09)
-18.08 (-86.75, 53.83)	25.38 (-40.83, 93.64)	31.30 (-37.53, 102.46)	-14.57 (-77.06, 46.97)	-11.33 (-77.97, 55.84)	-10.08 (-78.82, 59.02)
-2.04 (-62.81, 59.84)	41.14 (-13.73, 101.38)	48.00 (-12.56, 106.99)	0.93 (-47.71, 50.49)	4.35 (-37.64, 47.24)	5.51 (-46.12, 62.29)
Diosmectite	42.32 (-0.88, 90.17)	49.22 (-1.65, 99.57)	3.04 (-34.10, 39.16)	6.30 (-38.01, 50.00)	7.81 (-42.61, 58.57)
-42.32 (-90.17, 0.88)	Glycyrrhiza	7.31 (-29.69, 37.57)	-39.43 (-69.27, -16.29)	-35.99 (-75.90, -1.89)	-34.27 (-78.67, 5.74)
-49.22 (-99.57, 1.65)	-7.31 (-37.57, 29.69)	Laser	-46.76 (-79.70, -13.87)	-43.37 (-85.77, 0.68)	-41.94 (-88.73, 7.21)
-3.04 (-39.16, 34.10)	39.43 (16.29, 69.27)	46.76 (13.87, 79.70)	Placebo	3.16 (-22.34, 29.02)	4.63 (-27.46, 38.14)
-6.30 (-50.00, 38.01)	35.99 (1.89, 75.90)	43.37 (-0.68, 85.77)	-3.16 (-29.02, 22.34)	Triamcinolone	1.39 (-31.20, 36.15)
-7.81 (-58.57, 42.61)	34.27 (-5.74, 78.67)	41.94 (-7.21, 88.73)	-4.63 (-38.14, 27.46)	-1.39 (-36.15, 31.20)	Triester Glycerol Oxide

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12
Allicin	0.02	0.03	0.04	0.16	0.29	0.23	0.08	0.04	0.04	0.03	0.03	0.02
Aloe	0.01	0.01	0.01	0.02	0.05	0.11	0.18	0.17	0.15	0.13	0.09	0.06
Amlexanox	0.24	0.32	0.27	0.1	0.03	0.02	0.01	0.01	0	0	0	0
Berberine gelatin	0.03	0.03	0.05	0.28	0.28	0.16	0.06	0.03	0.03	0.02	0.02	0.01
Chitosan	0.11	0.05	0.05	0.15	0.1	0.09	0.06	0.05	0.04	0.05	0.08	0.17
Curcumin	0.01	0.01	0.02	0.04	0.06	0.09	0.1	0.07	0.07	0.09	0.14	0.31
Diosmectite	0	0.01	0.01	0.02	0.03	0.05	0.07	0.08	0.08	0.12	0.24	0.29
Glycyrrhiza	0.1	0.28	0.4	0.14	0.04	0.02	0.01	0	0	0	0	0
Laser	0.47	0.26	0.14	0.06	0.03	0.01	0.01	0.01	0	0	0	0
Placebo	0	0	0	0	0	0.02	0.06	0.12	0.19	0.29	0.25	0.05
Triamcinolone	0	0	0.01	0.01	0.03	0.07	0.16	0.23	0.24	0.15	0.08	0.02
Triester Glycerol Oxide	0.01	0.01	0.01	0.02	0.06	0.13	0.21	0.19	0.15	0.1	0.08	0.05

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	8.88 (0.88, 42.96)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Allicin	1.00
d.Placebo.Aloe	1.01
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Laser	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.TriesterGlycerolOxide	1.01
d.Triamcinolone.Curcumin	1.01
sd.d	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

14.29 (-39.25, 61.57)	15.52 (-32.61, 61.13)	18.75 (-21.71, 56.13)	-27.79 (-80.26, 21.85)	-20.82 (-71.40, 24.25)	22.04 (-31.43, 72.79)	21.34 (-42.59, 83.72)	1.81 (-66.75, 79.70)	-2.89 (-60.30, 48.30)	-23.84 (-76.80, 23.31)	14.52 (-38.79, 62.92)	Allicin
-0.30 (-44.82, 44.46)	1.24 (-32.11, 34.54)	4.40 (-27.39, 38.15)	-42.59 (-88.51, 5.36)	-34.83 (-81.42, 6.86)	8.36 (-43.22, 57.57)	8.21 (-46.95, 61.72)	-10.56 (-79.25, 65.86)	-17.62 (-69.32, 31.40)	-37.87 (-87.91, 9.07)	Aloe	-14.52 (-62.92, 38.79)
37.57 (-8.46, 87.06)	38.80 (-3.08, 83.54)	42.19 (10.29, 77.91)	-4.11 (-40.39, 35.84)	2.90 (-33.08, 36.66)	46.24 (-4.53, 97.81)	46.16 (-14.98, 106.23)	28.38 (-43.66, 104.36)	20.51 (-29.88, 72.43)	Amlexanox	37.87 (-9.07, 87.91)	23.84 (-23.31, 76.80)
17.43 (-34.09, 66.44)	18.96 (-26.42, 63.12)	21.90 (-13.70, 60.12)	-24.55 (-74.80, 26.47)	-17.47 (-65.13, 28.99)	26.01 (-27.89, 80.44)	25.54 (-35.99, 83.81)	7.07 (-64.79, 82.59)	Berberine gelatin	-20.51 (-72.43, 29.88)	17.62 (-31.40, 69.32)	2.89 (-48.30, 60.30)

-1.81 (-79.70, 66.75)	-21.34 (-83.72, 42.59)	-22.04 (-72.79, 31.43)	20.82 (-24.25, 71.40)	27.79 (-21.85, 80.26)	-18.75 (-56.13, 21.71)	-15.52 (-61.13, 32.61)	-14.29 (-61.57, 39.25)		
10.56 (-65.86, 79.25)	-8.21 (-61.72, 46.95)	-8.36 (-57.57, 43.22)	34.83 (-6.86, 81.42)	42.59 (-5.36, 88.51)	-4.40 (-38.15, 27.39)	-1.24 (-34.54, 32.11)	0.30 (-44.46, 44.82)		
-28.38 (-104.36, 43.66)	-46.16 (-106.22, 14.98)	-46.24 (-97.81, 4.53)	-2.90 (-36.66, 33.08)	4.11 (-35.84, 40.39)	-42.19 (-77.91, -10.29)	-38.90 (-83.54, 3.08)	-37.57 (-87.06, 8.46)		
-7.07 (-82.59, 64.79)	-25.54 (-83.81, 35.99)	-26.01 (-80.44, 27.89)	17.47 (-26.99, 65.13)	24.55 (-26.47, 74.80)	-21.90 (-60.12, 13.70)	-18.96 (-63.12, 26.42)	-17.43 (-66.44, 34.09)		
Chitosan	-18.52 (-92.08, 65.99)	-18.28 (-89.71, 57.87)	25.42 (-41.81, 97.91)	31.96 (-38.75, 107.17)	-14.66 (-76.69, 50.02)	-11.48 (-78.29, 58.89)	-10.05 (-80.46, 65.66)		
18.52 (-65.99, 92.08)	Curcumin	0.31 (-62.10, 62.49)	43.64 (-12.19, 103.03)	50.26 (-11.97, 109.73)	3.80 (-47.91, 53.48)	7.18 (-36.84, 49.05)	8.45 (-47.99, 63.86)		
18.28 (-57.87, 89.71)	-0.31 (-62.49, 62.10)	Dissmectite	42.93 (-1.42, 91.64)	50.78 (-0.41, 99.02)	3.99 (-34.48, 40.79)	7.33 (-38.93, 52.39)	8.68 (-42.37, 58.83)		
-25.42 (-97.91, 41.81)	-43.64 (-103.03, 12.19)	-42.93 (-91.64, 1.42)	Glycyrrhiza	6.58 (-29.44, 41.29)	-39.51 (-69.01, -13.13)	-36.01 (-76.48, 0.60)	-34.38 (-81.70, 6.40)		
-31.98 (-107.17, 38.75)	-50.26 (-109.73, 11.97)	-50.78 (-99.02, 0.41)	-6.58 (-41.29, 29.44)	Laser	-41.02 (-94.48, 23.19)	-43.58 (-87.08, 0.39)	-42.35 (-90.66, 6.73)		
14.66 (-50.02, 76.69)	-3.80 (-53.48, 47.81)	-3.99 (-40.79, 34.48)	39.51 (13.13, 69.01)	41.02 (-23.19, 94.48)	Placebo	3.10 (-23.20, 30.04)	4.54 (-29.74, 40.26)		
11.48 (-58.89, 78.29)	-7.18 (-49.05, 36.84)	-7.33 (-52.39, 38.93)	36.01 (-0.60, 76.48)	43.58 (-0.39, 87.08)	-3.10 (-30.04, 23.20)	Triamcinolone	1.46 (-33.76, 35.92)		
10.05 (-65.66, 80.46)	-8.45 (-63.86, 47.99)	-8.68 (-58.83, 42.37)	34.38 (-6.40, 81.70)	42.35 (-6.73, 90.66)	-4.54 (-40.26, 29.74)	-1.46 (-35.92, 33.76)	Triester Glycerol Oxide		

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Glycyrrhiza, Laser, Placebo	3.60 (-41.97, 68.36)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	8.57 (0.49, 43.70)
Inconsistency Standard Deviation	25.73 (1.12, 51.05)

2.4 Convergence Diagnostics

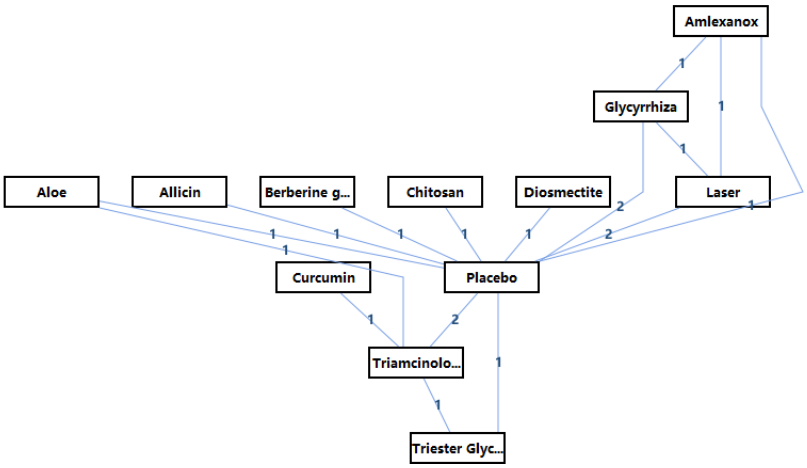
Parameter	PSRF
d.Allicin.Placebo	1.00
d.Aloe.Triamcinolone	1.00
d.Glycyrrhiza.Laser	1.01
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.04
d.Placebo.Diosmectite	1.00
d.Placebo.Glycyrrhiza	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
w.Glycyrrhiza.Laser.Placebo	1.01
sd.d	1.01
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Glycyrrhiza, Laser	9.29 (-28.30, 48.97)	-54.27 (-204.92, 99.93)	7.31 (-29.69, 37.57)	0.39

4. Network structure



Day 3

1. Consistency Model

1.1 Summary estimates

-99.84 (-236.93, 37.79)	-69.57 (-183.04, 57.74)	-26.69 (-138.12, 86.20)	-14.19 (-106.28, 80.00)	-13.08 (-135.08, 132.49)	-28.19 (-139.91, 88.75)	-43.30 (-197.22, 114.54)	-64.36 (-193.82, 79.42)	-36.97 (-171.75, 100.17)	-38.19 (-157.33, 85.41)	Aloe
-61.77 (-183.72, 58.04)	-31.33 (-102.97, 45.89)	11.10 (-91.32, 108.98)	23.84 (-52.09, 96.88)	26.54 (-72.57, 141.46)	9.91 (-89.38, 108.56)	-5.34 (-105.16, 87.24)	-25.24 (-124.28, 75.82)	0.88 (-122.12, 120.99)	Amlexanox	38.19 (-85.41, 157.33)
-63.09 (-201.00, 73.68)	-32.55 (-146.25, 92.68)	10.18 (-105.20, 130.41)	22.38 (-72.48, 120.71)	23.92 (-103.51, 170.48)	8.51 (-108.21, 128.42)	-6.60 (-161.55, 148.07)	-28.02 (-159.94, 116.85)	Cryotherapy	-0.88 (-120.99, 122.12)	36.97 (-100.17, 171.75)
-35.93 (-177.50, 99.41)	-5.06 (-75.40, 63.26)	37.40 (-84.90, 148.55)	49.71 (-54.05, 141.86)	51.46 (-54.38, 168.26)	36.27 (-86.66, 150.99)	20.01 (-125.54, 157.17)	Curcumin	28.02 (-116.85, 159.94)	25.24 (-75.82, 124.28)	64.36 (-79.42, 193.82)

43.30 (-114.54, 197.22)	28.19 (-88.75, 139.91)	13.08 (-132.49, 135.08)	14.19 (-80.00, 106.28)	26.69 (-86.20, 138.12)	69.57 (-57.74, 183.04)	99.84 (-37.79, 236.93)
5.34 (-87.24, 105.16)	-9.91 (-108.56, 89.38)	-26.54 (-141.46, 72.57)	-23.84 (-96.88, 52.09)	-11.10 (-108.98, 91.32)	31.33 (-45.89, 102.97)	61.77 (-58.04, 183.72)
6.60 (-148.07, 161.55)	-8.51 (-128.42, 108.21)	-23.92 (-170.48, 103.51)	-22.38 (-120.71, 72.48)	-10.18 (-130.41, 105.20)	32.55 (-92.68, 146.25)	63.09 (-73.68, 201.00)
-20.01 (-157.17, 125.54)	-36.27 (-150.99, 86.66)	-51.46 (-168.26, 54.38)	-49.71 (-141.86, 54.05)	-37.40 (-148.55, 84.90)	5.06 (-63.26, 75.40)	35.93 (-99.41, 177.50)
14.88 (-122.53, 153.05)	Glycyrrhiza	-15.72 (-139.37, 90.66)	-14.01 (-81.13, 54.60)	-1.21 (-96.48, 92.59)	41.18 (-59.82, 134.15)	71.17 (-45.35, 191.41)
31.32 (-101.88, 189.69)	15.72 (-90.66, 139.37)	Laser	2.30 (-82.61, 106.35)	14.46 (-93.73, 139.12)	57.09 (-24.93, 148.69)	87.14 (-35.77, 230.43)
28.72 (-92.26, 150.52)	14.01 (-54.60, 81.13)	-2.30 (-106.35, 82.61)	Placebo	12.63 (-55.50, 78.63)	54.85 (-22.59, 119.89)	85.02 (-10.24, 181.86)
17.33 (-121.40, 157.99)	1.21 (-92.59, 96.48)	-14.46 (-139.12, 93.73)	-12.63 (-78.63, 55.50)	Probiotics	42.73 (-60.68, 133.84)	72.26 (-41.47, 189.09)
-25.63 (-143.49, 100.98)	-41.18 (-134.15, 59.82)	-57.09 (-148.69, 24.93)	-54.85 (-119.89, 22.59)	-42.73 (-133.84, 60.68)	Triamcinolone	30.50 (-85.10, 154.44)
-56.33 (-212.52, 94.05)	-71.17 (-191.41, 45.35)	-87.14 (-230.43, 35.77)	-85.02 (-181.86, 10.24)	-72.26 (-189.09, 41.47)	-30.50 (-154.44, 85.10)	Zinc

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11
Aloe	0.01	0.03	0.03	0.04	0.05	0.05	0.07	0.08	0.1	0.17	0.37
Amlexanox	0.01	0.04	0.07	0.13	0.19	0.17	0.13	0.1	0.08	0.06	0.02
Cryotherapy	0.06	0.11	0.08	0.1	0.1	0.1	0.1	0.08	0.08	0.1	0.09
Curcumin	0.14	0.19	0.18	0.13	0.1	0.07	0.05	0.04	0.04	0.04	0.02
Dexamethasone	0.09	0.11	0.1	0.12	0.11	0.1	0.07	0.06	0.07	0.08	0.09
Glycyrrhiza	0.02	0.04	0.06	0.08	0.11	0.13	0.14	0.13	0.11	0.1	0.06
Laser	0.01	0.03	0.04	0.07	0.07	0.09	0.1	0.09	0.11	0.16	0.24
Placebo	0	0	0	0.02	0.04	0.08	0.15	0.24	0.26	0.17	0.04
Probiotics	0.01	0.04	0.06	0.09	0.11	0.13	0.14	0.13	0.13	0.11	0.06
Triamcinolone	0.08	0.27	0.27	0.16	0.09	0.05	0.03	0.02	0.01	0.01	0
Zinc	0.57	0.14	0.09	0.06	0.04	0.03	0.02	0.02	0.01	0.01	0.01

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	36.53 (16.67, 87.26)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Amlexanox.Dexamethasone	1.02
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Cryotherapy	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Laser	1.00
d.Placebo.Probiotics	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Aloe	19.11 (-35.30, 91.12)	39.55 (-33.87, 107.84)	29.68 (-40.14, 117.89)	20.20 (-51.27, 106.48)	29.39 (-31.65, 86.17)	-3.75 (-82.85, 81.56)	14.37 (-34.17, 61.82)			
-19.11 (-91.12, 35.30)	Amlexanox	19.96 (-59.29, 78.09)	10.16 (-43.43, 63.44)	-0.31 (-48.39, 49.87)	10.37 (-52.03, 55.44)	-24.44 (-90.95, 38.32)	-4.08 (-54.95, 28.91)			
-39.55 (-107.84, 33.87)	-17.96 (-78.09, 59.29)	Cryotherapy	-7.56 (-81.75, 85.25)	-17.42 (-93.31, 73.94)	-8.81 (-71.59, 55.86)	-41.25 (-124.12, 49.05)	-23.64 (-75.70, 31.76)			
-29.68 (-117.89, 40.14)	-10.16 (-63.44, 43.43)	7.56 (-85.25, 81.75)	Curcumin	-8.80 (-84.11, 62.07)	0.56 (-81.18, 63.09)	-34.33 (-103.13, 30.06)	-14.88 (-88.12, 40.82)			
-20.20 (-106.48, 51.27)	0.31 (-49.87, 48.39)	17.42 (-73.94, 93.31)	8.80 (-62.07, 84.11)	Dexamethasone	10.19 (-74.14, 73.76)	-25.44 (-107.76, 52.52)	-4.97 (-77.45, 51.45)			
-29.39 (-86.17, 31.65)	-10.37 (-55.44, 52.03)	8.81 (-55.86, 71.59)	-0.56 (-63.09, 81.18)	-10.19 (-73.76, 74.14)	Glycyrrhiza	-33.85 (-105.55, 45.70)	-15.31 (-48.43, 21.18)			
3.75 (-81.56, 82.85)	24.44 (-38.32, 90.95)	41.25 (-49.05, 124.12)	34.33 (-30.06, 103.13)	25.44 (-52.52, 107.76)	33.85 (-45.70, 105.55)	Laser	46.21 (-46.38, 140.89)			
-14.37 (-61.82, 34.17)	4.08 (-28.91, 54.95)	23.64 (-31.76, 75.70)	14.88 (-40.82, 88.12)	4.97 (-51.45, 77.45)	15.31 (-21.18, 48.43)	-46.21 (-140.89, 46.38)	Placebo			
-28.58 (-84.35, 30.06)	-9.20 (-54.16, 52.98)	10.11 (-53.25, 71.11)	0.92 (-61.16, 81.71)	-8.59 (-72.27, 71.65)	0.86 (-46.33, 47.52)	-32.63 (-103.51, 45.91)	-13.96 (-46.30, 18.86)			
-31.19 (-113.33, 25.73)	-11.65 (-58.33, 22.23)	5.31 (-85.60, 68.04)	-2.72 (-43.98, 30.16)	-12.04 (-81.30, 45.68)	-1.54 (-78.01, 45.30)	-37.45 (-98.37, 14.71)	-94.02 (-133.75, -30.18)			
-100.09 (-166.94, -34.05)	-80.12 (-136.76, -8.59)	-61.70 (-136.33, 8.67)	-70.77 (-143.61, 16.48)	-78.98 (-152.83, 7.37)	-70.65 (-132.69, -12.11)	-105.03 (-186.21, -19.66)	-85.26 (-134.62, -36.60)			

-71.86 (-132.34, -12.05)	-2.78 (-78.82, 44.62)	Probiotics	13.96 (-18.86, 46.30)	32.63 (-45.91, 103.51)	-0.86 (-47.52, 46.33)	8.59 (-71.65, 72.27)	-0.92 (-81.71, 61.16)	-10.11 (-71.11, 53.25)	9.20 (-52.98, 54.16)	28.58 (-30.06, 84.35)
-67.76 (-130.03, 15.47)	Triamcinolone	2.78 (-44.62, 78.82)	94.02 (30.18, 133.75)	37.45 (-14.71, 98.37)	1.54 (-45.30, 78.01)	12.04 (-45.68, 81.30)	2.72 (-30.16, 43.98)	-5.31 (-68.04, 85.60)	11.65 (-22.23, 58.33)	31.19 (-25.73, 113.33)
Zinc	67.76 (-15.47, 130.03)	71.86 (12.05, 132.34)	85.26 (36.60, 134.62)	105.03 (19.66, 186.21)	70.65 (12.11, 132.69)	78.98 (-7.37, 152.83)	70.77 (-16.48, 143.61)	61.70 (-8.67, 136.33)	80.12 (8.59, 136.76)	100.09 (34.05, 166.94)

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Amlexanox, Laser, Placebo, Triamcinolone	-27.88 (-122.82, 59.06)
Amlexanox, Placebo, Triamcinolone	76.53 (-8.08, 123.31)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	11.67 (0.98, 55.76)
Inconsistency Standard Deviation	67.12 (16.68, 100.02)

2.4 Convergence Diagnostics

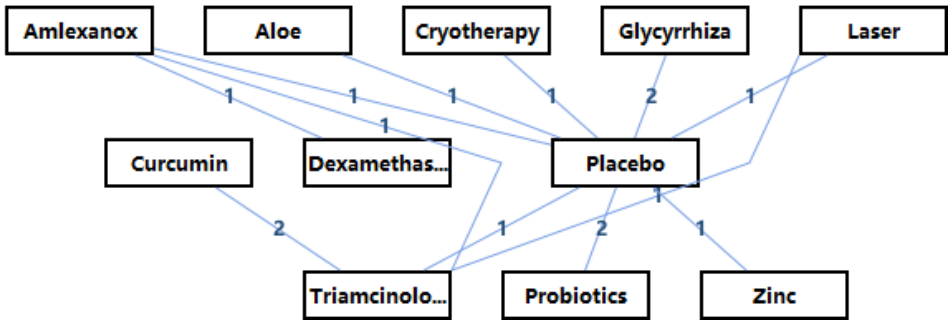
Parameter	PSRF
d.Aloe.Placebo	1.00
d.Amlexanox.Dexamethasone	1.19
d.Amlexanox.Triamcinolone	1.01
d.Placebo.Amlexanox	1.00
d.Placebo.Cryotherapy	1.01
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Probiotics	1.01
d.Placebo.Zinc	1.01
d.Triamcinolone.Curcumin	1.01
d.Triamcinolone.Laser	1.00
w.Amlexanox.Placebo.Laser.Tria...	1.00
w.Amlexanox.Placebo.Triamcinol...	1.00
sd.d	1.01
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Amlexanox, Placebo	-3.24 (-73.90, 61.95)	-80.03 (-150.79, 36.17)	-23.84 (-96.88, 52.09)	0.17
Amlexanox, Triamcinolone	10.14 (-53.70, 74.47)	89.12 (-22.73, 152.94)	31.33 (-45.89, 102.97)	0.14
Laser, Placebo	82.29 (-60.65, 226.22)	-38.33 (-165.77, 80.37)	2.30 (-82.61, 106.35)	0.18
Laser, Triamcinolone	29.42 (-68.30, 126.55)	150.30 (-8.90, 309.08)	57.09 (-24.93, 148.69)	0.19
Placebo, Triamcinolone	100.84 (55.85, 147.26)	11.02 (-53.67, 49.37)	54.85 (-22.59, 119.89)	0.01

4. Network structure



Day 4

1. Consistency Model

1.1 Summary estimates

Allicin	14.63 (-108.29, 133.33)	25.41 (-115.31, 172.60)	-5.19 (-151.54, 147.72)	-2.32 (-165.35, 158.56)	-13.68 (-145.68, 114.23)	-18.56 (-172.65, 129.70)	46.95 (-94.16, 197.67)	19.40 (-114.60, 154.81)
-14.63 (-133.33, 108.29)	Amlexanox	11.37 (-103.17, 127.86)	-19.08 (-136.15, 103.57)	-16.99 (-148.05, 113.56)	-27.47 (-124.29, 64.81)	-32.59 (-154.28, 86.84)	33.47 (-78.72, 151.35)	5.60 (-89.76, 101.33)
-25.41 (-172.60, 115.31)	-11.37 (-127.86, 103.17)	Benzydamine	-29.89 (-177.77, 117.81)	-28.69 (-187.29, 123.14)	-38.73 (-159.67, 69.28)	-43.70 (-194.77, 95.94)	22.18 (-86.46, 131.08)	-5.81 (-133.09, 116.87)
5.19 (-147.72, 151.54)	19.08 (-103.57, 136.15)	29.89 (-117.81, 177.77)	Berberine gelatin	2.21 (-157.49, 158.60)	-8.41 (-146.26, 117.13)	-14.45 (-169.09, 138.11)	52.02 (-94.71, 202.76)	24.27 (-107.59, 156.61)
2.32 (-158.56, 165.35)	16.99 (-113.56, 148.05)	28.69 (-123.14, 187.29)	-2.21 (-158.60, 157.49)	Chitosan	-11.65 (-157.21, 132.40)	-16.01 (-180.53, 146.44)	51.18 (-105.34, 210.60)	22.31 (-120.39, 165.57)
13.68 (-114.23, 145.68)	27.47 (-64.81, 124.29)	38.73 (-69.28, 159.67)	8.41 (-117.13, 146.26)	11.65 (-132.40, 157.21)	Curcumin	-5.64 (-133.96, 125.63)	61.30 (-47.45, 179.14)	33.16 (-74.74, 144.68)
18.56 (-129.70, 172.65)	32.59 (-86.84, 154.28)	43.70 (-95.94, 194.77)	14.45 (-138.11, 169.09)	16.01 (-146.44, 180.53)	5.64 (-125.63, 133.96)	Diosmectite	66.63 (-79.29, 217.37)	38.61 (-92.49, 170.16)
-46.95 (-197.67, 94.16)	-33.47 (-151.35, 78.72)	-22.18 (-131.08, 86.46)	-52.02 (-202.76, 94.71)	-51.18 (-210.60, 105.34)	-61.30 (-179.14, 47.45)	-66.63 (-217.37, 79.29)	Doxycycline	-27.81 (-156.47, 94.76)
-19.40 (-154.81, 114.60)	-5.60 (-101.33, 89.76)	5.81 (-116.87, 133.09)	-24.27 (-156.61, 107.59)	-22.31 (-165.57, 120.39)	-33.16 (-144.68, 74.74)	-38.61 (-170.16, 92.49)	27.81 (-94.76, 156.47)	Laser
19.93 (-85.93, 130.86)	34.68 (-20.72, 88.08)	45.62 (-49.84, 152.46)	15.88 (-85.74, 124.77)	17.90 (-103.62, 138.48)	7.03 (-70.13, 81.84)	2.30 (-104.81, 107.15)	67.70 (-28.64, 171.38)	40.11 (-36.50, 118.89)
-47.37 (-228.94, 130.28)	-32.95 (-192.07, 118.71)	-22.39 (-125.66, 85.11)	-51.89 (-233.57, 128.13)	-49.98 (-243.51, 135.97)	-60.34 (-220.75, 90.50)	-66.27 (-248.85, 114.44)	-0.00 (-152.86, 151.93)	-27.13 (-193.59, 135.33)
-30.78 (-157.23, 93.17)	-16.03 (-105.31, 67.90)	-5.15 (-102.31, 97.84)	-34.70 (-157.92, 93.75)	-32.82 (-172.74, 105.59)	-43.80 (-116.47, 20.79)	-49.76 (-178.77, 74.40)	17.51 (-80.88, 117.80)	-10.94 (-112.85, 91.77)
-14.09 (-161.01, 132.24)	0.09 (-115.99, 109.55)	10.86 (-118.03, 143.74)	-18.10 (-163.00, 127.11)	-16.32 (-173.34, 134.15)	-27.36 (-144.31, 83.50)	-33.24 (-182.47, 113.57)	33.89 (-98.11, 168.15)	5.16 (-122.30, 128.27)

-19.93 (-130.86, 85.93)	-34.68 (-88.08, 20.72)	-45.62 (-152.46, 49.84)	-15.88 (-124.77, 85.74)	-17.90 (-138.48, 103.62)	-7.03 (-81.84, 70.13)	-2.30 (-107.15, 104.81)	-67.70 (-171.38, 28.64)	-40.11 (-118.89, 36.50)	-67.39 (-214.42, 74.27)	-51.01 (-118.39, 12.04)	-34.50 (-136.84, 60.31)
47.37 (-130.28, 228.94)	32.95 (-118.71, 192.07)	22.39 (-85.11, 125.66)	51.89 (-128.13, 233.57)	49.98 (-135.97, 243.51)	60.34 (-90.50, 220.75)	66.27 (-114.44, 248.85)	0.00 (-151.93, 152.86)	27.13 (-135.33, 193.59)	67.39 (-74.27, 214.42)	17.05 (-127.47, 164.83)	33.39 (-134.07, 203.08)
30.78 (-93.17, 157.23)	16.03 (-67.90, 105.31)	5.15 (-97.84, 102.31)	34.70 (-93.75, 157.92)	32.82 (-105.59, 172.74)	43.80 (-20.79, 116.47)	49.76 (-74.40, 178.77)	-17.51 (-117.80, 80.88)	10.94 (-91.77, 112.85)	51.01 (-12.04, 118.39)	-17.05 (-164.83, 127.47)	15.83 (-81.26, 115.14)
14.09 (-132.24, 161.01)	-0.09 (-109.55, 115.99)	-10.86 (-143.74, 118.03)	18.10 (-127.11, 163.00)	16.32 (-134.15, 173.34)	27.36 (-83.50, 144.31)	33.24 (-113.57, 182.47)	-33.89 (-168.15, 98.11)	-5.16 (-128.27, 122.30)	34.50 (-60.31, 136.84)	-33.39 (-203.08, 134.07)	-15.83 (-115.14, 81.26)

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13
Allicin	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.08	0.08	0.08	0.08	0.1	0.12
Amlexanox	0.03	0.05	0.08	0.1	0.12	0.13	0.14	0.13	0.09	0.06	0.04	0.03	0.01
Benzydamine	0.04	0.13	0.13	0.12	0.11	0.1	0.08	0.08	0.06	0.05	0.05	0.04	0.02
Berberine gelatin	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.12	0.14
Chitosan	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.08	0.1	0.18
Curcumin	0	0.01	0.02	0.03	0.05	0.07	0.08	0.1	0.12	0.12	0.14	0.14	0.12
Diosmectite	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.08	0.1	0.14	0.23
Doxycycline	0.23	0.18	0.14	0.1	0.08	0.07	0.06	0.04	0.03	0.02	0.02	0.02	0.01
Laser	0.07	0.09	0.1	0.1	0.1	0.1	0.1	0.09	0.08	0.06	0.04	0.04	0.02
Placebo	0	0	0	0	0.01	0.01	0.04	0.08	0.15	0.24	0.25	0.17	0.05
Quercetin	0.31	0.14	0.09	0.07	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.04	0.04
Triamcinolone	0.05	0.1	0.15	0.17	0.16	0.12	0.1	0.07	0.04	0.02	0.01	0.01	0
Triester Glycerol Oxide	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.08	0.08	0.07	0.06	0.06	0.05

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	46.52 (26.29, 91.77)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Benzydamine.Doxycycline	1.00
d.Benzydamine.Placebo	1.00
d.Benzydamine.Quercetin	1.00
d.Benzydamine.Triamcinolone	1.00
d.Placebo.Allicin	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Curcumin	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Laser	1.00
d.Placebo.TriesterGlycerolOxide	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Allicin																								
-14.24 (-137.57, 111.41)	Amlexanox	14.24 (-111.41, 137.57)																						
-25.03 (-178.16, 128.28)	-10.97 (-126.90, 107.55)	Benzydamine	25.03 (-128.28, 178.16)																					
4.52 (-153.10, 159.50)	18.73 (-102.16, 140.09)	29.56 (-124.03, 179.21)	Berberine gelatin	-4.52 (-159.50, 153.10)																				
1.63 (-162.59, 168.95)	15.60 (-116.29, 155.00)	27.03 (-136.25, 189.52)	-3.33 (-167.87, 162.21)	Chitosan	-1.63 (-168.95, 162.59)																			
15.19 (-127.83, 156.57)	28.96 (-75.92, 136.33)	39.58 (-83.01, 161.29)	10.11 (-129.74, 154.66)	13.82 (-140.34, 161.04)	Curcumin	-15.19 (-156.57, 127.83)																		
19.62 (-137.87, 174.90)	34.64 (-88.02, 156.83)	43.31 (-101.71, 197.65)	15.20 (-139.97, 170.81)	17.45 (-147.32, 181.10)	5.14 (-136.31, 144.77)	Diosmectite	-19.62 (-174.90, 137.87)																	
-48.33 (-201.34, 98.34)	-34.12 (-148.91, 82.90)	-23.50 (-139.72, 87.26)	-53.00 (-204.81, 95.12)	-50.71 (-218.39, 112.66)	-62.98 (-183.55, 56.74)	-67.13 (-221.72, 80.15)	Doxycycline	48.33 (-98.34, 201.34)																
-18.75 (-157.93, 115.94)	-4.76 (-101.83, 91.04)	6.07 (-126.36, 134.89)	-22.56 (-160.81, 110.84)	-20.29 (-176.66, 125.29)	-33.91 (-156.94, 81.43)	-38.10 (-172.96, 98.67)	29.21 (-100.74, 159.67)	Laser	-34.12 (-82.90, 148.91)															
20.59 (-91.01, 133.50)	35.19 (-19.92, 89.70)	46.12 (-57.92, 149.35)	17.18 (-92.99, 125.24)	19.66 (-106.58, 142.22)	7.88 (-80.06, 92.36)	1.32 (-108.84, 112.57)	68.89 (-32.28, 175.38)	39.68 (-39.68, 118.08)	Quercetin	-23.50 (-87.26, 139.72)														
-45.94 (-232.01, 142.21)	-32.22 (-186.67, 128.75)	-21.57 (-131.68, 86.60)	-51.58 (-236.70, 139.03)	-48.24 (-247.17, 143.13)	-61.42 (-225.25, 98.20)	-65.92 (-253.94, 115.92)	1.57 (-150.59, 162.57)	-27.46 (-118.08, 63.39)	-61.78 (-162.57, 39.68)	TriesterGlycerolOxide	-50.71 (-112.66, 218.39)													
-30.01 (-163.01, 98.81)	-16.42 (-108.37, 71.32)	-6.08 (-108.39, 97.44)	-35.25 (-165.69, 95.16)	-32.02 (-180.07, 108.85)	-45.35 (-118.53, 24.07)	-50.31 (-182.54, 78.40)	18.01 (-82.84, 118.08)	-10.91 (-91.71, 63.39)	-45.78 (-118.08, 27.46)	-16.84 (-91.71, 61.42)	Triamcinolone	-53.00 (-95.12, 204.81)												
-14.38 (-168.28, 135.69)	-0.41 (-115.64, 116.18)	10.39 (-126.56, 144.52)	-19.91 (-165.20, 127.10)	-16.84 (-174.52, 141.34)	-28.73 (-153.31, 86.54)	-34.07 (-184.25, 113.60)	34.27 (-99.18, 167.25)	-5.14 (-144.77, 136.31)	-40.92 (-162.57, 61.42)	-12.03 (-98.67, 72.91)	4.73 (-72.91, 82.36)	Placebo	-62.98 (-95.12, 56.74)											
-0.41 (-115.64, 116.18)	-16.42 (-108.37, 71.32)	-6.08 (-108.39, 97.44)	-35.25 (-165.69, 95.16)	-32.02 (-180.07, 108.85)	-45.35 (-118.53, 24.07)	-50.31 (-182.54, 78.40)	18.01 (-82.84, 118.08)	-10.91 (-91.71, 63.39)	-45.78 (-118.08, 27.46)	-16.84 (-91.71, 61.42)	-4.73 (-82.36, 72.91)	-12.03 (-98.67, 72.91)	Sd.d	-67.13 (-80.15, 221.72)										
10.39 (-126.56, 144.52)	-6.08 (-108.39, 97.44)	6.07 (-126.36, 134.89)	-22.56 (-160.81, 110.84)	-20.29 (-176.66, 125.29)	-33.91 (-156.94, 81.43)	-38.10 (-172.96, 98.67)	29.21 (-100.74, 159.67)	-17.45 (-181.10, 147.32)	-50.71 (-112.66, 218.39)	-33.91 (-156.94, 81.43)	-19.66 (-106.58, 142.22)	-22.56 (-160.81, 110.84)	-39.68 (-161.29, 83.01)	Sd.Laser	-53.00 (-95.12, 204.81)								
-19.91 (-165.20, 127.10)	-35.25 (-165.69, 95.16)	-51.58 (-236.70, 139.03)	-48.24 (-247.17, 143.13)	-61.42 (-225.25, 98.20)	-65.92 (-253.94, 115.92)	1.57 (-150.59, 162.57)	-27.46 (-118.08, 63.39)	-61.78 (-162.57, 39.68)	-10.91 (-91.71, 63.39)	-45.78 (-118.08, 27.46)	-16.84 (-91.71, 61.42)	-4.73 (-82.36, 72.91)	-12.03 (-98.67, 72.91)	-39.68 (-161.29, 83.01)	Sd.Placebo	-62.98 (-95.12, 56.74)							
-16.84 (-174.52, 141.34)	-32.02 (-180.07, 108.85)	-50.71 (-218.39, 112.66)	-53.00 (-204.81, 95.12)	-50.71 (-218.39, 112.66)	-62.98 (-183.55, 56.74)	-67.13 (-221.72, 80.15)	Doxycycline	-27.46 (-118.08, 63.39)	-61.78 (-162.57, 39.68)	-33.91 (-156.94, 81.43)	-19.66 (-106.58, 142.22)	-22.56 (-160.81, 110.84)	-39.68 (-161.29, 83.01)	-10.91 (-154.66, 129.74)	-53.00 (-95.12, 204.81)	Sd.Triamcinolone							
-28.73 (-153.31, 86.54)	-45.35 (-118.53, 24.07)	-61.42 (-225.25, 98.20)	-65.92 (-253.94, 115.92)	1.57 (-150.59, 162.57)	-27.46 (-118.08, 63.39)	-61.78 (-162.57, 39.68)	-10.91 (-91.71, 63.39)	-45.78 (-118.08, 27.46)	-16.84 (-91.71, 61.42)	-4.73 (-82.36, 72.91)	-12.03 (-98.67, 72.91)	-39.68 (-161.29, 83.01)	-10.91 (-154.66, 129.74)	-53.00 (-95.12, 204.81)	Sd.TriesterGlycerolOxide								
-34.07 (-184.25, 113.60)	-50.31 (-182.54, 78.40)	18.01 (-82.84, 118.08)	-10.91 (-91.71, 63.39)	-45.78 (-118.08, 27.46)	-16.84 (-91.71, 61.42)	-4.73 (-82.36, 72.91)	-12.03 (-98.67, 72.91)	-39.68 (-161.29, 83.01)	-10.91 (-154.66, 129.74)	-53.00 (-95.12, 204.81)	Sd.Triamcinolone													
34.27 (-99.18, 167.25)	18.01 (-82.84, 118.08)	1.57 (-150.59, 162.57)	-27.46 (-118.08, 63.39)	-61.78 (-162.57, 39.68)	-10.91 (-91.71, 63.39)	-45.78 (-118.08, 27.46)	-16.84 (-91.71, 61.42)	-4.73 (-82.36, 72.91)	-12.03 (-98.67, 72.91)	-39.68 (-161.29, 83.01)	-10.91 (-154.66, 129.74)	-53.00 (-95.12, 204.81)	Sd.TriesterGlycerolOxide											

18.75 (-115.94, 157.93)	-20.59 (-133.50, 91.01)	45.94 (-142.21, 232.01)	30.01 (-98.81, 163.01)	14.38 (-135.69, 168.28)	4.76 (-91.04, 101.83)	-35.19 (-89.70, 19.92)	32.22 (-128.75, 186.67)	16.42 (-71.32, 108.37)	0.41 (-116.18, 115.64)	-6.07 (-134.89, 126.36)	-46.12 (-149.35, 57.92)	21.57 (-86.60, 131.68)	6.08 (-97.44, 108.39)	-10.39 (-144.52, 126.56)	22.56 (-110.84, 160.81)	-17.18 (-125.24, 92.99)	51.58 (-139.03, 236.70)	35.25 (-95.16, 165.69)	19.91 (-127.10, 165.20)	20.29 (-125.29, 176.66)	-19.66 (-142.22, 106.58)	48.24 (-143.13, 247.17)	32.02 (-108.85, 180.07)	16.84 (-141.34, 174.52)	33.91 (-81.43, 156.94)	-7.88 (-92.36, 80.06)	61.42 (-98.20, 225.25)	45.35 (-24.07, 118.53)	28.73 (-86.54, 153.31)	38.10 (-98.67, 172.96)	-1.32 (-112.57, 108.84)	65.92 (-115.92, 253.94)	50.31 (-78.40, 182.54)	34.07 (-113.60, 184.25)	-29.21 (-159.67, 100.74)	-68.89 (-175.38, 32.28)	-1.57 (-162.57, 150.59)	-18.01 (-118.08, 82.84)	-34.27 (-167.25, 99.18)	40.13 (-37.62, 121.23)	-40.13 (-121.23, 37.62)	28.06 (-143.14, 194.84)	11.78 (-94.73, 119.10)	-4.63 (-133.32, 124.61)	-28.06 (-194.84, 143.14)	-67.43 (-215.71, 82.80)	67.43 (-82.80, 215.71)	-15.38 (-161.40, 132.40)	-32.23 (-203.02, 143.53)	-11.78 (-119.10, 94.73)	-51.77 (-125.45, 16.77)	15.38 (-132.40, 161.40)	51.77 (-16.77, 125.45)	35.39 (-65.20, 138.28)	4.63 (-124.61, 133.32)	-35.39 (-138.28, 65.20)	32.23 (-143.53, 203.02)	16.43 (-84.08, 118.37)	-16.43 (-118.37, 84.08)
Laser	Placebo	Quercetin	Triamcinolone	Triester Glycerol Oxide

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Curcumin, Placebo, Triamcinolone	0.78 (-85.57, 87.20)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	48.70 (27.52, 92.50)
Inconsistency Standard Deviation	45.97 (2.49, 106.18)

2.4 Convergence Diagnostics

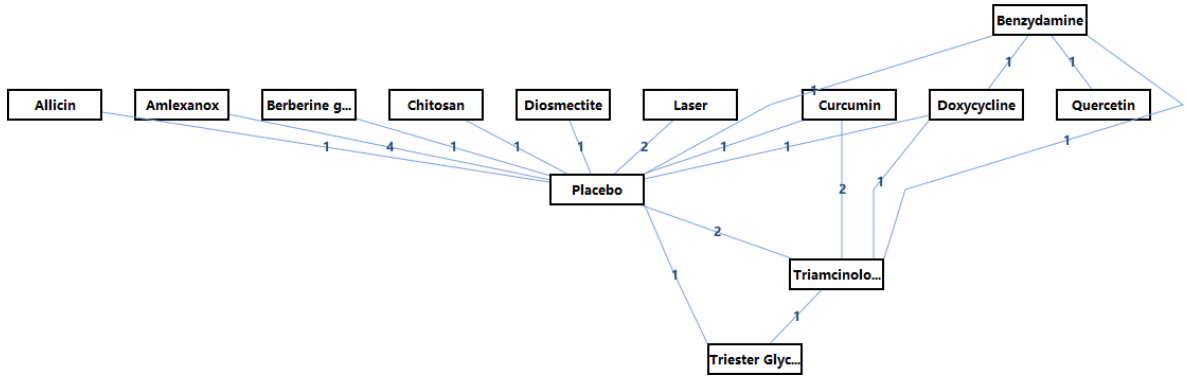
Parameter	PSRF
d.Allicin.Placebo	1.00
d.Benzydamine.Doxycycline	1.00
d.Benzydamine.Quercetin	1.00
d.Benzydamine.Triamcinolone	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Benzydamine	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Laser	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
w.Curcumin.Placebo.Triamcinolo...	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Benzydamine, Placebo	-72.90 (-176.97, 26.31)	10.29 (-114.57, 130.70)	-45.62 (-152.46, 49.84)	0.23
Benzydamine, Triamcinolone	31.20 (-69.80, 130.93)	-51.46 (-176.19, 82.66)	5.15 (-97.84, 102.31)	0.27
Curcumin, Placebo	-10.02 (-130.15, 112.82)	-5.08 (-120.90, 122.67)	-7.03 (-81.84, 70.13)	0.94
Curcumin, Triamcinolone	46.37 (-36.96, 135.10)	41.15 (-103.00, 185.63)	43.80 (-20.79, 116.47)	0.95
Placebo, Triamcinolone	51.33 (-31.39, 135.71)	56.45 (-90.55, 210.36)	51.01 (-12.04, 118.39)	0.94

4. Network structure



Day 5

1. Consistency Model

1.1 Summary estimates

Aloe	-13.05 (-88.43, 64.92)	16.56 (-67.88, 106.20)	-21.20 (-131.48, 88.41)	-9.27 (-84.95, 66.32)	-6.15 (-81.28, 77.48)	18.85 (-50.32, 86.31)	-3.45 (-81.59, 75.66)	-14.27 (-81.83, 53.69)	-24.17 (-129.59, 80.23)
13.05 (-64.92, 88.43)	Amlexanox	28.84 (-38.42, 102.36)	-9.21 (-87.94, 68.07)	3.72 (-49.81, 56.13)	6.39 (-45.74, 67.85)	32.02 (-14.28, 74.58)	9.37 (-51.75, 67.45)	-1.43 (-51.32, 48.83)	-11.57 (-104.64, 77.37)
-16.56 (-106.20, 67.88)	-28.84 (-102.36, 38.42)	Curcumin	-38.25 (-148.31, 64.60)	-24.91 (-103.01, 47.08)	-21.93 (-95.21, 53.63)	2.51 (-70.56, 67.22)	-19.98 (-96.65, 51.45)	-30.97 (-84.24, 17.80)	-40.97 (-150.51, 58.46)
21.20 (-88.41, 131.48)	9.21 (-68.07, 87.94)	38.25 (-64.60, 148.31)	Dexamethasone	13.04 (-79.97, 107.16)	15.79 (-75.37, 116.22)	41.05 (-49.79, 130.22)	19.16 (-80.36, 115.57)	7.69 (-84.67, 99.72)	-2.38 (-125.11, 117.78)
9.27 (-66.32, 84.95)	-3.72 (-56.13, 49.81)	24.91 (-47.08, 103.01)	-13.04 (-107.16, 79.97)	Glycyrrhiza	2.80 (-48.35, 61.98)	27.79 (-10.89, 64.32)	5.47 (-52.12, 62.40)	-5.43 (-61.89, 48.05)	-15.21 (-103.74, 69.05)
6.15 (-77.48, 81.28)	-6.39 (-67.85, 45.74)	21.93 (-53.63, 95.21)	-15.79 (-116.22, 75.37)	-2.80 (-61.98, 48.35)	Laser	24.96 (-29.55, 70.08)	2.57 (-66.53, 62.69)	-8.40 (-67.32, 43.48)	-18.53 (-116.88, 67.67)
-18.85 (-86.31, 50.32)	-32.02 (-74.58, 14.28)	-2.51 (-67.22, 70.56)	-41.05 (-130.22, 49.79)	-27.79 (-64.32, 10.89)	-24.96 (-70.08, 29.55)	Placebo	-22.30 (-67.26, 22.82)	-33.73 (-76.79, 11.82)	-43.36 (-120.28, 33.67)

-21.11 (-112.74, 69.51)	-11.33 (-65.10, 42.80)	Probiotics	22.30 (-22.82, 67.26)	-2.57 (-62.69, 66.53)	-5.47 (-62.40, 52.12)	-19.16 (-115.57, 80.36)	19.98 (-51.45, 96.65)	-9.37 (-67.45, 51.75)	3.45 (-75.66, 81.59)
-10.07 (-102.61, 78.37)	Triamcinolone	11.33 (-42.80, 65.10)	33.73 (-11.82, 76.79)	8.40 (-43.48, 67.32)	5.43 (-48.05, 61.89)	-7.69 (-99.72, 84.67)	30.97 (-17.80, 84.24)	1.43 (-48.83, 51.32)	14.27 (-53.69, 81.83)
Zinc	10.07 (-78.37, 102.61)	21.11 (-69.51, 112.74)	43.36 (-33.67, 120.28)	18.53 (-67.67, 116.88)	15.21 (-69.05, 103.74)	2.38 (-117.78, 125.11)	40.97 (-58.46, 150.51)	11.57 (-77.37, 104.64)	24.17 (-80.23, 129.59)

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10
Aloe	0.08	0.09	0.08	0.08	0.09	0.09	0.11	0.12	0.13	0.13
Amlexanox	0.04	0.14	0.17	0.17	0.16	0.13	0.1	0.06	0.03	0.01
Curcumin	0.02	0.03	0.04	0.05	0.06	0.08	0.1	0.12	0.17	0.33
Dexamethasone	0.31	0.15	0.09	0.07	0.06	0.06	0.06	0.06	0.06	0.09
Glycyrrhiza	0.05	0.11	0.13	0.14	0.14	0.15	0.12	0.09	0.05	0.01
Laser	0.06	0.1	0.11	0.12	0.12	0.13	0.12	0.11	0.08	0.05
Placebo	0	0	0	0.01	0.03	0.06	0.11	0.21	0.31	0.27
Probiotics	0.04	0.08	0.1	0.11	0.12	0.13	0.14	0.13	0.09	0.05
Triamcinolone	0.07	0.15	0.18	0.17	0.16	0.12	0.08	0.04	0.02	0
Zinc	0.33	0.15	0.09	0.07	0.06	0.06	0.06	0.06	0.05	0.06

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	33.43 (19.44, 62.54)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Amlexanox.Dexamethasone	1.00
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Laser	1.00
d.Placebo.Probiotics	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Abe	3.32 (-75.78, 83.10)	-16.74 (-110.99, 70.28)	12.36 (-93.42, 118.62)	-13.83 (-101.68, 71.89)	-2.37 (-88.08, 76.10)	-18.45 (-83.23, 46.43)	13.89 (-76.28, 103.91)	14.63 (-49.73, 78.88)	24.30 (-73.32, 118.91)
-3.32 (-83.10, 75.78)	Amlexanox	-21.39 (-100.44, 54.75)	9.10 (-61.95, 81.08)	-17.91 (-70.75, 38.25)	-5.56 (-63.69, 45.34)	-22.45 (-69.31, 29.32)	9.36 (-65.45, 90.23)	7.35 (-47.31, 62.73)	21.37 (-66.40, 109.00)
16.74 (-70.28, 110.99)	21.39 (-54.75, 100.44)	Curcumin	29.82 (-72.10, 138.02)	3.30 (-79.96, 91.75)	14.35 (-59.68, 89.67)	-1.53 (-73.42, 75.08)	31.04 (-42.77, 109.29)	29.64 (-15.53, 80.58)	41.42 (-60.57, 146.89)
-12.36 (-118.62, 93.42)	-9.10 (-81.08, 61.95)	-29.82 (-138.02, 72.10)	Dexamethasone	-27.22 (-115.64, 65.04)	-14.61 (-109.66, 72.74)	-30.77 (-118.32, 57.33)	1.36 (-104.75, 106.46)	0.06 (-93.20, 93.44)	12.84 (-100.78, 122.83)
13.83 (-71.89, 101.68)	17.91 (-38.25, 70.75)	-3.30 (-91.75, 79.96)	27.22 (-65.04, 115.64)	Glycyrrhiza	12.31 (-53.09, 64.89)	-32.68 (-65.45, 3.49)	26.90 (-54.85, 116.96)	26.17 (-42.56, 96.38)	38.66 (-54.81, 131.27)
2.37 (-76.10, 88.08)	5.56 (-45.34, 63.69)	-14.35 (-89.67, 59.68)	14.61 (-72.74, 109.66)	-12.31 (-64.89, 53.09)	Laser	4.41 (-63.29, 96.57)	16.34 (-56.80, 96.15)	15.14 (-39.34, 75.07)	26.82 (-61.57, 121.17)
18.45 (-46.43, 83.23)	22.45 (-29.32, 69.31)	1.53 (-75.08, 73.42)	30.77 (-57.33, 118.32)	32.68 (-3.49, 65.45)	-4.41 (-96.57, 63.29)	Placebo	16.77 (-26.67, 63.72)	29.87 (-72.72, 132.38)	43.03 (-28.15, 115.81)
-13.89 (-103.91, 76.28)	-9.36 (-90.23, 65.45)	-31.04 (-109.29, 42.77)	-1.36 (-106.46, 104.75)	-26.90 (-116.96, 54.85)	-16.34 (-96.15, 56.80)	-16.77 (-63.72, 26.67)	Probiotics	-1.84 (-61.20, 58.73)	9.78 (-89.72, 109.72)
-14.63 (-78.68, 49.73)	-7.35 (-62.73, 47.31)	-29.64 (-80.58, 15.53)	-0.06 (-93.44, 93.20)	-26.17 (-96.38, 42.56)	-15.14 (-75.07, 39.34)	-29.87 (-132.38, 72.72)	1.84 (-58.73, 61.20)	Triamcinolone	10.95 (-79.04, 103.77)
-24.30 (-118.91, 73.32)	-21.37 (-109.00, 66.40)	-41.42 (-146.89, 60.57)	-12.84 (-122.83, 100.78)	-38.66 (-131.27, 54.81)	-26.82 (-121.17, 61.57)	-43.03 (-115.81, 28.15)	-9.78 (-109.72, 89.72)	-10.95 (-103.77, 79.04)	Zinc

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Amlexanox, Glycyrrhiza, Placebo	-24.97 (-88.02, 19.55)
Amlexanox, Laser, Placebo	15.95 (-36.44, 110.28)
Amlexanox, Laser, Triamcinolone	0.54 (-55.45, 64.80)
Amlexanox, Laser, Placebo, Triamcinolone	1.13 (-55.54, 61.19)
Amlexanox, Laser, Placebo, Probiotics, Triamcinolone	10.65 (-42.90, 89.06)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	30.03 (14.97, 59.34)
Inconsistency Standard Deviation	34.85 (3.35, 87.39)

2.4 Convergence Diagnostics

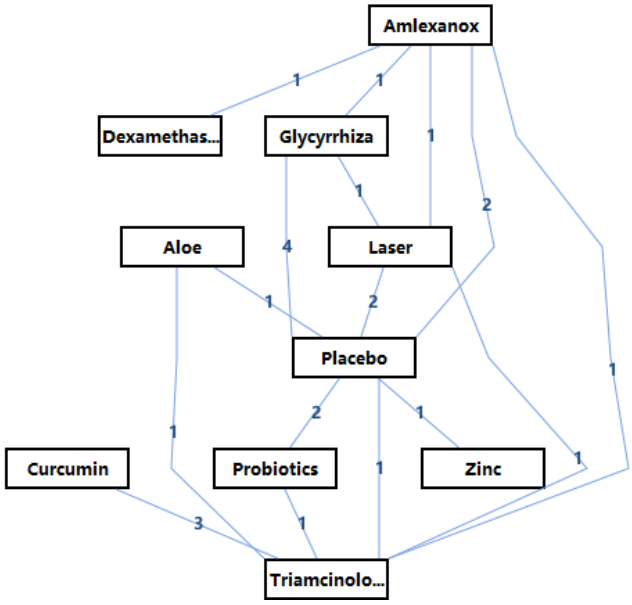
Parameter	PSRF
d.Aloe.Placebo	1.00
d.Amlexanox.Dexamethasone	1.00
d.Amlexanox.Glycyrrhiza	1.00
d.Glycyrrhiza.Laser	1.00
d.Laser.Triamcinolone	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Probiotics	1.00
w.Amlexanox.Glycyrrhiza.Placebo	1.00
w.Amlexanox.Laser.Placebo	1.00
w.Amlexanox.Laser.Triamcinolone	1.00
w.Amlexanox.Laser.Triamcinolon...	1.00
w.Amlexanox.Laser.Triamcinolon...	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Amlexanox, Glycyrrhiza	-14.55 (-96.93, 66.57)	-1.23 (-69.58, 69.12)	-3.72 (-56.13, 49.81)	0.79
Amlexanox, Laser	10.24 (-59.68, 77.49)	-56.43 (-132.79, 18.07)	-6.39 (-67.85, 45.74)	0.17
Amlexanox, Placebo	-44.02 (-98.67, 9.64)	-16.18 (-76.22, 48.61)	-32.02 (-74.58, 14.28)	0.46
Amlexanox, Triamcinolone	8.69 (-74.93, 91.39)	-4.71 (-81.18, 69.16)	1.43 (-48.83, 51.32)	0.79
Glycyrrhiza, Laser	22.52 (-45.28, 91.87)	-53.33 (-132.35, 21.65)	-2.80 (-61.98, 48.35)	0.12
Laser, Placebo	-39.77 (-98.34, 36.30)	-24.69 (-87.00, 42.32)	-24.96 (-70.08, 29.55)	0.71
Laser, Triamcinolone	29.34 (-55.66, 115.59)	-5.56 (-74.37, 75.58)	8.40 (-43.48, 67.32)	0.52
Placebo, Probiotics	10.55 (-43.57, 65.00)	60.79 (-36.75, 151.55)	22.30 (-22.82, 67.26)	0.32
Placebo, Triamcinolone	35.39 (-47.22, 117.45)	31.70 (-30.73, 91.02)	33.73 (-11.82, 76.79)	0.93
Probiotics, Triamcinolone	-16.45 (-96.23, 63.34)	32.79 (-41.72, 105.53)	11.33 (-42.80, 65.10)	0.32

4. Network structure



Day 6

1. Consistency Model

1.1 Summary estimates

Allicin	10.62 (-115.02, 141.93)	27.47 (-78.94, 133.87)	-1.06 (-127.34, 128.88)	16.04 (-123.64, 156.62)	-76.58 (-226.85, 75.07)	7.24 (-124.72, 134.20)	
-10.62 (-141.93, 115.02)	Aloe	17.33 (-92.79, 122.57)	-12.28 (-142.02, 119.28)	5.97 (-134.45, 146.99)	-87.96 (-240.46, 67.43)	-3.31 (-137.94, 126.47)	
-27.47 (-133.87, 78.94)	-17.33 (-122.57, 92.79)	Amlexanox	-28.99 (-133.51, 76.27)	-11.59 (-129.64, 105.09)	-104.27 (-232.08, 25.46)	-20.26 (-126.51, 84.91)	
1.06 (-128.88, 127.34)	12.28 (-119.28, 142.02)	28.99 (-76.27, 133.51)	Berberine gelatin	16.98 (-121.13, 158.36)	-75.47 (-224.60, 77.28)	8.31 (-121.30, 133.73)	
-16.04 (-156.62, 123.64)	-5.97 (-146.99, 134.45)	11.59 (-105.09, 129.64)	-16.98 (-158.36, 121.13)	Chitosan	-93.20 (-251.02, 70.67)	-8.81 (-150.16, 128.52)	
76.58 (-75.07, 226.85)	87.96 (-67.43, 240.46)	104.27 (-25.46, 232.08)	75.47 (-77.28, 224.60)	93.20 (-70.67, 251.02)	Curcumin	83.96 (-67.54, 230.58)	
-7.24 (-134.20, 124.72)	3.31 (-126.47, 137.94)	20.26 (-84.91, 126.51)	-8.31 (-133.73, 121.30)	8.81 (-128.52, 150.16)	-83.96 (-230.58, 67.54)	Dexamethasone	
2.37 (-128.74, 129.38)	12.45 (-116.69, 141.42)	29.28 (-79.34, 132.96)	0.33 (-131.43, 130.79)	18.13 (-123.93, 156.45)	-75.10 (-228.50, 77.44)	8.05 (-122.98, 138.77)	
-27.89 (-159.12, 104.53)	-17.56 (-146.96, 119.53)	-0.37 (-111.21, 112.61)	-29.80 (-159.05, 103.90)	-12.46 (-155.02, 133.16)	-104.20 (-254.35, 51.04)	-21.47 (-155.41, 116.26)	
17.28 (-74.19, 106.72)	27.55 (-63.95, 120.59)	44.22 (-9.12, 97.63)	15.79 (-73.73, 105.29)	32.72 (-74.19, 136.98)	-59.55 (-177.74, 61.18)	23.83 (-67.01, 115.54)	
-1.74 (-114.62, 105.10)	8.58 (-108.35, 122.61)	25.41 (-58.39, 107.82)	-3.05 (-114.99, 107.60)	14.16 (-110.94, 137.64)	-78.53 (-177.30, 20.89)	4.52 (-110.37, 117.64)	
-2.17 (-125.08, 120.70)	7.56 (-115.17, 136.08)	24.95 (-76.76, 125.24)	-3.61 (-128.51, 121.62)	14.26 (-122.55, 148.81)	-79.47 (-206.41, 53.41)	4.87 (-122.34, 126.05)	

-2.37 (-129.38, 128.74)	27.89 (-104.53, 159.12)	-17.28 (-106.72, 74.19)	1.74 (-105.10, 114.62)	2.17 (-120.70, 125.08)	-4.87 (-126.05, 122.34)	79.47 (-53.41, 206.41)	-14.26 (-148.81, 122.55)	3.61 (-121.62, 128.51)	-24.95 (-125.24, 76.76)	-7.56 (-136.08, 115.17)	-4.51 (-128.72, 125.14)	Triester Glycerol Oxide
-12.45 (-141.42, 116.69)	17.56 (-119.53, 146.96)	-27.55 (-120.59, 63.95)	-8.58 (-122.61, 108.35)	1.74 (-105.10, 114.62)	-4.52 (-117.64, 110.37)	78.53 (-20.89, 177.30)	-14.16 (-137.64, 110.94)	3.05 (-107.60, 114.99)	-25.41 (-107.82, 58.39)	-8.58 (-122.61, 108.35)	-3.98 (-115.58, 111.06)	Triamcinolone
-29.28 (-132.96, 79.34)	0.37 (-112.61, 111.21)	-44.22 (-97.63, 9.12)	-27.55 (-120.59, 63.95)	-17.28 (-106.72, 74.19)	-23.83 (-115.54, 67.01)	59.55 (-61.18, 177.74)	-32.72 (-136.98, 74.19)	-15.79 (-105.29, 73.73)	-44.22 (-97.63, 9.12)	-27.55 (-120.59, 63.95)	-18.87 (-86.53, 46.25)	Placebo
-0.33 (-130.79, 131.43)	29.80 (-103.90, 159.05)	-15.79 (-105.29, 73.73)	3.05 (-107.60, 114.99)	3.61 (-121.62, 128.51)	-4.87 (-126.05, 122.34)	79.47 (-53.41, 206.41)	-14.26 (-148.81, 122.55)	3.61 (-121.62, 128.51)	-24.95 (-125.24, 76.76)	-7.56 (-136.08, 115.17)	0.91 (-85.34, 85.89)	Triester Glycerol Oxide
-18.13 (-156.45, 123.93)	12.46 (-133.16, 155.02)	-32.72 (-136.98, 74.19)	-14.16 (-137.64, 110.94)	-14.26 (-148.81, 122.55)	-4.52 (-117.64, 110.37)	78.53 (-20.89, 177.30)	-14.16 (-137.64, 110.94)	3.05 (-107.60, 114.99)	-25.41 (-107.82, 58.39)	-8.58 (-122.61, 108.35)	18.87 (-46.25, 86.53)	Triamcinolone
75.10 (-77.44, 228.50)	104.20 (-51.04, 254.35)	59.55 (-61.18, 177.74)	78.53 (-20.89, 177.30)	79.47 (-53.41, 206.41)	59.55 (-61.18, 177.74)	-23.83 (-115.54, 67.01)	-32.72 (-136.98, 74.19)	-15.79 (-105.29, 73.73)	-44.22 (-97.63, 9.12)	-27.55 (-120.59, 63.95)	-45.27 (-139.60, 55.49)	Placebo
-8.05 (-138.77, 122.98)	21.47 (-116.26, 155.41)	-23.83 (-115.54, 67.01)	-4.52 (-117.64, 110.37)	-4.87 (-126.05, 122.34)	-4.52 (-117.64, 110.37)	-4.52 (-117.64, 110.37)	-14.16 (-137.64, 110.94)	3.05 (-107.60, 114.99)	-25.41 (-107.82, 58.39)	-8.58 (-122.61, 108.35)	-26.39 (-140.75, 93.45)	Laser
-30.09 (-161.28, 106.17)	30.09 (-106.17, 161.28)	-15.12 (-108.35, 76.35)	3.98 (-111.06, 115.58)	4.51 (-125.14, 128.72)	-4.52 (-117.64, 110.37)	78.53 (-20.89, 177.30)	-14.16 (-137.64, 110.94)	3.05 (-107.60, 114.99)	-25.41 (-107.82, 58.39)	-8.58 (-122.61, 108.35)	18.87 (-46.25, 86.53)	Diosmectite
15.12 (-76.35, 108.35)	45.27 (-55.49, 139.60)	-45.27 (-139.60, 55.49)	-26.39 (-140.75, 93.45)	-25.62 (-151.09, 105.28)	-4.87 (-126.05, 122.34)	79.47 (-53.41, 206.41)	-14.26 (-148.81, 122.55)	3.61 (-121.62, 128.51)	-24.95 (-125.24, 76.76)	-7.56 (-136.08, 115.17)	19.47 (-64.48, 103.92)	Laser
-3.98 (-115.58, 111.06)	26.39 (-93.45, 140.75)	-18.87 (-86.53, 46.25)	18.87 (-46.25, 86.53)	19.47 (-64.48, 103.92)	-4.87 (-126.05, 122.34)	79.47 (-53.41, 206.41)	-14.26 (-148.81, 122.55)	3.61 (-121.62, 128.51)	-24.95 (-125.24, 76.76)	-7.56 (-136.08, 115.17)	0.91 (-85.34, 85.89)	Placebo
-4.51 (-128.72, 125.14)	25.62 (-105.28, 151.09)	-19.47 (-103.92, 64.48)	-0.91 (-85.89, 85.34)	-19.47 (-103.92, 64.48)	-4.87 (-126.05, 122.34)	79.47 (-53.41, 206.41)	-14.26 (-148.81, 122.55)	3.61 (-121.62, 128.51)	-24.95 (-125.24, 76.76)	-7.56 (-136.08, 115.17)	-19.47 (-103.92, 64.48)	Triamcinolone

1.2 Rank probability(**Rank 1 is best, rank N is worst**)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12
Allicin	0.06	0.07	0.08	0.08	0.09	0.1	0.09	0.08	0.09	0.09	0.11	0.05
Aloe	0.1	0.11	0.11	0.1	0.1	0.09	0.08	0.08	0.06	0.06	0.07	0.03
Amlexanox	0.12	0.19	0.18	0.16	0.12	0.09	0.06	0.03	0.02	0.01	0.01	0
Berberine gelatin	0.06	0.07	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.1	0.11	0.05
Chitosan	0.19	0.11	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.07	0.09	0.05
Curcumin	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.06	0.12	0.67
Dexamethasone	0.09	0.1	0.1	0.1	0.1	0.09	0.08	0.08	0.08	0.08	0.08	0.04
Diosmectite	0.06	0.07	0.07	0.08	0.09	0.09	0.09	0.09	0.09	0.1	0.12	0.05
Laser	0.24	0.15	0.12	0.09	0.08	0.07	0.06	0.05	0.04	0.04	0.04	0.02
Placebo	0	0	0	0	0.02	0.06	0.12	0.2	0.26	0.21	0.11	0.01
Triamcinolone	0.02	0.05	0.08	0.11	0.12	0.13	0.13	0.11	0.1	0.09	0.05	0
Triester Glycerol Oxide	0.05	0.07	0.08	0.1	0.1	0.11	0.1	0.1	0.09	0.09	0.09	0.03

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	37.38 (15.59, 76.19)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Allicin	1.00
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Laser	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.TriesterGlycerolOxide	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Allicin	11.02 (-116.41, 138.17)	26.38 (-81.98, 133.32)	-0.79 (-131.28, 129.26)	14.32 (-129.90, 156.87)	-77.66 (-228.47, 80.35)	6.76 (-124.28, 137.60)	-2.32 (-134.97, 128.16)	-11.02 (-138.17, 116.41)	11.02 (-116.41, 138.17)
-11.02 (-138.17, 116.41)	Aloe	15.64 (-92.45, 118.23)	-13.02 (-140.21, 119.51)	4.33 (-134.66, 145.26)	-88.94 (-236.22, 64.72)	-3.98 (-133.20, 125.94)	-13.14 (-142.28, 115.91)	-26.38 (-133.32, 81.98)	-15.64 (-118.23, 92.45)
-26.38 (-133.32, 81.98)	-15.64 (-118.23, 92.45)	Amlexanox	-28.21 (-131.32, 79.57)	-11.61 (-128.42, 111.64)	-104.26 (-232.83, 35.63)	-19.35 (-125.36, 89.58)	-29.13 (-132.43, 78.73)	0.79 (-129.26, 131.28)	13.02 (-119.51, 140.21)
0.79 (-129.26, 131.28)	13.02 (-119.51, 140.21)	28.21 (-79.57, 131.32)	Berberine gelatin	15.94 (-123.28, 156.78)	-76.58 (-223.88, 77.08)	7.64 (-122.35, 140.77)	-0.99 (-130.73, 131.28)	-14.32 (-156.87, 129.90)	-4.33 (-145.26, 134.66)
-14.32 (-156.87, 129.90)	-4.33 (-145.26, 134.66)	11.61 (-111.64, 128.42)	-15.94 (-156.78, 123.28)	Chitosan	-91.50 (-253.93, 71.75)	-8.93 (-150.75, 131.94)	-17.35 (-158.01, 123.59)	77.66 (-80.35, 228.47)	88.94 (-64.72, 236.22)
77.66 (-80.35, 228.47)	88.94 (-64.72, 236.22)	104.26 (-35.63, 232.83)	76.58 (-77.08, 223.88)	91.50 (-71.75, 253.93)	Curcumin	85.64 (-74.74, 236.95)	75.67 (-77.29, 223.91)	-6.76 (-137.60, 124.28)	3.98 (-125.94, 133.20)
-6.76 (-137.60, 124.28)	3.98 (-125.94, 133.20)	19.35 (-89.58, 125.36)	-7.64 (-140.77, 122.35)	8.93 (-131.94, 150.75)	-85.64 (-236.95, 74.74)	Dexamethasone	-9.06 (-139.83, 120.66)	2.32 (-128.16, 134.97)	13.14 (-115.91, 142.28)
2.32 (-128.16, 134.97)	13.14 (-115.91, 142.28)	29.13 (-78.73, 132.43)	0.99 (-131.28, 130.73)	17.35 (-123.59, 158.01)	-75.67 (-223.91, 77.29)	9.06 (-120.66, 139.83)	Diosmectite	-27.16 (-165.93, 109.42)	-16.33 (-153.62, 115.27)
-27.16 (-165.93, 109.42)	-16.33 (-153.62, 115.27)	-0.49 (-114.89, 108.54)	-29.07 (-165.14, 107.03)	-12.50 (-156.59, 132.81)	-104.23 (-262.11, 52.96)	-20.49 (-158.08, 117.93)	-29.90 (-168.42, 104.95)	17.52 (-75.60, 110.39)	28.60 (-63.60, 120.12)
17.52 (-75.60, 110.39)	28.60 (-63.60, 120.12)	44.26 (-12.35, 95.21)	16.02 (-73.85, 107.74)	32.91 (-73.57, 141.03)	-59.66 (-176.85, 63.54)	24.42 (-67.05, 116.81)	15.42 (-76.81, 108.33)	-1.07 (-117.50, 113.23)	9.60 (-101.39, 120.61)
-1.07 (-117.50, 113.23)	9.60 (-101.39, 120.61)	25.36 (-61.67, 106.44)	-2.35 (-113.55, 109.98)	13.77 (-112.56, 139.67)	-78.85 (-179.98, 23.50)	5.47 (-112.01, 118.98)	-3.66 (-119.12, 110.15)	-1.41 (-130.92, 124.43)	9.48 (-115.20, 132.44)
-1.41 (-130.92, 124.43)	9.48 (-115.20, 132.44)	25.13 (-78.83, 124.35)	-3.17 (-129.49, 123.52)	13.17 (-126.36, 151.37)	-78.80 (-212.67, 55.41)	5.12 (-122.42, 134.34)	-4.08 (-133.47, 122.16)		

27.16 (-109.42, 165.93)	-17.52 (-110.39, 75.60)	1.07 (-113.23, 117.50)	1.41 (-124.43, 130.92)	-9.48 (-132.44, 115.20)	-25.13 (-124.35, 78.83)	-9.60 (-120.61, 101.39)	-25.36 (-106.44, 61.67)	-13.77 (-139.67, 112.56)	2.35 (-109.98, 113.55)	3.17 (-123.52, 129.49)	-13.17 (-151.37, 126.36)	Triester Glycerol Oxide
16.33 (-115.27, 153.62)	-28.60 (-120.12, 63.60)	-9.60 (-120.61, 101.39)	-9.48 (-132.44, 115.20)	-25.13 (-124.35, 78.83)	-44.26 (-95.21, 12.35)	-25.36 (-106.44, 61.67)	-32.91 (-141.03, 73.57)	-16.02 (-107.74, 73.85)	-44.26 (-95.21, 12.35)	-16.02 (-107.74, 73.85)	-32.91 (-141.03, 73.57)	Triamcinolone
0.49 (-108.54, 114.89)	-44.26 (-95.21, 12.35)	-25.36 (-106.44, 61.67)	-25.13 (-124.35, 78.83)	-9.48 (-132.44, 115.20)	-45.02 (-145.41, 53.44)	-25.36 (-106.44, 61.67)	-32.91 (-141.03, 73.57)	-16.02 (-107.74, 73.85)	-45.02 (-145.41, 53.44)	-16.02 (-107.74, 73.85)	-32.91 (-141.03, 73.57)	Placebo
29.07 (-107.03, 165.14)	-16.02 (-107.74, 73.85)	2.35 (-109.98, 113.55)	3.17 (-123.52, 129.49)	-16.02 (-107.74, 73.85)	-16.02 (-107.74, 73.85)	2.35 (-109.98, 113.55)	3.17 (-123.52, 129.49)	-13.17 (-151.37, 126.36)	3.17 (-123.52, 129.49)	3.17 (-123.52, 129.49)	-13.17 (-151.37, 126.36)	Laser
12.50 (-132.81, 156.59)	-32.91 (-141.03, 73.57)	-13.77 (-139.67, 112.56)	-13.17 (-151.37, 126.36)	-32.91 (-141.03, 73.57)	-32.91 (-141.03, 73.57)	-13.77 (-139.67, 112.56)	-13.17 (-151.37, 126.36)	-32.91 (-141.03, 73.57)	-13.17 (-151.37, 126.36)	-32.91 (-141.03, 73.57)	-13.17 (-151.37, 126.36)	Diosmectite
104.23 (-52.96, 262.11)	59.66 (-63.54, 176.85)	78.85 (-23.50, 179.98)	78.80 (-55.41, 212.67)	59.66 (-63.54, 176.85)	59.66 (-63.54, 176.85)	78.85 (-23.50, 179.98)	78.80 (-55.41, 212.67)	59.66 (-63.54, 176.85)	78.80 (-55.41, 212.67)	59.66 (-63.54, 176.85)	78.80 (-55.41, 212.67)	Dexamethasone
20.49 (-117.93, 158.08)	-24.42 (-116.81, 67.05)	-5.47 (-118.98, 112.01)	-5.12 (-134.34, 122.42)	-24.42 (-116.81, 67.05)	-24.42 (-116.81, 67.05)	-5.47 (-118.98, 112.01)	-5.12 (-134.34, 122.42)	-24.42 (-116.81, 67.05)	-5.12 (-134.34, 122.42)	-24.42 (-116.81, 67.05)	-5.12 (-134.34, 122.42)	Chitosan
29.90 (-104.95, 168.42)	-15.42 (-108.33, 76.81)	3.66 (-110.15, 119.12)	4.08 (-122.16, 133.47)	-15.42 (-108.33, 76.81)	-15.42 (-108.33, 76.81)	3.66 (-110.15, 119.12)	4.08 (-122.16, 133.47)	-15.42 (-108.33, 76.81)	4.08 (-122.16, 133.47)	-15.42 (-108.33, 76.81)	4.08 (-122.16, 133.47)	Berberine gelatin
45.02 (-53.44, 145.41)	-45.02 (-145.41, 53.44)	19.00 (-44.19, 85.78)	-25.94 (-156.16, 104.19)	-19.00 (-85.78, 44.19)	-45.02 (-145.41, 53.44)	19.00 (-44.19, 85.78)	-25.94 (-156.16, 104.19)	-19.00 (-85.78, 44.19)	-45.02 (-145.41, 53.44)	-19.00 (-85.78, 44.19)	-25.94 (-156.16, 104.19)	Amlexanox
26.29 (-95.25, 144.49)	-19.00 (-85.78, 44.19)	-26.29 (-144.49, 95.25)	18.82 (-66.02, 107.07)	0.40 (-84.69, 85.98)	-19.00 (-85.78, 44.19)	-26.29 (-144.49, 95.25)	18.82 (-66.02, 107.07)	0.40 (-84.69, 85.98)	-19.00 (-85.78, 44.19)	0.40 (-84.69, 85.98)	18.82 (-66.02, 107.07)	Aloe
25.94 (-104.19, 156.16)	-18.82 (-107.07, 66.02)	-0.40 (-85.98, 84.69)	Triester Glycerol Oxide	0.40 (-84.69, 85.98)	18.82 (-66.02, 107.07)	-0.40 (-85.98, 84.69)	-5.12 (-134.34, 122.42)	3.17 (-123.52, 129.49)	-5.12 (-134.34, 122.42)	-5.47 (-118.98, 112.01)	4.08 (-122.16, 133.47)	Allicin

2.2 Variance Calculation

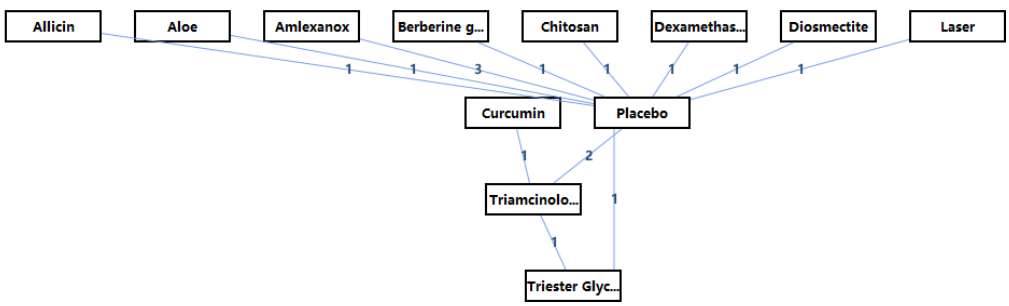
Parameter	Median (95% CI)
Random Effects Standard Deviation	37.78 (15.91, 76.37)
Inconsistency Standard Deviation	40.92 (1.92, 79.05)

2.4 Convergence Diagnostics

Parameter	PSRF
d.Allicin.Placebo	1.00
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Laser	1.00
d.Placebo.Triamcinolone	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Network structure



Day 7

1. Consistency Model

1.1 Summary estimates

Aloe	22.98 (-72.30, 116.68)	7.61 (-67.80, 87.05)	17.51 (-32.36, 69.90)	30.72 (-41.26, 103.68)	1.51 (-53.91, 54.32)	-1.49 (-40.02, 38.76)	19.31 (-62.63, 98.64)	11.29 (-36.97, 57.19)	10.57 (-60.92, 82.67)
-22.98 (-116.68, 72.30)	Anilexanox	-14.83 (-123.11, 94.37)	-5.20 (-99.55, 92.58)	7.85 (-52.11, 69.04)	-21.04 (-115.09, 74.25)	-24.15 (-107.89, 62.93)	-3.80 (-118.51, 113.03)	-11.90 (-106.25, 83.03)	-12.90 (-116.33, 92.88)
-7.61 (-87.05, 67.80)	14.83 (-94.37, 123.11)	Cryotherapy	9.45 (-67.42, 86.54)	22.95 (-69.11, 113.10)	-6.19 (-83.99, 69.68)	-8.97 (-74.43, 57.58)	11.29 (-89.63, 111.97)	3.13 (-73.53, 78.31)	2.09 (-85.42, 90.44)
-17.51 (-69.90, 32.36)	5.20 (-92.58, 99.55)	-9.45 (-86.54, 67.42)	Curcumin	13.29 (-62.43, 84.05)	-15.82 (-68.40, 32.76)	-18.81 (-58.53, 22.56)	1.58 (-70.79, 73.91)	-6.45 (-38.17, 23.82)	-7.93 (-79.71, 67.69)
-30.72 (-103.68, 41.26)	-7.85 (-69.04, 52.11)	-22.95 (-113.10, 69.11)	-13.29 (-84.05, 62.43)	Dexamethasone	-29.81 (-102.89, 44.40)	-31.99 (-91.88, 30.21)	-12.12 (-108.89, 86.68)	-19.79 (-92.09, 53.26)	-20.93 (-105.32, 65.72)
-1.51 (-54.32, 53.91)	21.04 (-74.25, 115.09)	6.19 (-69.68, 83.99)	15.82 (-32.76, 68.40)	29.81 (-44.40, 102.89)	Laser	-2.75 (-42.46, 39.73)	17.52 (-62.75, 98.25)	9.18 (-36.24, 56.85)	8.54 (-61.04, 82.65)
1.49 (-38.76, 40.02)	24.15 (-62.93, 107.89)	8.97 (-57.58, 74.43)	18.81 (-22.56, 58.53)	31.99 (-30.21, 91.88)	2.75 (-39.73, 42.46)	Placebo	20.48 (-57.48, 95.11)	12.40 (-27.35, 48.50)	11.27 (-48.66, 71.68)
-19.31 (-98.64, 62.63)	3.80 (-113.03, 118.51)	-11.29 (-111.97, 89.63)	-1.58 (-73.91, 70.79)	12.12 (-86.68, 108.89)	-17.52 (-98.25, 62.75)	-20.48 (-95.11, 57.48)	Probiotics	-8.36 (-72.45, 57.30)	-9.85 (-103.78, 90.18)
-11.29 (-57.19, 36.97)	11.90 (-83.03, 106.25)	-3.13 (-78.31, 73.53)	6.45 (-23.82, 38.17)	19.79 (-53.26, 92.09)	-9.18 (-56.85, 36.24)	-12.40 (-48.50, 27.35)	8.36 (-57.30, 72.45)	Triamcinolone	-1.55 (-71.30, 72.37)
-10.57 (-82.67, 60.92)	12.90 (-92.88, 116.33)	-2.09 (-90.44, 85.42)	7.93 (-67.69, 79.71)	20.93 (-65.72, 105.32)	-8.54 (-82.65, 61.04)	-11.27 (-71.68, 48.66)	9.85 (-90.18, 103.78)	1.55 (-72.37, 71.30)	Zinc

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10
Aloe	0.02	0.03	0.05	0.08	0.1	0.12	0.13	0.14	0.17	0.15
Amlexanox	0.22	0.18	0.11	0.08	0.06	0.05	0.05	0.06	0.07	0.14
Cryotherapy	0.12	0.09	0.1	0.09	0.07	0.07	0.08	0.08	0.1	0.19
Curcumin	0.07	0.12	0.17	0.17	0.16	0.11	0.08	0.05	0.04	0.02
Dexamethasone	0.22	0.26	0.14	0.09	0.07	0.06	0.04	0.04	0.05	0.02
Laser	0.02	0.04	0.07	0.09	0.11	0.12	0.13	0.14	0.15	0.14
Placebo	0	0	0.01	0.04	0.08	0.15	0.22	0.24	0.18	0.06
Probiotics	0.22	0.12	0.12	0.09	0.07	0.06	0.06	0.06	0.08	0.13
Triamcinolone	0.02	0.06	0.11	0.16	0.18	0.16	0.13	0.1	0.06	0.02
Zinc	0.1	0.09	0.11	0.11	0.09	0.08	0.08	0.08	0.11	0.14

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	26.48 (14.59, 42.00)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Dexamethasone.Amlexanox	1.00
d.Placebo.Aloe	1.00
d.Placebo.Cryotherapy	1.00
d.Placebo.Curcumin	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Laser	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.Zinc	1.08
d.Triamcinolone.Probiotics	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

-20.29 (-110.20, 56.75)	-11.68 (-59.38, 33.13)	-27.77 (-113.34, 54.29)	-9.80 (-53.15, 38.22)	4.33 (-58.48, 76.81)	-42.01 (-112.30, 36.39)	-25.93 (-82.30, 27.75)	-19.16 (-94.32, 62.12)	-33.62 (-121.56, 71.30)	Aloe
15.54 (-120.92, 110.18)	13.71 (-93.74, 98.95)	5.55 (-122.60, 109.33)	23.17 (-64.26, 102.43)	37.87 (-62.50, 129.84)	-8.79 (-70.54, 45.54)	7.61 (-99.05, 92.14)	13.90 (-95.87, 111.30)	Amlexanox	33.62 (-71.30, 121.56)
-1.49 (-104.86, 84.59)	-0.71 (-81.00, 72.53)	-8.91 (-114.44, 86.43)	9.08 (-54.18, 73.81)	23.46 (-57.34, 110.14)	-22.95 (-106.17, 65.80)	-6.54 (-87.87, 65.95)	Cryotherapy	-13.90 (-111.30, 95.87)	19.16 (-62.12, 94.32)
5.09 (-76.86, 76.53)	5.83 (-24.00, 36.04)	-2.27 (-72.44, 67.74)	15.75 (-21.20, 61.04)	29.10 (-22.76, 99.13)	-16.20 (-84.07, 61.83)	Curcumin	6.54 (-65.95, 87.87)	-7.61 (-92.14, 99.05)	25.93 (-27.75, 82.30)
21.77 (-81.36, 103.23)	21.97 (-56.72, 89.39)	14.03 (-88.97, 104.05)	31.69 (-28.40, 90.43)	45.46 (-30.81, 131.12)	Dexamethasone	16.20 (-61.83, 84.07)	22.95 (-65.80, 106.17)	8.79 (-45.54, 70.54)	42.01 (-36.39, 112.30)

Laser	2.31 (-34.42, 51.17)	32.76 (-47.72, 124.01)	22.53 (-24.80, 90.69)	21.50 (-61.85, 142.39)	-21.77 (-103.23, 81.36)	-5.09 (-76.53, 76.86)	1.49 (-84.59, 104.86)	-15.54 (-110.18, 120.92)	20.29 (-56.75, 110.20)
-2.31 (-51.17, 34.42)	Placebo	18.04 (-53.35, 97.69)	28.55 (-17.58, 69.69)	8.90 (-49.65, 90.80)	-21.97 (-89.39, 56.72)	-5.83 (-36.04, 24.00)	0.71 (-72.53, 81.00)	-13.71 (-98.95, 93.74)	11.68 (-33.13, 59.38)
-32.76 (-124.01, 47.72)	-18.04 (-97.69, 53.35)	Probiotics	-8.36 (-71.91, 55.53)	-7.36 (-103.84, 95.96)	-14.03 (-104.05, 88.97)	2.27 (-67.74, 72.44)	8.91 (-86.43, 114.44)	-5.55 (-109.33, 122.60)	27.77 (-54.29, 113.34)
-22.53 (-90.69, 24.80)	-28.55 (-69.69, 17.58)	8.36 (-55.53, 71.91)	Triamcinolone	1.04 (-68.99, 79.48)	-13.67 (-89.39, 56.72)	-2.73 (-36.04, 24.00)	-7.64 (-72.53, 81.00)	-19.40 (-98.95, 93.74)	5.84 (-33.13, 59.38)
-21.50 (-142.39, 61.85)	-8.90 (-90.80, 49.65)	7.36 (-95.96, 103.84)	-1.04 (-79.48, 68.99)	Zinc	-21.77 (-103.23, 81.36)	-5.09 (-76.53, 76.86)	1.49 (-84.59, 104.86)	-15.54 (-110.18, 120.92)	20.29 (-56.75, 110.20)
-45.46 (-131.12, 30.81)	-31.69 (-90.43, 28.40)	-14.03 (-104.05, 88.97)	-21.97 (-89.39, 56.72)	-21.77 (-103.23, 81.36)	Aloe	-16.92 (-76.53, 76.86)	-13.67 (-72.53, 81.00)	-25.56 (-98.95, 93.74)	-1.84 (-33.13, 59.38)
-29.10 (-99.13, 22.76)	-15.75 (-61.04, 21.20)	2.27 (-67.74, 72.44)	-5.83 (-36.04, 24.00)	-5.09 (-76.53, 76.86)	-16.92 (-76.53, 76.86)	Curcumin	3.23 (-72.53, 81.00)	-9.08 (-98.95, 93.74)	13.92 (-33.13, 59.38)
-23.46 (-110.14, 57.34)	-9.08 (-73.81, 54.18)	8.91 (-86.43, 114.44)	0.71 (-72.53, 81.00)	1.49 (-84.59, 104.86)	-13.67 (-72.53, 81.00)	3.23 (-72.53, 81.00)	Dexamethasone	-12.31 (-98.95, 93.74)	16.15 (-33.13, 59.38)
-37.87 (-129.84, 62.50)	-23.17 (-102.43, 64.26)	-5.55 (-109.33, 122.60)	-13.71 (-98.95, 93.74)	-15.54 (-110.18, 120.92)	-25.56 (-98.95, 93.74)	-9.08 (-98.95, 93.74)	-12.31 (-98.95, 93.74)	Cryotherapy	28.47 (-54.29, 113.34)
-4.33 (-76.81, 58.48)	9.80 (-38.22, 53.15)	27.77 (-54.29, 113.34)	11.68 (-33.13, 59.38)	20.29 (-56.75, 110.20)	-1.84 (-33.13, 59.38)	13.92 (-33.13, 59.38)	16.15 (-33.13, 59.38)	28.47 (-54.29, 113.34)	Exercise

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Aloe, Curcumin, Placebo, Triamcinolone	5.55 (-30.60, 51.07)
Curcumin, Laser, Placebo, Triamcinolone	6.31 (-29.65, 67.59)
Curcumin, Placebo, Triamcinolone	14.09 (-19.30, 61.60)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	24.40 (7.05, 41.92)
Inconsistency Standard Deviation	23.30 (1.93, 42.57)

2.4 Convergence Diagnostics

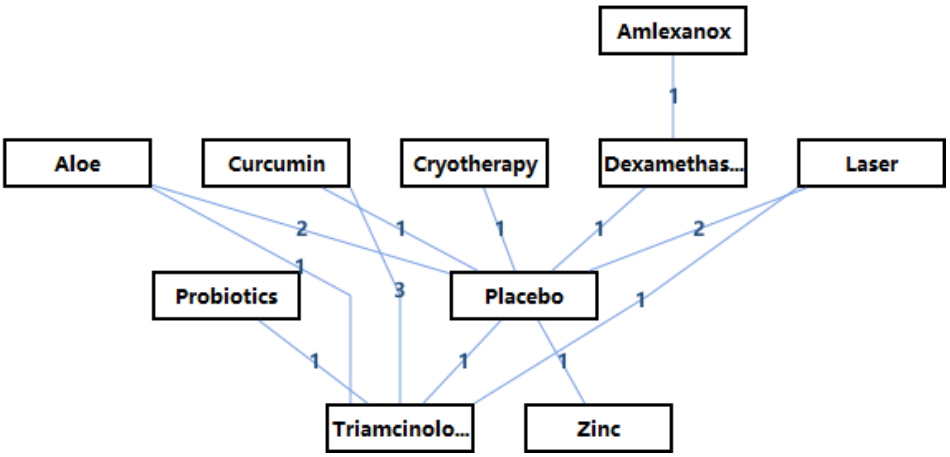
Parameter	PSRF
d.Aloe.Placebo	1.01
d.Curcumin.Triamcinolone	1.01
d.Dexamethasone.Amlexanox	1.19
d.Placebo.Cryotherapy	1.00
d.Placebo.Curcumin	1.06
d.Placebo.Dexamethasone	1.00
d.Placebo.Zinc	1.68
d.Triamcinolone.Laser	1.76
d.Triamcinolone.Probiotics	1.00
w.Aloe.Placebo.Curcumin.Triamc...	1.01
w.Curcumin.Placebo.Laser.Triam...	1.12
w.Curcumin.Placebo.Triamcinolo...	1.01
sd.d	1.06
sd.w	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Aloe, Triamcinolone	10.03 (-46.07, 70.52)	-9.03 (-74.33, 57.86)	11.29 (-36.97, 57.19)	0.61
Curcumin, Placebo	-2.09 (-60.34, 56.28)	-35.17 (-91.21, 21.28)	-18.81 (-58.53, 22.56)	0.37
Curcumin, Triamcinolone	-11.53 (-47.40, 20.19)	21.25 (-54.91, 92.39)	-6.45 (-38.17, 23.82)	0.37
Laser, Placebo	-1.56 (-49.22, 50.99)	-4.35 (-85.85, 79.11)	-2.75 (-42.46, 39.73)	0.95
Laser, Triamcinolone	7.43 (-63.13, 77.77)	11.55 (-52.61, 77.03)	9.18 (-36.24, 56.85)	0.94
Placebo, Triamcinolone	39.96 (-19.36, 97.87)	-2.85 (-56.38, 47.59)	12.40 (-27.35, 48.50)	0.24

4. Network structure



Day 10

1. Consistency Model

1.1 Summary estimates

Aloe	13.96 (-29.65, 55.90)	3.25 (-36.87, 47.86)	12.45 (-36.52, 60.32)	13.85 (-25.91, 53.36)	0.00 (-26.04, 26.61)	1.69 (-51.49, 55.64)	13.79 (-25.69, 53.29)
-13.96 (-55.90, 29.65)	Benzydamine	-9.56 (-50.22, 33.82)	-2.12 (-43.76, 40.48)	-0.37 (-30.60, 32.31)	-13.98 (-47.18, 20.09)	-10.43 (-60.34, 38.18)	-0.57 (-30.48, 32.00)
-3.25 (-47.86, 36.87)	9.56 (-33.82, 50.22)	Cryotherapy	8.31 (-40.40, 54.07)	10.44 (-29.11, 47.49)	-3.15 (-38.60, 26.33)	-2.21 (-55.58, 50.46)	10.42 (-29.48, 47.90)
-12.45 (-60.32, 36.52)	2.12 (-40.48, 43.76)	-8.31 (-54.07, 40.40)	Curcumin	1.42 (-34.98, 40.13)	-12.39 (-52.12, 27.94)	-9.03 (-56.31, 35.82)	1.50 (-26.29, 29.96)
-13.85 (-53.36, 25.91)	0.37 (-32.31, 30.60)	-10.44 (-47.49, 29.11)	-1.42 (-40.13, 34.98)	Doxycycline	-13.86 (-42.66, 14.13)	-11.12 (-57.56, 32.92)	0.03 (-26.40, 25.94)
-0.00 (-26.61, 26.04)	13.98 (-20.09, 47.18)	3.15 (-26.33, 38.60)	12.39 (-27.94, 52.12)	13.86 (-14.13, 42.66)	Placebo	1.72 (-43.99, 50.06)	13.79 (-14.33, 42.93)
-1.69 (-55.64, 51.49)	10.43 (-38.18, 60.34)	2.21 (-50.46, 55.58)	9.03 (-35.82, 56.31)	11.12 (-32.92, 57.56)	-1.72 (-50.06, 43.99)	Probiotics	11.45 (-25.77, 49.21)
-13.79 (-53.29, 25.69)	0.57 (-32.00, 30.48)	-10.42 (-47.90, 29.48)	-1.50 (-29.96, 26.29)	-0.03 (-25.94, 26.40)	-13.79 (-42.93, 14.33)	-11.45 (-49.21, 25.77)	Triamcinolone

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8
Aloe	0.05	0.05	0.06	0.07	0.11	0.17	0.25	0.25
Benzydamine	0.28	0.16	0.12	0.14	0.12	0.09	0.06	0.05
Cryotherapy	0.09	0.08	0.08	0.1	0.17	0.18	0.14	0.16
Curcumin	0.2	0.15	0.13	0.16	0.13	0.1	0.07	0.06
Doxycycline	0.15	0.22	0.23	0.18	0.11	0.06	0.03	0.02
Placebo	0.01	0.03	0.04	0.08	0.14	0.24	0.31	0.15
Probiotics	0.13	0.07	0.06	0.07	0.13	0.11	0.11	0.31
Triamcinolone	0.09	0.24	0.29	0.2	0.1	0.06	0.02	0

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	10.38 (0.44, 20.77)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Aloe	1.00
d.Placebo.Benzydamine	1.15
d.Placebo.Cryotherapy	1.67
d.Placebo.Doxycycline	1.27
d.Placebo.Triamcinolone	1.26
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Probiotics	1.00
sd.d	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Aloe	26.37 (-19.12, 69.63)	0.52 (-41.67, 46.63)	20.10 (-30.64, 69.96)	21.36 (-21.09, 62.32)	0.02 (-26.07, 27.39)	9.32 (-46.39, 65.06)	21.39 (-20.86, 62.61)
-26.37 (-69.63, 19.12)	Benzydamine	-25.64 (-77.97, 27.56)	-6.82 (-47.81, 36.07)	-5.16 (-35.60, 26.67)	-26.05 (-62.30, 11.77)	-16.63 (-64.92, 33.82)	-5.12 (-35.69, 25.80)
-0.52 (-46.63, 41.67)	25.64 (-27.56, 77.97)	Cryotherapy	19.40 (-36.75, 73.93)	21.06 (-29.33, 67.48)	-0.54 (-37.73, 34.47)	8.98 (-54.23, 68.23)	21.16 (-28.45, 66.85)
-20.10 (-69.96, 30.64)	6.82 (-36.07, 47.81)	-19.40 (-73.93, 36.75)	Curcumin	1.73 (-36.30, 40.16)	-19.56 (-61.73, 23.43)	-10.75 (-57.04, 37.09)	1.66 (-26.46, 29.11)
-21.36 (-62.32, 21.09)	5.16 (-26.67, 35.60)	-21.06 (-67.48, 29.33)	-1.73 (-40.16, 36.30)	Doxycycline	-20.91 (-53.45, 12.42)	-12.71 (-56.36, 35.87)	0.04 (-27.09, 25.96)
-0.02 (-27.39, 26.07)	26.05 (-11.77, 62.30)	0.54 (-34.47, 37.73)	19.56 (-23.43, 61.73)	20.91 (-12.42, 53.45)	Placebo	9.30 (-40.48, 59.12)	21.25 (-12.39, 53.05)
-9.32 (-65.06, 46.39)	16.63 (-33.82, 64.92)	-8.98 (-68.23, 54.23)	10.75 (-37.09, 57.04)	12.71 (-35.87, 56.36)	-9.30 (-59.12, 40.48)	Probiotics	12.23 (-26.64, 49.63)
-21.39 (-62.61, 20.86)	5.12 (-25.80, 35.69)	-21.16 (-66.85, 28.45)	-1.66 (-29.11, 26.46)	-0.04 (-25.96, 27.09)	-21.25 (-53.05, 12.39)	-12.23 (-49.63, 26.64)	Triamcinolone

2.2 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	10.63 (0.61, 20.75)
Inconsistency Standard Deviation	10.50 (0.51, 20.74)

2. Convergence Diagnostics

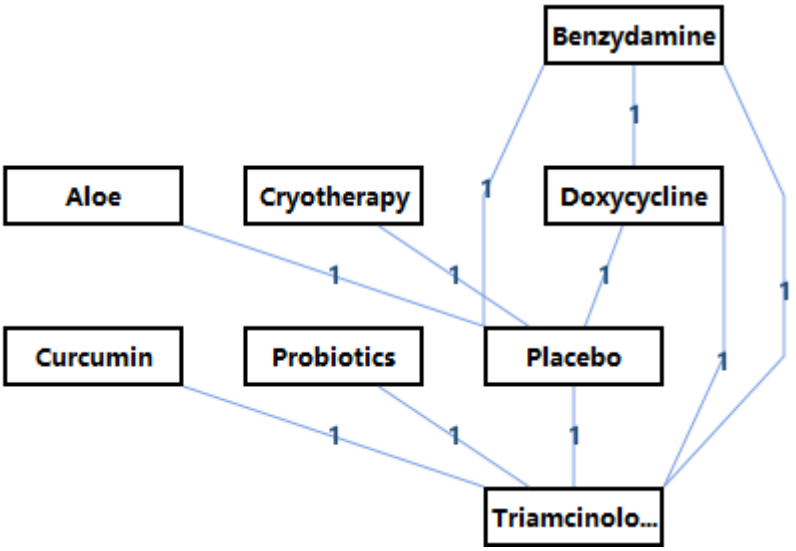
Parameter	PSRF
d.Aloe.Placebo	1.00
d.Benzydamine.Doxycycline	1.52
d.Doxycycline.Triamcinolone	1.00
d.Placebo.Benzydamine	1.34
d.Placebo.Cryotherapy	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Probiotics	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Placebo, Triamcinolone	11.40 (-33.38, 50.39)	4.38 (-627.78, 629.87)	13.79 (-14.33, 42.93)	0.99

4. Network structure



Chapter S3 Symptom-reducing effect

1.Consistency Model

Summary estimates for Symptom-reducing effect

The estimate values for symptom-reducing effect are given as mean difference (MD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Alicin														
11.13(-47.06, 69.75)	Aloe													
0.48(-51.58, 51.58)	-11.13(-69.75, 47.06)	Amlexanox												
6.81(-57.85, 69.49)	-4.46(-57.67, 46.64)	6.04(-36.96, 49.06)	Benzydamine											
7.33(-59.28, 76.31)	-3.64(-64.38, 54.99)	7.13(-45.02, 58.15)	1.33(-63.12, 63.47)	Berberine gelatin										
15.21(-56.61, 87.00)	3.78(-59.91, 66.84)	15.18(-42.48, 71.55)	8.29(-57.75, 76.68)	7.91(-64.66, 78.66)	Chitosan									
-4.35(-74.46, 63.41)	-15.57(-75.11, 43.06)	-5.10(-58.04, 47.89)	-11.22(-74.46, 52.03)	-12.00(-82.88, 58.02)	-19.92(-93.32, 53.93)	Chlorhexidine								
-8.78(-68.00, 53.20)	-19.52(-67.12, 26.95)	-8.19(-48.31, 30.35)	-14.44(-65.93, 35.37)	-15.63(-75.85, 43.16)	-23.57(-86.94, 41.96)	-3.81(-60.13, 53.55)	Curcumin							
5.10(-52.19, 65.20)	-5.73(-54.53, 41.86)	5.15(-29.62, 39.53)	-1.17(-53.76, 51.24)	-2.28(-61.93, 58.73)	-9.74(-72.70, 55.05)	9.78(-50.47, 72.01)	13.19(-34.96, 63.86)	Dexamethasone						
6.24(-60.89, 74.41)	-5.17(-63.37, 53.64)	5.78(-44.66, 57.63)	-0.60(-62.90, 63.32)	-1.47(-69.65, 67.67)	-9.29(-78.93, 63.25)	10.64(-58.14, 80.90)	14.12(-46.31, 74.81)	1.00(-58.99, 60.79)	Dioscorine					
13.80(-40.31, 67.06)	2.73(-39.11, 42.52)	13.41(-16.87, 43.26)	7.07(-35.26, 48.88)	6.14(-47.12, 59.18)	-1.90(-59.23, 56.75)	18.51(-36.62, 73.79)	21.94(-19.85, 64.81)	8.36(-33.93, 50.47)	7.53(-47.34, 60.81)	Diosmectite				
2.30(-51.28, 57.04)	-8.56(-50.29, 31.57)	2.07(-26.50, 31.34)	-3.97(-51.06, 41.89)	-5.15(-58.03, 49.13)	-12.85(-70.28, 45.70)	7.03(-48.88, 62.80)	10.59(-30.93, 54.27)	-2.78(-45.77, 38.95)	-3.48(-58.22, 50.02)	-10.39(-74.81, 53.64)	Ebastine			
-22.60(-89.40, 46.50)	-33.67(-94.40, 27.91)	-23.17(-74.90, 31.19)	-29.10(-91.86, 35.12)	-30.25(-98.02, 38.57)	-37.85(-107.64, 34.95)	-17.90(-87.36, 55.52)	-14.62(-73.88, 48.19)	-27.77(-86.91, 32.53)	-28.37(-98.07, 40.42)	-34.88(-107.73, 37.97)	-24.49(-93.78, 44.80)	Ebrotidine		
-8.88(-58.79, 42.10)	-19.67(-56.44, 16.80)	-8.95(-31.73, 14.74)	-15.06(-58.35, 27.47)	-16.20(-66.31, 34.94)	-23.98(-78.47, 32.41)	-3.98(-55.28, 48.70)	-0.48(-37.26, 36.66)	-14.00(-51.54, 23.57)	-14.94(-65.78, 36.07)	-21.45(-80.90, 37.99)	-11.05(-70.28, 48.18)	13.43(-34.96, 63.86)	Famotidine	
-13.42(-101.20, 72.54)	-24.26(-105.48, 53.55)	-13.26(-88.22, 59.65)	-20.06(-101.17, 62.00)	-21.04(-108.15, 64.66)	-28.55(-120.37, 61.91)	-8.90(-61.99, 42.94)	-4.73(-82.45, 70.35)	-18.58(-99.83, 60.50)	-19.27(-108.16, 67.11)	-25.87(-117.73, 68.10)	-16.47(-107.18, 73.68)	9.01(-58.22, 50.02)	-4.45(-74.81, 46.31)	Fluorouracil
23.68(-23.63, 71.40)	12.51(-21.63, 46.30)	23.26(4.15, 42.15)	17.16(-24.03, 57.33)	16.06(-31.45, 65.31)	8.08(-44.73, 62.68)	28.19(-21.68, 80.09)	31.75(-3.89, 68.34)	18.31(-16.30, 52.81)	17.41(-31.22, 65.56)	10.81(-47.06, 68.68)	19.93(-19.85, 59.70)	33.44(-3.93, 70.81)	28.98(-14.94, 72.91)	24.53(-24.53, 73.60)
18.32(-38.88, 77.09)	7.38(-39.47, 52.86)	18.11(-19.40, 54.95)	11.77(-38.87, 64.16)	10.76(-46.05, 69.73)	3.14(-57.41, 65.31)	22.52(-37.53, 84.26)	26.48(-21.04, 74.20)	12.86(-34.61, 60.46)	12.07(-44.86, 68.66)	4.64(-63.41, 72.03)	13.72(-30.93, 58.27)	27.37(-8.98, 63.72)	22.92(-19.85, 65.70)	18.47(-30.93, 67.88)
-0.32(-80.47, 81.21)	-11.87(-84.22, 61.96)	-0.45(-68.52, 67.87)	-6.41(-69.13, 44.18)	-7.93(-89.00, 72.93)	-15.53(-99.54, 68.35)	4.57(-76.78, 85.38)	7.54(-63.98, 81.64)	-6.02(-79.37, 66.86)	-6.69(-87.12, 75.67)	-14.19(-97.00, 69.61)	-5.28(-76.78, 66.21)	9.49(-63.98, 81.64)	5.04(-66.21, 74.29)	-0.42(-81.64, 80.79)
-2.67(-71.14, 65.26)	-13.75(-71.36, 45.54)	-2.77(-53.37, 48.34)	-8.83(-72.51, 53.97)	-10.03(-75.82, 57.53)	-18.21(-89.10, 54.22)	2.21(-68.39, 73.94)	5.57(-52.32, 66.02)	-8.41(-65.11, 51.65)	-8.51(-75.81, 59.70)	-16.11(-89.10, 57.53)	-7.70(-73.49, 59.70)	7.07(-52.32, 66.02)	2.63(-59.70, 73.49)	-2.84(-73.49, 66.02)
-11.31(-95.64, 72.67)	-22.59(-98.43, 53.39)	-11.74(-82.70, 61.38)	-18.00(-96.26, 61.93)	-19.33(-102.53, 65.83)	-27.01(-116.27, 62.04)	-6.67(-53.92, 41.44)	-3.32(-77.49, 71.95)	-16.91(-94.24, 61.68)	-17.37(-102.73, 68.10)	-25.00(-124.73, 74.73)	-15.47(-107.18, 76.24)	-1.70(-71.95, 68.10)	-6.15(-76.24, 63.94)	-11.31(-77.49, 54.86)
-5.01(-56.21, 46.14)	-16.02(-51.47, 18.38)	-4.98(-29.39, 18.10)	-11.21(-52.26, 29.12)	-12.39(-63.00, 39.53)	-20.31(-75.42, 36.43)	-0.38(-47.33, 47.96)	3.11(-27.44, 34.40)	-10.19(-49.11, 28.52)	-11.27(-63.29, 40.42)	-18.97(-77.49, 41.96)	-9.58(-54.24, 35.08)	4.79(-27.44, 34.40)	0.34(-34.24, 34.96)	-4.81(-54.24, 44.96)
-0.81(-64.30, 63.96)	-12.17(-64.93, 41.05)	-1.00(-46.93, 44.17)	-7.18(-64.49, 49.25)	-8.13(-71.00, 54.56)	-16.41(-83.29, 52.69)	3.83(-60.21, 66.49)	7.29(-44.85, 59.78)	-6.33(-60.21, 47.23)	-7.06(-71.51, 56.74)	-14.76(-83.29, 52.69)	-5.33(-71.51, 60.21)	11.44(-44.85, 59.78)	6.99(-60.21, 74.49)	-0.46(-71.51, 60.21)
13.95(-53.92, 82.30)	2.57(-58.36, 61.57)	13.62(-38.34, 65.86)	7.00(-55.47, 69.16)	6.45(-59.80, 75.09)	-1.34(-72.17, 70.89)	18.50(-52.45, 89.74)	21.82(-37.45, 82.78)	8.75(-52.20, 67.58)	7.68(-61.58, 74.55)	-3.82(-82.78, 74.55)	5.18(-67.58, 74.55)	21.41(-37.45, 82.78)	16.96(-52.20, 74.55)	12.51(-52.20, 74.55)

-13.80 (-67.06, 40.31)	-2.30 (-57.04, 51.28)	22.60 (-46.50, 89.40)	8.88 (-42.10, 58.79)	13.42 (-72.54, 101.20)	-23.68 (-71.40, 23.63)	-18.32 (-77.09, 38.88)	0.32 (-81.21, 80.47)	2.67 (-65.26, 71.14)	11.31 (-72.67, 95.64)	5.01 (-46.14, 56.21)	0.81 (-63.96, 64.30)	-13.95 (-82.30, 53.92)
-2.73 (-42.52, 39.11)	8.56 (-31.57, 50.29)	33.67 (-27.91, 94.40)	19.67 (-16.80, 56.44)	24.26 (-53.55, 105.48)	-12.51 (-46.30, 21.63)	-7.38 (-52.86, 39.47)	11.87 (-61.96, 84.22)	13.75 (-45.54, 71.36)	22.59 (-53.39, 98.43)	16.02 (-18.38, 51.47)	12.17 (-41.05, 64.93)	-2.57 (-61.57, 58.36)
-13.41 (-43.26, 16.87)	-2.07 (-31.34, 26.50)	23.17 (-31.19, 74.90)	8.95 (-14.74, 31.73)	13.26 (-59.65, 88.22)	-23.26 (-42.15, -4.15)	-18.11 (-54.95, 19.40)	0.45 (-67.87, 68.52)	2.77 (-48.34, 53.37)	11.74 (-61.38, 82.70)	4.98 (-18.10, 29.39)	1.00 (-44.17, 46.93)	-13.62 (-65.86, 38.34)
-7.07 (-48.88, 35.26)	3.97 (-41.89, 51.06)	29.10 (-35.12, 91.86)	15.06 (-27.47, 58.35)	20.06 (-62.00, 101.17)	-17.16 (-57.33, 24.03)	-11.77 (-64.16, 38.87)	6.41 (-44.18, 59.13)	8.83 (-53.97, 72.51)	18.00 (-61.93, 96.26)	11.21 (-29.12, 52.26)	7.18 (-49.25, 64.49)	-7.00 (-69.16, 55.47)
-6.14 (-59.18, 47.12)	5.15 (-49.13, 58.03)	30.25 (-38.57, 98.02)	16.20 (-34.94, 66.31)	21.04 (-64.66, 108.15)	-16.06 (-65.31, 31.45)	-10.76 (-69.73, 46.05)	7.93 (-72.93, 89.00)	10.03 (-57.53, 75.82)	19.33 (-65.83, 102.53)	12.39 (-39.53, 63.00)	8.13 (-54.56, 71.00)	-6.45 (-75.09, 59.89)
1.90 (-56.75, 59.23)	12.85 (-45.70, 70.28)	37.85 (-34.95, 107.64)	23.98 (-32.41, 78.47)	28.55 (-61.91, 120.37)	-8.08 (-62.68, 44.73)	-3.14 (-65.31, 57.41)	15.53 (-68.35, 99.54)	18.21 (-54.22, 89.10)	27.01 (-62.04, 116.27)	20.31 (-36.43, 75.42)	16.41 (-52.69, 83.29)	1.34 (-70.89, 72.17)
-18.51 (-73.79, 36.62)	-7.03 (-62.80, 48.88)	17.90 (-55.52, 87.36)	3.98 (-48.70, 55.28)	8.90 (-42.94, 61.99)	-28.19 (-80.09, 21.68)	-22.52 (-84.26, 37.53)	-4.57 (-85.38, 76.78)	-2.21 (-73.94, 68.39)	6.67 (-41.44, 53.92)	0.58 (-47.98, 47.33)	-3.83 (-66.49, 60.21)	-18.50 (-89.74, 52.45)
-21.94 (-64.81, 19.85)	-10.59 (-54.27, 30.93)	14.62 (-48.19, 73.85)	0.48 (-36.66, 37.26)	4.73 (-70.35, 82.45)	-31.75 (-68.34, 3.69)	-26.48 (-74.20, 21.04)	-7.54 (-81.64, 63.98)	-5.57 (-66.02, 52.32)	3.32 (-71.95, 77.49)	-3.11 (-34.40, 27.44)	-7.29 (-59.78, 44.85)	-21.82 (-82.78, 37.45)
-8.36 (-50.47, 33.93)	2.78 (-38.95, 45.77)	27.77 (-32.53, 86.91)	14.00 (-23.57, 51.54)	18.58 (-60.50, 99.83)	-18.31 (-52.81, 16.30)	-12.86 (-60.46, 34.61)	6.02 (-66.86, 79.37)	8.41 (-51.65, 65.11)	16.91 (-61.68, 94.24)	10.19 (-28.52, 49.11)	6.33 (-47.23, 60.21)	-8.75 (-67.58, 52.20)
-7.53 (-60.81, 47.34)	3.48 (-50.02, 58.22)	28.37 (-40.42, 98.07)	14.94 (-36.07, 65.78)	19.27 (-67.11, 108.16)	-17.41 (-65.56, 31.22)	-12.07 (-68.66, 44.86)	6.96 (-75.67, 87.12)	8.51 (-59.70, 75.81)	17.37 (-68.10, 102.73)	11.27 (-40.42, 63.29)	7.06 (-56.74, 71.51)	-7.68 (-74.55, 61.58)
Doxycycline	11.30 (-22.44, 43.57)	36.17 (-19.34, 90.45)	22.35 (-6.76, 50.25)	27.17 (-48.19, 103.87)	-10.00 (-34.51, 13.65)	-4.72 (-44.91, 35.41)	13.99 (-52.83, 79.24)	16.02 (-37.84, 68.53)	25.11 (-48.92, 97.55)	18.39 (-9.26, 46.67)	14.35 (-33.69, 61.84)	-0.71 (-53.33, 52.75)
-11.30 (-43.57, 22.44)	Glycyrrhiza	25.07 (-30.21, 79.20)	11.08 (-16.23, 38.16)	15.88 (-59.61, 92.11)	-21.10 (-44.72, 2.27)	-16.00 (-56.40, 25.25)	2.76 (-66.14, 71.12)	5.25 (-49.45, 57.80)	13.76 (-59.97, 87.11)	7.30 (-21.39, 36.03)	3.33 (-45.32, 50.78)	-11.45 (-65.01, 42.06)
-36.17 (-90.45, 19.34)	-25.07 (-79.20, 30.21)	Insulin-liposomal gel	-14.15 (-65.20, 39.06)	-9.53 (-95.34, 81.53)	-46.49 (-94.73, 3.77)	-40.82 (-98.20, 18.56)	-22.63 (-103.13, 59.67)	-20.12 (-87.61, 47.67)	-11.79 (-95.27, 74.71)	-17.95 (-69.46, 36.39)	-21.61 (-86.94, 44.52)	-36.23 (-104.82, 33.91)
-22.35 (-50.25, 6.76)	-11.08 (-38.16, 16.23)	14.15 (-39.06, 65.20)	Laser	4.53 (-67.96, 79.56)	-32.21 (-48.08, -16.39)	-26.83 (-62.81, 8.51)	-8.44 (-74.54, 58.20)	-6.07 (-56.28, 43.35)	2.78 (-68.75, 72.64)	-3.74 (-23.22, 16.50)	-7.81 (-51.89, 35.95)	-22.46 (-73.28, 28.18)
-27.17 (-103.87, 48.19)	-15.88 (-92.11, 59.61)	9.53 (-81.53, 95.34)	-4.53 (-79.56, 67.96)	N-acetylcysteine	-36.75 (-111.29, 35.20)	-31.86 (-112.07, 47.24)	-13.12 (-107.24, 82.42)	-10.61 (-99.37, 76.63)	-2.61 (-71.77, 68.59)	-8.35 (-79.41, 61.37)	-12.42 (-96.10, 69.89)	-27.04 (-117.14, 61.20)
10.00 (-13.65, 34.51)	21.10 (-2.27, 44.72)	46.49 (-3.77, 94.73)	32.21 (16.39, 48.08)	36.75 (-35.20, 111.29)	Placebo	5.25 (-26.72, 37.76)	23.62 (-41.49, 88.72)	26.05 (-21.91, 73.10)	34.80 (-35.11, 104.24)	28.45 (10.36, 46.76)	24.69 (-17.58, 66.07)	9.53 (-38.55, 58.13)
4.72 (-35.41, 44.91)	16.00 (-25.25, 56.40)	40.82 (-18.56, 98.20)	26.83 (-8.51, 62.81)	31.86 (-47.24, 112.07)	-5.25 (-37.76, 26.72)	Probiotics	18.81 (-52.26, 89.91)	20.77 (-35.98, 77.43)	30.06 (-49.02, 106.89)	22.94 (-13.29, 60.68)	19.27 (-33.74, 72.05)	4.34 (-53.30, 63.20)
-13.99 (-79.24, 52.83)	-2.76 (-71.12, 66.14)	22.63 (-59.67, 103.13)	8.44 (-58.20, 74.54)	13.12 (-82.42, 107.24)	-23.62 (-88.72, 41.49)	-18.81 (-89.91, 52.26)	Quercetin	2.21 (-77.47, 82.40)	10.98 (-84.23, 105.86)	4.67 (-60.23, 70.61)	0.14 (-76.59, 79.24)	-14.43 (-94.23, 67.61)
-16.02 (-68.53, 37.84)	-5.25 (-57.80, 49.45)	20.12 (-47.67, 87.61)	6.07 (-43.35, 56.28)	10.61 (-76.63, 99.37)	-26.05 (-73.10, 21.91)	-20.77 (-77.43, 35.98)	-2.21 (-82.40, 77.47)	Silver nitrate	9.20 (-76.87, 94.61)	2.52 (-47.78, 53.88)	-1.40 (-64.41, 61.75)	-16.32 (-83.45, 51.86)
-25.11 (-97.55, 48.92)	-13.76 (-87.11, 59.97)	11.79 (-74.71, 95.27)	-2.78 (-72.64, 68.75)	2.61 (-68.59, 71.77)	-34.80 (-104.24, 35.11)	-30.06 (-106.89, 49.02)	-10.98 (-105.86, 84.23)	-9.20 (-94.61, 76.87)	Sucralfate	-6.49 (-75.01, 61.48)	-10.67 (-89.62, 69.89)	-25.44 (-110.44, 61.69)
-18.39 (-46.67, 9.26)	-7.30 (-36.03, 21.39)	17.95 (-36.39, 69.46)	3.74 (-16.50, 23.22)	8.35 (-61.37, 79.41)	-28.45 (-46.76, -10.36)	-22.94 (-60.68, 13.29)	-4.67 (-70.61, 60.23)	-2.52 (-53.88, 47.78)	6.49 (-61.48, 75.01)	Triamcinolone	-4.01 (-46.35, 37.87)	-18.74 (-70.98, 32.54)
-14.35 (-61.84, 33.69)	-3.33 (-50.78, 45.32)	21.61 (-44.52, 86.94)	7.81 (-35.95, 51.89)	12.42 (-69.89, 96.10)	-24.69 (-66.07, 17.58)	-19.27 (-72.05, 33.74)	-0.14 (-79.24, 76.59)	1.40 (-61.75, 64.41)	10.67 (-69.89, 89.62)	4.01 (-37.87, 46.35)	Triester Glycerol Oxide	-14.62 (-77.79, 48.99)
0.71 (-52.75, 53.33)	11.45 (-42.06, 65.01)	36.23 (-33.91, 104.82)	22.46 (-28.18, 73.28)	27.04 (-61.20, 117.14)	-9.53 (-58.13, 38.55)	-4.34 (-63.20, 53.30)	14.43 (-67.61, 94.23)	16.32 (-51.86, 83.45)	25.44 (-61.69, 110.44)	18.74 (-32.54, 70.98)	14.62 (-48.99, 77.79)	Zinc

Rank probability

Rank 1 is best, rank N is worst.

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17
Allicin	0.05	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Aloe	0	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.06	0.07	0.08	0.07
Amlexanox	0	0.01	0.01	0.02	0.04	0.05	0.06	0.07	0.08	0.1	0.1	0.1	0.09	0.08	0.06	0.05	0.04
Benzydamine	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.06
Berberine gelatin	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05
Chitosan	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.05
Chlorhexidine	0.01	0.06	0.1	0.08	0.07	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04
Curcumin	0.04	0.07	0.08	0.09	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03
Dexamethasone	0.01	0.02	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.05	0.06	0.06	0.06	0.06
Diosmectite	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.05
Doxycycline	0	0	0	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1
Glycyrrhiza	0	0.01	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.07	0.07	0.05
Insulin-liposomal gel	0.24	0.15	0.1	0.08	0.06	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Laser	0.01	0.03	0.05	0.09	0.11	0.12	0.12	0.11	0.1	0.08	0.06	0.05	0.03	0.02	0.01	0.01	0
N-acetylcysteine	0.18	0.12	0.08	0.06	0.05	0.04	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.02
Placebo	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0.04	0.08
Probiotics	0	0	0	0.01	0.01	0.01	0.02	0.01	0.02	0.03	0.03	0.03	0.04	0.05	0.06	0.07	0.07
Quercetin	0.1	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03
Silver nitrate	0.06	0.07	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Sucralfate	0.15	0.12	0.08	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Triamcinolone	0	0.01	0.02	0.04	0.06	0.09	0.12	0.12	0.12	0.11	0.1	0.08	0.05	0.04	0.02	0.01	0.01
Triester Glycerol Oxide	0.03	0.05	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.04
Zinc	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05

0.05	0.04	0	0.02	0.04	0.03	0.07	0.13	0.02	0	0.01	0.04	0.1	0.05	0.05	0.02	0.03	0.05	0.05	0.05	0.02	0.07	0.04	Rank 18
0.05	0.03	0	0.02	0.03	0.03	0.08	0.19	0.02	0	0.01	0.03	0.09	0.05	0.05	0.02	0.03	0.05	0.05	0.05	0.01	0.06	0.04	Rank 19
0.06	0.03	0	0.03	0.03	0.03	0.08	0.21	0.03	0	0.01	0.02	0.08	0.04	0.04	0.01	0.03	0.06	0.05	0.04	0.01	0.06	0.04	Rank 20
0.07	0.03	0	0.03	0.03	0.04	0.09	0.18	0.03	0	0.01	0.01	0.06	0.05	0.04	0.01	0.04	0.06	0.05	0.05	0	0.06	0.04	Rank 21
0.09	0.03	0	0.04	0.04	0.06	0.11	0.1	0.04	0	0.01	0.01	0.04	0.06	0.04	0.01	0.03	0.09	0.07	0.05	0	0.06	0.04	Rank 22
0.13	0.03	0	0.05	0.04	0.08	0.09	0.03	0.05	0	0.01	0	0.02	0.07	0.03	0	0.01	0.16	0.08	0.03	0	0.05	0.04	Rank 23

Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	23.46 (18.29, 31.60)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Benzydamine.Quercetin	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Chlorhexidine.Sucralfate	1.00
d.Placebo.Allicin	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomlgel	1.05
d.Placebo.Probiotics	1.00
d.Placebo.Silvernitrate	1.00
d.Placebo.Zinc	1.01
d.Triamcinolone.Aloe	1.00
d.Triamcinolone.Amlexanox	1.00
d.Triamcinolone.Benzydamine	1.01
d.Triamcinalone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Doxycycline	1.01
d.Triamcinolone.Laser	1.01
d.Triamcinolone.Placebo	1.01
d.Triamcinolone. TriesterGlycerolOxide	1.00
sd.d	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor : 2.5

2.Inconsistency Model

Summary estimates for Symptom-reducing effect

The estimate values for symptom-reducing effect are given as mean difference (MD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Alfen	-10.84 (-69.10, 50.20)	-3.21 (-57.33, 50.76)	-4.71 (-70.35, 59.91)	-7.83 (-75.89, 58.71)	-15.61 (-85.98, 57.56)	4.96 (-68.80, 75.96)	7.80 (-53.99, 70.81)	-6.94 (-88.99, 54.83)	-6.94 (-73.38, 61.21)
10.84 (-50.20, 69.10)	Alte	7.65 (-36.92, 47.18)	5.67 (-47.01, 57.73)	2.14 (-57.67, 60.36)	-4.82 (-68.21, 57.14)	15.53 (-46.07, 74.54)	18.94 (-29.85, 66.80)	3.73 (-48.70, 52.89)	3.57 (-55.85, 61.47)
3.21 (-50.76, 57.33)	-7.65 (-47.18, 36.92)	Antiseanox	-2.12 (-49.37, 49.27)	-4.95 (-57.36, 49.75)	-12.29 (-69.87, 47.60)	7.64 (-46.74, 63.92)	11.53 (-30.11, 54.43)	-3.87 (-41.11, 33.13)	-3.78 (-56.78, 50.54)
4.71 (-58.91, 70.35)	-5.67 (-57.73, 47.01)	2.12 (-49.27, 49.37)	Benzydamine	-2.82 (-59.37, 54.47)	-10.72 (-77.50, 58.38)	9.37 (-54.48, 74.09)	13.30 (-39.72, 65.46)	-2.18 (-60.05, 55.07)	-2.36 (-65.57, 62.97)
7.83 (-58.71, 75.89)	-2.14 (-60.36, 57.67)	4.95 (-49.75, 57.36)	2.82 (-54.47, 59.37)	Berberine gelatin	-7.90 (-74.17, 61.18)	12.19 (-47.60, 69.87)	16.12 (-34.78, 67.27)	0.65 (-52.46, 53.88)	-0.46 (-62.41, 61.12)
15.61 (-57.56, 85.98)	4.82 (-57.14, 69.21)	12.29 (-47.60, 69.87)	10.72 (-58.38, 77.50)	7.90 (-61.18, 74.17)	Chitosan	20.09 (-34.75, 74.54)	24.02 (-23.32, 69.45)	8.81 (-50.25, 72.21)	8.34 (-53.66, 82.62)
-4.96 (-75.96, 68.80)	-15.53 (-74.54, 46.07)	-7.64 (-63.92, 46.74)	-9.37 (-74.09, 54.48)	-13.35 (-83.34, 60.27)	-19.99 (-94.54, 54.75)	Chlorhexidine	3.92 (-53.88, 62.45)	-11.28 (-75.68, 53.45)	-11.44 (-82.41, 59.12)
-7.80 (-70.81, 53.99)	-18.94 (-66.80, 29.85)	-11.53 (-54.43, 30.11)	-13.30 (-65.46, 39.72)	-16.78 (-78.27, 44.78)	-23.72 (-89.45, 42.32)	-3.52 (-62.45, 53.88)	Curcumin	-15.11 (-68.29, 36.79)	-15.35 (-76.98, 47.37)
6.94 (-54.83, 68.99)	-3.73 (-52.89, 48.70)	3.87 (-33.13, 41.11)	2.18 (-55.07, 60.05)	-1.70 (-62.06, 62.33)	-8.81 (-72.21, 59.25)	11.25 (-53.45, 75.68)	15.11 (-36.79, 68.29)	Dexamethasone	0.31 (-60.69, 61.90)
6.94 (-61.21, 73.38)	-3.57 (-61.47, 55.85)	3.78 (-50.54, 56.78)	2.36 (-62.97, 65.57)	-1.52 (-69.05, 66.58)	-8.34 (-82.62, 63.66)	11.44 (-39.12, 62.41)	15.35 (-47.37, 76.98)	-0.31 (-61.90, 60.89)	Desmectite
11.14 (-45.36, 67.45)	0.56 (-43.38, 44.11)	9.31 (-33.45, 43.43)	6.61 (-36.97, 49.54)	3.13 (-53.47, 57.95)	-3.96 (-65.10, 55.64)	16.31 (-41.61, 72.42)	19.72 (-25.89, 64.18)	4.91 (-46.52, 50.90)	4.74 (-52.57, 60.00)
8.25 (-49.84, 68.77)	-3.20 (-45.49, 47.97)	4.51 (-27.48, 37.91)	2.58 (-50.52, 60.35)	-0.49 (-56.71, 59.60)	-7.55 (-67.96, 56.24)	12.26 (-46.36, 74.82)	15.81 (-31.01, 67.79)	0.88 (-45.15, 48.58)	1.11 (-55.05, 61.76)
-25.97 (-96.46, 41.84)	-36.48 (-94.79, 22.07)	-29.05 (-83.08, 23.77)	-30.76 (-95.42, 32.60)	-34.21 (-101.22, 33.48)	-41.64 (-113.55, 29.85)	-21.27 (-92.90, 51.72)	-17.27 (-78.93, 43.69)	-32.72 (-95.84, 29.13)	-32.83 (-101.93, 34.79)
-8.39 (-62.92, 46.32)	-19.00 (-57.23, 22.94)	-11.60 (-40.94, 15.85)	-13.50 (-59.35, 35.61)	-16.91 (-70.11, 38.30)	-24.32 (-79.39, 34.82)	-3.96 (-57.90, 53.07)	-0.09 (-40.46, 41.52)	-15.38 (-58.42, 27.29)	-15.63 (-69.57, 39.35)
-14.27 (-102.11, 75.83)	-24.69 (-103.55, 55.35)	-17.64 (-94.08, 59.08)	-18.96 (-102.97, 63.75)	-22.41 (-109.28, 66.61)	-29.70 (-123.46, 61.17)	-9.42 (-61.60, 41.88)	-5.90 (-84.71, 71.26)	-21.26 (-104.34, 61.11)	-21.57 (-109.36, 65.36)
24.54 (-24.76, 71.69)	13.46 (-18.86, 48.45)	24.04 (3.93, 44.21)	17.90 (-29.20, 65.23)	16.10 (-31.59, 63.34)	8.40 (-43.59, 61.76)	28.93 (-24.99, 81.27)	32.48 (-5.89, 71.20)	17.31 (-21.51, 54.30)	17.04 (-31.13, 64.24)
19.02 (-39.73, 76.27)	8.53 (-38.68, 55.04)	15.32 (-25.26, 55.88)	13.80 (-39.81, 67.29)	10.58 (-47.63, 67.92)	3.06 (-57.55, 64.65)	23.24 (-38.89, 86.28)	27.00 (-22.75, 77.35)	11.56 (-40.09, 63.30)	12.04 (-45.68, 69.86)
-2.65 (-84.95, 80.63)	-13.16 (-87.34, 59.57)	-5.86 (-77.99, 64.84)	-7.62 (-59.16, 42.49)	-10.88 (-94.20, 70.67)	-18.02 (-103.64, 66.29)	1.69 (-81.37, 83.14)	5.81 (-68.05, 78.58)	-9.81 (-89.23, 67.01)	-9.39 (-91.30, 73.81)
-1.67 (-69.95, 65.12)	-13.14 (-70.88, 46.15)	-5.25 (-59.15, 47.81)	-6.94 (-72.36, 56.95)	-10.52 (-77.34, 59.02)	-17.86 (-88.11, 52.92)	2.43 (-69.77, 75.12)	5.93 (-55.13, 67.51)	-8.92 (-70.36, 52.78)	-9.19 (-76.01, 60.16)
-11.24 (-96.85, 75.84)	-21.54 (-98.04, 56.24)	-13.88 (-87.25, 58.49)	-15.46 (-95.68, 64.44)	-19.33 (-104.30, 68.82)	-25.85 (-114.71, 62.04)	-6.24 (-53.97, 41.36)	-2.59 (-77.35, 72.23)	-18.07 (-99.11, 61.80)	-17.77 (-104.16, 69.26)
-4.99 (-59.79, 48.42)	-15.82 (-52.08, 21.21)	-8.02 (-38.22, 19.06)	-10.28 (-52.12, 31.53)	-13.19 (-66.27, 38.73)	-20.89 (-77.56, 37.36)	-0.59 (-48.34, 47.98)	3.10 (-28.65, 33.83)	-11.86 (-55.67, 29.06)	-12.05 (-64.43, 41.15)
-2.60 (-69.77, 62.74)	-13.53 (-67.14, 43.22)	-5.99 (-57.32, 42.50)	-8.21 (-64.73, 49.53)	-11.24 (-76.87, 55.02)	-18.17 (-86.93, 51.74)	2.22 (-64.37, 64.60)	5.55 (-47.69, 59.17)	-9.93 (-88.83, 47.71)	-9.54 (-75.66, 56.38)
8.04 (-63.65, 77.79)	-2.20 (-64.59, 58.69)	5.22 (-54.60, 59.56)	3.39 (-64.98, 69.26)	0.46 (-71.04, 71.60)	-7.56 (-81.56, 65.87)	13.26 (-61.65, 85.70)	16.58 (-50.56, 80.51)	1.30 (-64.86, 64.17)	1.13 (-72.30, 72.04)

-11.14 (-67.45, 45.36)	-8.25 (-68.77, 49.84)	25.97 (-41.84, 96.46)	8.39 (-46.32, 62.92)	14.27 (-75.83, 102.11)	-24.54 (-71.69, 24.76)	-19.02 (-76.27, 39.73)	2.65 (-80.63, 84.95)	1.67 (-65.12, 69.95)	11.24 (-75.84, 96.85)	4.99 (-48.42, 59.79)	2.60 (-62.74, 69.77)	-8.04 (-77.79, 63.65)
-0.56 (-44.11, 43.38)	3.20 (-47.97, 45.49)	36.48 (-22.07, 94.79)	19.00 (-22.94, 57.23)	24.69 (-55.35, 103.55)	-13.46 (-48.45, 18.86)	-8.53 (-55.04, 38.68)	13.16 (-59.57, 87.34)	13.14 (-46.15, 70.88)	21.54 (-56.24, 98.04)	15.82 (-21.21, 52.08)	13.53 (-43.22, 67.14)	2.20 (-58.69, 64.59)
-9.31 (-43.43, 33.45)	-4.51 (-37.91, 27.48)	29.05 (-23.77, 83.08)	11.60 (-15.85, 40.94)	17.64 (-59.08, 94.08)	-24.04 (-44.21, -3.93)	-15.32 (-55.88, 25.26)	5.86 (-64.84, 77.99)	5.25 (-47.81, 59.15)	13.88 (-58.49, 87.25)	8.02 (-19.06, 38.22)	5.99 (-42.50, 57.32)	-5.22 (-59.56, 54.60)
-6.61 (-49.54, 36.97)	-2.58 (-60.35, 50.52)	30.76 (-32.60, 95.42)	13.50 (-35.61, 59.35)	18.96 (-63.75, 102.97)	-17.90 (-65.23, 29.20)	-13.80 (-67.29, 39.81)	7.62 (-42.49, 59.16)	6.54 (-56.95, 72.36)	15.46 (-64.44, 95.68)	10.28 (-31.53, 52.12)	8.21 (-49.53, 64.73)	-3.39 (-69.26, 64.98)
-3.13 (-57.95, 53.47)	0.49 (-59.60, 56.71)	34.21 (-33.48, 101.22)	16.91 (-38.30, 70.11)	22.41 (-66.61, 109.28)	-16.10 (-63.34, 31.59)	-10.58 (-67.92, 47.63)	10.88 (-70.67, 94.20)	10.52 (-59.02, 77.34)	19.33 (-68.82, 104.30)	13.19 (-38.73, 66.27)	11.24 (-55.02, 76.87)	-0.46 (-71.60, 71.04)
3.96 (-55.64, 65.10)	7.55 (-56.24, 67.96)	41.64 (-29.85, 113.55)	24.32 (-34.82, 79.39)	29.70 (-61.17, 123.46)	-8.40 (-61.76, 43.59)	-3.06 (-64.65, 57.55)	18.02 (-66.29, 103.64)	17.86 (-52.92, 88.11)	25.85 (-62.04, 114.71)	20.89 (-37.36, 77.56)	18.17 (-51.74, 86.93)	7.56 (-65.87, 81.56)
-16.31 (-72.42, 41.61)	-12.26 (-74.82, 46.36)	21.27 (-51.72, 92.90)	3.96 (-53.07, 57.90)	9.42 (-41.88, 61.60)	-28.93 (-81.27, 24.99)	-23.24 (-86.28, 38.89)	-1.69 (-83.14, 81.37)	-2.43 (-75.12, 69.77)	6.24 (-41.36, 53.97)	0.59 (-47.98, 48.34)	-2.22 (-64.60, 64.37)	-13.26 (-85.70, 61.65)
-19.72 (-64.18, 25.89)	-15.81 (-67.79, 31.01)	17.27 (-43.69, 78.93)	0.09 (-41.52, 40.46)	5.90 (-71.26, 84.71)	-32.48 (-71.20, 5.89)	-27.00 (-77.35, 22.75)	-5.81 (-78.58, 68.05)	-5.93 (-67.51, 55.13)	2.59 (-72.23, 77.35)	-3.10 (-33.83, 28.65)	-5.55 (-59.17, 47.69)	-16.58 (-80.51, 50.56)
-4.91 (-50.90, 46.52)	-0.88 (-48.58, 45.15)	32.72 (-29.13, 95.84)	15.38 (-27.29, 58.42)	21.26 (-61.11, 104.34)	-17.31 (-54.30, 21.51)	-11.56 (-63.30, 40.09)	9.81 (-67.01, 89.23)	8.92 (-52.78, 70.36)	18.07 (-61.80, 99.11)	11.86 (-29.06, 55.67)	9.93 (-47.71, 68.83)	-1.30 (-64.17, 64.86)
-4.74 (-60.00, 52.57)	-1.11 (-61.76, 55.05)	32.83 (-34.79, 101.93)	15.63 (-39.35, 68.57)	21.57 (-65.36, 109.36)	-17.04 (-64.24, 31.13)	-12.04 (-69.86, 45.68)	9.39 (-73.81, 91.30)	9.19 (-60.16, 76.01)	17.77 (-69.26, 104.16)	12.05 (-41.15, 64.43)	9.54 (-56.38, 75.66)	-1.13 (-72.04, 72.30)
Doxycycline	4.53 (-48.56, 43.16)	37.06 (-20.12, 94.46)	20.61 (-21.14, 53.27)	25.50 (-52.19, 102.96)	-9.58 (-34.51, 14.95)	-6.98 (-53.10, 34.94)	13.98 (-52.58, 79.83)	13.47 (-43.71, 68.31)	22.17 (-53.04, 95.71)	16.89 (-16.44, 47.63)	14.24 (-37.38, 63.98)	3.37 (-55.83, 63.59)
-4.53 (-43.16, 48.56)	Glycyrrhiza	33.96 (-23.04, 93.97)	16.14 (-14.70, 51.70)	22.03 (-58.39, 103.87)	-22.12 (-46.63, 1.73)	-11.24 (-53.89, 39.05)	10.57 (-61.89, 87.94)	9.70 (-45.30, 68.93)	18.58 (-56.57, 96.99)	12.75 (-21.26, 54.72)	10.52 (-43.49, 67.56)	-0.24 (-58.86, 61.48)
-37.06 (-94.46, 20.12)	-33.96 (-93.97, 23.04)	Insulin-liposomal gel	-17.47 (-71.14, 35.45)	-12.01 (-100.86, 77.23)	-50.04 (-97.82, -1.73)	-44.34 (-101.74, 13.09)	-23.06 (-104.43, 58.88)	-23.67 (-91.87, 43.98)	-15.43 (-101.63, 71.34)	-20.70 (-73.83, 32.26)	-23.29 (-89.19, 42.18)	-33.84 (-103.21, 37.30)
-20.61 (-53.27, 21.14)	-16.14 (-51.70, 14.70)	17.47 (-35.45, 71.14)	Laser	5.75 (-69.66, 83.06)	-32.21 (-48.76, -14.99)	-27.17 (-66.13, 13.85)	-6.06 (-74.23, 64.81)	-5.97 (-59.51, 47.66)	2.29 (-71.25, 76.19)	-3.73 (-26.00, 19.54)	-6.09 (-53.37, 43.88)	-16.42 (-72.94, 42.22)
-25.50 (-102.96, 52.19)	-22.03 (-103.87, 58.39)	12.01 (-77.23, 100.86)	-5.75 (-83.06, 69.66)	N-acetylcysteine	-38.05 (-113.06, 36.44)	-32.74 (-115.57, 49.29)	-11.87 (-109.91, 85.66)	-11.70 (-102.69, 76.49)	-3.32 (-74.03, 64.08)	-8.71 (-79.51, 61.27)	-11.66 (-94.09, 72.82)	-22.19 (-111.94, 69.08)
9.58 (-14.95, 34.51)	22.12 (-1.73, 46.63)	50.04 (1.73, 97.82)	32.21 (14.99, 48.76)	38.05 (-36.44, 113.06)	Placebo	5.60 (-27.57, 37.30)	26.64 (-39.35, 94.56)	26.14 (-21.64, 73.85)	34.62 (-36.58, 106.68)	28.24 (-1.97, 58.52)	25.78 (-24.25, 74.93)	16.00 (-34.63, 68.34)
6.98 (-34.94, 53.10)	11.24 (-39.05, 53.89)	44.34 (-13.09, 101.74)	27.17 (-13.85, 66.13)	32.74 (-49.29, 115.57)	-5.60 (-37.30, 27.57)	Probiotics	21.27 (-50.85, 94.45)	20.99 (-36.91, 77.64)	28.98 (-48.15, 109.88)	23.84 (-14.70, 63.62)	21.50 (-34.48, 77.36)	10.87 (-49.60, 72.12)
-13.98 (-79.83, 52.58)	-10.57 (-87.94, 61.89)	23.06 (-58.88, 104.43)	6.06 (-64.81, 74.23)	11.87 (-85.66, 109.91)	-26.64 (-94.56, 39.35)	-21.27 (-94.45, 50.85)	Quercetin	-0.99 (-82.58, 80.53)	7.93 (-86.56, 101.61)	2.64 (-63.52, 67.51)	0.24 (-76.53, 76.66)	-10.94 (-96.28, 74.37)
-13.47 (-68.31, 43.71)	-9.70 (-68.93, 45.30)	23.67 (-43.98, 91.87)	5.97 (-47.66, 59.51)	11.70 (-76.49, 102.69)	-26.14 (-73.85, 21.64)	-20.99 (-77.64, 36.91)	0.99 (-80.53, 82.58)	Silver nitrate	8.95 (-77.81, 95.52)	3.34 (-49.41, 55.96)	0.60 (-65.13, 66.60)	-10.23 (-80.40, 60.74)
-22.17 (-95.71, 53.04)	-18.58 (-96.99, 56.57)	15.43 (-71.34, 101.63)	-2.29 (-76.19, 71.25)	3.32 (-64.08, 74.03)	-34.62 (-106.68, 36.58)	-28.98 (-109.88, 48.15)	-7.93 (-101.61, 86.56)	-8.95 (-95.52, 77.81)	Sucralfate	-5.41 (-73.59, 62.75)	-8.07 (-88.35, 71.56)	-19.04 (-108.64, 69.73)
-16.89 (-47.63, 16.44)	-12.75 (-54.72, 21.26)	20.70 (-32.26, 73.83)	3.73 (-19.54, 26.00)	8.71 (-61.27, 79.51)	-28.24 (-58.52, 1.97)	-23.84 (-63.62, 14.70)	-2.64 (-67.51, 63.52)	-3.34 (-55.96, 49.41)	5.41 (-62.75, 73.59)	Triamcinolone	-2.49 (-46.23, 40.75)	-13.52 (-69.10, 44.29)
-14.24 (-63.98, 37.38)	-10.52 (-67.56, 43.49)	23.29 (-42.18, 89.19)	6.09 (-43.88, 53.37)	11.66 (-72.82, 94.09)	-25.78 (-74.93, 24.25)	-21.50 (-77.36, 34.48)	-0.24 (-76.66, 76.53)	-0.60 (-66.60, 65.13)	8.07 (-71.56, 88.35)	2.49 (-40.75, 46.23)	Triester Glycerol Oxide	-10.70 (-78.76, 60.83)
-3.37 (-63.59, 55.83)	0.24 (-61.48, 58.86)	33.84 (-37.30, 103.21)	16.42 (-42.22, 72.94)	22.19 (-69.08, 111.94)	-16.00 (-68.34, 34.63)	-10.87 (-72.12, 49.60)	10.94 (-74.37, 96.28)	10.23 (-60.74, 80.40)	19.04 (-69.73, 108.64)	13.52 (-44.29, 69.10)	10.70 (-60.83, 78.76)	Zinc

Inconsistency Factors

Cycle	Median (95% CI)
Aloe, Amlexanox, Placebo, Triamcinolone	0.50 (-14.31, 31.47)
Aloe, Amlexanox, Dexamethasone, Placebo, Triamcinolone	0.05 (-25.55, 26.18)
Aloe, Doxycycline, Placebo, Triamcinolone	-0.38 (-32.56, 15.35)
Aloe, Amlexanox, Glycyrrhiza, Placebo, Triamcinolone	1.70 (-9.46, 41.74)
Aloe, Amlexanox, Laser, Placebo, Triamcinolone	-0.10 (-22.51, 22.79)
Aloe, Placebo, Triamcinolone	-0.13 (-27.69, 24.14)
Aloe, Placebo, Triamcinolone	-0.13 (-27.69, 24.14)
Aloe, Placebo, Triamcinolone	-0.13 (-27.69, 24.14)
Amlexanox, Laser, Triamcinolone	0.01 (-25.66, 20.43)

Variance Calculation

Parameter	**Median (95% CI)**
Random Effects Standard Deviation	23.41 (17.97, 32.05)
Inconsistency Standard Deviation	6.74 (0.15, 37.28)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Allicin.Placebo	1.00
d.Aloe.Triamcinolone	1.00
d.Amlexanox.Dexamethasone	1.00
d.Amlexanox.Glycyrrhiza	1.01
d.Benzydamine.Doxyeycline	1.00
d.Benzydamine.Quercetin	1.00
d.Chlorhexidine.Nacetyleysteine	1.00
d.Chlorhexidine.Sucralfate	1.00
d.Glycyrrhiza.Laser	1.01
d.Placebo.Aloe	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Insulinliposomalgel	1.00
d.placebo.Probiotics	1.00
d.Placebo.Silvernitrate	1.00
d.Placebo.Zinc	1.15
d.Triamcinolone.Amlexanox	1.01
d.Triamcinolone.Benzydamine	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.TriesterGlycerolOxide	1.00
w.Aloe.Placebo.Amlexanox.Triamcinolone	1.01
w.Aloe.Placebo.Dexamethasone.Amlexanox.Triamcinolone	1.01
w.Aloe.Placebo.Doxycycline.Triamcinolone	1.01
w.Aloe.Placebo.Glycyrrhiza.Amlexanox.Triamcinolone	1.02
w.Aloe.Placebo.Laser.Amlexanox.Triamcinolone	1.03
w.Aloe.Placebo.Triamcinolone	1.01
w.Aloe.Placebo.Triamcinolone	1.01
w.Aloe.Placebo.Triamcinolone	1.01
w.Amlexanox.Laser.Triamcinolone	1.01
sd.d	1.00
sd.w	1.03

Number of chains	: 4
Tuning iterations	: 20,000
Simulation iterations	: 50,000
Thinning interval	: 10
Inference samples	: 10,000
Variance scaling factor	: 2.5

3. Node-splitting analysis

Node-splitting analysis of inconsistency

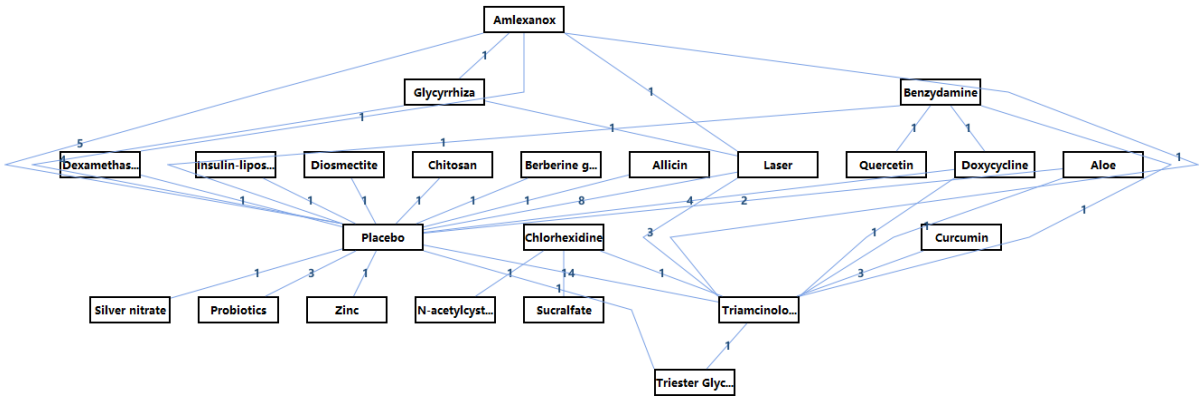
Inconsistency between direct and indirect estimates was estimated in the Node-Splitting Model. When P values is above 0.05 in a comparison, there is evidence of statistical inconsistency.

Name	Direct Effect	Indirect Effect	Overall	P-Value
Aloe, Triamcinolone	10.75 (-40.60, 60.29)	22.21 (-21.04, 64.30)	16.02 (-18.38, 51.47)	0.72
Amlexanox, Dexamethasone	-0.12 (-48.39, 48.02)	-11.31 (-64.58, 41.28)	-5.15 (-39.53, 29.62)	0.74
Amlexanox, Glycyrrhiza	-16.91 (-67.12, 32.29)	-3.20 (-38.03, 31.48)	-2.07 (-31.34, 26.50)	0.66
Amlexanox, Laser	8.18 (-43.87, 59.96)	7.79 (-17.34, 33.33)	8.95 (-14.74, 31.73)	0.99
Amlexanox, Placebo	-33.36 (-55.45, -12.01)	-7.72 (-39.82, 22.76)	-23.26 (-42.15, -4.15)	0.17
Amlexanox, Triamcinolone	42.21 (-4.58, 87.65)	-7.76 (-33.96, 19.47)	4.98 (-18.10, 29.39)	0.07
Benzydamine, Doxycycline	-0.13 (-49.50, 48.84)	-18.79 (-71.52, 36.16)	-7.07 (-48.88, 35.26)	0.6
Benzydamine, Placebo	-12.10 (-60.76, 37.64)	-20.69 (-67.17, 25.07)	-17.16 (-57.33, 24.03)	0.8
Benzydamine, Triamcinolone	-0.28 (-49.39, 48.65)	24.33 (-23.53, 73.33)	11.21 (-29.12, 52.26)	0.46
Dexamethasone, Placebo	-13.05 (-63.34, 36.72)	-24.48 (-77.06, 27.32)	-18.31 (-52.81, 16.30)	0.75
Doxycycline, Triamcinolone	0.03 (-49.01, 48.53)	23.59 (-8.72, 56.12)	18.39 (-9.26, 46.67)	0.4
Glycyrrhiza, Laser	24.22 (-25.07, 74.40)	8.48 (-20.95, 38.30)	11.08 (-16.23, 38.16)	0.57
Laser, Placebo	-34.75 (-53.20, -16.15)	-30.79 (-59.83, -1.68)	-32.21 (-48.08, -16.39)	0.8
Laser, Triamcinolone	-5.25 (-35.21, 24.96)	-7.16 (-36.01, 22.01)	-3.74 (-23.22, 16.50)	0.92
Placebo, Triamcinolone	18.98 (-5.22, 43.91)	44.45 (16.19, 73.39)	28.45 (10.36, 46.76)	0.18

4. Network structure

Network structure of sensitivity analysis

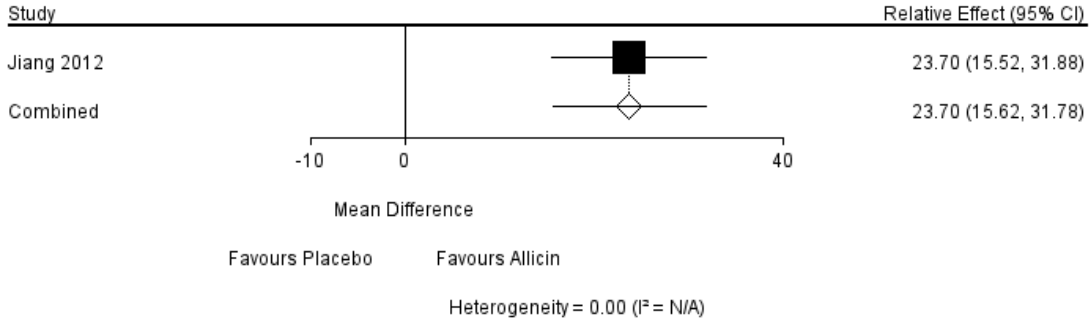
46 RCTs involving 23 local interventions were included in the sensitivity analysis considering the symptom-reducing effect.

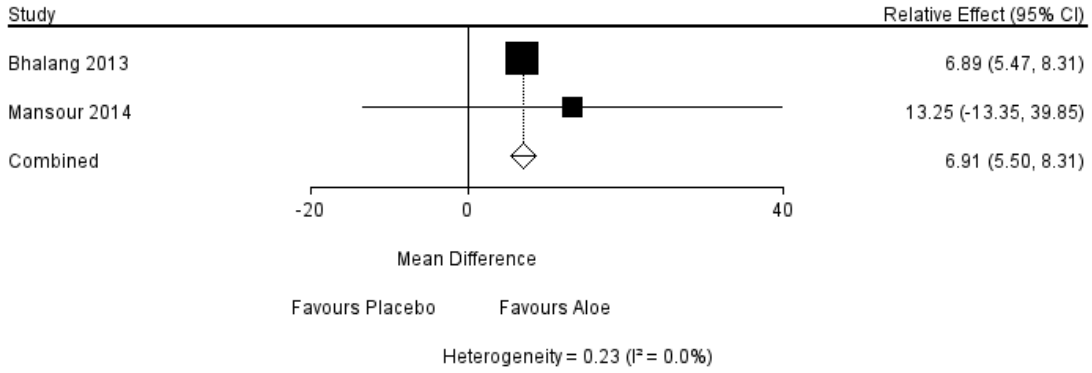


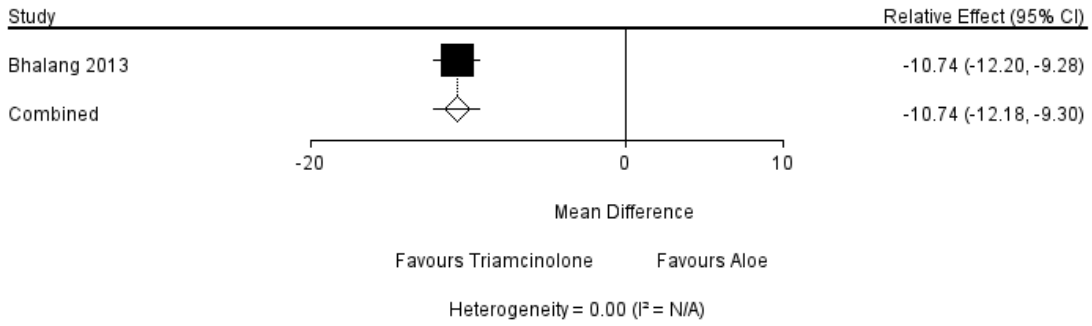
5. Pairwise meta-analysis

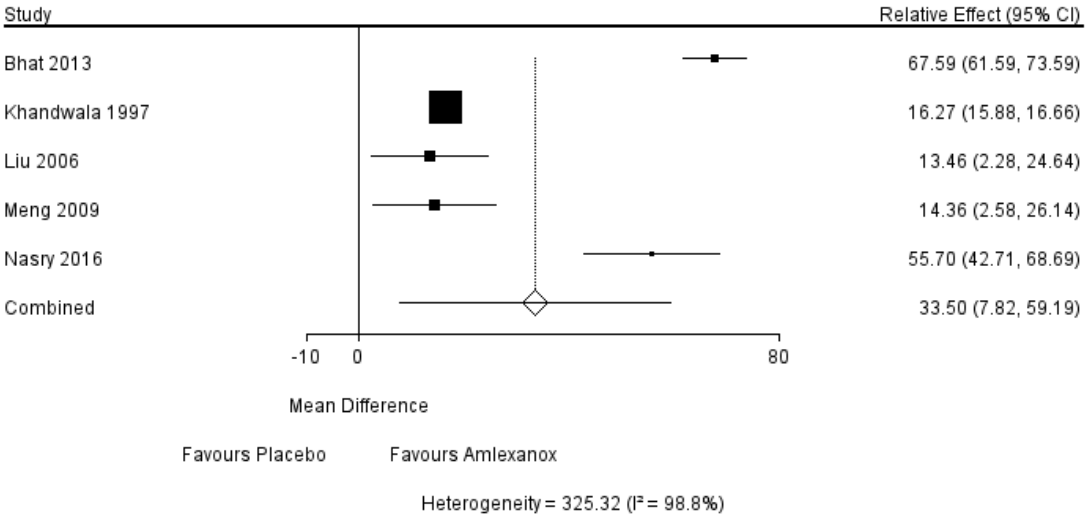
Pairwise meta-analysis of symptom-reducing effect

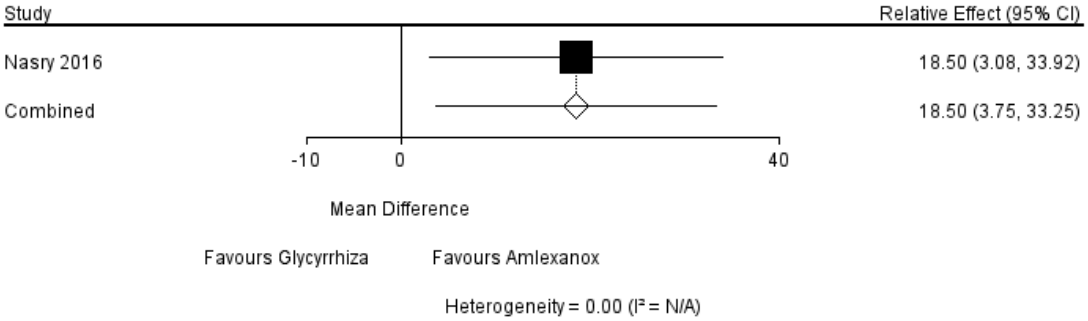
Symptom-reducing effect were measured by mean difference (MD) and 95% confidence interval (CI).

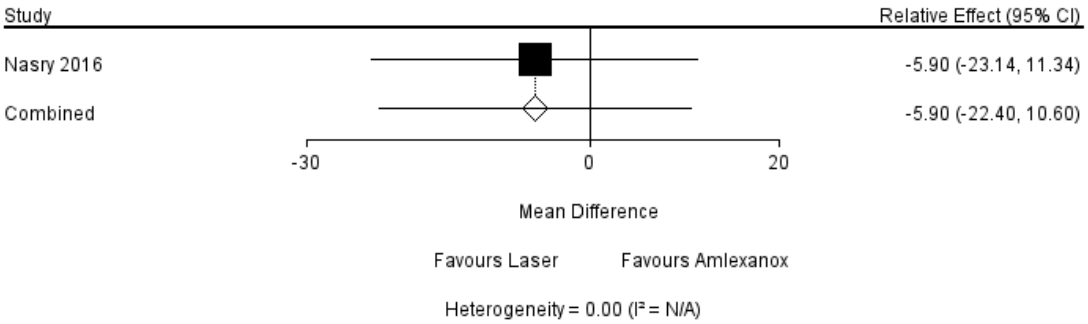


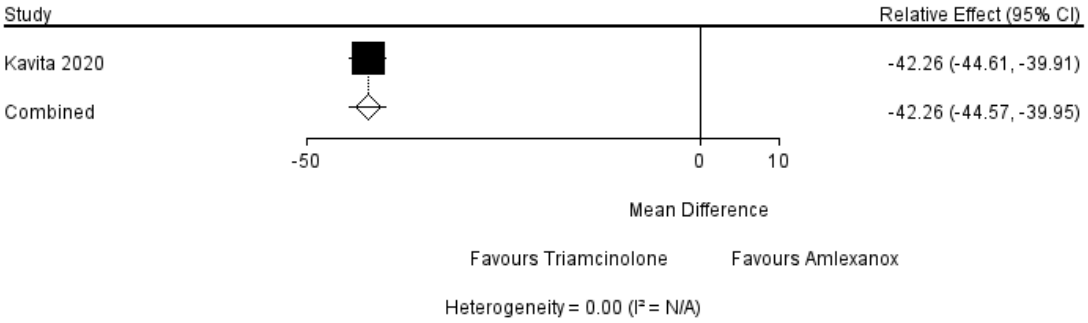


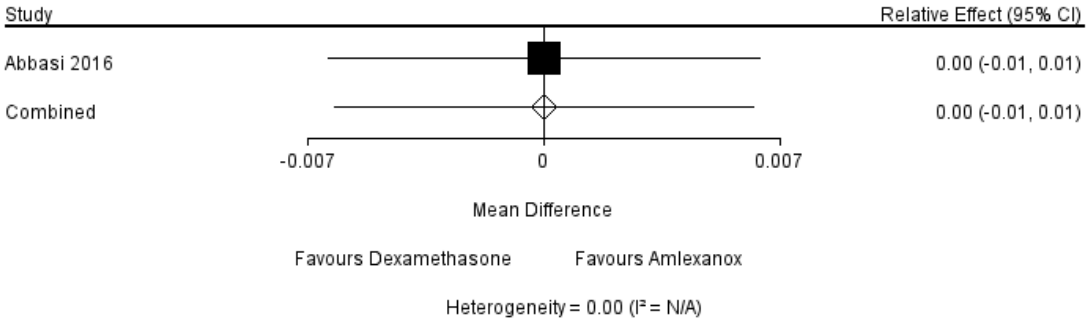


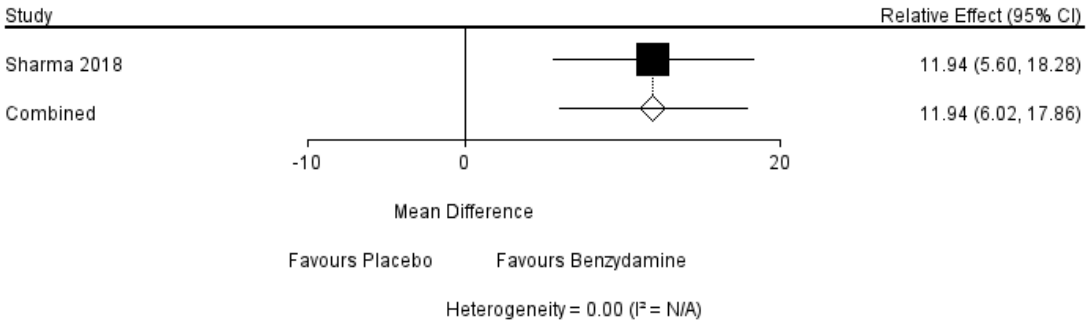

Study
Relative Effect (95% CI)
Bhat 2013
67.59 (61.59, 73.59)
Khandwala 1997
16.27 (15.88, 16.66)
Liu 2006
13.46 (2.28, 24.64)
Meng 2009
14.36 (2.58, 26.14)
Nasry 2016
55.70 (42.71, 68.69)
Combined
33.50 (7.82, 59.19)
-10
0
80
Mean Difference
Favours Placebo
Favours Amlexanox
Heterogeneity = 325.32 (I² = 98.8%)

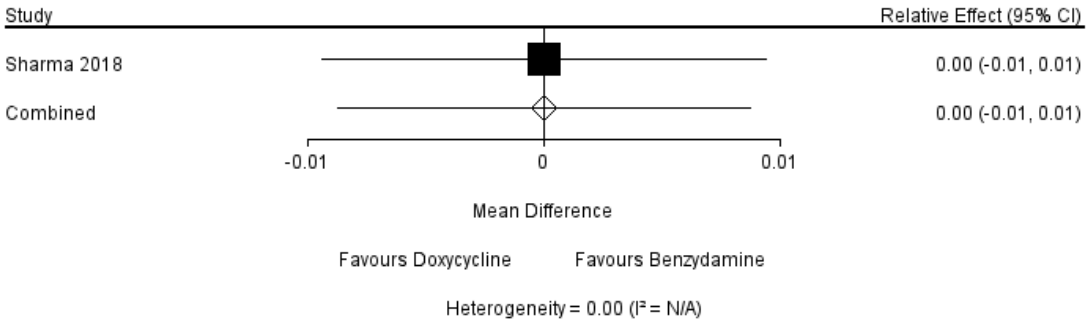

Study
Relative Effect (95% CI)
Nasry 2016
18.50 (3.08, 33.92)
Combined
18.50 (3.75, 33.25)
-10
0
40
Mean Difference
Favours Glycyrrhiza
Favours Amlexanox
Heterogeneity = 0.00 (I² = N/A)

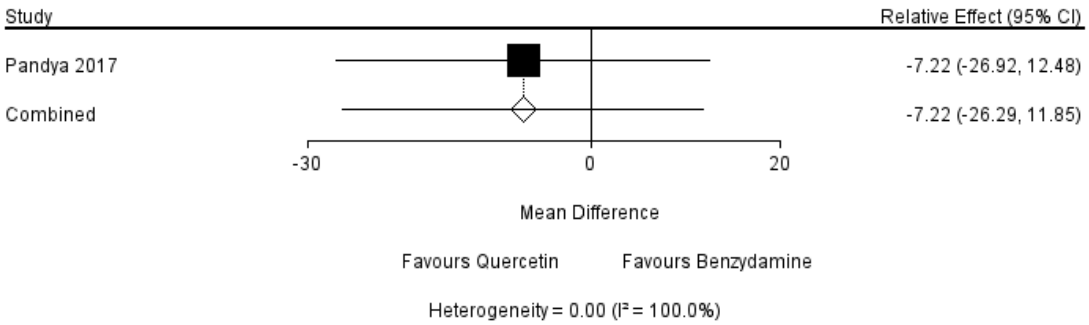

Study
Relative Effect (95% CI)
Nasry 2016
-5.90 (-23.14, 11.34)
Combined
-5.90 (-22.40, 10.60)
-30
0
20
Mean Difference
Favours Laser
Favours Amlexanox
Heterogeneity = 0.00 (I² = N/A)

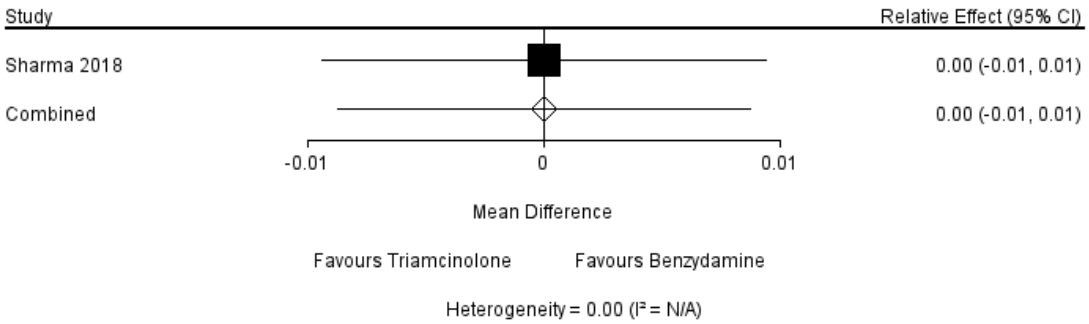

Study
Relative Effect (95% CI)
Kavita 2020
-42.26 (-44.61, -39.91)
Combined
-42.26 (-44.57, -39.95)
-50
0
10
Mean Difference
Favours Triamcinolone
Favours Amlexanox
Heterogeneity = 0.00 (I² = N/A)

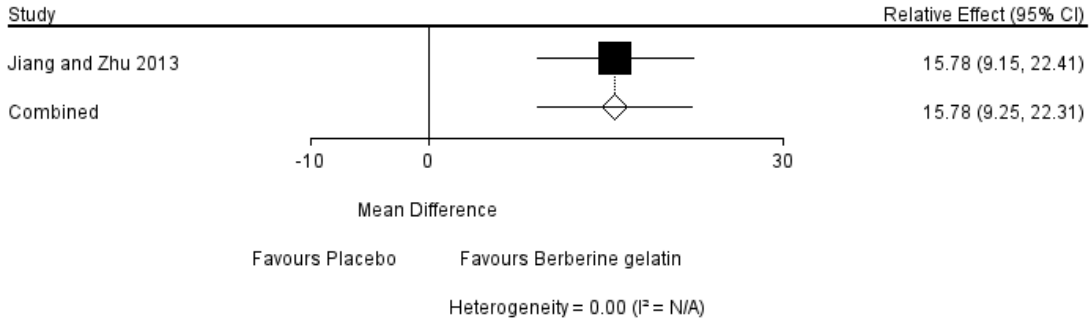

Study
Relative Effect (95% CI)
Abbasi 2016
0.00 (-0.01, 0.01)
Combined
0.00 (-0.01, 0.01)
-0.007
0
0.007
Mean Difference
Favours Dexamethasone
Favours Amlexanox
Heterogeneity = 0.00 (I² = N/A)

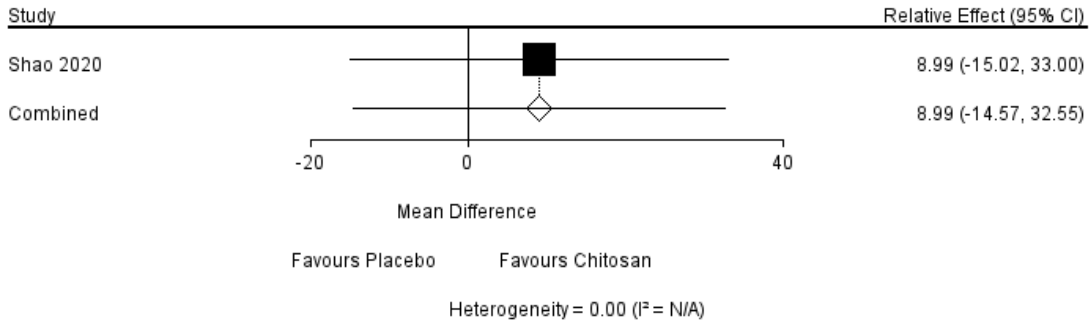

Study
Relative Effect (95% CI)
Sharma 2018
11.94 (5.60, 18.28)
Combined
11.94 (6.02, 17.86)
-10
0
20
Mean Difference
Favours Placebo
Favours Benzydamine
Heterogeneity = 0.00 (I² = N/A)

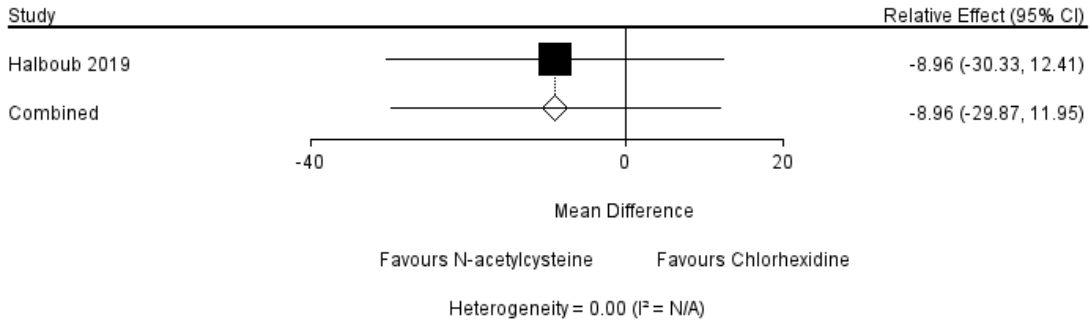

Study
Relative Effect (95% CI)
Sharma 2018
0.00 (-0.01, 0.01)
Combined
0.00 (-0.01, 0.01)
-0.01
0
0.01
Mean Difference
Favours Doxycycline
Favours Benzydamine
Heterogeneity = 0.00 (I² = N/A)

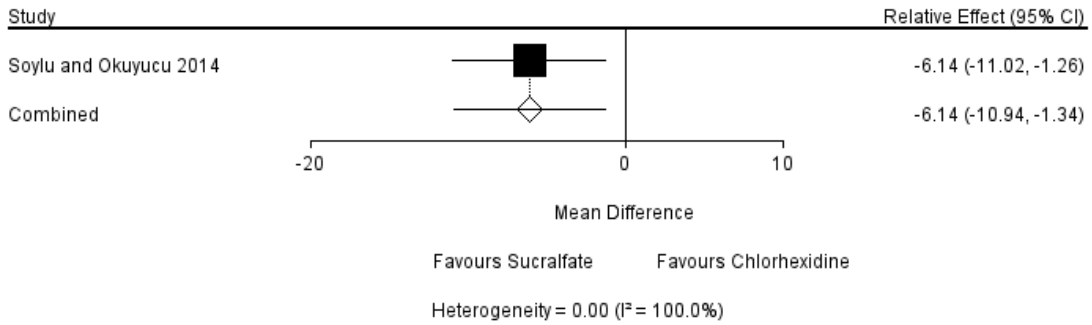

Study
Relative Effect (95% CI)
Pandya 2017
-7.22 (-26.92, 12.48)
Combined
-7.22 (-26.29, 11.85)
-30
0
20
Mean Difference
Favours Quercetin
Favours Benzydamine
Heterogeneity = 0.00 (I² = 100.0%)

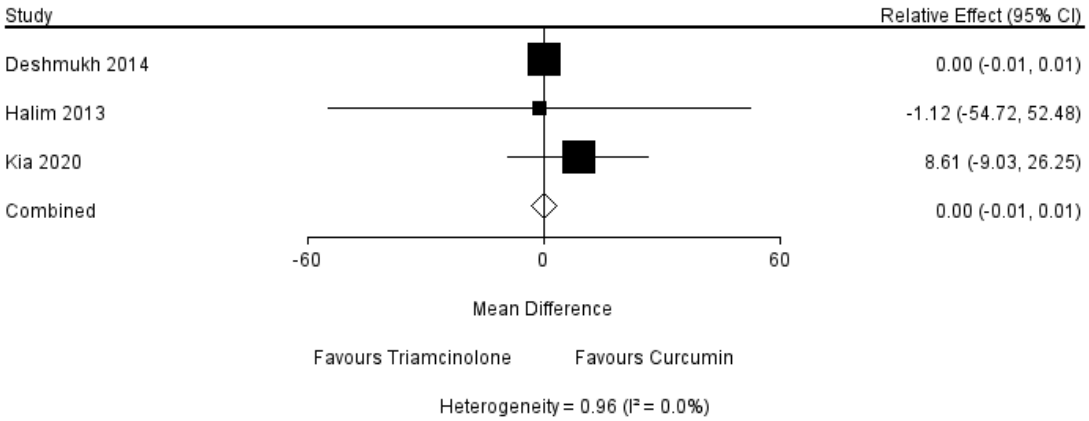

Study
Relative Effect (95% CI)
Sharma 2018
0.00 (-0.01, 0.01)
Combined
0.00 (-0.01, 0.01)
-0.01
0
0.01
Mean Difference
Favours Triamcinolone
Favours Benzydamine
Heterogeneity = 0.00 (I² = N/A)

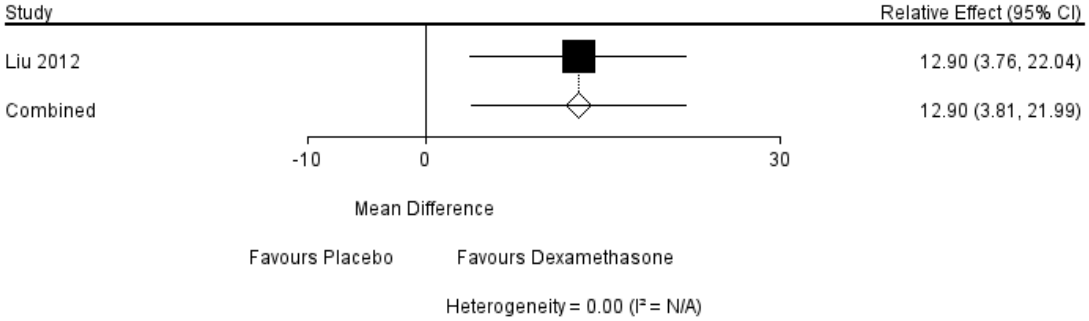

Study
Relative Effect (95% CI)
Jiang and Zhu 2013
15.78 (9.15, 22.41)
Combined
15.78 (9.25, 22.31)
-10
0
30
Mean Difference
Favours Placebo
Favours Berberine gelatin
Heterogeneity = 0.00 (I² = N/A)

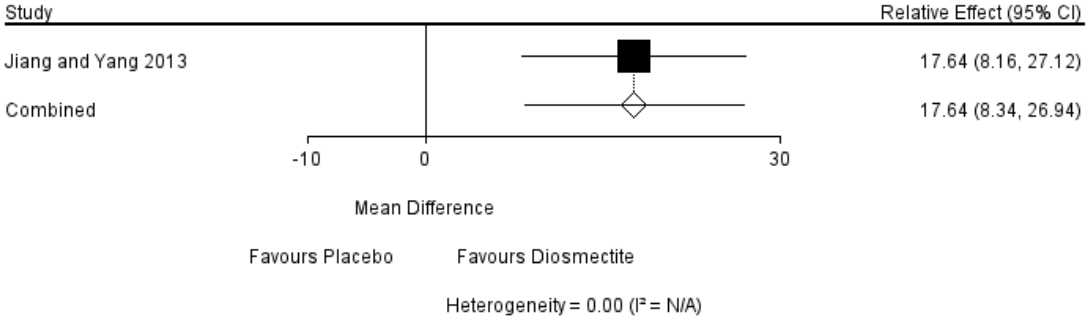

Study
Relative Effect (95% CI)
Shao 2020
8.99 (-15.02, 33.00)
Combined
8.99 (-14.57, 32.55)
-20
0
40
Mean Difference
Favours Placebo
Favours Chitosan
Heterogeneity = 0.00 (I² = N/A)

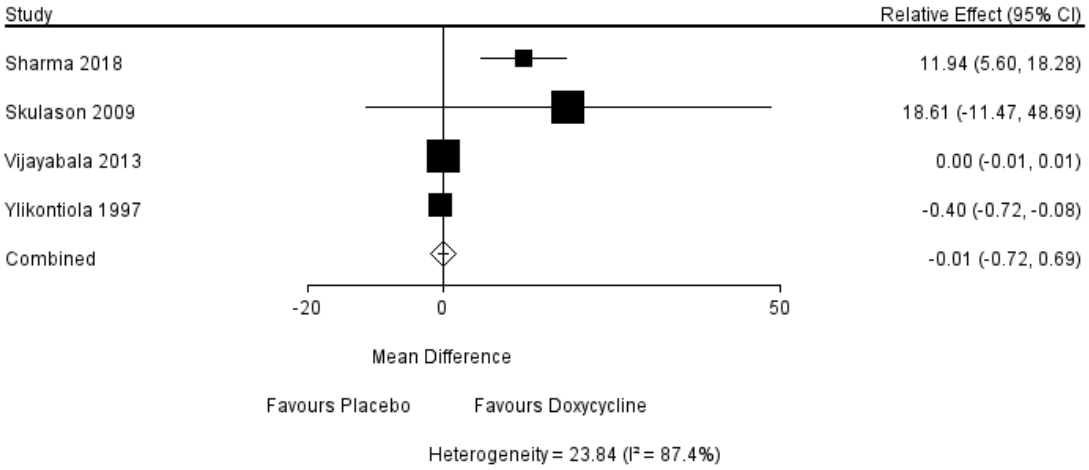

Study
Relative Effect (95% CI)
Halboub 2019
-8.96 (-30.33, 12.41)
Combined
-8.96 (-29.87, 11.95)
-40
0
20
Mean Difference
Favours N-acetylcysteine
Favours Chlorhexidine
Heterogeneity = 0.00 (I² = N/A)

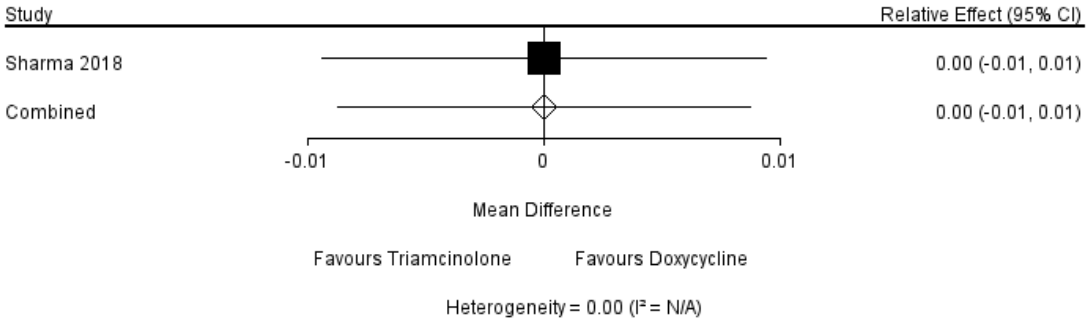

Study
Relative Effect (95% CI)
Soylu and Okuyucu 2014
-6.14 (-11.02, -1.26)
Combined
-6.14 (-10.94, -1.34)
-20
0
10
Mean Difference
Favours Sucralfate
Favours Chlorhexidine
Heterogeneity = 0.00 (I² = 100.0%)

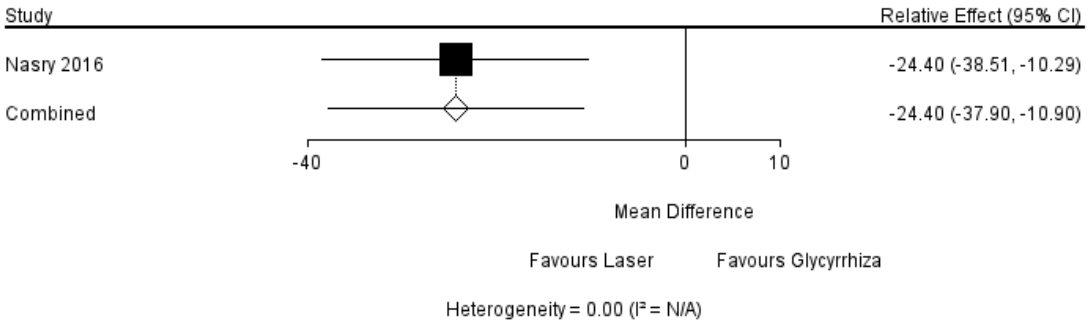

Study
Relative Effect (95% CI)
Deshmukh 2014
0.00 (-0.01, 0.01)
Halim 2013
-1.12 (-54.72, 52.48)
Kia 2020
8.61 (-9.03, 26.25)
Combined
0.00 (-0.01, 0.01)
-60
0
60
Mean Difference
Favours Triamcinolone
Favours Curcumin
Heterogeneity = 0.96 (I² = 0.0%)

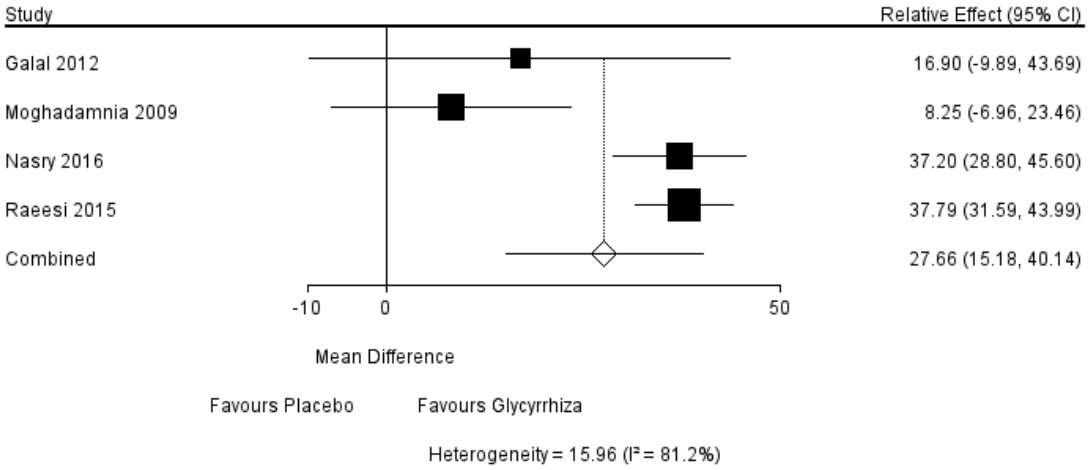

Study
Relative Effect (95% CI)
Liu 2012
12.90 (3.76, 22.04)
Combined
12.90 (3.81, 21.99)
-10
0
30
Mean Difference
Favours Placebo
Favours Dexamethasone
Heterogeneity = 0.00 (I² = N/A)

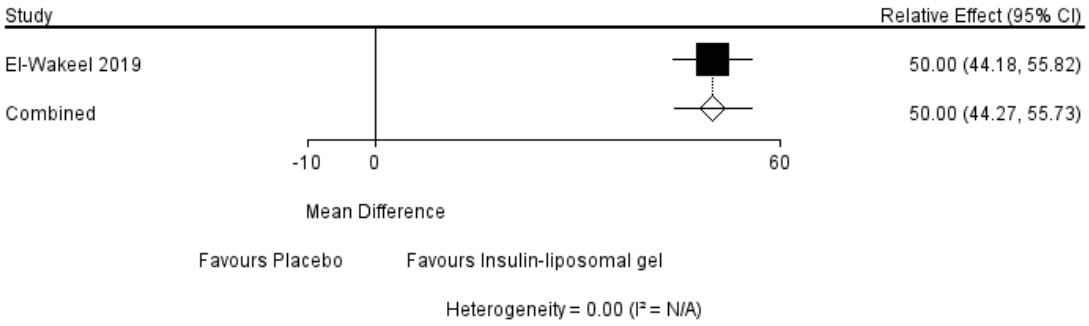

Study
Relative Effect (95% CI)
Jiang and Yang 2013
17.64 (8.16, 27.12)
Combined
17.64 (8.34, 26.94)
-10
0
30
Mean Difference
Favours Placebo
Favours Diosmectite
Heterogeneity = 0.00 (I² = N/A)

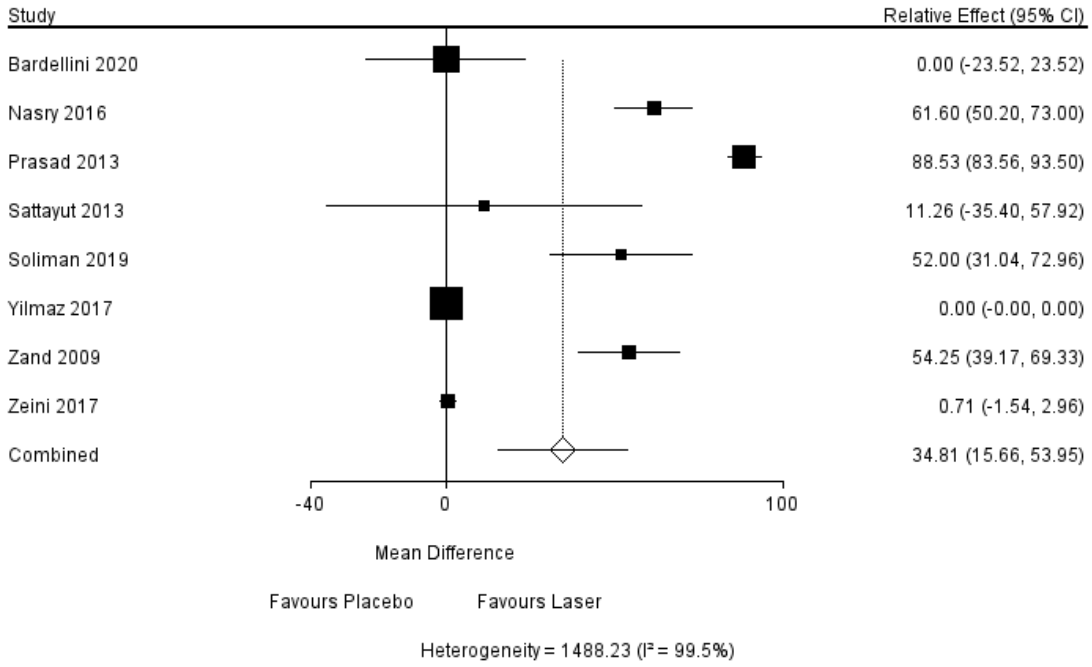

Study
Relative Effect (95% CI)
Sharma 2018
11.94 (5.60, 18.28)
Skulason 2009
18.61 (-11.47, 48.69)
Vijayabala 2013
0.00 (-0.01, 0.01)
Ylikontiola 1997
-0.40 (-0.72, -0.08)
Combined
-0.01 (-0.72, 0.69)
-20
0
50
Mean Difference
Favours Placebo
Favours Doxycycline
Heterogeneity = 23.84 (I² = 87.4%)

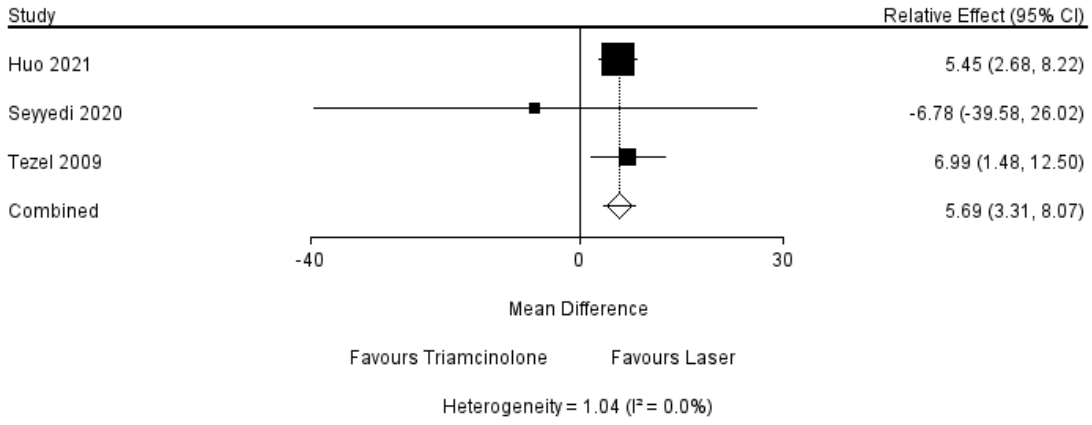

Study
Relative Effect (95% CI)
Sharma 2018
0.00 (-0.01, 0.01)
Combined
0.00 (-0.01, 0.01)
-0.01
0
0.01
Mean Difference
Favours Triamcinolone
Favours Doxycycline
Heterogeneity = 0.00 (I² = N/A)

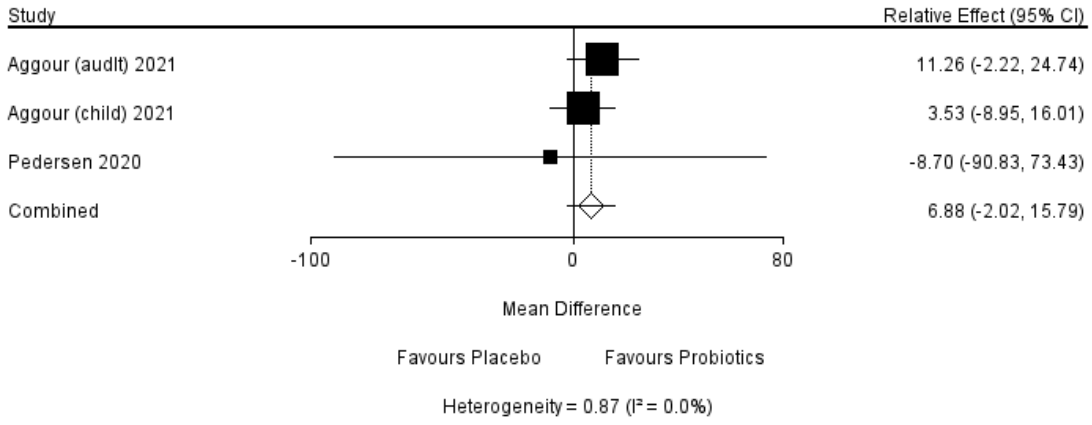

Study
Relative Effect (95% CI)
Nasry 2016
-24.40 (-38.51, -10.29)
Combined
-24.40 (-37.90, -10.90)
-40
0
10
Mean Difference
Favours Laser
Favours Glycyrrhiza
Heterogeneity = 0.00 (I² = N/A)

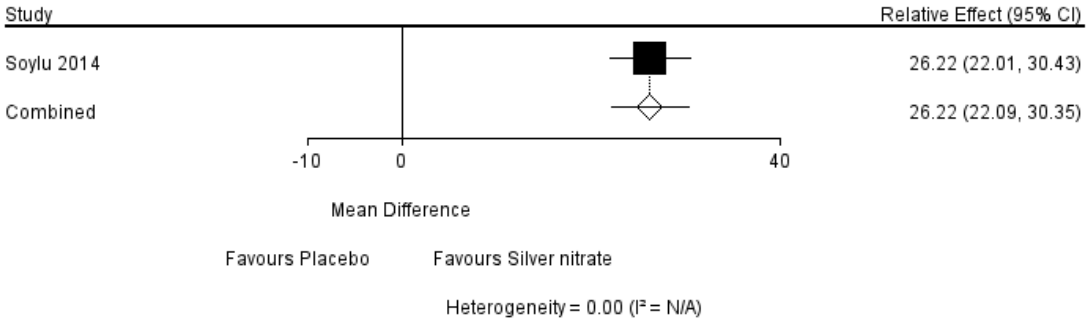

Study
Relative Effect (95% CI)
Galal 2012
16.90 (-9.89, 43.69)
Moghadamnia 2009
8.25 (-6.96, 23.46)
Nasry 2016
37.20 (28.80, 45.60)
Raeesi 2015
37.79 (31.59, 43.99)
Combined
27.66 (15.18, 40.14)
-10
0
50
Mean Difference
Favours Placebo
Favours Glycyrrhiza
Heterogeneity = 15.96 (I² = 81.2%)

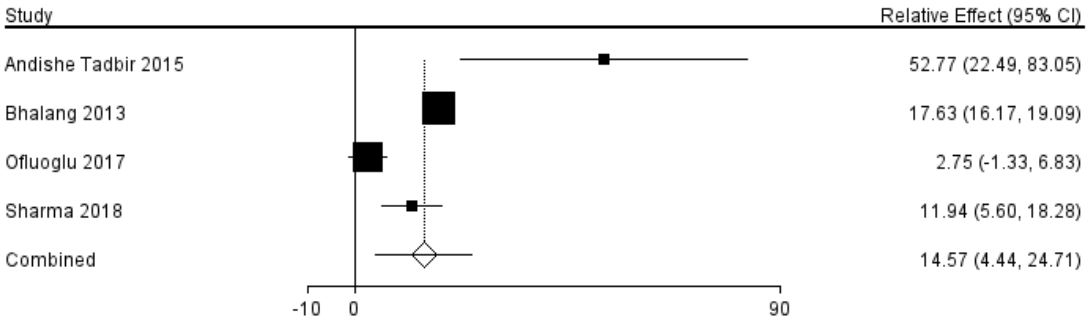

Study
Relative Effect (95% CI)
El-Wakeel 2019
50.00 (44.18, 55.82)
Combined
50.00 (44.27, 55.73)
-10
0
60
Mean Difference
Favours Placebo
Favours Insulin-liposomal gel
Heterogeneity = 0.00 (I² = N/A)

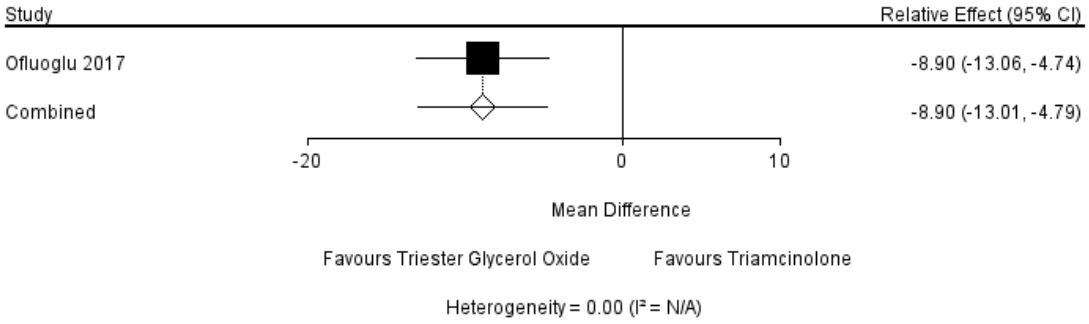

Study
Relative Effect (95% CI)
Bardellini 2020
0.00 (-23.52, 23.52)
Nasry 2016
61.60 (50.20, 73.00)
Prasad 2013
88.53 (83.56, 93.50)
Sattayut 2013
11.26 (-35.40, 57.92)
Soliman 2019
52.00 (31.04, 72.96)
Yilmaz 2017
0.00 (-0.00, 0.00)
Zand 2009
54.25 (39.17, 69.33)
Zeini 2017
0.71 (-1.54, 2.96)
Combined
34.81 (15.66, 53.95)
-40
0
100
Mean Difference
Favours Placebo
Favours Laser
Heterogeneity = 1488.23 (I² = 99.5%)

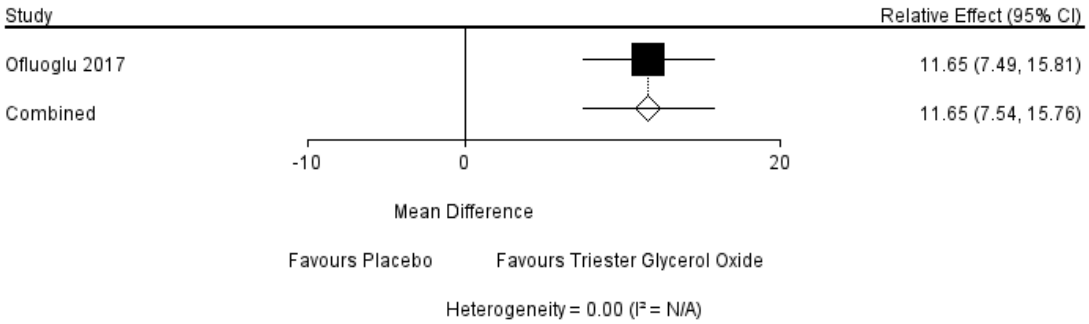

Study
Relative Effect (95% CI)
Huo 2021
5.45 (2.68, 8.22)
Seyyedi 2020
-6.78 (-39.58, 26.02)
Tezel 2009
6.99 (1.48, 12.50)
Combined
5.69 (3.31, 8.07)
-40
0
30
Mean Difference
Favours Triamcinolone
Favours Laser
Heterogeneity = 1.04 (I² = 0.0%)

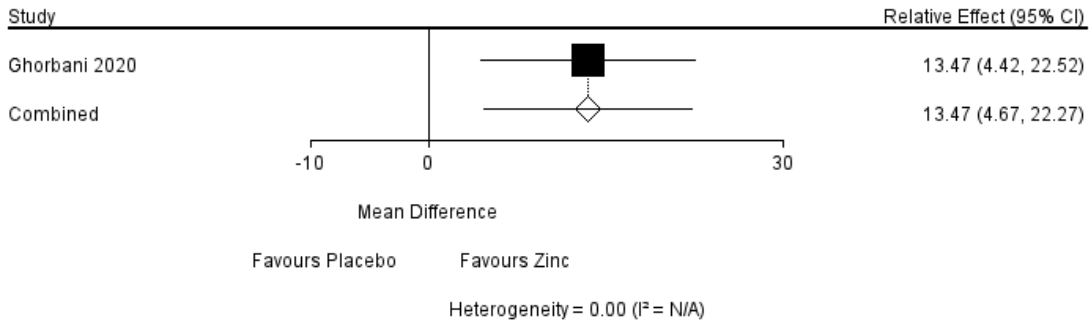

Study
Relative Effect (95% CI)
Aggour (audlt) 2021
11.26 (-2.22, 24.74)
Aggour (child) 2021
3.53 (-8.95, 16.01)
Pedersen 2020
-8.70 (-90.83, 73.43)
Combined
6.88 (-2.02, 15.79)
-100
0
80
Mean Difference
Favours Placebo
Favours Probiotics
Heterogeneity = 0.87 (I² = 0.0%)


Study
Relative Effect (95% CI)
Soylu 2014
26.22 (22.01, 30.43)
Combined
26.22 (22.09, 30.35)
-10
0
40
Mean Difference
Favours Placebo
Favours Silver nitrate
Heterogeneity = 0.00 (I² = N/A)


Study
Relative Effect (95% CI)
Andishe Tadbir 2015
52.77 (22.49, 83.05)
Bhalang 2013
17.63 (16.17, 19.09)
Ofluoglu 2017
2.75 (-1.33, 6.83)
Sharma 2018
11.94 (5.60, 18.28)
Combined
14.57 (4.44, 24.71)
-10
0
90
Mean Difference
Favours Placebo
Favours Triamcinolone
Heterogeneity = 54.27 (I² = 94.5%)


Study
Relative Effect (95% CI)
Ofluoglu 2017
-8.90 (-13.06, -4.74)
Combined
-8.90 (-13.01, -4.79)
-20
0
10
Mean Difference
Favours Triester Glycerol Oxide
Favours Triamcinolone
Heterogeneity = 0.00 (I² = N/A)


Study
Relative Effect (95% CI)
Ofluoglu 2017
11.65 (7.49, 15.81)
Combined
11.65 (7.54, 15.76)
-10
0
20
Mean Difference
Favours Placebo
Favours Triester Glycerol Oxide
Heterogeneity = 0.00 (I² = N/A)


Study
Relative Effect (95% CI)
Ghorbani 2020
13.47 (4.42, 22.52)
Combined
13.47 (4.67, 22.27)
-10
0
30
Mean Difference
Favours Placebo
Favours Zinc
Heterogeneity = 0.00 (I² = N/A)

Comparison	NO. of included study	Heterogeneity (I^2)	Combined effect [SMD (95%CI)]
Allicin vs			
Placebo	1	NA	23.70 (15.62, 31.78)
Aloe vs			
Placebo	2	0%	6.91 (5.50, 8.31)
Triamcinolone	1	NA	-10.74 (-12.18, -9.30)
Amlexanox vs			
Placebo	5	99%	33.50 (7.82, 59.19)
Glycyrrhiza	1	NA	18.50 (3.75, 33.25)
Laser	1	NA	-5.90 (-22.40, 10.60)
Triamcinolone	1	NA	-42.26 (-44.57, -39.95)
Dexamethasone	1	NA	0.00 (-0.01, 0.01)
Benzydamine vs			
Placebo	1	NA	11.94 (6.02, 17.86)
Doxycycline	1	NA	0.00 (-0.01, 0.01)
Quercetin	1	NA	-7.22 (-26.29, 11.85)
Triamcinolone	1	NA	0.00 (-0.01, 0.01)
Berberine gelatin vs			
Placebo	1	NA	15.78 (9.25, 22.31)
Chitosan vs			
Placebo	1	NA	8.99 (-14.57, 32.55)
Chlorhexidine vs			
N-acetylcysteine	1	NA	-8.96 (-29.87, 11.95)
Sucralfate	1	NA	-6.14 (-10.94, -1.34)
Curcumin vs			
Triamcinolone	3	0%	0.00 (-0.01, 0.01)
Dexamethasone vs			
Placebo	1	NA	12.90 (3.81, 21.99)
Diosmectite vs			
Placebo	1	NA	17.64 (8.34, 26.94)
Doxycycline vs			
Placebo	4	87.4%	-0.01 (-0.72, 0.69)
Triamcinolone	1	NA	0.00 (-0.01, 0.01)
Glycyrrhiza vs			
Laser	1	NA	-24.40 (-37.90, -10.90)
Placebo	4	81.2%	27.66 (15.18, 40.14)
Insulin-liposomal gel vs			
Placebo	1	NA	50.00 (44.27, 55.73)
Laser vs			
Placebo	8	99.5%	34.81 (15.66, 53.95)
Triamcinolone	3	0%	6.99 (1.85, 12.13)
Probiotics vs			
Placebo	3	0%	6.88 (-2.02, 15.79)
Silver nitrate vs			
Placebo	1	NA	26.22 (26.09, 30.35)
Triamcinolone vs			
Placebo	4	94.5%	14.57 (4.44, 24.71)
Triester Glycerol Oxide	1	NA	-8.90 (-13.01, -4.79)
Triester Glycerol Oxide vs			
Placebo	1	NA	11.65 (7.54, 15.76)
Zinc vs			
Placebo	1	NA	13.47 (4.67, 22.27)

MD, mean difference; CI, confidence interval; NA, not applicable.

6. Subgroup Discussion

The 56 RCTs studied for the symptom-reducing effect had different durations of local intervention and were examined at different times during the trial. The size-reducing effect is discussed separately according to the different examination times.

Day 0

1. Consistency Model

1.1 Summary estimates

Aloe	60.01 (-45.60, 159.40)	-10.79 (-107.87, 83.10)	5.38 (-94.80, 102.16)
-60.01 (-159.40, 45.60)	Laser	-70.96 (-115.42, -26.81)	-54.41 (-133.09, 20.80)
10.79 (-83.10, 107.87)	70.96 (26.81, 115.42)	Placebo	16.74 (-60.78, 92.32)
-5.38 (-102.16, 94.80)	54.41 (-20.80, 133.09)	-16.74 (-92.32, 60.78)	Triamcinolone

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4
Aloe	0.1	0.3	0.28	0.33
Laser	0.85	0.12	0.03	0
Placebo	0	0.18	0.35	0.47
Triamcinolone	0.05	0.41	0.35	0.2

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	44.73 (25.24, 86.33)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Aloe	1.00
d.Placebo.Laser	1.00
d.Placebo.Triamcinolone	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Aloe	63.25 (-46.01, 172.29)	-8.69 (-111.98, 93.09)	2.84 (-99.39, 109.45)
-63.25 (-172.29, 46.01)	Laser	-71.93 (-117.97, -24.56)	-51.07 (-139.54, 34.18)
8.69 (-93.09, 111.98)	71.93 (24.56, 117.97)	Placebo	27.06 (-112.79, 179.88)
-2.84 (-109.45, 99.39)	51.07 (-34.18, 139.54)	-27.06 (-179.88, 112.79)	Triamcinolone

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Laser, Placebo, Triamcinolone	4.62 (-68.95, 94.10)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	46.49 (25.57, 88.78)
Inconsistency Standard Deviation	41.76 (1.80, 92.60)

2.4 Convergence Diagnostics

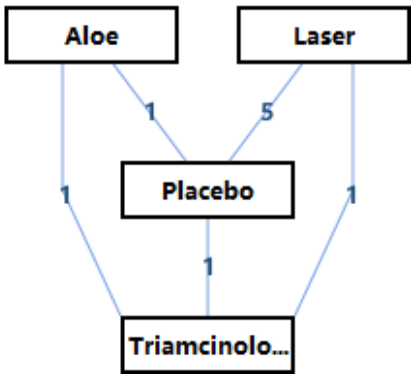
Parameter	PSRF
d.Aloe.Placebo	1.00
d.Laser.Triamcinolone	1.00
d.Placebo.Laser	1.00
w.Laser.Placebo.Triamcinolone	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Laser, Placebo	-73.56 (-125.70, -22.42)	-43.34 (-201.05, 115.96)	-70.96 (-115.42, -26.81)	0.67
Laser, Triamcinolone	-40.77 (-154.72, 70.35)	-72.62 (-197.56, 52.79)	-54.41 (-133.09, 20.80)	0.66
Placebo, Triamcinolone	2.43 (-112.79, 118.03)	34.31 (-92.49, 158.95)	16.74 (-60.78, 92.32)	0.66

4. Network structure



Day 1

1. Consistency Model

1.1 Summary estimates

Curcumin	-0.37 (-96.16, 97.91)	-23.52 (-121.32, 77.32)	35.77 (-75.63, 148.25)	44.11 (-24.98, 111.65)	-26.08 (-106.28, 55.32)	-10.56 (-120.97, 103.79)	-1.24 (-56.79, 55.56)
0.37 (-97.91, 96.16)	Doxycycline	-22.54 (-101.25, 51.93)	36.79 (-58.43, 131.02)	44.49 (-24.94, 108.29)	-25.74 (-80.55, 29.01)	-9.82 (-102.66, 83.38)	-0.72 (-83.26, 77.19)
23.52 (-77.32, 121.32)	22.54 (-51.93, 101.25)	Glycyrrhiza	59.22 (-34.92, 152.48)	67.71 (-1.53, 133.22)	-3.13 (-57.59, 52.06)	13.12 (-80.52, 104.59)	22.47 (-60.22, 99.57)
-35.77 (-148.25, 75.63)	-36.79 (-131.02, 58.43)	-59.22 (-152.48, 34.92)	Insulin-liposomal gel	8.30 (-79.64, 92.53)	-62.07 (-137.87, 14.99)	-46.23 (-152.78, 61.73)	-36.81 (-135.30, 56.99)
-44.11 (-111.65, 24.98)	-44.49 (-108.29, 24.94)	-67.71 (-133.22, 1.53)	-8.30 (-92.53, 79.64)	Laser	-70.45 (-107.84, -28.77)	-54.50 (-137.91, 35.31)	-45.11 (-88.94, -1.39)
26.08 (-55.32, 106.28)	25.74 (-29.01, 80.55)	3.13 (-52.06, 57.59)	62.07 (-14.99, 137.87)	70.45 (28.77, 107.84)	Placebo	15.94 (-59.36, 92.86)	25.28 (-35.00, 83.01)
10.56 (-103.79, 120.97)	9.82 (-83.38, 102.66)	-13.12 (-104.59, 80.52)	46.23 (-61.73, 152.78)	54.50 (-35.31, 137.91)	-15.94 (-92.86, 59.36)	Silver nitrate	9.15 (-89.92, 103.20)
1.24 (-55.56, 56.79)	0.72 (-77.19, 83.26)	-22.47 (-99.57, 60.22)	36.81 (-56.99, 135.30)	45.11 (1.39, 88.94)	-25.28 (-83.01, 35.00)	-9.15 (-103.20, 89.92)	Triamcinolone

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8
Curcumin	0.05	0.11	0.18	0.17	0.15	0.11	0.1	0.13
Doxycycline	0.04	0.09	0.19	0.18	0.2	0.15	0.09	0.06
Glycyrrhiza	0.01	0.03	0.06	0.1	0.13	0.17	0.2	0.3
Insulin-liposomal gel	0.37	0.27	0.13	0.09	0.06	0.04	0.02	0.02
Laser	0.47	0.37	0.11	0.03	0.01	0	0	0
Placebo	0	0	0.01	0.03	0.11	0.25	0.37	0.23
Silver nitrate	0.05	0.07	0.13	0.13	0.14	0.14	0.12	0.21
Triamcinolone	0.01	0.06	0.19	0.26	0.2	0.14	0.11	0.05

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	33.57 (18.72, 66.78)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Laser.Placebo	1.00
d.Laser.Triamcinolone	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Silvernitrate	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Curcumin	-1.01 (-97.93, 98.18)	-23.17 (-119.67, 73.70)	33.83 (-76.96, 146.31)	43.94 (-27.10, 115.41)	-26.28 (-106.73, 57.30)	-10.71 (-122.07, 100.07)	-0.75 (-54.60, 55.29)
1.01 (-98.18, 97.93)	Doxycycline	-21.97 (-99.46, 53.67)	34.47 (-58.00, 130.14)	45.24 (-22.76, 111.78)	-25.57 (-79.97, 27.68)	-9.36 (-101.74, 82.54)	0.45 (-80.83, 80.36)
23.17 (-73.70, 119.67)	21.97 (-53.67, 99.46)	Glycyrrhiza	57.99 (-34.90, 152.79)	67.35 (-0.81, 131.27)	-3.43 (-55.87, 50.90)	12.43 (-82.33, 108.22)	22.44 (-56.96, 101.81)
-33.83 (-146.31, 76.96)	-34.47 (-130.14, 58.00)	-57.99 (-152.79, 34.90)	Insulin-liposomal gel	10.23 (-75.90, 94.54)	-60.82 (-137.64, 15.77)	-44.96 (-153.51, 61.54)	-35.10 (-132.96, 60.61)
-43.94 (-115.41, 27.10)	-45.24 (-111.78, 22.76)	-67.35 (-131.27, 0.81)	-10.23 (-94.54, 75.90)	Laser	-70.72 (-109.05, -29.71)	-55.52 (-138.86, 33.38)	-44.83 (-88.31, 0.54)
26.28 (-57.30, 106.73)	25.57 (-27.68, 79.97)	3.43 (-50.90, 55.87)	60.82 (-15.77, 137.64)	70.72 (29.71, 109.05)	Placebo	16.19 (-60.01, 91.33)	25.95 (-33.34, 83.79)
10.71 (-100.07, 122.07)	9.36 (-82.54, 101.74)	-12.43 (-108.22, 82.33)	44.96 (-61.54, 153.51)	55.52 (-33.38, 138.86)	-16.19 (-91.33, 60.01)	Silver nitrate	10.45 (-86.44, 107.98)
0.75 (-55.29, 54.60)	-0.45 (-80.36, 80.83)	-22.44 (-101.81, 56.96)	35.10 (-60.61, 132.96)	44.83 (-0.54, 88.31)	-25.95 (-83.79, 33.34)	-10.45 (-107.98, 86.44)	Triamcinolone

2.2 Variance Calculation

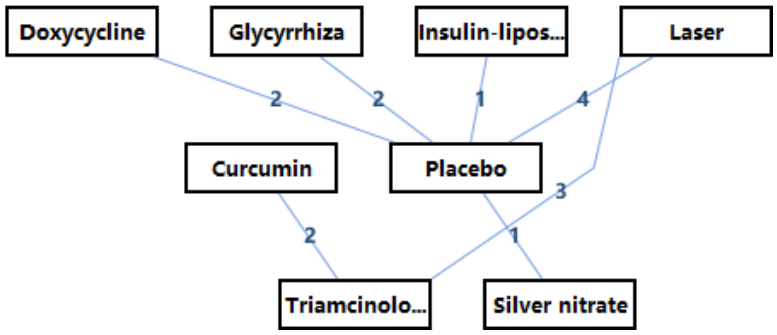
Parameter	Median (95% CI)
Random Effects Standard Deviation	33.45 (18.80, 66.98)
Inconsistency Standard Deviation	48.39 (2.30, 92.92)

2.3 Convergence Diagnostics

Parameter	PSRF
d.Curcumin.Triamcinolone	1.00
d.Laser.Placebo	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.02
d.Placebo.Silvernitrate	1.00
d.Triamcinolone.Laser	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

4. Network structure



Day 2

1. Consistency Model

1.1 Summary estimates

Allicin	3.40 (-89.94, 97.62)	9.51 (-83.70, 101.89)	3.74 (-93.95, 105.03)	6.08 (-96.67, 105.08)	19.35 (-89.84, 128.27)	15.07 (-92.09, 125.58)	-2.61 (-98.28, 94.89)	26.29 (-56.93, 107.58)	-12.57 (-92.44, 67.22)	56.63 (-42.74, 155.52)
-3.40 (-97.62, 89.94)	Aloe	6.20 (-81.94, 90.51)	-0.23 (-92.63, 96.77)	2.31 (-94.38, 99.30)	15.66 (-78.25, 110.04)	11.39 (-85.34, 105.51)	-5.58 (-100.22, 86.05)	22.71 (-54.15, 96.85)	-16.06 (-90.42, 54.32)	52.59 (-41.81, 146.80)
-9.51 (-101.89, 83.70)	-6.20 (-90.51, 81.94)	Amlexanox	-5.76 (-95.41, 86.37)	-3.42 (-96.59, 90.19)	9.20 (-87.72, 111.65)	4.95 (-91.35, 106.57)	-11.60 (-103.14, 79.50)	16.40 (-54.39, 89.18)	-22.11 (-84.57, 39.12)	47.10 (-46.17, 139.35)
-3.74 (-105.03, 93.95)	0.23 (-96.77, 92.63)	5.76 (-86.37, 95.41)	Berberine gelatin	1.39 (-98.18, 99.64)	15.13 (-94.57, 124.29)	11.00 (-96.27, 119.35)	-5.45 (-103.22, 90.01)	22.57 (-59.82, 101.90)	-16.35 (-98.78, 61.26)	53.13 (-50.55, 151.51)
-6.08 (-105.08, 96.67)	-2.31 (-99.30, 94.38)	3.42 (-90.19, 96.59)	-1.39 (-99.64, 98.18)	Chitosan	13.40 (-96.90, 124.19)	9.47 (-98.86, 120.83)	-7.91 (-106.05, 89.84)	20.58 (-62.06, 105.53)	-18.48 (-101.37, 62.23)	50.68 (-51.85, 149.69)
-19.35 (-128.27, 89.84)	-15.66 (-110.04, 78.25)	-9.20 (-111.65, 87.72)	-15.13 (-124.29, 94.57)	-13.40 (-124.19, 96.90)	Chlorhexidine	-3.87 (-103.26, 93.69)	-21.28 (-129.26, 85.89)	7.04 (-86.29, 98.46)	-31.41 (-124.57, 57.78)	37.63 (-71.27, 144.35)
-15.07 (-125.58, 92.09)	-11.39 (-105.51, 85.34)	-4.95 (-106.57, 91.35)	-11.00 (-119.35, 96.27)	-9.47 (-120.83, 98.86)	3.87 (-93.69, 103.26)	Curcumin	-17.04 (-127.45, 88.97)	11.43 (-83.21, 102.61)	-26.85 (-119.65, 61.10)	41.30 (-67.99, 146.83)
2.61 (-94.89, 98.28)	5.58 (-86.05, 100.22)	11.60 (-79.50, 103.14)	5.45 (-90.01, 103.22)	7.91 (-89.84, 106.05)	21.28 (-85.89, 129.26)	17.04 (-88.97, 127.45)	Diosmectite	28.11 (-51.30, 107.09)	-10.93 (-91.09, 70.94)	58.58 (-40.87, 160.24)
-26.29 (-107.58, 56.93)	-22.71 (-96.85, 54.15)	-16.40 (-89.18, 54.39)	-22.57 (-101.90, 59.82)	-20.58 (-105.53, 62.06)	-7.04 (-98.46, 86.29)	-11.43 (-102.61, 83.21)	-28.11 (-107.09, 51.30)	Doxycycline	-38.99 (-95.11, 17.90)	30.38 (-50.84, 109.62)
12.57 (-67.22, 92.44)	16.06 (-54.32, 90.42)	22.11 (-39.12, 84.57)	16.35 (-61.26, 98.78)	18.48 (-62.23, 101.37)	31.41 (-57.78, 124.57)	26.85 (-61.10, 119.65)	10.93 (-70.94, 91.09)	38.99 (-17.90, 95.11)	Glycyrrhiza	69.13 (-11.98, 149.48)
-56.63 (-155.52, 42.74)	-52.59 (-146.80, 41.81)	-47.10 (-139.35, 46.17)	-53.13 (-151.51, 50.55)	-50.68 (-149.69, 51.85)	-37.63 (-144.35, 71.27)	-41.30 (-146.83, 67.99)	-58.58 (-160.24, 40.87)	-30.38 (-109.62, 50.84)	-69.13 (-149.48, 11.98)	Insulin-liposomal gel
-29.49 (-105.91, 50.27)	-25.25 (-92.58, 45.15)	-19.54 (-79.89, 42.15)	-25.17 (-100.87, 55.25)	-22.69 (-103.82, 55.87)	-9.82 (-92.50, 76.63)	-14.09 (-97.34, 74.23)	-31.11 (-107.00, 45.11)	-2.86 (-54.31, 50.47)	-41.82 (-87.94, 5.75)	27.64 (-50.14, 103.60)
-34.56 (-165.85, 90.71)	-31.16 (-148.57, 86.08)	-24.50 (-152.37, 94.27)	-30.67 (-160.78, 95.77)	-28.81 (-160.42, 101.28)	-16.21 (-85.68, 53.57)	-19.47 (-139.62, 99.23)	-37.14 (-166.50, 89.64)	-8.54 (-125.04, 102.10)	-47.78 (-164.05, 64.27)	22.37 (-110.27, 145.21)
6.22 (-64.16, 76.51)	9.95 (-52.65, 74.05)	16.28 (-43.76, 75.25)	10.06 (-58.15, 81.57)	12.41 (-60.34, 85.16)	25.60 (-56.45, 108.22)	21.33 (-59.51, 107.67)	4.59 (-64.75, 73.85)	32.47 (-9.40, 73.44)	-6.31 (-46.47, 32.85)	62.85 (-6.66, 132.31)
-13.22 (-95.10, 67.89)	-9.42 (-70.88, 54.10)	-3.68 (-76.70, 64.27)	-9.37 (-88.99, 74.07)	-7.17 (-91.53, 74.67)	6.23 (-64.54, 77.41)	1.58 (-69.17, 73.02)	-14.80 (-96.80, 64.63)	12.73 (-46.42, 69.79)	-25.60 (-83.09, 28.76)	43.60 (-38.94, 122.50)
-14.46 (-108.70, 78.86)	-10.58 (-93.87, 73.83)	-4.99 (-90.65, 79.91)	-10.68 (-104.10, 83.98)	-8.83 (-106.12, 88.51)	4.33 (-87.33, 99.20)	0.65 (-92.87, 98.14)	-16.63 (-107.63, 76.71)	11.50 (-63.35, 86.18)	-26.77 (-100.51, 45.24)	42.77 (-56.01, 136.19)
-28.43 (-124.59, 71.60)	-25.03 (-119.07, 70.44)	-19.51 (-110.16, 73.63)	-25.38 (-123.16, 80.33)	-22.95 (-122.65, 78.43)	-9.39 (-117.58, 102.05)	-13.45 (-120.23, 98.01)	-30.48 (-128.99, 67.54)	-3.04 (-82.75, 80.78)	-41.47 (-119.63, 39.25)	27.71 (-70.59, 129.03)

29.49 (-50.27, 105.91)	34.56 (-90.71, 165.85)	-6.22 (-76.51, 64.16)	13.22 (-67.89, 95.10)	14.46 (-78.86, 108.70)	28.43 (-71.60, 124.59)
25.25 (-45.15, 92.58)	31.16 (-86.08, 148.57)	-9.95 (-74.05, 52.65)	9.42 (-54.10, 70.88)	10.58 (-73.83, 93.87)	25.03 (-70.44, 119.07)
19.54 (-42.15, 79.89)	24.50 (-94.27, 152.37)	-16.28 (-75.25, 43.76)	3.68 (-64.27, 76.70)	4.99 (-79.91, 90.65)	19.51 (-73.63, 110.16)
25.17 (-55.25, 100.87)	30.67 (-95.77, 160.78)	-10.06 (-81.57, 58.15)	9.37 (-74.07, 88.99)	10.68 (-83.98, 104.10)	25.38 (-80.33, 123.16)
22.69 (-55.87, 103.82)	28.81 (-101.28, 160.42)	-12.41 (-85.16, 60.34)	7.17 (-74.67, 91.53)	8.83 (-88.51, 106.12)	22.95 (-78.43, 122.65)
9.82 (-76.63, 92.50)	16.21 (-53.57, 85.68)	-25.60 (-108.22, 56.45)	-6.23 (-77.41, 64.54)	-4.33 (-99.20, 87.33)	9.39 (-102.05, 117.58)
14.09 (-74.23, 97.34)	19.47 (-99.23, 139.62)	-21.33 (-107.67, 59.51)	-1.58 (-73.02, 69.17)	-0.65 (-98.14, 92.87)	13.45 (-98.01, 120.23)
31.11 (-45.11, 107.00)	37.14 (-89.64, 166.50)	-4.59 (-73.85, 64.75)	14.80 (-64.63, 96.80)	16.63 (-76.71, 107.63)	30.48 (-67.54, 128.99)
2.86 (-50.47, 54.31)	8.54 (-102.10, 125.04)	-32.47 (-73.44, 9.40)	-12.73 (-69.79, 46.42)	-11.50 (-86.18, 63.35)	3.04 (-80.78, 82.75)
41.82 (-5.75, 87.94)	47.78 (-64.27, 164.05)	6.31 (-32.85, 46.47)	25.60 (-28.76, 83.09)	26.77 (-45.24, 100.51)	41.47 (-39.25, 119.63)
-27.64 (-103.60, 50.14)	-22.37 (-145.21, 110.27)	-62.85 (-132.31, 6.66)	-43.60 (-122.50, 38.94)	-42.77 (-136.19, 56.01)	-27.71 (-129.03, 70.59)
Laser	5.89 (-101.97, 117.71)	-35.33 (-68.12, -0.74)	-16.00 (-60.86, 31.63)	-14.36 (-81.77, 55.86)	-0.64 (-78.36, 76.07)
-5.89 (-117.71, 101.97)	N-acetylcysteine	-40.81 (-149.04, 65.00)	-21.80 (-121.29, 76.19)	-19.88 (-138.34, 97.45)	-6.16 (-136.72, 120.53)
35.33 (0.74, 68.12)	40.81 (-65.00, 149.04)	Placebo	19.69 (-21.03, 61.57)	21.17 (-41.69, 83.57)	35.36 (-36.44, 104.58)
16.00 (-31.63, 60.86)	21.80 (-76.19, 121.29)	-19.69 (-61.57, 21.03)	Triamcinolone	1.62 (-62.58, 63.40)	15.26 (-67.19, 97.45)
14.36 (-55.86, 81.77)	19.88 (-97.45, 138.34)	-21.17 (-83.57, 41.69)	-1.62 (-63.40, 62.58)	Triester Glycerol Oxide	14.37 (-80.76, 107.03)
0.64 (-76.07, 78.36)	6.16 (-120.53, 136.72)	-35.36 (-104.58, 36.44)	-15.26 (-97.45, 67.19)	-14.37 (-107.03, 80.76)	Zinc

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17
Allicin	0.02	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.1	0.13
Aloe	0.01	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08
Amlexanox	0.02	0.04	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.06	0.06	0.07	0.06	0.05
Berberine gelatin	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.09	0.1
Chitosan	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.11
Chlorhexidine	0.03	0.09	0.1	0.08	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.06	0.05
Curcumin	0.06	0.07	0.07	0.07	0.06	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08
Diosmectite	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.11	0.14
Doxycycline	0.03	0.08	0.1	0.11	0.11	0.11	0.1	0.09	0.07	0.06	0.05	0.03	0.03	0.02	0.01	0.01	0
Glycyrrhiza	0	0	0	0	0.01	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.11	0.12	0.16	0.17	0.13
Insulin-liposomal gel	0.38	0.18	0.11	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
Laser	0.02	0.07	0.11	0.14	0.14	0.13	0.11	0.09	0.07	0.05	0.03	0.02	0.01	0.01	0	0	0
N-acetylcysteine	0.22	0.13	0.08	0.06	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.05
Placebo	0	0	0	0	0	0	0.01	0.02	0.04	0.07	0.11	0.16	0.2	0.2	0.13	0.06	0.01
Triamcinolone	0	0.01	0.02	0.04	0.07	0.09	0.11	0.12	0.13	0.12	0.1	0.07	0.06	0.04	0.02	0.01	0
Triester Glycerol Oxide	0.03	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.04
Zinc	0.1	0.12	0.1	0.08	0.08	0.07	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	30.83 (18.70, 56.88)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Chlorhexidine.Nacetylcysteine	1.00
d.Placebo.Allicin	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Aloe	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Laser	1.00
d.Triamcinolone.Placebo	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Allicin	0.57 (-91.04, 92.65)	-8.17 (-107.31, 95.14)	3.67 (-92.49, 97.91)	4.88 (-95.09, 102.50)	12.05 (-94.00, 122.61)	8.28 (-98.60, 112.96)
-0.57 (-92.65, 91.04)	Aloe	-8.52 (-102.22, 85.71)	3.12 (-89.10, 93.14)	5.19 (-89.16, 96.18)	11.50 (-83.21, 105.19)	7.28 (-87.59, 98.59)
8.17 (-95.14, 107.31)	8.52 (-85.71, 102.22)	Amlexanox	11.42 (-89.14, 110.47)	12.40 (-90.88, 113.48)	20.47 (-89.62, 124.61)	15.78 (-90.52, 119.68)
-3.67 (-97.91, 92.49)	-3.12 (-93.14, 89.10)	-11.42 (-110.47, 89.14)	Berberine gelatin	1.90 (-96.14, 98.24)	9.03 (-97.27, 115.03)	4.14 (-102.24, 111.37)
-4.88 (-102.50, 95.09)	-5.19 (-96.18, 89.16)	-12.40 (-113.48, 90.88)	-1.90 (-98.24, 96.14)	Chitosan	6.86 (-101.00, 115.22)	3.20 (-103.89, 109.15)
-12.05 (-122.61, 94.00)	-11.50 (-105.19, 83.21)	-20.47 (-124.61, 89.62)	-9.03 (-115.03, 97.27)	-6.86 (-115.22, 101.00)	Chlorhexidine	-3.78 (-106.82, 91.86)
-8.28 (-112.96, 98.60)	-7.28 (-98.59, 87.59)	-15.78 (-119.68, 90.52)	-4.14 (-111.37, 102.24)	-3.20 (-109.15, 103.89)	3.78 (-91.86, 106.82)	Curcumin
1.87 (-94.40, 99.94)	2.00 (-88.75, 97.54)	-5.75 (-105.31, 96.63)	4.90 (-88.79, 100.25)	6.86 (-91.45, 105.30)	13.80 (-91.54, 124.83)	9.68 (-96.24, 115.92)
-25.84 (-103.01, 54.72)	-25.44 (-95.41, 49.10)	-33.39 (-115.76, 53.63)	-22.38 (-99.36, 58.52)	-20.54 (-101.78, 61.47)	-13.57 (-104.97, 80.29)	-17.45 (-106.93, 72.45)
19.94 (-69.38, 110.60)	20.74 (-60.02, 106.27)	11.95 (-50.41, 79.42)	23.50 (-65.79, 113.16)	24.72 (-67.47, 116.87)	32.52 (-64.35, 130.35)	27.84 (-66.00, 125.10)
-56.54 (-151.60, 41.49)	-56.17 (-145.55, 34.45)	-64.62 (-162.01, 37.48)	-52.67 (-149.39, 43.14)	-51.33 (-149.55, 46.18)	-44.70 (-151.02, 63.74)	-48.96 (-154.57, 58.09)
-8.69 (-98.69, 82.35)	-7.93 (-85.31, 73.10)	-16.09 (-765.3, 45.77)	-5.21 (-94.18, 83.88)	-3.27 (-96.98, 87.18)	4.11 (-90.90, 95.73)	0.15 (-90.18, 87.26)
-28.04 (-157.85, 101.79)	-27.13 (-148.34, 93.20)	-36.02 (-160.43, 93.54)	-24.07 (-153.77, 106.64)	-23.13 (-152.42, 109.46)	-16.03 (-85.50, 52.07)	-19.75 (-142.65, 99.46)
6.05 (-59.80, 75.65)	6.70 (-52.44, 70.69)	12.46 (-70.77, 94.50)	9.75 (-57.83, 78.11)	11.54 (-59.63, 82.46)	18.62 (-64.01, 102.47)	13.99 (-67.11, 95.92)
-5.80 (-88.67, 76.05)	-5.28 (-65.43, 55.58)	-14.31 (-89.91, 64.68)	-2.33 (-84.44, 75.62)	-0.97 (-84.76, 80.90)	5.34 (-64.41, 77.90)	2.01 (-69.58, 69.78)
-11.85 (-106.97, 81.91)	-11.58 (-92.55, 70.57)	-19.35 (-112.88, 77.14)	-8.22 (-104.89, 83.80)	-6.58 (-103.77, 85.99)	0.05 (-93.31, 94.59)	-3.89 (-99.75, 88.40)
-28.21 (-123.86, 67.75)	-28.13 (-118.20, 64.25)	-36.44 (-133.41, 65.67)	-24.71 (-121.42, 69.38)	-22.70 (-123.42, 75.87)	-16.57 (-121.28, 92.96)	-20.91 (-125.09, 86.47)

-1.87 (-99.94, 94.40)	25.84 (-54.72, 103.01)	-19.94 (-110.60, 69.38)	56.54 (-41.49, 151.60)	8.69 (-82.35, 98.69)	28.04 (-101.79, 157.85)	-6.05 (-75.65, 59.80)	5.80 (-76.05, 88.67)	11.85 (-81.91, 106.97)	28.21 (-67.75, 123.86)				
-2.00 (-97.54, 88.75)	25.44 (-49.10, 95.41)	-20.74 (-106.27, 60.02)	56.17 (-34.45, 145.55)	7.93 (-73.10, 85.31)	27.13 (-93.20, 148.34)	-6.70 (-70.69, 52.44)	5.28 (-55.58, 65.43)	11.58 (-70.57, 92.55)	28.13 (-64.25, 118.20)				
5.75 (-96.63, 105.31)	33.39 (-53.63, 115.76)	-11.95 (-79.42, 50.41)	64.62 (-37.48, 162.01)	16.09 (-45.77, 76.53)	36.02 (-93.54, 160.43)	-12.46 (-94.50, 70.77)	14.31 (-64.68, 89.91)	19.35 (-77.14, 112.88)	36.44 (-65.67, 133.41)				
-4.90 (-100.25, 88.79)	22.38 (-58.52, 99.36)	-23.50 (-113.16, 65.79)	52.67 (-43.14, 149.39)	5.21 (-83.88, 94.18)	24.07 (-106.64, 153.77)	-9.75 (-78.11, 57.83)	2.33 (-75.62, 84.44)	8.22 (-83.80, 104.89)	24.71 (-69.38, 121.42)				
-6.86 (-105.30, 91.45)	20.54 (-61.47, 101.78)	-24.72 (-116.87, 67.47)	51.33 (-46.18, 149.55)	3.27 (-87.18, 96.98)	23.13 (-109.46, 152.42)	-11.54 (-82.46, 59.63)	0.97 (-80.90, 84.76)	6.58 (-85.99, 103.77)	22.70 (-75.87, 123.42)				
-13.80 (-124.83, 91.54)	13.57 (-80.29, 104.97)	-32.52 (-130.35, 64.35)	44.70 (-63.74, 151.02)	-4.11 (-95.73, 90.90)	16.03 (-52.07, 85.50)	-18.62 (-102.47, 64.01)	-5.34 (-77.90, 64.41)	-0.05 (-94.59, 93.31)	16.57 (-92.96, 121.28)				
-9.68 (-115.92, 96.24)	17.45 (-72.45, 106.93)	-27.84 (-125.10, 66.00)	48.96 (-58.09, 154.57)	-0.15 (-87.26, 90.18)	19.75 (-99.46, 142.65)	-13.99 (-95.92, 67.11)	-2.01 (-69.78, 69.58)	3.89 (-88.40, 99.75)	20.91 (-86.47, 125.09)				
Diosmectite	27.44 (-52.00, 106.47)	-18.22 (-108.64, 71.45)	58.73 (-35.87, 153.82)	10.18 (-76.43, 99.96)	29.54 (-102.57, 163.99)	-4.78 (-73.08, 63.50)	7.82 (-71.26, 90.56)	13.19 (-76.00, 108.44)	30.27 (-66.63, 125.15)				
-27.44 (-106.47, 52.00)	Doxycycline	-45.06 (-119.85, 25.08)	30.71 (-47.09, 108.95)	-17.02 (-86.86, 51.87)	2.23 (-114.31, 120.71)	-32.08 (-74.10, 7.39)	-19.57 (-77.20, 42.34)	-13.61 (-88.15, 62.31)	2.95 (-77.09, 80.75)				
18.22 (-71.45, 108.64)	45.06 (-25.08, 119.85)	Glycyrrhiza	77.22 (-15.05, 168.39)	28.80 (-26.28, 84.53)	48.38 (-73.96, 170.94)	17.31 (-28.07, 61.19)	26.09 (-37.52, 94.50)	31.66 (-54.47, 118.29)	48.20 (-42.08, 141.04)				
-58.73 (-153.82, 35.87)	-30.71 (-108.95, 47.09)	-77.22 (-168.39, 15.05)	Insulin-liposomal gel	-48.29 (-137.98, 42.27)	-28.13 (-157.14, 100.25)	-62.97 (-131.39, 5.72)	-50.82 (-128.96, 30.35)	-44.46 (-137.86, 48.74)	-28.57 (-124.37, 69.17)				
-10.18 (-99.96, 76.43)	17.02 (-51.87, 86.86)	-28.80 (-84.53, 26.28)	48.29 (-42.27, 137.98)	Laser	20.35 (-98.03, 136.11)	-28.53 (-97.33, 43.83)	-2.44 (-58.54, 56.23)	3.56 (-76.77, 82.97)	19.57 (-67.55, 110.40)				
-29.54 (-163.99, 102.57)	-2.23 (-120.71, 114.31)	-48.38 (-170.94, 73.96)	28.13 (-100.25, 157.14)	-20.35 (-136.11, 98.03)	N-acetylcysteine	-34.42 (-145.38, 75.47)	-21.71 (-123.43, 80.01)	-15.49 (-139.26, 105.04)	0.63 (-132.36, 128.30)				
4.78 (-63.50, 73.08)	32.08 (-7.39, 74.10)	-17.31 (-61.19, 28.07)	62.97 (-5.72, 131.39)	28.53 (-43.83, 97.33)	34.42 (-75.47, 145.38)	Placebo	12.29 (-29.47, 58.66)	18.50 (-42.97, 82.61)	34.99 (-33.54, 101.57)				
-7.82 (-90.56, 71.26)	19.57 (-42.34, 77.20)	-26.09 (-94.50, 37.52)	50.82 (-30.35, 128.96)	2.44 (-56.23, 58.54)	21.71 (-80.01, 123.43)	-12.29 (-58.66, 29.47)	Triamcinolone	5.57 (-57.38, 69.33)	22.09 (-60.36, 104.20)				
-13.19 (-108.44, 76.00)	13.61 (-62.31, 88.15)	-31.66 (-118.29, 54.47)	44.46 (-48.74, 137.86)	-3.56 (-82.97, 76.77)	15.49 (-105.04, 139.26)	-18.50 (-82.61, 42.97)	-5.57 (-69.33, 57.38)	Triester Glycerol Oxide	16.90 (-78.33, 106.91)				
-30.27 (-125.15, 66.63)	-2.95 (-80.75, 77.09)	-48.20 (-141.04, 42.08)	28.57 (-69.17, 124.37)	-19.57 (-110.40, 67.55)	-0.63 (-128.30, 132.36)	-34.99 (-101.57, 33.54)	-22.09 (-104.20, 60.36)	-16.90 (-106.91, 78.33)	Zinc				

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Glycyrrhiza, Laser, Placebo, Triamcinolone	2.55 (-55.03, 60.50)
Laser, Placebo, Triamcinolone	9.41 (-48.09, 83.17)
Laser, Placebo, Triamcinolone	9.41 (-48.09, 83.17)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	30.07 (17.32, 57.49)
Inconsistency Standard Deviation	31.46 (2.78, 74.72)

2.4 Convergence Diagnostics

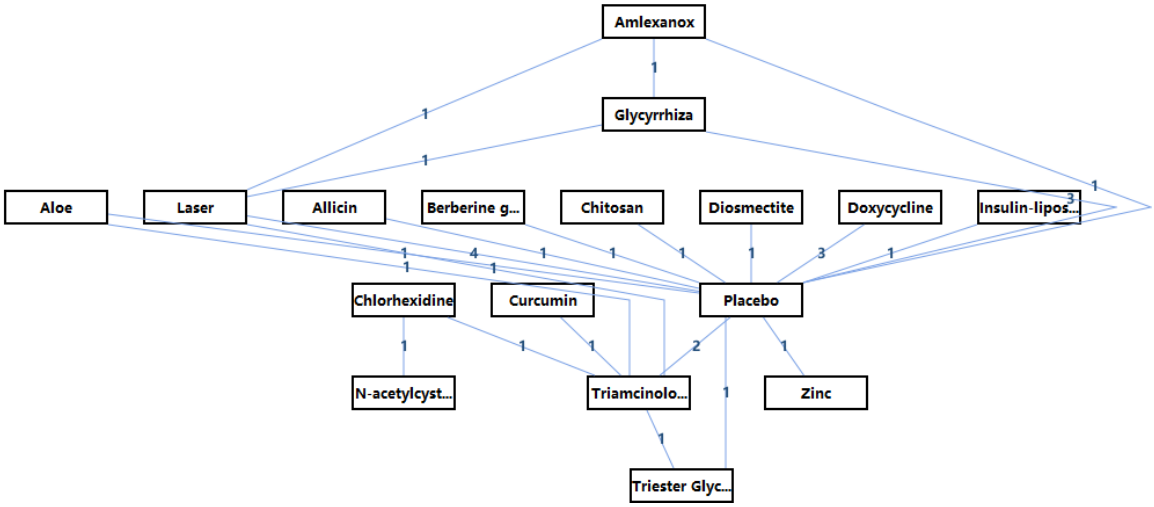
Parameter	PSRF
d.Allicin.Placebo	1.00
d.Aloe.Triamcinolone	1.01
d.Amlexanox.Glycyrrhiza	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Laser.Amlexanox	1.03
d.Placebo.Aloe	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Laser	1.01
d.Triamcinolone.TriesterGlycerol...	1.00
w.Glycyrrhiza.Laser.Triamcinolon...	1.00
w.Laser.Placebo.Triamcinolone	1.01
w.Laser.Placebo.Triamcinolone	1.01
sd.d	1.01
sd.w	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Glycyrrhiza, Laser	22.17 (-50.35, 96.69)	47.47 (-14.03, 106.87)	41.82 (-5.75, 87.94)	0.55
Laser, Placebo	-48.05 (-80.34, -14.42)	1.37 (-53.56, 56.74)	-35.33 (-68.12, -0.74)	0.11
Laser, Triamcinolone	12.25 (-61.23, 86.57)	-34.09 (-94.67, 28.70)	-16.00 (-60.86, 31.63)	0.29
Placebo, Triamcinolone	7.80 (-41.33, 55.90)	55.55 (-27.48, 139.67)	19.69 (-21.03, 61.57)	0.29

4. Network structure



Day 3

1. Consistency Model

1.1 Summary estimates

Aloe														
9.13 (-57.44, 73.82)	Amlexanox													
-58.24 (-139.41, 24.84)	-66.83 (-143.52, 8.92)	Chlorhexidine												
-29.60 (-110.36, 52.29)	-38.96 (-114.71, 35.34)	28.43 (-59.80, 117.18)	Curcumin											
13.20 (-78.74, 101.11)	4.16 (-59.51, 66.53)	70.95 (-28.89, 168.23)	42.28 (-56.86, 139.10)	Dexamethasone										
3.36 (-76.37, 83.68)	-5.40 (-78.71, 71.43)	61.12 (-30.59, 155.95)	32.80 (-57.32, 125.26)	-10.06 (-104.54, 89.53)	Diosmectite									
-22.86 (-85.01, 43.10)	-31.59 (-87.67, 29.19)	35.39 (-41.83, 114.68)	6.75 (-68.69, 85.53)	-35.63 (-118.63, 50.29)	-26.04 (-95.62, 44.12)	Doxycycline								
-0.27 (-69.50, 69.07)	-9.23 (-69.92, 54.96)	57.86 (-23.86, 143.61)	29.10 (-49.50, 109.56)	-13.62 (-98.67, 78.11)	-3.72 (-78.24, 71.43)	22.80 (-34.90, 77.75)	Glycyrrhiza							
-61.60 (-140.69, 19.68)	-70.28 (-142.83, 6.97)	-3.43 (-92.85, 90.19)	-31.91 (-122.99, 60.27)	-74.78 (-168.47, 25.07)	-64.56 (-147.67, 19.38)	-38.74 (-108.94, 29.50)	-60.89 (-134.76, 10.83)	Insulin, liposomal gel						
-46.86 (-105.60, 13.22)	-56.14 (-104.54, -4.09)	10.93 (-59.07, 82.32)	-17.39 (-86.16, 51.96)	-59.96 (-137.81, 19.85)	-50.19 (-118.73, 16.83)	-24.10 (-72.37, 23.43)	-46.81 (-101.02, 6.24)	14.35 (-53.90, 82.01)	Laser					
14.13 (-39.93, 68.67)	4.96 (-37.96, 50.43)	71.92 (1.15, 142.56)	43.73 (-23.90, 112.15)	1.15 (-73.21, 79.00)	10.83 (-49.83, 69.15)	36.76 (-0.37, 71.84)	14.03 (-29.48, 57.80)	75.51 (14.96, 134.42)	61.05 (29.60, 92.61)	Placebo				
5.98 (-61.32, 73.53)	-2.75 (-64.12, 57.58)	63.64 (-15.11, 144.57)	36.06 (-42.88, 115.66)	-6.69 (-93.03, 79.84)	2.82 (-69.87, 75.09)	28.73 (-26.37, 83.25)	6.20 (-54.98, 65.87)	67.46 (-5.40, 140.36)	52.91 (1.21, 104.12)	-8.11 (-49.17, 34.11)				
-6.45 (-85.81, 72.96)	-15.38 (-88.67, 57.50)	51.08 (-36.22, 142.43)	22.62 (-67.11, 111.76)	-19.19 (-116.97, 76.94)	-10.22 (-95.10, 76.12)	16.00 (-54.33, 84.00)	-6.85 (-78.39, 66.46)	54.63 (-29.53, 138.81)	40.64 (-26.14, 107.37)	-20.63 (-79.71, 37.56)				
-77.39 (-178.97, 23.86)	-86.61 (-182.37, 7.55)	-19.81 (-78.46, 39.13)	-47.86 (-152.07, 54.57)	-90.71 (-203.98, 23.26)	-81.19 (-189.04, 25.72)	-55.15 (-152.31, 39.83)	-77.80 (-179.72, 20.96)	-16.38 (-125.12, 89.41)	-30.82 (-122.74, 57.69)	-92.29 (-183.49, -3.94)				
-28.36 (-83.09, 23.71)	-37.42 (-82.40, 6.48)	29.49 (-33.83, 91.32)	1.27 (-60.03, 62.00)	-41.79 (-118.90, 36.15)	-31.54 (-100.98, 34.36)	-5.90 (-55.14, 40.25)	-28.11 (-83.69, 24.95)	33.05 (-35.86, 100.94)	18.51 (-15.44, 50.02)	-42.65 (-74.68, -12.28)				
-47.12 (-126.67, 32.70)	-56.04 (-130.32, 18.89)	10.73 (-81.42, 104.71)	-17.53 (-106.36, 74.00)	-60.03 (-155.83, 39.79)	-50.40 (-138.56, 35.55)	-24.30 (-94.77, 45.56)	-46.96 (-122.90, 25.52)	14.70 (-71.00, 97.87)	0.22 (-68.49, 66.46)	-61.36 (-121.02, -0.88)				

-53.05 (-127.95, 19.85)	-34.61 (-86.79, 16.07)	-83.66 (-181.98, 11.37)	-12.44 (-84.39, 57.90)	Probiotics	8.11 (-34.11, 49.17)	-52.91 (-104.12, -1.21)	-67.46 (-140.36, 5.40)	-6.20 (-65.87, 54.98)	-28.73 (-83.25, 26.37)	-2.82 (-75.09, 69.87)	6.69 (-79.84, 93.03)	-36.06 (-115.66, 42.88)	-63.64 (-144.57, 15.11)	2.75 (-57.58, 64.12)	-5.98 (-73.53, 61.32)
-39.93 (-123.78, 42.00)	-21.78 (-88.72, 43.40)	-71.34 (-176.85, 33.85)	Silver nitrate	12.44 (-57.90, 84.39)	20.63 (-37.56, 79.71)	-40.64 (-107.37, 26.14)	-54.63 (-138.81, 29.53)	6.85 (-66.46, 78.39)	-16.00 (-84.00, 54.33)	10.22 (-76.12, 95.10)	19.19 (-76.94, 116.97)	-22.62 (-111.76, 67.11)	-51.08 (-142.43, 36.22)	15.38 (-57.50, 88.67)	6.45 (-72.96, 85.81)
30.63 (-76.64, 139.82)	49.17 (-35.44, 135.75)	Sucralfate	71.34 (-33.85, 176.85)	83.66 (-11.37, 181.98)	92.29 (3.94, 183.49)	30.82 (-57.69, 122.74)	16.38 (-89.41, 125.12)	77.80 (-20.96, 179.72)	55.15 (-39.83, 152.31)	81.19 (-25.72, 189.04)	90.71 (-23.26, 203.98)	47.86 (-54.57, 152.07)	19.81 (-39.13, 78.46)	86.61 (-7.55, 182.37)	77.39 (-23.86, 178.97)
-18.72 (-86.48, 50.10)	Triamcinolone	-49.17 (-135.75, 35.44)	21.78 (-43.40, 88.72)	34.61 (-16.07, 86.79)	42.65 (12.28, 74.68)	-18.51 (-50.02, 15.44)	-33.05 (-100.94, 35.86)	28.11 (-24.95, 83.69)	5.90 (-40.25, 55.14)	31.54 (-34.36, 100.98)	41.79 (-36.15, 118.90)	-1.27 (-62.00, 60.03)	-29.49 (-91.32, 33.83)	37.42 (-6.48, 82.40)	28.36 (-23.71, 83.09)
Zinc	18.72 (-50.10, 86.48)	-30.63 (-139.82, 76.64)	39.93 (-42.00, 123.78)	53.05 (-19.85, 127.95)	61.36 (0.88, 121.02)	-0.22 (-66.46, 68.49)	-14.70 (-97.87, 71.00)	46.96 (-25.52, 122.90)	24.30 (-45.56, 94.77)	50.40 (-35.55, 138.56)	60.03 (-39.79, 155.83)	17.53 (-74.00, 106.36)	-10.73 (-104.71, 81.42)	56.04 (-18.89, 130.32)	47.12 (-32.70, 126.67)

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16
Aloe	0	0	0.01	0.02	0.02	0.03	0.05	0.08	0.09	0.11	0.11	0.11	0.09	0.09	0.09	0.1
Amlexanox	0	0	0	0	0.01	0.01	0.02	0.04	0.06	0.09	0.11	0.13	0.14	0.14	0.17	0.08
Chlorhexidine	0.07	0.29	0.19	0.13	0.09	0.06	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0
Curcumin	0.05	0.06	0.09	0.09	0.1	0.1	0.09	0.09	0.08	0.06	0.05	0.04	0.03	0.03	0.03	0.02
Dexamethasone	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.12	0.3
Diosmectite	0	0.01	0.01	0.02	0.03	0.03	0.05	0.05	0.08	0.09	0.1	0.09	0.09	0.08	0.11	0.16
Doxycycline	0	0.01	0.03	0.06	0.08	0.12	0.14	0.16	0.13	0.1	0.07	0.04	0.02	0.01	0.01	0
Glycyrrhiza	0	0	0.01	0.01	0.02	0.03	0.04	0.07	0.1	0.12	0.13	0.12	0.11	0.09	0.08	0.07
Insulin-liposomal gel	0.24	0.19	0.18	0.12	0.08	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0	0	0	0
Laser	0.03	0.1	0.18	0.23	0.21	0.12	0.06	0.03	0.02	0.01	0	0	0	0	0	0
Placebo	0	0	0	0	0	0	0	0	0.01	0.02	0.06	0.15	0.23	0.27	0.2	0.07
Probiotics	0	0	0	0.01	0.01	0.02	0.03	0.05	0.07	0.1	0.12	0.12	0.12	0.12	0.11	0.11
Silver nitrate	0.01	0.01	0.03	0.03	0.05	0.06	0.07	0.08	0.1	0.1	0.1	0.08	0.07	0.07	0.07	0.08
Sucralfate	0.47	0.18	0.1	0.06	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0	0.01	0.01
Triamcinolone	0	0	0.02	0.05	0.13	0.21	0.23	0.17	0.1	0.05	0.02	0.01	0	0	0	0
Zinc	0.12	0.13	0.14	0.14	0.12	0.09	0.07	0.06	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.01

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	26.72 (16.53, 48.07)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Amlexanox.Dexamethasone	1.00
d.Chlorhexidine.Sucralfate	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.03
d.Placebo.Probiotics	1.00
d.Placebo.Silvernitrate	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Aloe	1.00
d.Triamcinolone.Amlexanox	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Laser	1.00
d.Triamcinolone.Placebo	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Aloe	Amlexanox	Chlorhexidine	Curcumin	Dexamethasone	Diosmectite	Doxycycline	Glycyrrhiza
0.63 (-65.06, 67.67)	-0.83 (-67.67, 65.06)	66.97 (-17.22, 147.56)	39.50 (-43.13, 120.18)	-4.82 (-98.01, 85.74)	3.40 (-76.52, 84.82)	30.21 (-35.25, 92.99)	7.73 (-61.80, 74.76)
-66.97 (-147.56, 17.22)	-67.86 (-142.50, 8.74)	67.86 (-8.74, 142.50)	40.34 (-36.09, 111.87)	-4.18 (-65.17, 55.25)	4.30 (-68.23, 76.45)	31.08 (-27.05, 86.75)	8.86 (-52.78, 67.51)
-39.50 (-120.18, 43.13)	-40.34 (-111.87, 36.09)	27.67 (-60.21, 112.30)	-27.67 (-112.30, 60.21)	-71.94 (-169.01, 24.81)	-63.81 (-152.29, 30.14)	-36.49 (-116.24, 42.30)	-59.56 (-140.81, 23.44)
4.82 (-85.74, 98.01)	4.18 (-55.25, 65.17)	71.94 (-24.81, 169.01)	44.12 (-53.31, 139.47)	-44.12 (-139.47, 53.31)	-35.67 (-124.35, 56.12)	-8.58 (-85.57, 66.74)	-31.44 (-110.59, 47.74)
-3.40 (-84.82, 76.52)	-4.30 (-76.45, 68.23)	63.81 (-30.14, 152.29)	35.67 (-56.12, 124.35)	-8.68 (-105.12, 85.34)	8.68 (-85.34, 105.12)	26.30 (-41.97, 95.18)	3.80 (-69.68, 74.13)
-30.21 (-92.99, 35.25)	-31.08 (-86.75, 27.05)	36.49 (-42.30, 116.24)	8.58 (-66.74, 85.57)	-35.31 (-117.62, 46.23)	-26.30 (-95.18, 41.97)	35.31 (-46.23, 117.62)	12.66 (-72.21, 99.27)
-7.73 (-74.76, 61.80)	-8.86 (-67.51, 52.78)	59.56 (-23.44, 140.81)	31.44 (-47.74, 110.59)	-12.66 (-99.27, 72.21)	-3.80 (-74.13, 69.68)	22.18 (-30.93, 77.04)	-22.18 (-77.04, 30.93)
-68.09 (-148.03, 14.06)	-69.15 (-140.56, 6.32)	-1.61 (-92.20, 90.99)	-29.01 (-116.69, 61.39)	-72.77 (-170.57, 23.04)	-64.40 (-146.90, 18.77)	-37.92 (-107.53, 31.35)	-60.24 (-131.93, 10.31)
-56.19 (-121.55, 5.93)	-57.62 (-111.06, -4.94)	9.46 (-59.55, 81.48)	-18.16 (-86.50, 52.88)	-61.64 (-142.46, 18.88)	-52.76 (-126.30, 19.28)	-26.94 (-81.16, 26.86)	-49.26 (-107.56, 9.15)
7.19 (-47.63, 62.64)	6.30 (-37.77, 50.34)	74.14 (2.95, 143.66)	46.01 (-21.72, 112.86)	1.80 (-76.17, 75.51)	10.71 (-47.99, 69.36)	37.11 (1.42, 70.89)	14.57 (-27.09, 56.69)
-0.52 (-70.85, 68.74)	-1.21 (-61.07, 59.34)	66.98 (-16.54, 148.52)	38.15 (-39.03, 117.37)	-5.55 (-92.52, 79.78)	3.16 (-68.52, 76.23)	29.25 (-24.32, 84.27)	6.94 (-52.20, 66.32)
-13.42 (-92.52, 64.99)	-14.46 (-85.06, 56.69)	53.91 (-35.58, 141.59)	25.24 (-62.55, 112.88)	-18.06 (-114.96, 75.32)	-9.63 (-92.23, 73.42)	16.59 (-51.53, 83.04)	-6.01 (-79.02, 64.22)
-86.89 (-186.08, 19.65)	-86.45 (-181.35, 9.78)	-19.22 (-76.88, 37.90)	-47.01 (-150.14, 58.02)	-90.98 (-204.87, 23.22)	-82.53 (-187.00, 28.07)	-55.62 (-152.33, 43.26)	-78.25 (-179.68, 22.81)
-28.75 (-100.57, 45.93)	-38.35 (-83.15, 5.33)	28.66 (-32.53, 89.86)	1.36 (-58.07, 59.09)	-42.56 (-120.26, 31.70)	-34.38 (-101.87, 33.95)	-7.60 (-57.06, 40.60)	-30.15 (-84.06, 22.74)
-54.30 (-135.63, 26.92)	-55.02 (-130.82, 20.30)	12.07 (-82.66, 103.71)	-15.38 (-106.34, 77.14)	-59.30 (-158.03, 36.77)	-50.59 (-135.09, 34.03)	-24.09 (-93.93, 44.29)	-46.86 (-120.18, 25.69)

68.09 (-14.06, 148.03)	56.19 (-5.93, 121.55)	-7.19 (-62.64, 47.63)	0.52 (-68.74, 70.85)	13.42 (-64.99, 92.52)	86.89 (-19.65, 186.08)	28.75 (-45.93, 100.57)	54.30 (-26.92, 135.63)			
69.15 (-6.32, 140.56)	57.62 (4.94, 111.06)	-6.30 (-50.34, 37.77)	1.21 (-59.34, 61.07)	14.46 (-56.69, 85.06)	86.45 (-9.78, 181.35)	38.35 (-5.33, 83.15)	55.02 (-20.30, 130.82)			
1.61 (-90.99, 92.20)	-9.46 (-81.48, 59.55)	-74.14 (-143.66, -2.95)	-66.98 (-148.52, 16.54)	-53.91 (-141.59, 35.58)	19.22 (-37.90, 76.88)	-28.66 (-89.86, 32.53)	-12.07 (-103.71, 82.66)			
29.01 (-61.39, 116.69)	18.16 (-52.88, 86.50)	-46.01 (-112.86, 21.72)	-38.15 (-117.37, 39.03)	-25.24 (-112.88, 62.55)	47.01 (-58.02, 150.14)	-1.36 (-59.09, 58.07)	15.38 (-77.14, 106.34)			
72.77 (-23.04, 170.57)	61.64 (-18.88, 142.46)	-1.80 (-75.51, 76.17)	5.55 (-79.78, 92.52)	18.06 (-75.32, 114.96)	90.98 (-23.22, 204.87)	42.56 (-31.70, 120.26)	59.30 (-36.77, 158.03)			
64.40 (-18.77, 146.90)	52.76 (-19.28, 126.30)	-10.71 (-69.36, 47.99)	-3.16 (-76.23, 68.52)	9.63 (-73.42, 92.23)	82.53 (-28.07, 187.00)	34.38 (-33.95, 101.87)	50.59 (-34.03, 135.09)			
37.92 (-31.35, 107.53)	26.94 (-26.86, 81.16)	-37.11 (-70.89, -1.42)	-29.25 (-84.27, 24.32)	-16.59 (-83.04, 51.53)	55.62 (-43.26, 152.33)	7.60 (-40.60, 57.06)	24.09 (-44.29, 93.93)			
60.24 (-10.31, 131.93)	49.26 (-9.15, 107.56)	-14.57 (-56.69, 27.09)	-6.94 (-66.32, 52.20)	6.01 (-64.22, 79.02)	78.25 (-22.81, 179.68)	30.15 (-22.74, 84.06)	46.86 (-25.69, 120.18)			
Insulin-liposomal gel	-11.34 (-81.86, 59.06)	-75.22 (-132.46, -15.52)	-66.84 (-137.71, 3.49)	-54.53 (-134.33, 28.68)	18.39 (-91.13, 126.04)	-30.83 (-96.73, 39.62)	-13.35 (-97.20, 71.51)			
11.34 (-59.06, 81.86)	Laser	-61.25 (-93.02, -28.02)	-56.02 (-113.39, 1.52)	-43.14 (-114.11, 27.67)	29.36 (-63.98, 120.81)	-19.26 (-54.50, 18.24)	-2.32 (-75.25, 71.60)			
75.22 (15.52, 132.46)	61.25 (28.02, 93.02)	Placebo	7.78 (-34.66, 48.39)	20.41 (-36.01, 78.14)	93.05 (-0.58, 182.72)	51.67 (-5.55, 126.24)	61.51 (1.09, 121.53)			
66.84 (-3.49, 137.71)	56.02 (-1.52, 113.39)	-7.78 (-48.39, 34.66)	Probiotics	12.95 (-58.15, 84.04)	85.89 (-16.53, 184.04)	36.89 (-14.58, 90.96)	53.38 (-19.57, 126.79)			
54.53 (-28.68, 134.33)	43.14 (-27.67, 114.11)	-20.41 (-78.14, 36.01)	-12.95 (-84.04, 58.15)	Silver nitrate	72.50 (-33.83, 176.63)	24.37 (-42.72, 89.91)	40.73 (-42.03, 124.10)			
-18.39 (-126.04, 91.13)	-29.36 (-120.81, 63.98)	-93.05 (-182.72, 0.58)	-85.89 (-184.04, 16.53)	-72.50 (-176.63, 33.83)	Sucralfate	-48.24 (-132.24, 39.58)	-31.83 (-136.29, 80.66)			
30.83 (-39.62, 96.73)	19.26 (-18.24, 54.50)	-51.67 (-126.24, 5.55)	-36.89 (-90.96, 14.58)	-24.37 (-89.91, 42.72)	48.24 (-39.58, 132.24)	Triamcinolone	16.64 (-52.41, 85.48)			
13.35 (-71.51, 97.20)	2.32 (-71.60, 75.25)	-61.51 (-121.53, -1.09)	-53.38 (-126.79, 19.57)	-40.73 (-124.10, 42.03)	31.83 (-80.66, 136.29)	-16.64 (-85.48, 52.41)	Zinc			

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Amlexanox, Laser, Placebo, Triamcinolone	-1.00 (-44.82, 37.53)
Amlexanox, Placebo, Triamcinolone	5.22 (-40.96, 72.30)
Amlexanox, Placebo, Triamcinolone	5.22 (-40.96, 72.30)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	25.89 (15.63, 48.04)
Inconsistency Standard Deviation	22.79 (0.64, 71.08)

2.4 Convergence Diagnostics

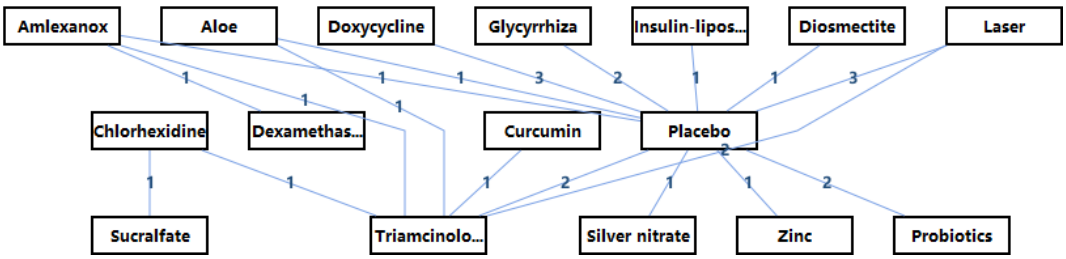
Parameter	PSRF
d.Aloe.Placebo	1.00
d.Amlexanox.Dexamethasone	1.00
d.Amlexanox.Triamcinolone	1.00
d.Chlorhexidine.Sucralfate	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Probiotics	1.00
d.Placebo.Silvernitrate	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Laser	1.00
w.Amlexanox.Placebo.Laser.Tria...	1.00
w.Amlexanox.Placebo.Triamcinol...	1.00
w.Amlexanox.Placebo.Triamcinol...	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Amlexanox, Placebo	-5.71 (-70.72, 60.86)	-5.20 (-79.45, 69.55)	-4.96 (-50.43, 37.96)	1
Amlexanox, Triamcinolone	37.74 (-28.49, 101.58)	37.23 (-37.02, 111.53)	37.42 (-6.48, 82.40)	0.99
Laser, Placebo	-59.48 (-100.64, -19.03)	-63.88 (-128.46, -1.40)	-61.05 (-92.61, -29.60)	0.9
Laser, Triamcinolone	-20.04 (-66.88, 27.58)	-15.76 (-73.03, 42.86)	-18.51 (-50.02, 15.44)	0.9
Placebo, Triamcinolone	43.93 (-1.45, 90.98)	40.57 (-9.38, 91.52)	42.65 (12.28, 74.68)	0.93

4. Network structure



Day 4

1. Consistency Model

1.1 Summary estimates

Allicin	-21.91 (-64.39, 21.05)	2.67 (-33.50, 38.84)	-11.32 (-56.24, 33.22)	-0.63 (-46.97, 45.48)	-13.03 (-65.68, 39.89)	5.56 (-45.85, 58.64)	-3.44 (-46.21, 41.16)	-4.90 (-50.44, 42.18)	8.71 (-27.46, 45.95)	-29.43 (-77.43, 18.97)
21.91 (-21.05, 64.39)	Aloe	24.59 (-6.92, 57.22)	10.56 (-28.69, 50.20)	21.07 (-21.44, 63.86)	8.96 (-39.61, 59.14)	27.57 (-18.55, 75.49)	18.70 (-18.25, 55.75)	17.55 (-26.59, 61.14)	30.93 (-2.94, 63.19)	-7.57 (-51.79, 37.65)
-2.67 (-38.84, 33.50)	-24.59 (-57.22, 6.92)	Amlexanox	-14.13 (-47.84, 19.93)	-3.69 (-38.63, 32.46)	-15.71 (-58.36, 28.48)	3.08 (-40.60, 47.36)	-6.14 (-39.10, 27.24)	-7.31 (-43.76, 29.78)	6.05 (-17.93, 31.09)	-32.45 (-70.10, 6.20)
11.32 (-33.22, 56.24)	-10.56 (-50.20, 28.69)	14.13 (-19.93, 47.84)	Benzydamine	10.62 (-32.91, 55.13)	-1.23 (-52.67, 49.07)	16.89 (-29.84, 66.66)	7.83 (-30.63, 47.06)	6.66 (-38.05, 51.60)	20.15 (-11.58, 51.53)	-18.19 (-64.25, 28.09)
0.63 (-45.48, 46.97)	-21.07 (-63.86, 21.44)	3.69 (-32.46, 38.63)	-10.62 (-55.13, 32.91)	Berberine gelatin	-11.99 (-62.17, 40.30)	6.45 (-46.37, 60.05)	-2.83 (-45.20, 40.91)	-3.74 (-50.45, 41.33)	9.85 (-28.21, 46.99)	-28.66 (-76.29, 18.62)
13.03 (-39.89, 65.68)	-8.96 (-59.14, 39.61)	15.71 (-28.48, 58.36)	1.23 (-49.07, 52.67)	11.99 (-40.30, 62.17)	Chitosan	18.69 (-38.67, 77.00)	9.33 (-40.60, 59.29)	8.39 (-44.65, 60.76)	21.78 (-24.08, 67.12)	-16.83 (-71.68, 36.52)
-5.56 (-58.64, 45.85)	-27.57 (-75.49, 18.55)	-3.08 (-47.36, 40.60)	-16.89 (-66.66, 29.84)	-6.45 (-60.05, 46.37)	-18.69 (-77.00, 38.67)	Chlorhexidine	-9.34 (-55.05, 35.30)	-9.80 (-64.85, 41.30)	3.23 (-42.28, 46.57)	-34.92 (-89.92, 17.73)
3.44 (-41.16, 46.21)	-18.70 (-55.75, 18.25)	6.14 (-27.24, 39.10)	-7.83 (-47.06, 30.63)	2.83 (-40.91, 45.20)	-9.33 (-59.29, 40.60)	9.34 (-35.30, 55.05)	Curcumin	-0.78 (-46.11, 42.12)	12.42 (-21.04, 44.95)	-25.95 (-72.22, 18.54)
4.90 (-42.18, 50.44)	-17.55 (-61.14, 26.59)	7.31 (-29.78, 43.76)	-6.66 (-51.60, 38.05)	3.74 (-41.33, 50.45)	-8.39 (-60.76, 44.65)	9.80 (-41.30, 64.85)	0.78 (-42.12, 46.11)	Diosmectite	13.28 (-25.37, 51.55)	-25.08 (-73.70, 22.82)
-8.71 (-45.95, 27.46)	-30.93 (-63.19, 2.94)	-6.05 (-31.09, 17.93)	-20.15 (-51.53, 11.58)	-9.85 (-46.99, 28.21)	-21.78 (-67.12, 24.08)	-3.23 (-46.57, 42.28)	-12.42 (-44.95, 21.04)	-13.28 (-51.55, 25.37)	Doxycycline	-38.74 (-77.82, 1.67)
29.43 (-18.97, 77.43)	7.57 (-37.65, 51.79)	32.45 (-6.20, 70.10)	18.19 (-28.09, 64.25)	28.66 (-18.62, 76.29)	16.83 (-36.52, 71.68)	34.92 (-17.73, 89.92)	25.95 (-18.54, 72.22)	25.08 (-22.82, 73.70)	38.74 (-1.67, 77.82)	Glycyrrhiza
-13.09 (-60.69, 34.52)	-35.23 (-80.14, 10.16)	-10.84 (-47.51, 27.20)	-24.47 (-70.01, 20.60)	-13.90 (-59.56, 32.08)	-26.05 (-78.39, 27.00)	-7.75 (-60.59, 46.08)	-16.96 (-61.16, 27.38)	-17.87 (-65.52, 30.10)	-4.34 (-43.37, 34.69)	-42.86 (-90.94, 6.70)
-40.64 (-77.33, -3.55)	-63.17 (-94.25, -30.52)	-38.30 (-62.16, -14.39)	-52.51 (-86.33, -18.71)	-41.65 (-78.72, -4.50)	-54.09 (-97.44, -8.87)	-35.02 (-77.87, 8.95)	-44.31 (-76.15, -12.45)	-45.42 (-83.03, -7.56)	-32.03 (-58.17, -6.34)	-70.48 (-109.65, -32.13)
-21.33 (-85.93, 43.61)	-43.12 (-106.37, 18.38)	-18.46 (-78.02, 40.84)	-32.40 (-94.97, 29.36)	-22.25 (-88.47, 43.28)	-33.82 (-105.18, 35.68)	-15.39 (-55.18, 24.86)	-24.59 (-84.86, 34.91)	-25.25 (-92.68, 39.69)	-12.17 (-72.83, 46.50)	-50.78 (-117.62, 15.63)
22.84 (-9.96, 55.31)	0.89 (-27.33, 28.22)	25.47 (9.44, 41.54)	11.22 (-18.37, 41.40)	21.88 (-9.92, 54.54)	9.82 (-30.90, 50.48)	28.64 (-12.32, 70.15)	19.33 (-9.52, 48.42)	18.29 (-15.43, 50.91)	31.78 (12.33, 50.54)	-6.94 (-41.97, 27.14)
-6.72 (-66.09, 51.72)	-29.06 (-84.58, 25.10)	-4.29 (-56.05, 46.44)	-18.32 (-56.56, 19.80)	-8.00 (-66.79, 50.64)	-20.19 (-84.19, 44.82)	-1.17 (-63.71, 61.25)	-10.46 (-64.44, 43.95)	-11.62 (-70.12, 46.43)	1.73 (-47.93, 51.10)	-36.57 (-95.38, 22.15)
4.93 (-32.43, 40.86)	-17.32 (-46.41, 10.77)	7.51 (-16.21, 30.10)	-6.55 (-36.73, 23.90)	4.02 (-32.53, 40.47)	-8.29 (-51.93, 36.21)	10.72 (-26.37, 48.76)	1.54 (-22.95, 25.03)	0.35 (-37.15, 36.55)	13.66 (-9.54, 36.56)	-24.70 (-63.31, 13.07)
1.41 (-41.86, 44.83)	-20.40 (-59.58, 17.43)	4.51 (-29.26, 37.01)	-9.59 (-50.08, 30.69)	0.85 (-41.75, 43.97)	-11.10 (-60.17, 38.39)	7.40 (-39.51, 55.54)	-1.93 (-39.32, 36.16)	-2.98 (-47.52, 40.75)	10.51 (-23.78, 43.37)	-28.10 (-72.01, 17.05)
-41.74 (-89.11, 5.29)	-63.52 (-107.61, -19.79)	-39.01 (-76.71, -1.31)	-53.08 (-98.66, -8.12)	-42.57 (-88.81, 4.15)	-55.15 (-106.93, -0.50)	-36.14 (-88.05, 17.05)	-45.14 (-90.19, -0.19)	-46.43 (-94.18, 1.77)	-32.89 (-72.49, 5.56)	-71.57 (-119.24, -21.15)

13.09 (-34.52, 60.69)	40.64 (3.55, 77.33)	21.33 (-43.61, 85.99)	-22.84 (-55.31, 9.96)	6.72 (-51.72, 66.09)	-4.93 (-40.86, 32.43)	-1.41 (-44.83, 41.86)	41.74 (-5.29, 89.11)
35.23 (-10.16, 80.14)	63.17 (30.52, 94.25)	43.12 (-18.38, 106.37)	-0.89 (-28.22, 27.33)	29.06 (-25.10, 84.58)	17.32 (-10.77, 46.41)	20.40 (-17.43, 59.58)	63.52 (19.79, 107.61)
10.84 (-27.20, 47.51)	38.30 (14.39, 62.16)	18.46 (-40.84, 78.02)	-25.47 (-41.54, -9.44)	4.29 (-46.44, 56.05)	-7.51 (-30.10, 16.21)	-4.51 (-37.01, 29.26)	39.01 (1.31, 76.71)
24.47 (-20.60, 70.01)	52.51 (18.71, 86.33)	32.40 (-29.36, 94.97)	-11.22 (-41.40, 18.37)	18.32 (-19.80, 56.56)	6.55 (-23.90, 36.73)	9.59 (-30.69, 50.08)	53.08 (8.12, 98.66)
13.90 (-32.08, 59.56)	41.65 (4.50, 78.72)	22.25 (-43.28, 88.47)	-21.88 (-54.54, 9.92)	8.00 (-50.64, 66.79)	-4.02 (-40.47, 32.53)	-0.85 (-43.97, 41.75)	42.57 (-4.15, 88.81)
26.05 (-27.00, 78.39)	54.09 (8.87, 97.44)	33.82 (-35.68, 105.18)	-9.82 (-50.48, 30.90)	20.19 (-44.82, 84.19)	8.29 (-36.21, 51.93)	11.10 (-38.39, 60.17)	55.15 (0.50, 106.93)
7.75 (-46.08, 60.59)	35.02 (-8.95, 77.87)	15.39 (-24.86, 55.18)	-28.64 (-70.15, 12.32)	1.17 (-61.25, 63.71)	-10.72 (-48.76, 26.37)	-7.40 (-55.54, 39.51)	36.14 (-17.05, 88.05)
16.96 (-27.38, 61.16)	44.31 (12.45, 76.15)	24.59 (-34.91, 84.86)	-19.33 (-48.42, 9.52)	10.46 (-43.95, 64.44)	-1.54 (-25.03, 22.95)	1.93 (-36.16, 39.32)	45.14 (0.19, 90.19)
17.87 (-30.10, 65.52)	45.42 (7.56, 83.03)	25.25 (-39.69, 92.68)	-18.29 (-50.91, 15.43)	11.62 (-46.43, 70.12)	-0.35 (-36.55, 37.15)	2.98 (-40.75, 47.52)	46.43 (-1.77, 94.18)
4.34 (-34.69, 43.37)	32.03 (6.34, 58.17)	12.17 (-46.50, 72.83)	-31.78 (-50.54, -12.33)	-1.73 (-51.10, 47.93)	-13.66 (-36.56, 9.54)	-10.51 (-43.37, 23.78)	32.89 (-5.56, 72.49)
42.86 (-6.70, 90.94)	70.48 (32.13, 109.65)	50.78 (-15.63, 117.62)	6.94 (-27.14, 41.97)	36.57 (-22.15, 95.38)	24.70 (-13.07, 63.31)	28.10 (-17.05, 72.01)	71.57 (21.15, 119.24)
-27.69 (-65.70, 10.27)	Laser	-19.85 (-78.34, 38.84)	-63.68 (-81.37, -45.97)	-33.93 (-84.04, 17.12)	-45.82 (-66.42, -24.87)	-42.67 (-74.78, -10.63)	1.12 (-37.79, 39.08)
-8.00 (-74.17, 58.30)	19.85 (-38.84, 78.34)	N-acetylcysteine	-43.60 (-101.04, 13.45)	-14.16 (-88.53, 58.87)	-26.28 (-81.03, 28.45)	-22.65 (-83.93, 38.51)	20.43 (-46.14, 85.44)
36.15 (1.47, 69.20)	63.68 (45.97, 81.37)	43.60 (-13.45, 101.04)	Placebo	29.69 (-18.27, 77.88)	17.85 (1.80, 34.39)	21.04 (-7.20, 49.83)	64.55 (30.62, 98.58)
6.09 (-53.38, 65.20)	33.93 (-17.12, 84.04)	14.16 (-58.87, 88.53)	-29.69 (-77.88, 18.27)	Quercetin	-11.67 (-60.27, 37.36)	-8.73 (-64.65, 46.73)	34.87 (-25.26, 94.47)
18.17 (-20.47, 54.54)	45.82 (24.87, 66.42)	26.28 (-28.45, 81.03)	-17.85 (-34.39, -1.80)	11.67 (-37.36, 60.27)	Triamcinolone	3.11 (-25.44, 31.10)	46.71 (8.08, 83.72)
14.82 (-30.10, 58.67)	42.67 (10.63, 74.78)	22.65 (-38.51, 83.93)	-21.04 (-49.83, 7.20)	8.73 (-46.73, 64.65)	-3.11 (-31.10, 25.44)	Triester Glycerol Oxide	43.35 (-1.15, 87.07)
-28.81 (-75.89, 19.86)	-1.12 (-39.08, 37.79)	-20.43 (-85.44, 46.14)	-64.55 (-98.58, -30.62)	-34.87 (-94.47, 25.26)	-46.71 (-83.72, -8.08)	-43.35 (-87.07, 1.15)	Zinc

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17	Rank 18	Rank 19
Allicin	0	0.01	0.04	0.06	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.03	0.03	0.02
Aloe	0	0	0	0	0	0	0.01	0.01	0.01	0.02	0.03	0.04	0.05	0.08	0.1	0.13	0.15	0.19	0.17
Amlexanox	0	0	0.01	0.03	0.07	0.1	0.12	0.13	0.13	0.12	0.09	0.07	0.05	0.04	0.02	0.01	0	0	0
Benzydamine	0	0	0	0.01	0.02	0.02	0.03	0.05	0.05	0.06	0.06	0.08	0.09	0.11	0.11	0.1	0.09	0.08	0.05
Berberine gelatin	0	0.01	0.03	0.05	0.06	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.05	0.03	0.03	0.02
Chitosan	0	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.07	0.08	0.08	0.08	0.11	0.14
Chlorhexidine	0.01	0.03	0.06	0.12	0.11	0.09	0.07	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.03	0.03	0.03	0.01
Curcumin	0	0	0.02	0.03	0.04	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.08	0.07	0.05	0.03	0.02	0.02
Diosmectite	0	0.01	0.02	0.04	0.05	0.06	0.06	0.07	0.07	0.06	0.07	0.07	0.07	0.08	0.08	0.06	0.05	0.05	0.03
Doxycycline	0	0.01	0.04	0.1	0.15	0.16	0.14	0.11	0.09	0.07	0.05	0.03	0.02	0.01	0.01	0	0	0	0
Glycyrrhiza	0	0	0	0	0	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.06	0.07	0.1	0.17	0.42
Insulin-liposomal	0.02	0.05	0.14	0.15	0.13	0.09	0.08	0.07	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0

Laser	0.32	0.42	0.17	0.06	0.02	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
N-acetylcysteine	0.16	0.12	0.16	0.11	0.07	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Placebo	0	0	0	0	0	0	0	0	0	0	0	0.01	0.02	0.05	0.12	0.22	0.31	0.22	0.06
Quercetin	0.04	0.06	0.1	0.1	0.08	0.07	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03
Triamcinolone	0	0	0	0	0.01	0.01	0.03	0.05	0.09	0.13	0.16	0.17	0.15	0.1	0.06	0.02	0.01	0	0
TGO	0	0.01	0.02	0.04	0.05	0.07	0.08	0.08	0.08	0.08	0.09	0.08	0.09	0.07	0.06	0.04	0.02	0.02	0.01
Zinc	0.42	0.27	0.15	0.07	0.04	0.02	0.01	0.01	0.01	0	0	0	0	0	0	0	0	0	0

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	14.34 (9.10, 25.48)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Benzydamine.Quercetin	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Placebo.Allicin	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.15
d.Placebo.Zinc	1.00
d.Triamcinolone.Aloe	1.00
d.Triamcinolone.Benzydamine	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Doxycycline	1.00
d.Triamcinolone.Laser	1.00
d.Triamcinolone.Placebo	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

-41.38 (-91.44, 7.63)	-1.72 (-47.34, 43.93)	3.83 (-35.14, 42.71)	-9.27 (-69.85, 51.86)	22.76 (-11.68, 57.37)	-22.16 (-89.02, 45.73)	-41.57 (-84.60, 1.83)	-14.46 (-61.62, 34.91)	29.41 (-20.34, 79.17)	-9.62 (-48.04, 30.78)	4.17 (-44.26, 52.80)	2.58 (-44.47, 48.98)	-6.41 (-59.41, 49.52)	12.57 (-40.65, 66.41)	0.72 (-45.93, 48.71)	9.16 (-37.33, 55.76)	-2.95 (-40.16, 35.40)	18.78 (-26.69, 65.21)	Allicin
-60.14 (-107.37, -14.12)	-20.49 (-59.97, 20.08)	-16.90 (-68.65, 38.60)	-27.72 (-85.93, 30.32)	3.97 (-26.84, 34.22)	-40.71 (-103.56, 21.16)	-60.40 (-97.69, -21.30)	-32.99 (-79.02, 12.30)	10.89 (-35.88, 57.07)	-28.20 (-62.59, 6.77)	-14.53 (-60.83, 30.65)	-16.31 (-55.22, 22.78)	-25.15 (-72.45, 24.04)	-6.27 (-56.75, 45.40)	-17.81 (-62.99, 26.57)	-9.63 (-50.71, 32.58)	-21.25 (-56.35, 13.20)	Aloe	-18.78 (-65.21, 26.69)
-38.66 (-79.13, -0.21)	1.09 (-33.65, 35.95)	6.73 (-17.68, 30.91)	-6.05 (-61.02, 46.51)	25.46 (8.72, 41.99)	-19.54 (-81.09, 40.52)	-38.86 (-70.17, -7.41)	-11.71 (-49.03, 25.86)	32.22 (-6.22, 71.81)	-6.78 (-32.30, 19.09)	6.92 (-32.08, 44.26)	5.21 (-30.24, 40.89)	-3.65 (-48.92, 42.11)	15.15 (-28.18, 59.58)	3.43 (-33.40, 40.18)	12.14 (-24.38, 48.43)	Amlexanox	21.25 (-13.20, 56.35)	2.95 (-35.40, 40.16)
-50.72 (-98.04, -3.96)	-10.72 (-53.09, 31.13)	-5.08 (-38.03, 26.88)	-18.36 (-57.79, 20.98)	13.61 (-18.83, 45.00)	-31.75 (-95.96, 33.91)	-50.45 (-90.57, -10.36)	-23.57 (-69.96, 23.00)	20.64 (-28.03, 66.86)	-18.73 (-51.87, 13.62)	-4.88 (-52.04, 40.44)	-6.89 (-47.79, 34.27)	-15.48 (-66.16, 36.37)	3.27 (-47.76, 53.80)	-8.38 (-55.11, 36.65)	Benzydamine	-12.14 (-48.43, 24.38)	9.63 (-32.58, 50.71)	-9.16 (-55.76, 37.33)

-0.72 (-48.71, 45.93)	-12.57 (-66.41, 40.65)	6.41 (-49.52, 59.41)	-2.58 (-48.98, 44.47)	-4.17 (-52.80, 44.26)	9.62 (-30.78, 48.04)	-29.41 (-79.17, 20.34)	14.46 (-34.91, 61.62)	41.57 (-1.83, 84.60)	22.16 (-45.73, 89.02)	-22.76 (-57.37, 11.68)	9.27 (-51.86, 69.85)	-3.83 (-42.71, 35.14)
17.81 (-26.57, 62.99)	6.27 (-45.40, 56.75)	25.15 (-24.04, 72.45)	16.31 (-22.78, 55.22)	14.53 (-30.65, 60.83)	28.20 (-6.77, 62.59)	-10.89 (-57.07, 35.88)	32.99 (-12.30, 79.02)	60.40 (21.30, 97.69)	40.71 (-21.16, 103.56)	-3.97 (-34.22, 26.84)	27.72 (-30.32, 85.93)	16.90 (-38.60, 68.65)
-3.43 (-40.18, 33.40)	-15.15 (-59.58, 28.18)	3.65 (-42.11, 48.92)	-5.21 (-40.89, 30.24)	-6.92 (-44.26, 32.08)	6.78 (-19.09, 32.30)	-32.22 (-71.81, 6.22)	11.71 (-25.86, 49.03)	38.86 (7.41, 70.17)	19.54 (-40.52, 81.09)	-25.46 (-41.99, -8.72)	6.05 (-46.51, 61.02)	-6.73 (-30.91, 17.68)
8.38 (-36.65, 55.11)	-3.27 (-53.80, 47.76)	15.48 (-36.37, 66.16)	6.89 (-34.27, 47.79)	4.88 (-40.44, 52.04)	18.73 (-13.62, 51.87)	-20.64 (-66.86, 28.03)	23.57 (-23.00, 69.96)	50.45 (10.36, 90.57)	31.75 (-33.91, 95.96)	-13.61 (-45.00, 18.83)	18.36 (-20.98, 57.79)	5.08 (-26.88, 38.03)
Berberine gelatin	-11.66 (-64.28, 40.48)	7.23 (-46.80, 60.00)	-1.59 (-47.52, 43.14)	-3.38 (-50.05, 43.86)	10.51 (-28.47, 47.58)	-28.68 (-77.02, 19.66)	15.53 (-32.13, 61.06)	42.20 (0.57, 84.64)	22.84 (-44.08, 90.71)	-21.86 (-54.39, 10.44)	9.79 (-49.71, 70.99)	-3.33 (-39.97, 33.91)
11.66 (-40.48, 64.28)	Chitosan	18.89 (-41.23, 77.45)	10.19 (-40.76, 60.18)	8.33 (-44.28, 60.85)	22.13 (-22.08, 66.53)	-17.10 (-71.74, 36.68)	26.88 (-24.02, 80.19)	53.90 (5.59, 101.93)	34.71 (-37.43, 107.40)	-10.21 (-49.40, 31.04)	21.59 (-43.26, 86.73)	8.52 (-35.55, 52.63)
-7.23 (-60.00, 46.80)	-18.89 (-77.45, 41.23)	Chlorhexidine	-8.88 (-54.69, 38.01)	-10.63 (-63.88, 44.87)	2.79 (-41.72, 49.92)	-35.77 (-90.50, 19.83)	7.90 (-45.58, 62.18)	35.20 (-12.10, 81.24)	15.95 (-24.72, 56.45)	-29.33 (-70.81, 13.95)	2.72 (-60.08, 66.99)	-10.21 (-47.88, 29.56)
1.59 (-43.14, 47.52)	-10.19 (-60.18, 40.76)	8.88 (-38.01, 54.69)	Curcumin	-2.06 (-47.03, 44.56)	12.03 (-23.28, 46.83)	-27.23 (-74.62, 20.50)	16.92 (-28.25, 62.71)	43.77 (8.58, 80.13)	24.88 (-36.31, 86.79)	-20.30 (-50.81, 11.29)	11.52 (-45.11, 67.67)	-1.67 (-26.54, 23.57)
3.38 (-43.86, 50.05)	-8.33 (-60.85, 44.28)	10.63 (-44.87, 63.88)	2.06 (-44.56, 47.03)	Diosmectite	13.86 (-26.32, 52.45)	-25.40 (-74.10, 22.90)	18.84 (-29.95, 65.12)	45.54 (2.93, 88.33)	26.81 (-41.49, 92.99)	-18.46 (-52.80, 15.38)	13.39 (-47.39, 72.76)	0.30 (-38.71, 38.67)
-10.51 (-47.58, 28.47)	-22.13 (-66.53, 22.08)	-2.79 (-49.92, 41.72)	-12.03 (-46.83, 23.28)	-13.86 (-52.45, 26.32)	Doxycycline	-39.18 (-78.49, 1.16)	5.00 (-34.35, 44.31)	31.88 (0.43, 64.11)	12.83 (-47.43, 74.05)	-32.39 (-51.35, -12.47)	-0.29 (-50.48, 50.52)	-13.51 (-37.09, 11.36)
28.68 (-19.66, 77.02)	17.10 (-36.68, 71.74)	35.77 (-19.83, 90.50)	27.23 (-20.50, 74.62)	25.40 (-22.90, 74.10)	39.18 (-1.16, 78.49)	Glycyrrhiza	43.66 (-4.16, 91.84)	70.96 (27.05, 115.51)	51.63 (-17.37, 120.45)	6.74 (-27.23, 41.96)	38.63 (-22.05, 100.18)	25.62 (-12.61, 65.95)
-15.53 (-61.06, 32.13)	-26.88 (-80.19, 24.02)	-7.90 (-62.18, 45.58)	-16.92 (-62.71, 28.25)	-18.84 (-65.12, 29.95)	-5.00 (-44.31, 34.35)	-43.66 (-91.84, 4.16)	Insulin-liposomal gel	26.77 (-15.79, 70.98)	7.66 (-59.79, 75.48)	-37.40 (-70.22, -3.12)	-5.15 (-65.78, 56.75)	-18.52 (-56.32, 20.38)
-42.20 (-84.64, -0.57)	-53.90 (-101.93, -5.59)	-35.20 (-81.24, 12.10)	-43.77 (-80.13, -8.58)	-45.54 (-88.33, -2.93)	-31.88 (-64.11, -0.43)	-70.96 (-115.51, -27.05)	-26.77 (-70.98, 15.79)	Laser	-19.17 (-80.25, 42.48)	-63.64 (-82.60, -44.84)	-32.53 (-87.20, 23.80)	-45.42 (-71.49, -18.92)
-22.84 (-90.71, 44.08)	-34.71 (-107.40, 37.43)	-15.95 (-56.45, 24.72)	-24.88 (-86.79, 36.31)	-26.81 (-92.99, 41.49)	-12.83 (-74.05, 47.43)	-51.63 (-120.45, 17.37)	-7.66 (-75.48, 59.79)	19.17 (-42.48, 80.25)	N-acetylcysteine	-45.10 (-102.97, 13.82)	-13.57 (-89.02, 62.07)	-26.19 (-83.00, 29.52)
21.86 (-10.44, 54.39)	10.21 (-31.04, 49.40)	29.33 (-13.95, 70.81)	20.30 (-11.29, 50.81)	18.46 (-15.38, 52.80)	32.39 (12.47, 51.35)	-6.74 (-41.96, 27.23)	37.40 (3.12, 70.22)	63.64 (44.84, 82.60)	45.10 (-13.82, 102.97)	Placebo	31.66 (-18.93, 82.55)	16.82 (-31.92, 67.53)
-9.79 (-70.99, 49.71)	-21.59 (-86.73, 43.26)	-2.72 (-66.99, 60.08)	-11.52 (-67.67, 45.11)	-13.39 (-72.76, 47.39)	0.29 (-50.52, 50.48)	-38.63 (-100.18, 22.05)	5.15 (-56.75, 65.78)	32.53 (-23.80, 87.20)	13.57 (-62.07, 89.02)	-31.66 (-82.55, 18.93)	Quercetin	-13.02 (-64.04, 38.10)
3.33 (-33.91, 39.97)	-8.52 (-52.63, 35.55)	10.21 (-29.56, 47.88)	1.67 (-23.57, 26.54)	-0.30 (-38.67, 38.71)	13.51 (-11.36, 37.09)	-25.62 (-65.95, 12.61)	18.52 (-20.38, 56.32)	45.42 (18.92, 71.49)	26.19 (-29.52, 83.00)	-16.82 (-67.53, 31.92)	13.02 (-38.10, 64.04)	Triamcinolone
-2.38 (-47.34, 41.74)	-14.19 (-65.59, 37.09)	4.91 (-44.46, 52.11)	-3.92 (-43.52, 35.22)	-5.88 (-51.82, 39.28)	8.02 (-26.74, 41.63)	-31.18 (-78.29, 15.15)	12.79 (-32.48, 57.74)	39.84 (2.68, 77.59)	20.86 (-43.28, 85.22)	-22.01 (-78.08, 29.99)	7.40 (-49.63, 64.43)	-5.64 (-35.54, 24.86)
-42.50 (-89.36, 4.75)	-54.03 (-108.12, -0.53)	-35.16 (-91.24, 19.08)	-43.84 (-91.67, 2.50)	-45.55 (-95.58, 2.58)	-31.78 (-73.13, 7.35)	-71.11 (-120.78, -20.91)	-26.94 (-76.39, 20.48)	-0.01 (-44.06, 43.51)	-19.29 (-87.32, 49.67)	-64.24 (-99.51, -29.05)	-32.09 (-94.98, 29.22)	-45.39 (-84.43, -6.61)

-40.24 (-85.81, 6.34)	Triester Glycerol Oxide	5.64 (-24.86, 35.54)	-7.40 (-64.43, 49.63)	22.01 (-29.99, 78.08)	-20.86 (-85.22, 43.28)	-39.84 (-77.59, -2.68)	-12.79 (-57.74, 32.48)	31.18 (-15.15, 78.29)	-8.02 (-41.63, 26.74)	5.88 (-39.28, 51.82)	3.92 (-35.22, 43.52)	-4.91 (-52.11, 44.46)	14.19 (-37.09, 65.59)	2.38 (-41.74, 47.34)	10.72 (-31.13, 53.09)	-1.09 (-35.95, 33.65)	20.49 (-20.08, 59.97)	1.72 (-43.93, 47.34)
Zinc	40.24 (-6.34, 85.81)	45.39 (6.61, 84.43)	32.09 (-29.22, 94.98)	64.24 (29.05, 99.51)	19.29 (-49.67, 87.32)	0.01 (-43.51, 44.06)	26.94 (-20.48, 76.39)	71.11 (20.91, 120.78)	31.78 (-7.35, 73.13)	45.55 (-2.58, 95.58)	43.84 (-2.50, 91.67)	35.16 (-19.08, 91.24)	54.03 (0.53, 108.12)	42.50 (-4.75, 89.36)	50.72 (3.96, 98.04)	38.66 (0.21, 79.13)	60.14 (14.12, 107.37)	41.38 (-7.63, 91.44)

2.3 Variance Calculation

Cycle	Median (95% CI)
Doxycycline, Laser, Placebo, Triamcinolone	-0.11 (-28.97, 26.24)
Doxycycline, Placebo, Triamcinolone	-1.01 (-48.44, 46.21)
Doxycycline, Placebo, Triamcinolone	-1.01 (-48.44, 46.21)
Doxycycline, Placebo, Triamcinolone	-1.01 (-48.44, 46.21)

2.4 Convergence Diagnostics

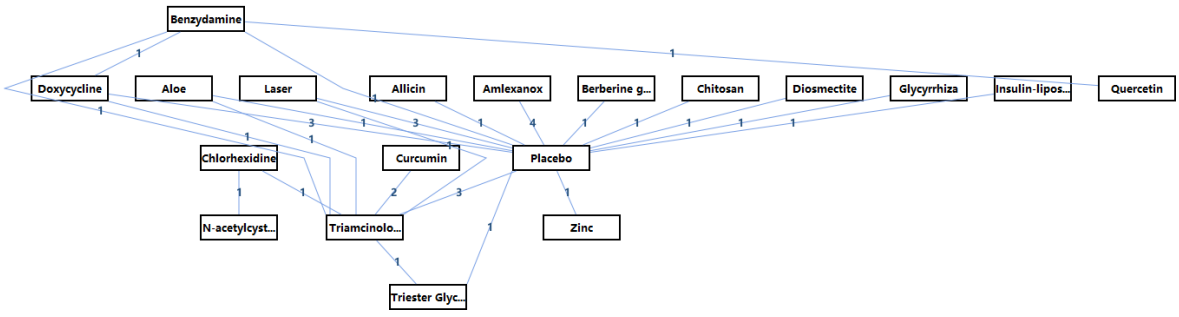
Parameter	PSRF
d.Benzydamine.Quercetin	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Placebo.Allicin	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Glycyrrhiza	1.00
d.Placebo.Insulinliposomalgel	1.15
d.Placebo.Zinc	1.00
d.Triamcinolone.Aloe	1.00
d.Triamcinolone.Benzydamine	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.Doxycycline	1.00
d.Triamcinolone.Laser	1.00
d.Triamcinolone.Placebo	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Parameter	Median (95% CI)
Random Effects Standard Deviation	14.66 (8.97, 26.74)
Inconsistency Standard Deviation	11.28 (0.65, 69.10)

4. Network structure



Day 5

1. Consistency Model

1.1 Summary estimates

Aloe	8.86 (-34.03, 54.31)	40.15 (-21.48, 103.51)	33.83 (-21.19, 89.33)	16.53 (-48.51, 82.12)	0.65 (-59.35, 59.48)	6.78 (-45.80, 57.36)	5.35 (-41.26, 51.84)	31.93 (-23.22, 87.73)	-14.62 (-55.44, 26.91)	-7.62 (-58.41, 44.39)	31.29 (-8.86, 72.31)	37.71 (-22.07, 100.28)
-8.86 (-54.31, 34.03)	Amlexanox	30.70 (-26.60, 90.64)	24.78 (-25.34, 73.95)	7.64 (-40.60, 56.12)	-8.22 (-59.91, 42.26)	-2.21 (-44.11, 38.08)	-3.32 (-35.40, 27.19)	23.19 (-19.68, 64.48)	-23.48 (-50.39, 2.53)	-15.94 (-57.81, 24.04)	22.39 (-11.79, 55.08)	29.32 (-22.30, 81.54)
-40.15 (-103.51, 21.48)	-30.70 (-90.64, 26.60)	Chlorhexidine	-6.54 (-69.60, 52.82)	-23.66 (-99.03, 50.89)	-39.41 (-115.39, 31.93)	-33.64 (-102.48, 32.39)	-34.69 (-98.69, 25.04)	-8.20 (-78.83, 60.39)	-54.53 (-115.42, 1.51)	-47.45 (-114.95, 17.31)	-8.55 (-57.85, 38.29)	-2.52 (-76.59, 71.65)
-33.83 (-89.33, 21.19)	-24.78 (-73.95, 25.34)	6.54 (-52.82, 69.60)	Curcumin	-17.33 (-85.54, 51.75)	-33.07 (-98.34, 33.88)	-26.98 (-85.87, 31.60)	-28.54 (-81.91, 25.78)	-1.63 (-64.20, 60.28)	-48.26 (-97.21, 3.09)	-40.99 (-99.36, 18.63)	-2.32 (-39.13, 34.99)	4.60 (-62.42, 72.38)
-16.53 (-82.12, 48.51)	-7.64 (-56.12, 40.60)	23.66 (-50.89, 99.03)	17.33 (-51.75, 85.54)	Dexamethasone	-15.66 (-86.31, 53.23)	-9.65 (-76.10, 52.55)	-10.62 (-69.76, 45.65)	15.85 (-50.92, 78.16)	-30.66 (-86.97, 22.81)	-23.97 (-87.52, 39.27)	15.06 (-42.91, 72.14)	21.50 (-51.36, 93.60)
-0.65 (-59.48, 59.35)	8.22 (-42.26, 59.91)	39.41 (-31.93, 115.39)	33.07 (-33.88, 98.34)	15.66 (-53.23, 86.31)	Diosmectite	5.93 (-48.04, 59.81)	4.94 (-44.54, 54.21)	31.68 (-29.95, 90.27)	-15.01 (-59.17, 28.45)	-7.90 (-61.36, 46.38)	30.67 (-23.00, 86.79)	37.54 (-25.09, 101.16)
-6.78 (-57.36, 45.80)	2.21 (-38.08, 44.11)	33.64 (-32.39, 102.48)	26.98 (-31.60, 85.87)	9.65 (-52.55, 76.10)	-5.93 (-59.81, 48.04)	Doxycycline	-1.01 (-40.02, 37.66)	25.19 (-23.74, 76.13)	-21.07 (-52.64, 10.92)	-13.80 (-58.49, 31.97)	24.90 (-20.66, 71.09)	31.58 (-21.76, 86.47)
-5.35 (-51.84, 41.26)	3.32 (-27.19, 35.40)	34.69 (-25.04, 98.69)	28.54 (-25.78, 81.91)	10.62 (-45.65, 69.76)	-4.94 (-54.21, 44.54)	1.01 (-37.66, 40.02)	Glycyrrhiza	26.88 (-14.92, 67.45)	-20.08 (-41.31, 2.53)	-12.65 (-51.28, 25.92)	25.77 (-12.07, 64.73)	32.65 (-16.17, 83.53)
-31.93 (-87.73, 23.22)	-23.19 (-64.48, 19.68)	8.20 (-60.39, 78.63)	1.63 (-60.28, 64.20)	-15.85 (-78.16, 50.92)	-31.68 (-90.27, 29.95)	-25.19 (-76.13, 23.74)	-26.88 (-67.45, 14.92)	Laser	-46.59 (-85.72, -6.63)	-39.21 (-89.55, 12.84)	-0.36 (-49.94, 49.34)	5.92 (-53.31, 67.63)
14.62 (-26.91, 55.44)	23.48 (-2.53, 50.39)	54.53 (-1.51, 115.42)	48.26 (-3.09, 97.21)	30.66 (-22.81, 86.97)	15.01 (-28.45, 59.17)	21.07 (-10.92, 52.64)	20.08 (-2.53, 41.31)	46.59 (6.63, 85.72)	Placebo	7.18 (-24.35, 38.85)	45.80 (12.78, 79.09)	52.81 (9.11, 98.47)
7.62 (-44.39, 58.41)	15.94 (-24.04, 57.81)	47.45 (-17.31, 114.95)	40.99 (-18.63, 99.36)	23.97 (-39.27, 87.52)	7.90 (-46.36, 61.36)	13.80 (-31.97, 58.49)	12.65 (-25.92, 51.28)	39.21 (-12.84, 89.55)	-7.18 (-38.85, 24.35)	Probiotics	38.73 (-6.15, 84.22)	45.70 (-9.48, 99.63)
-31.29 (-72.31, 8.86)	-22.39 (-55.08, 11.79)	8.55 (-38.29, 57.85)	2.32 (-34.99, 39.13)	-15.06 (-72.14, 42.91)	-30.67 (-86.79, 23.00)	-24.90 (-71.09, 20.66)	-25.77 (-64.73, 12.07)	0.36 (-49.34, 49.94)	-45.80 (-79.09, -12.78)	-38.73 (-84.22, 6.15)	Triamcinolone	6.61 (-48.82, 63.15)
-37.71 (-100.28, 22.07)	-29.32 (-81.54, 22.30)	2.52 (-71.65, 76.59)	-4.60 (-72.38, 62.42)	-21.50 (-93.60, 51.36)	-37.54 (-101.16, 25.09)	-31.58 (-86.47, 21.76)	-32.65 (-83.53, 16.17)	-5.92 (-67.83, 53.31)	-52.81 (-98.47, -9.11)	-45.70 (-99.63, 9.48)	-6.61 (-63.15, 48.82)	Zinc

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13
Aloe	0	0.01	0.02	0.03	0.05	0.08	0.09	0.1	0.12	0.13	0.13	0.11	0.14
Amlexanox	0	0	0.01	0.03	0.07	0.13	0.2	0.2	0.16	0.11	0.06	0.02	0.01
Chlorhexidine	0.31	0.18	0.13	0.1	0.07	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01
Curcumin	0.16	0.19	0.16	0.13	0.11	0.08	0.05	0.04	0.03	0.02	0.02	0.01	0.01
Dexamethasone	0.07	0.08	0.08	0.08	0.1	0.11	0.09	0.08	0.07	0.06	0.06	0.05	0.07
Diosmectite	0.01	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.12	0.12	0.11	0.15
Doxycycline	0.01	0.02	0.03	0.05	0.07	0.11	0.12	0.13	0.13	0.13	0.1	0.06	0.04
Glycyrrhiza	0	0	0.01	0.03	0.05	0.09	0.14	0.17	0.19	0.17	0.1	0.04	0.01
Laser	0.14	0.18	0.14	0.14	0.14	0.09	0.06	0.04	0.03	0.02	0.01	0.01	0
Placebo	0	0	0	0	0	0	0	0.01	0.02	0.07	0.2	0.37	0.34
Probiotics	0	0	0.01	0.01	0.02	0.04	0.05	0.07	0.09	0.13	0.17	0.19	0.21
Triamcinolone	0.03	0.13	0.25	0.24	0.18	0.08	0.04	0.02	0.01	0.01	0	0	0
Zinc	0.27	0.18	0.13	0.11	0.1	0.07	0.05	0.03	0.02	0.02	0.01	0.01	0.01

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	18.93 (11.29, 37.41)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Amlexanox.Dexamethasone	1.00
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.01
d.Placebo.Laser	1.00
d.Placebo.Probiotics	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

-41.82 (-102.81, 20.11)	-27.94 (-74.25, 14.52)	4.00 (-48.26, 59.07)	10.85 (-29.96, 55.36)	-19.27 (-86.67, 44.52)	-10.37 (-55.15, 40.47)	-10.05 (-61.46, 45.43)	-4.61 (-64.36, 60.71)	-5.49 (-82.50, 64.65)	-29.95 (-89.24, 25.51)	-36.70 (-103.43, 26.63)	2.13 (-53.94, 53.22)	Aloe
-43.30 (-105.33, 20.96)	-30.21 (-67.81, 8.74)	2.61 (-49.78, 57.98)	20.38 (-37.20, 70.85)	-21.38 (-63.26, 22.80)	0.25 (-35.80, 37.60)	-11.29 (-63.57, 43.59)	-6.19 (-65.21, 59.06)	-7.98 (-55.72, 40.00)	-31.87 (-83.62, 23.28)	-39.07 (-99.89, 24.02)	Amlexanox	-2.13 (-53.22, 53.94)
-4.43 (-81.27, 73.48)	9.32 (-39.56, 56.63)	41.24 (-26.46, 112.04)	48.25 (-10.69, 112.01)	18.04 (-55.32, 90.10)	26.86 (-34.44, 95.64)	26.59 (-40.02, 99.42)	32.95 (-40.04, 111.49)	31.58 (-48.75, 108.07)	7.30 (-54.10, 68.97)	Chlorhexidine	39.07 (-24.02, 99.89)	36.70 (-26.63, 103.43)

29.95 (-25.51, 89.24)	5.49 (-64.65, 82.50)	4.61 (-60.71, 64.36)	10.05 (-45.43, 61.46)	10.37 (-40.47, 55.15)	19.27 (-44.52, 86.67)	-10.85 (-55.36, 29.96)	-4.00 (-59.07, 48.26)	27.94 (-14.52, 74.25)	41.82 (-20.11, 102.81)	
31.87 (-23.28, 83.62)	7.98 (-40.00, 55.72)	6.19 (-59.06, 65.21)	11.29 (-43.59, 63.57)	-0.25 (-37.60, 35.80)	21.38 (-22.80, 63.26)	-20.38 (-70.85, 37.20)	-2.61 (-57.98, 49.78)	30.21 (-8.74, 67.81)	43.30 (-20.96, 105.33)	
-7.30 (-68.97, 54.10)	-31.58 (-108.07, 48.75)	-32.95 (-111.49, 40.04)	-26.59 (-99.42, 40.02)	-26.86 (-95.64, 34.44)	-18.04 (-90.10, 55.32)	-48.25 (-112.01, 10.69)	-41.24 (-112.04, 26.46)	-9.32 (-56.63, 39.56)	4.43 (-73.48, 81.27)	
Curcumin	-24.36 (-94.70, 49.58)	-25.14 (-97.05, 40.50)	-19.49 (-84.31, 39.15)	-19.91 (-78.89, 34.00)	-10.75 (-75.68, 56.73)	-40.72 (-96.72, 10.25)	-33.69 (-98.24, 25.81)	-1.57 (-38.69, 35.21)	11.88 (-59.52, 80.21)	
24.36 (-49.58, 94.70)	Dexamethasone	-1.95 (-85.80, 73.73)	3.95 (-73.53, 73.58)	3.84 (-65.84, 67.97)	13.51 (-52.28, 75.90)	-17.17 (-86.10, 45.65)	-9.77 (-85.99, 59.48)	22.60 (-40.71, 82.25)	36.17 (-47.11, 112.12)	
25.14 (-40.50, 97.05)	1.95 (-73.73, 85.80)	Diosmectite	5.77 (-49.67, 62.07)	5.56 (-46.14, 56.84)	15.23 (-54.82, 88.27)	-15.68 (-80.10, 30.20)	-8.23 (-63.55, 48.60)	23.72 (-32.06, 86.88)	37.40 (-27.23, 103.36)	
19.49 (-39.15, 84.31)	-3.95 (-73.58, 73.53)	-5.77 (-62.07, 49.67)	Doxycycline	0.23 (-42.68, 40.31)	9.89 (-53.96, 74.72)	-21.09 (-53.81, 10.84)	-13.97 (-58.97, 31.71)	18.04 (-29.01, 71.84)	31.55 (-24.44, 88.99)	
19.91 (-34.00, 78.89)	-3.84 (-67.97, 65.84)	-5.56 (-56.84, 46.14)	-0.23 (-40.31, 42.68)	Glycyrrhiza	21.85 (-22.79, 64.44)	-21.34 (-45.65, 4.02)	-13.93 (-55.00, 27.11)	18.08 (-21.20, 63.73)	31.48 (-21.04, 86.36)	
10.75 (-56.73, 75.68)	-13.51 (-75.90, 52.28)	-15.23 (-88.27, 54.82)	-9.89 (-74.72, 53.96)	-21.85 (-64.44, 22.79)	Laser	-41.82 (-98.70, 25.67)	-24.30 (-89.28, 41.17)	8.97 (-44.02, 63.20)	21.85 (-50.03, 92.80)	
40.72 (-1025.96, 72)	17.17 (-45.65, 86.10)	15.68 (-30.20, 60.10)	21.09 (-10.84, 53.81)	21.34 (-4.02, 45.65)	41.82 (-25.67, 98.70)	Placebo	7.21 (-24.85, 39.58)	39.41 (3.28, 80.37)	52.66 (8.03, 99.50)	
33.69 (-2581.98, 24)	9.77 (-59.48, 85.99)	8.23 (-48.60, 63.55)	13.97 (-31.71, 58.97)	13.93 (-27.11, 55.00)	24.30 (-41.17, 89.28)	-7.21 (-39.58, 24.85)	Probiotics	32.17 (-15.07, 84.84)	45.68 (-11.20, 102.41)	
1.57 (-35.21, 38.69)	-22.60 (-82.25, 40.71)	-23.72 (-86.88, 32.06)	-18.04 (-71.84, 29.01)	-18.08 (-63.73, 21.20)	-8.97 (-63.20, 44.02)	-39.41 (-80.37, -3.28)	-32.17 (-84.84, 15.07)	Triamcinolone	13.72 (-48.70, 70.60)	
-11.88 (-80.21, 59.52)	-36.17 (-112.12, 47.11)	-37.40 (-103.36, 27.23)	-31.55 (-88.99, 24.44)	-31.48 (-86.36, 21.04)	-21.85 (-92.80, 50.03)	-52.66 (-99.50, -8.03)	-45.68 (-102.41, 11.20)	-13.72 (-70.60, 48.70)	Zinc	

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Amlexanox, Glycyrrhiza, Placebo, Triamcinolone	-6.32 (-61.36, 25.69)
Amlexanox, Placebo, Triamcinolone	-4.90 (-66.70, 35.23)
Amlexanox, Placebo, Triamcinolone	-4.90 (-66.70, 35.23)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	18.78 (10.27, 39.91)
Inconsistency Standard Deviation	22.19 (0.97, 58.63)

2.4 Convergence Diagnostics

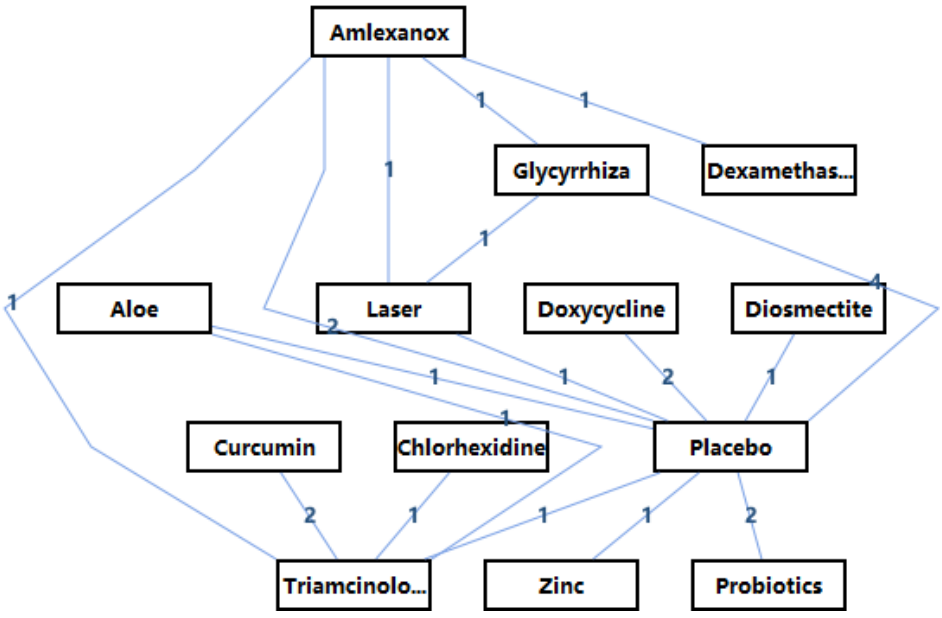
Parameter	PSRF
d.Aloe.Placebo	1.00
d.Amlexanox.Dexamethasone	1.00
d.Amlexanox.Laser	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Glycyrrhiza	1.01
d.Placebo.Probiotics	1.00
d.Placebo.Triamcinolone	1.00
d.Placebo.Zinc	1.00
d.Triamcinolone.Amlexanox	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
w.Amlexanox.Glycyrrhiza.Placeb...	1.00
w.Amlexanox.Placebo.Triamcinol...	1.00
w.Amlexanox.Placebo.Triamcinol...	1.00
sd.d	1.01
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Amlexanox, Glycyrrhiza	-15.42 (-69.31, 33.74)	-2.94 (-48.68, 41.88)	-3.32 (-35.40, 27.19)	0.67
Amlexanox, Placebo	-33.20 (-68.93, -0.68)	-14.02 (-57.49, 29.16)	-23.48 (-50.39, 2.53)	0.41
Amlexanox, Triamcinolone	42.12 (2.87, 82.51)	-6.95 (-57.71, 41.05)	22.39 (-11.79, 55.08)	0.1
Placebo, Triamcinolone	26.83 (-14.03, 66.31)	76.67 (29.75, 125.97)	45.80 (12.78, 79.09)	0.1

4. Network structure



Day 6

1. Consistency Model

1.1 Summary estimates

Allicin	-15.58 (-93.18, 61.40)	8.41 (-66.14, 81.71)	-8.29 (-96.30, 80.70)	-14.51 (-106.44, 77.58)	4.75 (-91.21, 103.46)	10.21 (-86.53, 109.21)	-10.46 (-100.81, 79.82)	-6.46 (-98.92, 81.03)	-13.27 (-90.17, 65.60)	27.12 (-64.78, 115.94)
15.58 (-61.40, 93.18)	Aloe	24.03 (-34.90, 78.37)	7.28 (-69.27, 82.73)	1.60 (-79.51, 78.74)	20.66 (-61.48, 103.64)	25.66 (-53.05, 105.99)	4.74 (-72.51, 80.50)	8.84 (-69.61, 84.87)	2.61 (-60.65, 63.29)	42.21 (-36.21, 120.26)
-8.41 (-81.71, 66.14)	-24.03 (-78.37, 34.90)	Amlexanox	-16.38 (-89.11, 56.13)	-23.24 (-98.40, 54.31)	-3.40 (-85.77, 81.70)	1.64 (-77.22, 85.69)	-19.23 (-90.68, 54.33)	-15.14 (-87.83, 56.75)	-21.30 (-78.45, 37.75)	18.53 (-54.93, 91.28)
8.29 (-80.70, 96.30)	-7.28 (-82.73, 69.27)	16.38 (-56.13, 89.11)	Berberine gelatin	-6.80 (-97.61, 86.22)	12.74 (-81.43, 111.82)	18.40 (-75.37, 113.49)	-2.51 (-90.75, 87.60)	1.21 (-86.13, 90.11)	-4.89 (-79.65, 73.32)	35.27 (-53.42, 124.28)
14.51 (-77.58, 106.44)	-1.60 (-78.74, 79.51)	23.24 (-54.31, 98.40)	6.80 (-86.22, 97.61)	Chitosan	19.40 (-77.48, 119.93)	25.30 (-73.34, 122.65)	3.83 (-87.99, 96.18)	8.07 (-86.29, 99.80)	2.13 (-77.93, 82.40)	40.79 (-49.35, 133.70)
-4.75 (-103.46, 91.21)	-20.66 (-103.64, 61.48)	3.40 (-81.70, 85.77)	-12.74 (-111.82, 81.43)	-19.40 (-119.93, 77.48)	Chlorhexidine	5.55 (-86.71, 94.49)	-15.87 (-113.41, 80.81)	-10.96 (-109.31, 84.04)	-18.10 (-107.72, 68.36)	22.00 (-80.99, 118.36)
-10.21 (-109.21, 86.53)	-25.66 (-105.99, 53.05)	-1.64 (-85.69, 77.22)	-18.40 (-113.49, 75.37)	-25.30 (-122.65, 73.34)	-5.55 (-94.49, 86.71)	Curcumin	-21.46 (-119.23, 75.18)	-17.18 (-114.44, 78.34)	-22.70 (-109.22, 61.74)	16.78 (-83.06, 112.80)
10.46 (-79.82, 100.81)	-4.74 (-80.50, 72.51)	19.23 (-54.33, 90.68)	2.51 (-87.60, 90.75)	-3.83 (-96.18, 87.99)	15.87 (-80.81, 113.41)	21.46 (-75.18, 119.23)	Dexamethasone	4.31 (-87.54, 91.84)	-1.93 (-78.82, 76.31)	37.66 (-52.21, 126.29)
6.46 (-81.03, 98.92)	-8.84 (-84.87, 69.61)	15.14 (-56.75, 87.83)	-1.21 (-90.11, 86.13)	-8.07 (-99.80, 86.29)	10.96 (-84.04, 109.31)	17.18 (-78.34, 114.44)	-4.31 (-91.84, 87.54)	Diosmectite	-6.40 (-84.60, 71.14)	33.90 (-55.81, 124.48)
13.27 (-65.60, 90.17)	-2.61 (-63.29, 60.65)	21.30 (-37.75, 78.45)	4.89 (-73.32, 79.65)	-2.13 (-82.40, 77.93)	18.10 (-68.36, 107.72)	22.70 (-61.74, 109.22)	1.93 (-76.31, 78.82)	6.40 (-71.14, 84.60)	Doxycycline	39.81 (-40.48, 116.70)
-27.12 (-115.94, 64.78)	-42.21 (-120.26, 36.21)	-18.53 (-91.28, 54.93)	-35.27 (-124.28, 53.42)	-40.79 (-133.70, 49.35)	-22.00 (-118.36, 80.99)	-16.78 (-112.80, 83.06)	-37.66 (-126.29, 52.21)	-33.90 (-124.48, 55.81)	-39.81 (-116.70, 40.48)	Insulin-liposomal gel
-35.60 (-132.39, 61.32)	-51.62 (-134.64, 35.77)	-28.00 (-107.42, 54.12)	-44.06 (-139.04, 51.53)	-50.21 (-146.46, 47.82)	-31.12 (-131.89, 72.43)	-25.29 (-126.48, 77.54)	-46.33 (-143.35, 48.23)	-43.05 (-137.10, 54.32)	-48.46 (-133.45, 36.68)	-8.96 (-103.55, 87.15)
-14.08 (-132.61, 104.84)	-30.00 (-134.03, 75.84)	-5.66 (-113.05, 100.00)	-22.22 (-141.78, 96.81)	-28.62 (-146.50, 91.85)	-8.61 (-73.78, 59.27)	-3.65 (-114.73, 108.86)	-24.53 (-143.77, 93.83)	-20.45 (-139.96, 96.71)	-26.56 (-134.95, 83.91)	12.97 (-107.16, 132.41)
23.71 (-40.14, 87.24)	8.17 (-34.62, 52.18)	32.31 (-5.64, 67.60)	15.60 (-47.75, 78.00)	9.14 (-57.49, 74.02)	28.75 (-44.93, 104.56)	33.85 (-37.82, 107.48)	12.92 (-50.08, 75.18)	17.41 (-46.89, 81.44)	11.34 (-33.04, 55.41)	50.76 (-13.42, 114.19)
-0.87 (-76.85, 72.28)	-16.41 (-65.70, 32.38)	7.55 (-46.15, 58.10)	-9.07 (-83.63, 60.35)	-15.20 (-92.40, 59.29)	4.32 (-61.10, 70.10)	9.29 (-55.34, 72.46)	-11.95 (-86.16, 61.60)	-7.40 (-81.85, 64.47)	-13.87 (-73.35, 42.34)	25.94 (-49.24, 98.32)
1.72 (-88.56, 86.47)	-14.31 (-82.89, 54.41)	9.83 (-58.52, 78.28)	-6.73 (-94.71, 75.92)	-13.08 (-101.58, 73.17)	6.09 (-80.50, 91.48)	11.71 (-74.17, 97.63)	-8.94 (-95.91, 75.52)	-5.51 (-91.16, 79.79)	-11.48 (-85.88, 61.08)	28.02 (-59.38, 112.80)
-15.54 (-107.60, 74.92)	-31.28 (-108.12, 48.65)	-7.07 (-82.47, 68.66)	-24.22 (-111.61, 65.79)	-30.42 (-123.04, 63.84)	-10.76 (-106.82, 92.51)	-5.67 (-103.32, 95.25)	-26.39 (-118.61, 65.73)	-21.79 (-116.15, 67.91)	-28.87 (-107.49, 50.82)	11.23 (-79.45, 101.12)

35.60 (-61.32, 132.39)	14.08 (-104.84, 132.61)	-23.71 (-87.24, 40.14)	0.87 (-72.28, 76.85)	-1.72 (-86.47, 88.56)	15.54 (-74.92, 107.60)												
51.62 (-35.77, 134.64)	30.00 (-75.84, 134.03)	-8.17 (-52.18, 34.62)	16.41 (-32.38, 65.70)	14.31 (-54.41, 82.89)	31.28 (-48.65, 108.12)												
28.00 (-54.12, 107.42)	5.66 (-100.00, 113.05)	-32.31 (-67.60, 5.64)	-7.55 (-58.10, 46.15)	-9.83 (-78.28, 58.52)	7.07 (-68.66, 82.47)												
44.06 (-51.53, 139.04)	22.22 (-96.81, 141.78)	-15.60 (-78.00, 47.75)	9.07 (-60.35, 83.63)	6.73 (-75.92, 94.71)	24.22 (-65.79, 111.61)												
50.21 (-47.82, 146.46)	28.62 (-91.85, 146.50)	-9.14 (-74.02, 57.49)	15.20 (-59.29, 92.40)	13.08 (-73.17, 101.58)	30.42 (-63.84, 123.04)												
31.12 (-72.43, 131.89)	8.61 (-59.27, 73.78)	-28.75 (-104.56, 44.93)	-4.32 (-70.10, 61.10)	-6.09 (-91.48, 80.50)	10.76 (-92.51, 106.82)												
25.29 (-77.54, 126.48)	3.65 (-108.86, 114.73)	-33.85 (-107.48, 37.82)	-9.29 (-72.46, 55.34)	-11.71 (-97.63, 74.17)	5.67 (-95.25, 103.32)												
46.33 (-48.23, 143.35)	24.53 (-93.83, 143.77)	-12.92 (-75.18, 50.08)	11.95 (-61.60, 86.16)	8.94 (-75.52, 95.91)	26.39 (-65.73, 118.61)												
43.05 (-54.32, 137.10)	20.45 (-96.71, 139.96)	-17.41 (-81.44, 46.89)	7.40 (-64.47, 81.85)	5.51 (-79.79, 91.16)	21.79 (-67.91, 116.15)												
48.46 (-36.68, 133.45)	26.56 (-83.91, 134.95)	-11.34 (-55.41, 33.04)	13.87 (-42.34, 73.35)	11.48 (-61.08, 85.88)	28.87 (-50.82, 107.49)												
8.96 (-87.15, 103.55)	-12.97 (-132.41, 107.16)	-50.76 (-114.19, 13.42)	-25.94 (-98.32, 49.24)	-28.02 (-112.80, 59.38)	-11.23 (-101.12, 79.45)												
Laser	-21.94 (-146.26, 102.10)	-59.65 (-130.10, 12.85)	-35.02 (-113.22, 48.18)	-36.93 (-127.00, 55.47)	-21.08 (-115.42, 72.78)												
21.94 (-102.10, 146.26)	N-acetylcysteine	-38.07 (-138.00, 62.75)	-12.81 (-105.96, 80.60)	-15.72 (-123.50, 95.09)	2.18 (-118.18, 119.62)												
59.65 (-12.85, 130.10)	38.07 (-62.75, 138.00)	Placebo	24.71 (-11.06, 61.67)	22.40 (-34.44, 80.55)	39.68 (-26.60, 104.99)												
35.02 (-48.18, 113.22)	12.81 (-80.60, 105.96)	-24.71 (-61.67, 11.06)	Triamcinolone	-2.35 (-58.83, 55.39)	14.76 (-62.20, 87.93)												
36.93 (-55.47, 127.00)	15.72 (-95.09, 123.50)	-22.40 (-80.55, 34.44)	2.35 (-55.39, 58.83)	Triester Glycerol Oxide	17.27 (-72.68, 101.91)												
21.08 (-72.78, 115.42)	-2.18 (-119.62, 118.18)	-39.68 (-104.99, 26.60)	-14.76 (-87.93, 62.20)	-17.27 (-101.91, 72.68)	Zinc												

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17
Allicin	0.03	0.05	0.06	0.06	0.07	0.07	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.06	0.06
Aloe	0	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.08	0.09	0.1	0.1	0.1	0.1	0.1	0.08
Amlexanox	0.01	0.04	0.07	0.1	0.12	0.11	0.11	0.1	0.08	0.08	0.06	0.05	0.03	0.02	0.01	0.01	0
Berberine gelatin	0.02	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.1
Chitosan	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.1	0.17
Chlorhexidine	0.03	0.08	0.09	0.08	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.04	0.05	0.06	0.04
Curcumin	0.09	0.09	0.09	0.08	0.08	0.07	0.06	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.04	0.03	0.04
Dexamethasone	0.02	0.03	0.04	0.05	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.09	0.12
Diosmectite	0.02	0.03	0.04	0.05	0.05	0.06	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.06	0.08	0.09
Doxycycline	0	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.06	0.08	0.09	0.09	0.1	0.09	0.09	0.08	0.07
Insulin-liposomal gel	0.17	0.18	0.13	0.1	0.08	0.06	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Laser	0.32	0.15	0.11	0.07	0.06	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
N-acetylcysteine	0.16	0.11	0.09	0.07	0.06	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.05	0.08
Placebo	0	0	0	0	0	0	0	0.01	0.01	0.03	0.06	0.1	0.15	0.21	0.22	0.16	0.05
Triamcinolone	0	0.01	0.02	0.04	0.07	0.1	0.12	0.13	0.13	0.12	0.1	0.07	0.05	0.03	0.02	0.01	0
Triester Glycerol Oxide	0.02	0.04	0.05	0.06	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.05	0.05	0.04
Zinc	0.09	0.12	0.12	0.1	0.08	0.07	0.06	0.06	0.05	0.04	0.04	0.03	0.04	0.03	0.03	0.03	0.02

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	26.71 (14.77, 55.74)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Chlorhexidine.Nacetylcysteine	1.00
d.Placebo.Allicin	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Insulinliposomalgel	1.03
d.Placebo.Laser	1.34
d.Placebo.Zinc	1.09
d.Triamcinolone.Aloe	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.03
d.Triamcinolone.Placebo	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
sd.d	1.00

Number of chains	: 4
Tuning iterations	: 20,000
Simulation iterations	: 50,000
Thinning interval	: 10
Inference samples	: 10,000
Variance scaling factor:	2.5

2.Inconsistency Model

2.1 Summary estimates

Allicin	-14.08 (-95.32, 67.04)	8.69 (-68.34, 83.56)	-7.54 (-103.78, 85.71)	-14.29 (-107.91, 78.80)	4.96 (-101.91, 112.38)	2.87 (-99.44, 108.30)											
14.08 (-67.04, 95.32)	Aloe	23.47 (-37.86, 80.91)	6.21 (-74.61, 87.21)	-0.01 (-81.41, 83.30)	18.99 (-68.93, 109.86)	18.02 (-70.72, 104.76)											
-8.69 (-83.56, 68.34)	-23.47 (-80.91, 37.86)	Amlexanox	-16.88 (-93.25, 64.40)	-23.08 (-99.07, 55.12)	-3.22 (-96.55, 90.17)	-5.48 (-95.56, 86.51)											
7.54 (-85.71, 103.78)	-6.21 (-87.21, 74.61)	16.88 (-64.40, 93.25)	Berberine gelatin	-6.66 (-103.75, 91.42)	13.07 (-94.65, 124.66)	10.82 (-96.06, 117.50)											
14.29 (-78.80, 107.91)	0.01 (-83.30, 81.41)	23.08 (-55.12, 99.07)	6.66 (-91.42, 103.75)	Chitosan	19.50 (-86.09, 128.51)	17.20 (-92.31, 123.71)											
-4.96 (-112.38, 101.91)	-18.99 (-109.86, 68.93)	3.22 (-90.17, 96.55)	-13.07 (-124.66, 94.65)	-19.50 (-128.51, 86.09)	Chlorhexidine	-2.42 (-97.53, 93.75)											
-2.87 (-108.30, 99.44)	-18.02 (-104.76, 70.72)	5.48 (-86.51, 95.56)	-10.82 (-117.50, 96.06)	-17.20 (-123.71, 92.31)	2.42 (-93.75, 97.53)	Curcumin											
11.22 (-82.66, 105.09)	-3.75 (-81.34, 79.15)	19.00 (-55.56, 97.55)	3.20 (-87.85, 95.53)	-3.32 (-97.43, 92.10)	15.49 (-88.72, 126.38)	14.50 (-92.08, 121.24)											
6.45 (-85.19, 100.02)	-7.22 (-89.25, 74.27)	15.61 (-60.47, 90.16)	-1.52 (-93.98, 92.41)	-8.16 (-101.35, 89.24)	11.40 (-95.64, 120.35)	10.09 (-96.08, 115.71)											
12.63 (-69.71, 95.93)	-1.77 (-67.00, 66.52)	21.26 (-40.45, 83.25)	4.33 (-75.25, 86.51)	-1.39 (-84.46, 82.92)	17.67 (-79.02, 116.32)	16.05 (-79.37, 116.06)											
-25.86 (-117.48, 69.58)	-39.59 (-119.66, 42.47)	-17.10 (-92.71, 62.09)	-33.77 (-123.69, 63.61)	-39.79 (-136.03, 56.08)	-20.63 (-125.50, 88.72)	-22.26 (-126.80, 85.81)											
-28.13 (-122.94, 67.79)	-42.77 (-124.77, 43.57)	-19.77 (-96.31, 59.43)	-36.73 (-130.11, 61.32)	-42.71 (-138.23, 55.65)	-23.50 (-130.94, 87.75)	-24.91 (-130.06, 83.63)											
-13.98 (-142.04, 112.43)	-28.80 (-139.63, 84.96)	-6.13 (-119.00, 111.24)	-22.88 (-149.38, 106.85)	-28.94 (-156.27, 103.68)	-9.57 (-78.01, 58.26)	-11.94 (-131.88, 111.76)											
23.59 (-41.52, 88.34)	9.39 (-36.64, 56.49)	32.39 (-5.70, 70.03)	15.82 (-50.68, 81.70)	9.30 (-59.04, 78.27)	28.74 (-56.58, 115.21)	26.96 (-57.76, 111.75)											
-1.45 (-84.65, 79.32)	-15.89 (-73.04, 41.06)	7.20 (-55.62, 67.98)	-9.17 (-93.38, 71.45)	-16.02 (-99.76, 68.50)	3.28 (-64.23, 72.01)	1.39 (-64.84, 66.58)											
0.50 (-96.59, 100.90)	-13.52 (-89.83, 68.01)	9.00 (-71.46, 93.91)	-7.18 (-105.74, 91.09)	-14.15 (-112.35, 91.12)	5.52 (-84.75, 98.34)	3.34 (-85.78, 96.31)											
-7.58 (-100.25, 85.88)	-21.89 (-99.98, 59.46)	1.20 (-74.05, 79.02)	-14.60 (-111.62, 76.55)	-21.64 (-117.49, 75.82)	-2.37 (-111.47, 106.56)	-4.30 (-108.49, 102.70)											

-11.22 (-105.09, 82.66)	-6.45 (-100.02, 85.19)	-12.63 (-95.93, 69.71)	25.86 (-69.58, 117.48)	28.13 (-67.79, 122.94)	13.98 (-112.43, 142.04)	-23.59 (-88.34, 41.52)	1.45 (-79.32, 84.65)	-0.50 (-100.90, 96.59)	7.58 (-85.88, 100.25)
3.75 (-79.15, 81.34)	7.22 (-74.27, 89.25)	1.77 (-66.52, 67.00)	39.59 (-42.47, 119.66)	42.77 (-43.57, 124.77)	28.80 (-84.96, 139.63)	-9.39 (-56.49, 36.64)	15.89 (-41.06, 73.04)	13.52 (-68.01, 89.83)	21.89 (-59.45, 99.98)
-19.00 (-97.55, 55.56)	-15.61 (-90.16, 60.47)	-21.26 (-83.25, 40.45)	17.10 (-62.09, 92.71)	19.77 (-59.43, 96.31)	6.13 (-111.24, 119.00)	-32.39 (-70.03, 5.70)	-7.20 (-67.98, 55.62)	-9.00 (-93.91, 71.46)	-1.29 (-79.09, 74.05)
-3.20 (-95.53, 87.85)	1.52 (-92.41, 93.98)	-4.33 (-86.51, 75.25)	33.77 (-63.61, 123.69)	36.73 (-61.32, 130.11)	22.88 (-106.85, 149.38)	-15.82 (-81.70, 50.68)	9.17 (-71.45, 93.38)	7.18 (-91.09, 105.74)	14.60 (-55.37, 82.62)
3.32 (-92.10, 97.43)	8.16 (-89.24, 101.35)	1.39 (-82.92, 84.46)	39.79 (-56.08, 136.03)	42.71 (-55.65, 138.23)	28.94 (-103.68, 156.27)	-9.30 (-78.27, 59.04)	16.02 (-68.50, 99.76)	14.15 (-91.12, 112.35)	21.64 (-60.88, 99.49)
-15.49 (-126.38, 88.72)	-11.40 (-120.35, 95.64)	-17.67 (-116.32, 79.02)	20.63 (-88.72, 125.50)	23.50 (-87.75, 130.94)	9.57 (-58.26, 78.01)	-28.74 (-115.21, 56.58)	-3.28 (-72.01, 64.23)	-5.52 (-98.34, 84.75)	2.37 (-55.11, 61.47)
-14.50 (-121.24, 92.08)	-10.09 (-115.71, 96.08)	-16.05 (-116.06, 79.37)	22.26 (-85.81, 126.80)	24.91 (-83.63, 130.06)	11.94 (-111.76, 131.88)	-26.96 (-111.75, 57.76)	-1.39 (-66.58, 64.84)	-3.34 (-96.31, 85.78)	4.30 (-74.72, 83.49)
Dexamethasone	4.42 (-88.79, 98.54)	-1.59 (-83.62, 80.04)	35.87 (-58.22, 129.90)	39.48 (-57.54, 134.78)	25.67 (-101.89, 154.11)	-12.94 (-78.31, 54.69)	12.55 (-67.61, 95.57)	10.18 (-89.79, 108.52)	18.34 (-76.93, 111.54)
-4.42 (-98.54, 88.79)	Diosmectite	-6.38 (-86.45, 73.82)	32.13 (-61.34, 124.16)	35.22 (-58.85, 127.94)	21.20 (-107.55, 151.85)	-16.84 (-83.71, 49.34)	8.52 (-72.55, 91.40)	5.95 (-93.56, 103.76)	14.27 (-81.64, 106.77)
1.59 (-80.04, 83.62)	6.38 (-73.82, 86.45)	Doxycycline	38.57 (-43.96, 118.96)	40.71 (-41.87, 124.88)	27.63 (-95.51, 145.26)	-10.85 (-57.93, 37.99)	14.19 (-54.04, 83.71)	12.19 (-76.43, 98.78)	20.42 (-60.22, 97.60)
-35.87 (-129.90, 58.22)	-32.13 (-124.16, 61.34)	-38.57 (-118.96, 43.96)	Insulin-liposomal gel	-2.71 (-91.47, 95.97)	-11.88 (-141.55, 117.83)	-49.20 (-114.29, 19.44)	-23.92 (-105.62, 61.19)	-26.40 (-124.73, 73.36)	-18.36 (-111.32, 67.78)
-39.48 (-134.78, 57.54)	-35.22 (-127.94, 58.85)	-40.71 (-124.88, 41.87)	-2.71 (-95.97, 91.47)	Laser	-13.51 (-143.80, 115.83)	-52.02 (-117.86, 17.43)	-26.63 (-109.11, 58.73)	-28.94 (-127.95, 72.96)	-20.71 (-112.61, 51.16)
-25.67 (-154.11, 101.89)	-21.20 (-151.85, 107.55)	-27.63 (-145.26, 95.51)	11.88 (-117.83, 141.55)	13.51 (-115.83, 143.80)	N-acetylcysteine	-38.46 (-145.73, 71.89)	-12.89 (-109.08, 85.78)	-15.65 (-130.59, 101.52)	-7.71 (-134.12, 23.14)
12.94 (-54.69, 78.31)	16.84 (-49.34, 83.71)	10.85 (-37.99, 57.93)	49.20 (-19.44, 114.29)	52.02 (-17.43, 117.86)	38.46 (-71.89, 145.73)	Placebo	24.18 (-38.05, 86.74)	21.75 (-57.98, 101.60)	29.52 (-35.42, 93.32)
-12.55 (-95.57, 67.61)	-8.52 (-91.40, 72.55)	-14.19 (-83.71, 54.04)	23.92 (-61.19, 105.62)	26.63 (-58.73, 109.11)	12.89 (-85.78, 109.08)	-24.18 (-86.74, 38.05)	Triamcinolone	-1.68 (-66.71, 57.89)	5.54 (-75.69, 86.42)
-10.18 (-108.52, 89.79)	-5.95 (-103.76, 93.56)	-12.19 (-98.78, 76.43)	26.40 (-73.36, 124.73)	28.94 (-72.96, 127.95)	15.65 (-101.52, 130.59)	-21.75 (-101.60, 57.98)	1.68 (-57.89, 66.71)	Triester Glycerol Oxide	7.37 (-80.99, 106.49)
-18.39 (-111.54, 75.08)	-14.27 (-106.77, 81.64)	-20.42 (-102.60, 60.22)	18.36 (-76.78, 111.32)	21.17 (-75.16, 112.61)	7.72 (-122.39, 134.12)	-31.52 (-97.32, 35.42)	-5.64 (-85.22, 75.69)	-8.37 (-106.09, 90.99)	Zinc

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Aloe, Placebo, Triamcinolone	-0.38 (-58.99, 54.34)
Aloe, Placebo, Triamcinolone	-0.38 (-58.99, 54.34)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	28.06 (15.11, 58.19)
Inconsistency Standard Deviation	24.41 (1.30, 64.80)

2.4 Convergence Diagnostics

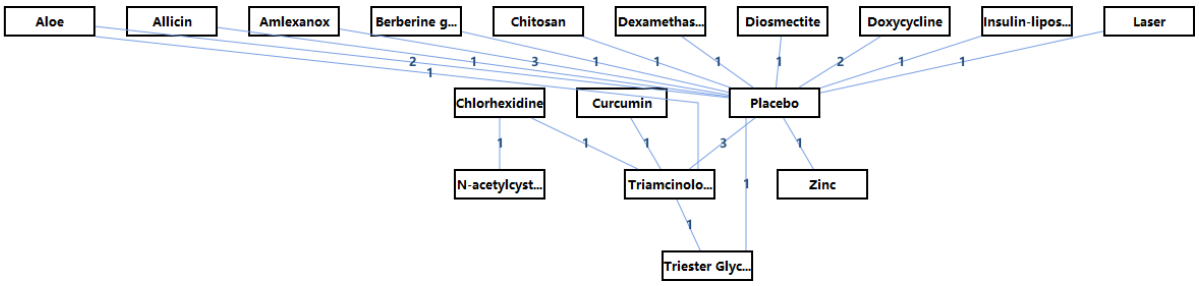
Parameter	PSRF
d.Allicin.Placebo	1.00
d.Aloe.Triamcinolone	1.00
d.Chlorhexidine.Nacetylcysteine	1.00
d.Placebo.Aloe	1.00
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.00
d.Placebo.Chitosan	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Diosmectite	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Insulinliposomalgel	1.00
d.Placebo.Laser	1.00
d.Placebo.Zinc	1.01
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
d.Triamcinolone.TriesterGlycerol...	1.00
w.Aloe.Placebo.Triamcinolone	1.00
w.Aloe.Placebo.Triamcinolone	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Aloe, Triamcinolone	18.64 (-51.20, 89.82)	15.88 (-56.56, 89.69)	16.41 (-32.38, 65.70)	0.94

4. Network structure



Day 7

1. Consistency Model

Aloe	8.28 (-29.91, 47.09)	3.27 (-34.44, 41.10)	11.63 (-14.23, 39.64)	8.42 (-22.49, 41.28)	4.91 (-22.35, 31.30)	10.31 (-13.72, 32.75)	-4.44 (-24.12, 17.39)	21.94 (-7.04, 53.69)	9.44 (-35.79, 52.40)	8.16 (-13.71, 28.52)	5.53 (-27.75, 40.21)
-8.28 (-47.09, 29.91)	Anilexanox	-5.77 (-53.42, 42.30)	3.40 (-36.37, 44.23)	-0.05 (-20.69, 22.41)	-3.30 (-40.40, 31.63)	1.89 (-35.24, 36.01)	-12.73 (-43.87, 19.53)	13.56 (-23.55, 53.30)	0.59 (-53.02, 53.15)	-0.07 (-37.96, 35.16)	-3.00 (-43.99, 39.13)
-3.27 (-41.10, 34.44)	5.77 (-42.30, 53.42)	Chlorhexidine	8.66 (-26.42, 45.14)	5.64 (-36.60, 50.04)	1.90 (-37.99, 40.35)	6.88 (-27.84, 40.74)	-7.29 (-42.37, 28.76)	18.81 (-21.20, 62.36)	6.14 (-15.99, 28.40)	4.88 (-27.16, 35.94)	2.78 (-41.64, 48.22)
-11.63 (-39.64, 14.23)	-3.40 (-44.23, 36.37)	-8.66 (-45.14, 26.42)	Curcumin	-3.42 (-37.76, 30.93)	-6.80 (-36.04, 20.42)	-1.43 (-25.33, 19.24)	-16.05 (-39.17, 7.77)	10.17 (-21.23, 44.08)	-2.59 (-45.24, 39.06)	-3.51 (-21.80, 11.68)	-6.29 (-40.77, 29.25)
-8.42 (-41.28, 22.49)	0.05 (-22.41, 20.69)	-5.64 (-50.04, 36.60)	3.42 (-30.93, 37.76)	Dexamethasone	-3.49 (-34.40, 23.95)	1.76 (-28.88, 28.24)	-12.74 (-36.19, 11.15)	13.31 (-19.18, 47.12)	0.42 (-49.75, 49.38)	-0.26 (-31.61, 27.63)	-3.05 (-37.44, 33.26)
-4.91 (-31.30, 22.35)	3.30 (-31.63, 40.40)	-1.90 (-40.35, 37.99)	6.80 (-20.42, 36.04)	3.49 (-23.95, 34.40)	Doxycycline	5.33 (-18.04, 27.48)	-9.23 (-24.43, 9.32)	16.97 (-9.50, 47.52)	4.33 (-41.47, 50.55)	3.30 (-20.56, 26.16)	0.84 (-28.70, 34.47)
-10.31 (-32.75, 13.72)	-1.89 (-36.01, 35.24)	-6.88 (-40.74, 27.84)	1.43 (-19.24, 25.33)	-1.76 (-28.24, 28.88)	-5.33 (-27.48, 18.04)	Laser	-14.63 (-28.41, 3.42)	11.53 (-13.52, 42.18)	-0.99 (-41.39, 40.23)	-2.08 (-15.95, 12.27)	-4.22 (-33.75, 28.28)
4.44 (-17.39, 24.12)	12.73 (-19.53, 43.87)	7.29 (-28.76, 42.37)	16.05 (-7.77, 39.17)	12.74 (-11.15, 36.19)	9.23 (-9.32, 24.43)	14.63 (-3.42, 28.41)	Placebo	26.25 (4.00, 49.84)	13.50 (-30.51, 54.46)	12.56 (-6.58, 27.34)	9.74 (-16.41, 37.01)
-21.94 (-53.69, 7.04)	-13.56 (-53.30, 23.55)	-18.81 (-62.36, 21.20)	-10.17 (-44.08, 21.23)	-13.31 (-47.12, 19.18)	-16.97 (-47.52, 9.50)	-11.53 (-42.18, 13.52)	-26.25 (-49.84, -4.00)	Silver nitrate	-12.79 (-63.70, 33.39)	-13.61 (-44.71, 12.11)	-16.50 (-52.07, 18.61)
-9.44 (-52.40, 35.79)	-0.59 (-53.15, 53.02)	-6.14 (-28.40, 15.99)	2.59 (-39.06, 45.24)	-0.42 (-49.38, 49.75)	-4.33 (-50.55, 41.47)	0.99 (-40.23, 41.39)	-13.50 (-54.46, 30.51)	12.79 (-33.39, 63.70)	Sucralfate	-1.06 (-39.83, 37.01)	-3.52 (-53.57, 47.73)
-8.16 (-28.52, 13.71)	0.07 (-35.16, 37.96)	-4.88 (-35.94, 27.16)	3.51 (-11.68, 21.80)	0.26 (-27.63, 31.61)	-3.30 (-26.16, 20.56)	2.08 (-12.27, 15.95)	-12.56 (-27.34, 6.58)	13.61 (-12.11, 44.71)	1.06 (-37.01, 39.83)	Triamcinolone	-2.79 (-31.72, 30.24)
-5.53 (-40.21, 27.75)	3.00 (-39.13, 43.99)	-2.78 (-48.22, 41.64)	6.29 (-29.25, 40.77)	3.05 (-33.26, 37.44)	-0.84 (-34.47, 28.70)	4.22 (-28.28, 33.75)	-9.74 (-37.01, 16.41)	16.50 (-18.61, 52.07)	3.52 (-47.73, 53.57)	2.79 (-30.24, 31.72)	Zinc

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11	Rank 12
Aloe	0.01	0.01	0.02	0.03	0.04	0.06	0.08	0.12	0.15	0.18	0.16	0.14
Amlexanox	0.09	0.11	0.1	0.08	0.08	0.07	0.08	0.08	0.08	0.08	0.06	0.08
Chlorhexidine	0.02	0.09	0.08	0.06	0.06	0.07	0.07	0.07	0.08	0.09	0.13	0.19
Curcumin	0.08	0.14	0.14	0.14	0.12	0.11	0.09	0.07	0.05	0.04	0.02	0.01
Dexamethasone	0.03	0.1	0.12	0.11	0.1	0.09	0.1	0.1	0.09	0.07	0.05	0.03
Doxycycline	0.01	0.04	0.06	0.08	0.09	0.1	0.12	0.14	0.12	0.11	0.07	0.04
Laser	0.02	0.09	0.12	0.17	0.15	0.14	0.12	0.09	0.05	0.03	0.02	0.01
Placebo	0	0	0	0	0.01	0.02	0.04	0.07	0.13	0.2	0.26	0.28
Silver nitrate	0.48	0.18	0.13	0.07	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0
Sucralfate	0.18	0.12	0.08	0.07	0.06	0.06	0.06	0.06	0.06	0.07	0.11	0.09
Triamcinolone	0	0.02	0.07	0.12	0.18	0.19	0.16	0.12	0.08	0.04	0.02	0
Zinc	0.07	0.1	0.08	0.07	0.07	0.06	0.07	0.08	0.08	0.09	0.1	0.13

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	8.57 (3.03, 21.72)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Chlorhexidine.Sucralfate	1.00
d.Dexamethasone.Amlexanox	1.00
d.Placebo.Aloe	1.00
d.Placebo.Dexamethasone	1.00
d.Placebo.Doxycycline	1.00
d.Placebo.Laser	1.01
d.Placebo.Silvernitrate	1.00
d.Placebo.Triamcinolone	1.01
d.Placebo.Zinc	1.59
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Aloe	7.22 (-35.81, 52.84)	-2.18 (-44.89, 42.62)	5.35 (-26.17, 42.91)	7.29 (-29.01, 45.57)	2.68 (-36.77, 27.63)	6.79 (-21.79, 35.22)	-5.79 (-28.86, 20.75)	20.61 (-14.82, 58.39)	4.19 (-47.24, 56.79)	9.62 (-17.50, 32.86)	6.17 (-35.93, 39.95)						
-7.22 (-52.84, 35.81)	Antexanox	-9.22 (-64.91, 44.78)	-2.22 (-46.74, 48.16)	-0.00 (-25.89, 26.29)	-4.87 (-54.04, 29.90)	-0.60 (-42.81, 39.92)	-12.84 (-49.54, 24.41)	13.38 (-33.09, 59.79)	-3.14 (-63.84, 57.81)	-5.34 (-48.39, 38.44)	-0.51 (-53.40, 40.25)						
2.18 (-42.62, 44.89)	9.22 (-44.78, 64.91)	Chlorhexidine	8.10 (-29.11, 49.08)	9.42 (-38.15, 57.97)	2.91 (-47.50, 43.54)	8.67 (-29.64, 45.45)	-3.12 (-42.98, 36.53)	23.20 (-23.50, 71.45)	6.26 (-19.82, 32.20)	4.40 (-28.58, 39.02)	8.61 (-44.68, 53.66)						
-5.35 (-42.91, 26.17)	2.22 (-48.16, 46.74)	-8.10 (-49.08, 29.11)	Curcumin	2.04 (-39.40, 38.91)	-3.38 (-49.24, 24.64)	1.88 (-27.16, 22.35)	-10.90 (-42.26, 16.17)	15.61 (-26.19, 51.53)	-1.66 (-50.95, 43.38)	-2.93 (-24.12, 13.87)	1.42 (-47.93, 35.10)						
-7.29 (-45.57, 29.01)	0.00 (-26.29, 25.89)	-9.42 (-57.97, 38.15)	-2.04 (-38.91, 39.40)	Dexamethasone	-5.25 (-46.22, 22.84)	-0.67 (-35.26, 31.39)	-12.79 (-40.44, 14.81)	13.32 (-25.03, 51.20)	-3.17 (-58.23, 52.03)	-5.30 (-40.65, 30.00)	-0.50 (-46.96, 33.59)						
-2.68 (-27.63, 36.77)	4.87 (-29.90, 54.04)	-2.91 (-43.54, 47.50)	3.38 (-24.64, 49.24)	5.25 (-22.84, 46.22)	Doxycycline	4.66 (-17.93, 38.89)	-8.18 (-22.16, 21.23)	17.99 (-7.98, 60.09)	2.97 (-43.71, 61.25)	0.35 (-24.06, 37.80)	5.18 (-25.52, 38.90)						
-6.79 (-35.22, 21.79)	0.60 (-39.92, 42.81)	-8.67 (-45.45, 29.64)	-1.88 (-22.35, 27.16)	0.67 (-31.39, 35.26)	-4.66 (-38.89, 17.93)	Laser	-12.00 (-29.93, 7.52)	14.34 (-17.53, 47.33)	-2.57 (-47.88, 43.83)	-4.69 (-20.15, 13.56)	-0.08 (-39.34, 30.35)						
5.79 (-20.75, 28.86)	12.84 (-24.41, 49.54)	3.12 (-36.53, 42.98)	10.90 (-16.17, 42.26)	12.79 (-14.81, 40.44)	8.18 (-21.23, 22.16)	12.00 (-7.52, 29.93)	Placebo	26.27 (-0.56, 52.70)	9.67 (-38.34, 57.39)	1.90 (-36.27, 37.25)	11.53 (-23.02, 35.05)						
-20.61 (-58.39, 14.82)	-13.38 (-59.79, 33.09)	-23.20 (-71.45, 23.50)	-15.61 (-51.53, 26.19)	-13.32 (-51.20, 25.03)	-17.99 (-60.09, 7.98)	-14.34 (-47.33, 17.53)	-26.27 (-52.70, 0.56)	Silver nitrate	-16.68 (-71.62, 37.56)	-18.68 (-52.96, 16.61)	-14.11 (-60.49, 19.06)						
-4.19 (-56.79, 47.24)	3.14 (-57.81, 63.84)	-6.26 (-32.20, 19.82)	1.66 (-43.38, 50.95)	3.17 (-52.03, 58.23)	-2.97 (-61.25, 43.71)	2.57 (-43.83, 47.88)	-9.67 (-57.39, 38.34)	16.68 (-37.56, 71.62)	Sucralfate	-1.84 (-44.42, 41.42)	2.42 (-58.09, 54.27)						
-9.62 (-32.86, 17.50)	5.34 (-38.44, 48.39)	-4.40 (-39.02, 28.58)	2.93 (-13.87, 24.12)	5.30 (-30.00, 40.65)	-0.35 (-37.80, 24.06)	4.69 (-13.56, 20.15)	-1.90 (-37.25, 36.27)	18.68 (-16.61, 52.96)	1.84 (-41.42, 44.42)	Triamcinolone	4.30 (-38.46, 35.32)						
-6.17 (-39.95, 35.93)	0.51 (-40.25, 53.40)	-8.61 (-53.66, 44.68)	-1.42 (-35.10, 47.93)	0.50 (-33.59, 46.96)	-5.18 (-38.90, 25.52)	0.08 (-30.35, 39.34)	-11.53 (-35.05, 23.02)	14.11 (-19.06, 60.49)	-2.42 (-54.27, 58.09)	-4.30 (-35.32, 38.46)	Zinc						

2.2 Inconsistency Factors

Cycle	Median (95% CI)
Laser, Placebo, Triamcinolone	-5.32 (-28.08, 12.93)

2.3 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	9.36 (1.27, 23.84)
Inconsistency Standard Deviation	12.65 (0.78, 25.43)

2.4 Convergence Diagnostics

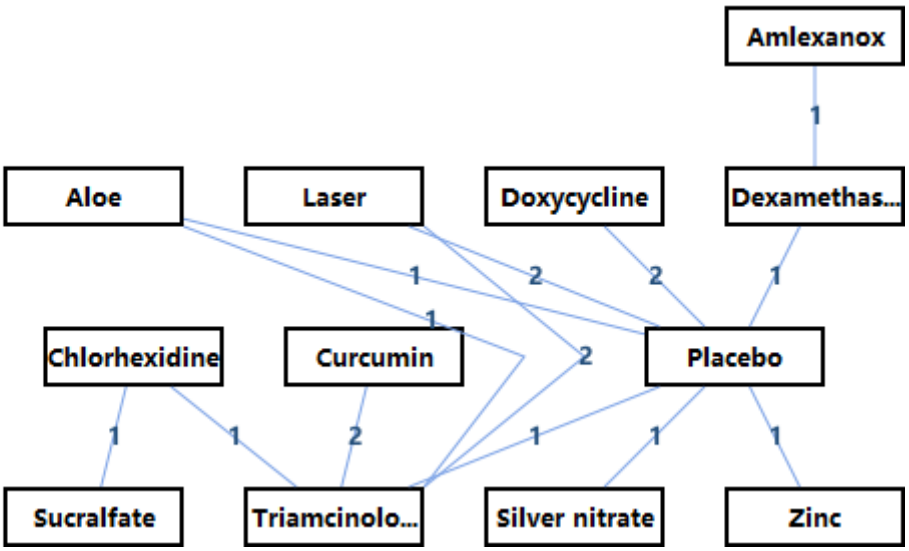
Parameter	PSRF
d.Aloe.Placebo	1.08
d.Chlorhexidine.Sucralfate	1.07
d.Dexamethasone.Amlexanox	1.08
d.Laser.Triamcinolone	1.07
d.Placebo.Dexamethasone	1.06
d.Placebo.Doxycycline	1.60
d.Placebo.Laser	1.04
d.Placebo.Silvernitrate	1.08
d.Placebo.Zinc	1.46
d.Triamcinolone.Chlorhexidine	1.02
d.Triamcinolone.Curcumin	1.08
w.Laser.Placebo.Triamcinolone	1.04
sd.d	2.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Laser, Placebo	-9.19 (-26.50, 11.28)	-23.95 (-49.70, 4.00)	-14.63 (-28.41, 3.42)	0.24
Laser, Triamcinolone	-6.77 (-25.31, 12.97)	9.13 (-21.39, 43.63)	-2.08 (-15.95, 12.27)	0.31
Placebo, Triamcinolone	17.68 (-4.24, 40.87)	2.27 (-24.74, 26.04)	12.56 (-6.58, 27.34)	0.23

4. Network structure



Day 8

1. Consistency Model

1.1 Summary estimates

Benzydamine	-12.99 (-32.92, 12.62)	13.14 (-2.11, 28.07)	-0.11 (-10.10, 10.43)	-0.24 (-10.39, 10.39)	-11.47 (-22.19, 0.55)
12.99 (-12.62, 32.92)	Chlorhexidine	25.39 (-1.50, 48.30)	13.02 (-11.37, 31.84)	12.83 (-11.63, 31.84)	1.88 (-19.09, 17.00)
-13.14 (-28.07, 2.11)	-25.39 (-48.30, 1.50)	Dexamethasone	-12.86 (-24.79, -0.78)	-12.95 (-24.20, -1.97)	-24.18 (-38.72, -9.63)
0.11 (-10.43, 10.10)	-13.02 (-31.84, 11.37)	12.86 (0.78, 24.79)	Doxycycline	-0.09 (-5.05, 4.62)	-11.12 (-20.78, -1.93)
0.24 (-10.39, 10.39)	-12.83 (-31.84, 11.63)	12.95 (1.97, 24.20)	0.09 (-4.62, 5.05)	Placebo	-11.10 (-20.96, -1.34)
11.47 (-0.55, 22.19)	-1.88 (-17.00, 19.09)	24.18 (9.63, 38.72)	11.12 (1.93, 20.78)	11.10 (1.34, 20.96)	Triamcinolone

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6
Benzydamine	0.03	0.37	0.15	0.34	0.1	0.02
Chlorhexidine	0.03	0.14	0.05	0.03	0.21	0.54
Dexamethasone	0.93	0.05	0.01	0.01	0	0
Doxycycline	0.01	0.23	0.4	0.29	0.07	0
Placebo	0	0.21	0.39	0.31	0.08	0.01
Triamcinolone	0	0	0.01	0.02	0.54	0.43

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	1.56 (0.10, 10.03)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Benzydamine	1.00
d.Placebo.Dexamethasone	1.01
d.Placebo.Doxycycline	1.00
d.Placebo.Triamcinolone	1.00
d.Triamcinolone.Chlorhexidine	4.64
sd.d	1.01

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Benzydamine	-9.51 (-30.86, 13.71)	12.49 (-4.10, 30.96)	0.51 (-10.65, 12.45)	-0.52 (-11.49, 11.30)	-10.30 (-23.01, 1.17)
9.51 (-13.71, 30.86)	Chlorhexidine	22.44 (-3.96, 46.40)	10.50 (-12.93, 30.73)	9.72 (-13.84, 30.26)	-0.85 (-21.51, 16.68)
-12.49 (-30.96, 4.10)	-22.44 (-46.40, 3.96)	Dexamethasone	-11.98 (-27.24, 1.26)	-12.74 (-26.59, -0.65)	-22.92 (-42.43, -7.14)
-0.51 (-12.45, 10.65)	-10.50 (-30.73, 12.93)	11.98 (-1.26, 27.24)	Doxycycline	-0.73 (-6.76, 4.72)	-11.08 (-22.32, -0.92)
0.52 (-11.30, 11.49)	-9.72 (-30.26, 13.84)	12.74 (0.65, 26.59)	0.73 (-4.72, 6.76)	Placebo	-10.24 (-21.33, 0.32)
10.30 (-1.17, 23.01)	0.85 (-16.68, 21.51)	22.92 (7.14, 42.43)	11.08 (0.92, 22.32)	10.24 (-0.32, 21.33)	Triamcinolone

2.2 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	2.06 (0.09, 10.83)
Inconsistency Standard Deviation	6.48 (0.26, 12.58)

2.3 Convergence Diagnostics

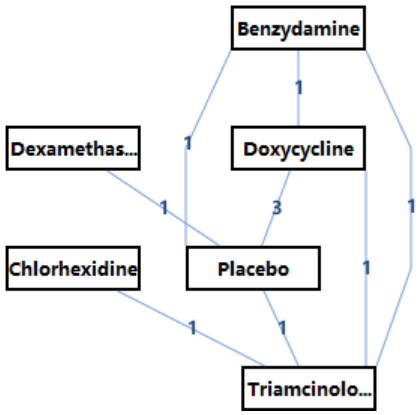
Parameter	PSRF
d.Benzydamine.Doxycycline	1.02
d.Doxycycline.Placebo	1.11
d.Placebo.Dexamethasone	1.01
d.Placebo.Triamcinolone	1.01
d.Triamcinolone.Chlorhexidine	1.00
sd.d	1.02
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Doxycycline, Triamcinolone	-10.89 (-22.76, -0.56)	-0.64 (-383.98, 380.63)	-11.12 (-20.78, -1.93)	0.96
Placebo, Triamcinolone	-11.15 (-22.38, 0.27)	1.43 (-381.59, 374.20)	-11.10 (-20.96, -1.34)	0.95

4. Network structure



Day 10

1. Consistency Model

1.1 Summary estimates

Benzydamine	-0.13 (-24.02, 23.63)	8.58 (-20.45, 36.99)	-3.88 (-21.34, 10.69)	-7.56 (-34.90, 13.44)	-7.97 (-27.63, 6.47)	-0.02 (-16.65, 16.99)
0.13 (-23.63, 24.02)	Chlorhexidine	8.63 (-21.61, 37.92)	-3.80 (-27.45, 17.84)	-7.44 (-39.68, 18.42)	-7.87 (-33.97, 13.21)	0.09 (-16.85, 17.08)
-8.58 (-36.99, 20.45)	-8.63 (-37.92, 21.61)	Curcumin	-12.66 (-41.78, 15.00)	-16.80 (-51.89, 14.80)	-16.97 (-47.99, 10.54)	-8.55 (-31.87, 15.78)
3.88 (-10.69, 21.34)	3.80 (-17.84, 27.45)	12.66 (-15.00, 41.78)	Doxycycline	-3.64 (-25.14, 14.67)	-3.91 (-15.61, 5.00)	3.97 (-10.57, 21.29)
7.56 (-13.44, 34.90)	7.44 (-18.42, 39.68)	16.80 (-14.80, 51.89)	3.64 (-14.67, 25.14)	Laser	-0.13 (-16.70, 16.64)	7.58 (-12.92, 34.99)
7.97 (-6.47, 27.63)	7.87 (-13.21, 33.97)	16.97 (-10.54, 47.99)	3.91 (-5.00, 15.61)	0.13 (-16.64, 16.70)	Placebo	8.09 (-6.64, 27.60)
0.02 (-16.99, 16.65)	-0.09 (-17.08, 16.85)	8.55 (-15.78, 31.87)	-3.97 (-21.29, 10.57)	-7.58 (-34.99, 12.92)	-8.09 (-27.60, 6.64)	Triamcinolone

1.2 Rank probability(Rank 1 is best, rank N is worst)

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7
Benzydamine	0.14	0.23	0.2	0.21	0.11	0.07	0.05
Chlorhexidine	0.14	0.24	0.17	0.14	0.11	0.09	0.11
Curcumin	0.6	0.12	0.08	0.06	0.04	0.04	0.06
Doxycycline	0.03	0.07	0.13	0.22	0.33	0.16	0.06
Laser	0.04	0.07	0.07	0.09	0.14	0.19	0.4
Placebo	0	0.02	0.04	0.08	0.16	0.4	0.3
Triamcinolone	0.05	0.24	0.33	0.2	0.1	0.06	0.02

1.3 Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	8.08 (2.39, 11.75)

1.4 Convergence Diagnostics

Parameter	PSRF
d.Placebo.Benzydamine	1.29
d.Placebo.Doxycycline	1.21
d.Placebo.Laser	1.02
d.Placebo.Triamcinolone	1.30
d.Triamcinolone.Chlorhexidine	1.02
d.Triamcinolone.Curcumin	1.01
sd.d	1.51

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

2.Inconsistency Model

2.1 Summary estimates

Benzydamine	0.12 (-22.25, 22.64)	8.86 (-19.00, 36.44)	-3.23 (-18.42, 10.84)	-6.51 (-28.92, 14.31)	-6.50 (-21.76, 7.57)	-0.10 (-15.59, 15.98)
-0.12 (-22.64, 22.25)	Chlorhexidine	8.66 (-18.53, 35.77)	-3.35 (-25.29, 18.10)	-6.55 (-34.20, 19.66)	-6.58 (-29.19, 14.60)	-0.05 (-15.86, 15.76)
-8.86 (-36.44, 19.00)	-8.66 (-35.77, 18.53)	Curcumin	-12.08 (-39.38, 14.82)	-15.60 (-46.80, 15.51)	-15.40 (-42.92, 11.22)	-8.75 (-31.44, 14.23)
3.23 (-10.84, 18.42)	3.35 (-18.10, 25.29)	12.08 (-14.82, 39.38)	Doxycycline	-3.25 (-21.62, 14.38)	-3.17 (-12.83, 5.82)	3.23 (-11.22, 18.76)
6.51 (-14.31, 28.92)	6.55 (-19.66, 34.20)	15.60 (-15.51, 46.80)	3.25 (-14.38, 21.62)	Laser	0.16 (-15.89, 15.61)	6.64 (-14.49, 28.81)
6.50 (-7.57, 21.76)	6.58 (-14.60, 29.19)	15.40 (-11.22, 42.92)	3.17 (-5.82, 12.83)	-0.16 (-15.61, 15.89)	Placebo	6.50 (-7.74, 22.38)
0.10 (-15.98, 15.59)	0.05 (-15.76, 15.86)	8.75 (-14.23, 31.44)	-3.23 (-18.76, 11.22)	-6.64 (-28.81, 14.49)	-6.50 (-22.38, 7.74)	Triamcinolone

2.2 Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	7.15 (2.76, 11.57)
Inconsistency Standard Deviation	6.08 (0.30, 11.66)

2.3 Convergence Diagnostics

Parameter	PSRF
d.Benzydamine.Doxycycline	1.00
d.Doxycycline.Placebo	1.00
d.Placebo.Laser	1.00
d.Placebo.Triamcinolone	1.00
d.Triamcinolone.Chlorhexidine	1.00
d.Triamcinolone.Curcumin	1.00
sd.d	1.00
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 50,000
Thinning interval : 10
Inference samples : 10,000
Variance scaling factor: 2.5

3. Node-splitting analysis

Name	Direct Effect	Indirect Effect	Overall	P-Value
Doxycycline, Triamcinolone	0.07 (-16.35, 16.57)	-3.87 (-355.67, 356.11)	3.97 (-10.57, 21.29)	0.98
Placebo, Triamcinolone	9.71 (-4.44, 28.47)	8.71 (-337.74, 358.78)	8.09 (-6.64, 27.60)	1

4. Network structure

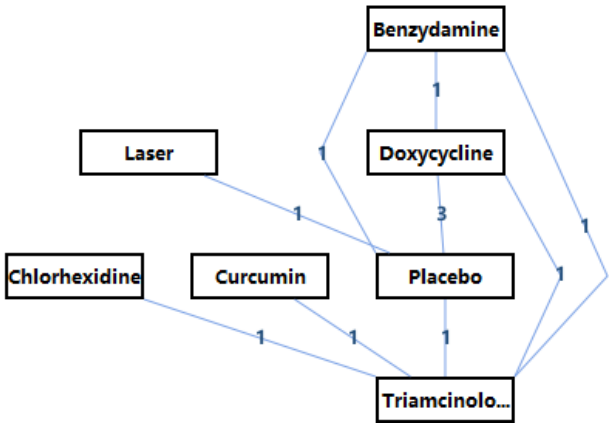
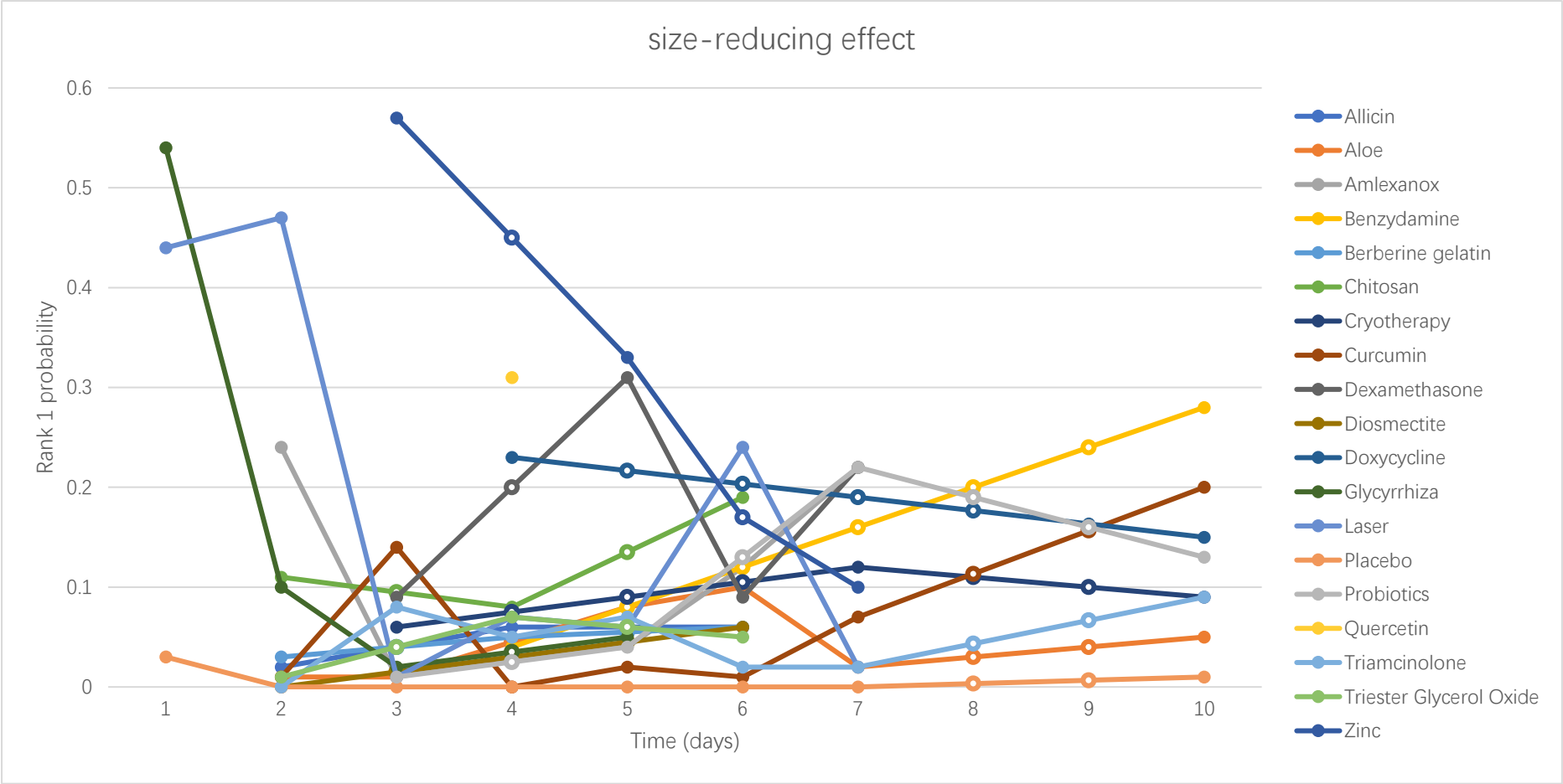
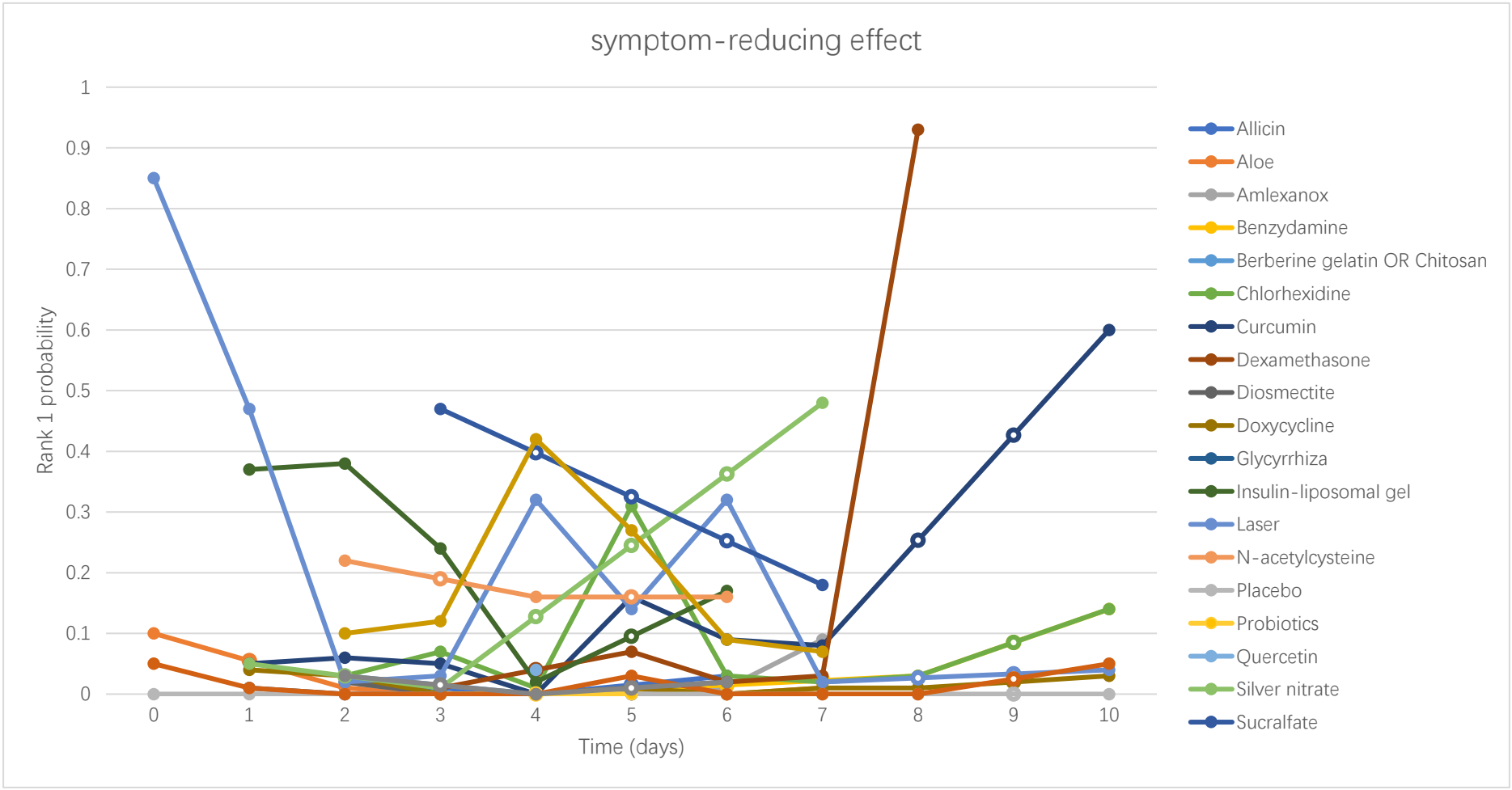


Chart S1 “Time-Rank 1 probability” folding line chart

In order to clearly demonstrate the effect of the different local interventions on ulcer size reduction and symptom reduction at the various stages of the trial, we plot line graphs on time-rank 1 probability. The solid points represent the real results obtained and the hollow points are only dummy values introduced to represent the trend in the effect of the local intervention according to a linear equation.


size-reducing effect
Rank 1 probability
0.6
0.5
0.4
0.3
0.2
0.1
0
1
2
3
4
5
6
7
8
9
10
Time (days)
Allicin
Aloe
Amlexanox
Benzydamine
Berberine gelatin
Chitosan
Cryotherapy
Curcumin
Dexamethasone
Diosmectite
Doxycycline
Glycyrrhiza
Laser
Placebo
Probiotics
Quercetin
Triamcinolone
Triester Glycerol Oxide
Zinc


symptom-reducing effect
Rank 1 probability
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1
2
3
4
5
6
7
8
9
10
Time (days)
Allicin
Aloe
Amlexanox
Benzydamine
Berberine gelatin OR Chitosan
Chlorhexidine
Curcumin
Dexamethasone
Diosmectite
Doxycycline
Glycyrrhiza
Insulin-liposomal gel
Laser
N-acetylcysteine
Placebo
Probiotics
Quercetin
Silver nitrate
Sucralfate

Chapter S4 Safety outcomes

Adverse effect

36 RCTs included in the study reported on the side effects of the topical interventions.

Interventions	RCTs	Events	Total
Allicin	1	0	48
Aloe	1	0	60
Amlexanox	5	9 (4 report local, transient “stinging”, 3 report "cooling" sensation and 3 report metallic taste)	328
Benzydamine	1	0	10
Berberine gelatin	1	0	48
Chitosan	2	1 (mild throat sore and bad taste)	54
Chlorhexidine	1	0	35
Curcumin	4	0	117
Dexamethasone	1	4 (slight rash surrounding the mouth, a burning sensation in the larynx, or a stimulant pain at the medication site)	120
Diosmectite	1	0	35
Doxycycline	3	9(1 report short burning sensation, 8 report transient bitter sensation)	60
Glycyrrhiza	1	0	20
Honey	2	0	92
Laser	5	0	95
Penicillin	1	3 (minor burning sensation)	25
Probiotics	2	0	25
Silver nitrate	2	0	60
Sucralfate	1	0	35
Triamcinolone	9	0	259
Triester Glycerol Oxide	1	0	56
Zinc	1	0	23

1.Consistency Model

Summary estimates for averse effect

The estimate values for adverse effect are given as risk difference (RD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Allicin	Aloe	Amlexanox	Benzydamine	Berberine gelatin	Chitosan	Clobetasol	Curcumin	Dexamethasone
1779.43 (0.00, 12801	0.00 (0.00, 67795612	29743559.73 (0.00, 1	95.50 (0.00, 5855834	0.10 (0.00, 31074703	488139.21 (0.00, 388	0.23 (0.00, 51724186	30463.40 (0.00, 4235	971619.18 (0.00, 330
0.00 (0.00, 98262861	1540658244.49 (0.0	0.00 (0.00, 35039437	358636.95 (0.00, 444	353.77 (0.00, 619917	2375935428.17 (0.00	42.89 (0.00, 2590922	4255653.14 (0.00, 17	625925929.84 (0.00,
0.01 (0.00, 29259572	0.00 (0.00, 24059808	91091.27 (0.00, 3948	0.01 (0.00, 85083806	178.26 (0.00, 154837	0.01 (0.00, 27660634	20.51 (0.00, 1992265	3019.29 (0.00, 10586	
9.76 (0.00, 1927166	7.00 (0.00, 15599742	86904344.51 (0.00, 3	151.75 (0.00, 352718	Berberine gelatin	2052733.92 (0.00, 55	0.20 (0.00, 49595304	10236.77 (0.00, 1389	3690931.68 (0.00, 16
0.00 (0.00, 11342492	0.00 (0.00, 63626914	299.48 (0.00, 188077	0.01 (0.00, 30363564	0.00 (0.00, 98707875	Chitosan	0.00 (0.00, 1728717	1.00 (0.00, 43748785	11.22 (0.00, 7559230
4.37 (0.00, 13881182	0.02 (0.00, 44161219	84775814.80 (0.00, 1	92.96 (0.00, 1236731	4.93 (0.00, 14399524	2035525.09 (0.00, 64	Clobetasol	14891.99 (0.00, 2269	2610072.73 (0.00, 71
0.00 (0.00, 15581864	0.00 (0.00, 27721300	17259.99 (0.00, 6682	0.05 (0.00, 2439574	0.00 (0.00, 50818455	222.26 (0.00, 366016	0.00 (0.00, 10637383	Curcumin	645.06 (0.00, 243441
0.00 (0.00, 27013289	0.00 (0.00, 72925201	29.91 (0.08, 18750.26	0.00 (0.00, 12955323	0.00 (0.00, 58074401	0.09 (0.00, 64455000	0.00 (0.00, 68097053	0.00 (0.00, 6144532	Dexamethasone
0.12 (0.00, 52192537	0.00 (0.00, 10390338	4240298.60 (0.00, 75	22.84 (0.00, 1024881	0.01 (0.00, 69936172	73377.77 (0.00, 5592	0.02 (0.00, 21374551	541.06 (0.00, 235778	133596.25 (0.00, 306
0.00 (0.00, 10925525	0.00 (0.00, 5004320.9	0.00 (0.00, 1.53)	0.00 (0.00, 3642726	0.00 (0.00, 21895129	0.00 (0.00, 81447246	0.00 (0.00, 34147359	0.00 (0.00, 1650203	0.00 (0.00, 0.06)
13.67 (0.00, 1771286	0.00 (0.00, 19226614	286314486.75 (0.00,	7742.05 (0.00, 65204	1.77 (0.00, 51396439	9486779.95 (0.00, 29	5.81 (0.00, 66181361	68947.82 (0.00, 1899	8338551.59 (0.00, 22
510558.19 (0.00, 112	241.04 (0.00, 475799	23573035422 36.30 (	289254382.66 (0.00,	9579.77 (0.00, 19191	3111833965.72 (0.00	8353.42 (0.00, 23398	1142895 69.02 (0.00,	83222103031.52 (0.0
41.55 (0.00, 8980422	0.28 (0.00, 8524294	8 1562196143.41 (0.00	323830.39 (0.00, 148	1553.83 (0.00, 42529	16529229.76 (0.00,	179.19 (0.00, 186861	317660.64 (0.00, 578	48425776.88 (0.00, 1
1.19 (0.00, 3465336	3 0.00 (0.00, 18056717	1147369.31 (0.00, 21	197.87 (0.00, 383900	0.02 (0.00, 12256261	10309.06 (0.00, 5317	0.02 (0.00, 4565144	597.27 (0.00, 575993	45903.10 (0.00, 3949
0.00 (0.00, 12424267	0.00 (0.00, 3490516.2	0.00 (0.00, 3.45)	0.00 (0.00, 1947008	1 0.00 (0.00, 10179858	0.00 (0.00, 43915386	0.00 (0.00, 84338449	0.00 (0.00, 2310513	3 0.00 (0.00, 0.10)
0.00 (0.00, 98107911	0.00 (0.00, 31435817	11.87 (0.28, 1221.84)	0.00 (0.00, 39291446	0.00 (0.00, 28271294	0.04 (0.00, 25336157	0.00 (0.00, 28099223	0.00 (0.00, 2976841	1 0.44 (0.00, 39.68)
14217.21 (0.00, 2848	6.32 (0.00, 23909266	1856064816 2.68 (0.0	1903891.94 (0.00, 46	96.44 (0.00, 1725994	16317054 42.78 (0.00	985.08 (0.00, 204170	10744120.37 (0.00, 2	6859086 50.27 (0.00,
9.53 (0.00, 6555900	0.03 (0.00, 4383888	4 6343031 58.67 (0.00,	12978.14 (0.00, 4375	78.64 (0.00, 6700159	77513643.34 (0.00, 1	398.10 (0.00, 692762	236305.11 (0.00, 167	22182114.23 (0.00, 6
9775686423285851	2 4056771761945232	0558742857301789 2	435531054083613 13	4630196115201825	(1861881510852974	3656791543828444 5	6 7341079039630773	0 2057065130271681 2
6.75 (0.00, 1627419	4 0.00 (0.00, 2329005	3 2480424 41.84 (0.00,	1968.29 (0.00, 35089	0.50 (0.00, 2362000	6 1303905.50 (0.00, 57	1.01 (0.00, 1855134	5 819.39 (0.00, 115557	8362648.73 (0.00, 93
25.84 (0.00, 1738817	0.03 (0.00, 1792808	4 3048852 85.84 (0.00,	252.70 (0.00, 481991	0.96 (0.00, 4095288	2 8737844.55 (0.00, 45	0.53 (0.00, 1237984	9 111743.09 (0.00, 272	10359459.65 (0.00, 6

8.07 (0.00, 14245820	179159184019466.6(	0.07 (0.00, 74417800	0.00 (0.00, 67673897	0.02 (0.00, 91598076	0.84 (0.00, 14473074	1199541074498556(	2081706.29 (0.00, 62	0.00 (0.00, 49806243
26577.60 (0.00, 8983	16762833642392473	236.82 (0.00, 510091	0.00 (0.00, 18211922	3.62 (0.00, 76243181	3847.17 (0.00, 52303	14291063434929485	1338904140.46 (0.00	0.16 (0.00, 31799259
0.00 (0.00, 81521727	1395278.26 (0.65, 26	0.00 (0.00, 47915409	0.00 (0.00, 42037465	0.00 (0.00, 39903372	0.00 (0.00, 31774052	7789711215.21 (0.29	0.08 (0.00, 3.52)	0.00 (0.00, 71629218
0.04 (0.00, 44096871	524088819802.66 (0.	0.00 (0.00, 14235591	0.00 (0.00, 24955402	0.00 (0.00, 14645864	0.01 (0.00, 11460975	130286629799389126	6996.16 (0.00, 24614	0.00 (0.00, 95606285
82.04 (0.00, 8928644	3254276114437173.(	0.56 (0.00, 37165177	0.00 (0.00, 39308743	0.00 (0.00, 45789221	65.90 (0.00, 1020745	14084693526390493	7939707.38 (0.00, 30	0.01 (0.00, 46881564
0.00 (0.00, 86014641	3560728226.33 (0.00	0.00 (0.00, 14984363	0.00 (0.00, 98007152	0.00 (0.00, 11598082	0.00 (0.00, 10970948	12411002727300.38	23.86 (0.00, 1372103	0.00 (0.00, 26401373
54.19 (0.00, 5285005	367785632764922.5(	0.17 (0.00, 11575467	0.00 (0.00, 12274737	0.01 (0.00, 24799032	45.64 (0.00, 5659900	25737532503420314	6100256.94 (0.00, 13	0.00 (0.00, 58430438
0.00 (0.00, 28850985	90780915358.26 (0.0	0.00 (0.00, 18164450	0.00 (0.00, 74339734	0.00 (0.00, 11261167	0.00 (0.00, 25822676	1869763179827788.(	1350.55 (0.00, 40061	0.00 (0.00, 11177273
0.00 (0.00, 22294281	40345058.39 (17.51,	0.00 (0.00, 13733717	0.00 (0.00, 14795078	0.00 (0.00, 12333577	0.00 (0.00, 88681834	219021826291.38 (9.	2.26 (0.03, 202.63)	0.00 (0.00, 28340018
Diosmectite	20134650118030.25	0.00 (0.00, 79541098	0.00 (0.00, 25718931	0.00 (0.00, 13535773	1.15 (0.00, 18908035	64532567030743680	297291.60 (0.00, 497	0.00 (0.00, 26028447
0.00 (0.00, 30066570	Doxycycline	0.00 (0.00, 15788394	0.00 (0.00, 59841474	0.00 (0.00, 875.10)	0.00 (0.00, 13756889	3885.43 (0.00, 61929	0.00 (0.00, 0.06)	0.00 (0.00, 30368085
367.00 (0.00, 119978	6660105593931289.(	Glycyrrhiza	0.00 (0.00, 28768137	0.01 (0.00, 41191073	72.89 (0.00, 8926664	22434624791409250	18198051.83 (0.00, 5	0.00 (0.00, 15112021
6628256.69 (0.00, 14	15765004434093180	14188.85 (0.00, 1878	Honey	163.62 (0.00, 150275	804045.86 (0.00, 508	42442200157852845	181239811725.30 (0.	8.25 (0.00, 25762060
1600.59 (0.00, 20545	582334781891348960	121.76 (0.00, 132871	0.01 (0.00, 59423727	Laser	10535.23 (0.00, 2965	11553708204429963	105101772.45 (0.00,	0.03 (0.00, 10741497
0.87 (0.00, 14206879	21648679651076.24	0.01 (0.00, 29198886	0.00 (0.00, 28574717	0.00 (0.00, 14165912	Minocycline	64805737992517645	99627.97 (0.00, 8707	0.00 (0.00, 18022840
0.00 (0.00, 10510171	0.00 (0.00, 24012917	0.00 (0.00, 66271843	0.00 (0.00, 55858630	0.00 (0.00, 106.57)	0.00 (0.00, 23654218	Penicillin	0.00 (0.00, 0.14)	0.00 (0.00, 566069.82
0.00 (0.00, 88297629	17629126.31 (17.46,	0.00 (0.00, 66378286	0.00 (0.00, 58563467	0.00 (0.00, 38948662	0.00 (0.00, 29595640	103133737876.48 (7.	Placebo	0.00 (0.00, 11003059
3388.91 (0.00, 58273	22662818563877283	386.08 (0.00, 392880	0.12 (0.00, 64789700	30.10 (0.00, 4900062	180809.91 (0.00, 133	12705884877122506	1554787148.86 (0.00	Probiotics
205.04 (0.00, 675817	14326490070467732	4.20 (0.00, 47879380	0.00 (0.00, 85040573	0.92 (0.00, 76564274	3745.88 (0.00, 23124	91231175311989960	43876646.48 (0.00, 1	0.00 (0.00, 10656641
4858317239979175(	90339117659138750	786123725181457.0(	75281414437.06 (0.0	40782394449006.22	21091022864645209	232788434196809433	43120130982564420	5409036028181.45 (
111.40 (0.00, 626963	3304812767729931.(	1.45 (0.00, 13809747	0.00 (0.00, 44072515	0.02 (0.00, 79103293	17.56 (0.00, 5484954	15866992607524266	19087254.90 (0.00, 1	0.00 (0.00, 62186403
132.85 (0.00, 399774	9069683347239406.(	0.03 (0.00, 36923980	0.00 (0.00, 21246026	0.01 (0.00, 11271375	135.87 (0.00, 380184	96423371705792150	20780188.25 (0.00, 1	0.00 (0.00, 18154334

0.10 (0.00, 16291917	0.00 (0.00, 53658820	0.15 (0.00, 74026898	0.04 (0.00, 58222375
29.03 (0.00, 5602728	0.00 (0.00, 20060255	365.43 (0.00, 640568	31.15 (0.00, 2447007
0.00 (0.00, 35941342	0.00 (0.00, 0.00)	0.00 (0.00, 52421976	0.00 (0.00, 20572351
0.00 (0.00, 22415412	0.00 (0.00, 38722108	0.00 (0.00, 32023617	0.00 (0.00, 53928468
0.01 (0.00, 10614015	0.00 (0.00, 99593565	2.02 (0.00, 51661781	1.05 (0.00, 18710743
0.00 (0.00, 15794748	0.00 (0.00, 0.08)	0.00 (0.00, 99300653	0.00 (0.00, 85609614
0.00 (0.00, 11828327	0.00 (0.00, 11667577	0.99 (0.00, 25878136	1.89 (0.00, 13455355
0.00 (0.00, 20098081	0.00 (0.00, 70453969	0.00 (0.00, 27431359	0.00 (0.00, 22469827
0.00 (0.00, 11416080	0.00 (0.00, 0.00)	0.00 (0.00, 16705726	0.00 (0.00, 59804123
0.00 (0.00, 18643620	0.00 (0.00, 20061798	0.01 (0.00, 15725986	0.01 (0.00, 36048854
0.00 (0.00, 46650966	0.00 (0.00, 0.00)	0.00 (0.00, 11113104	0.00 (0.00, 32200723
0.24 (0.00, 84524037	0.00 (0.00, 40907691	0.69 (0.00, 38703867	29.65 (0.00, 4083894
435.09 (0.00, 914316	0.00 (0.00, 15799893	22675.55 (0.00, 5095	27664.93 (0.00, 1636
1.09 (0.00, 85720831	0.00 (0.00, 80493267	48.64 (0.00, 4955122	109.18 (0.00, 109589
0.00 (0.00, 34802356	0.00 (0.00, 95466242	0.06 (0.00, 68283635	0.01 (0.00, 11419142
0.00 (0.00, 436115.83	0.00 (0.00, 0.00)	0.00 (0.00, 17159074	0.00 (0.00, 88662838
0.00 (0.00, 52018465	0.00 (0.00, 0.00)	0.00 (0.00, 63331872	0.00 (0.00, 20611439
2184.43 (0.00, 12867	0.00 (0.00, 16694787	503.22 (0.00, 353615	251.83 (0.00, 133121
Silver nitrate	0.00 (0.00, 23044968	11.42 (0.00, 3784319	3.00 (0.00, 33153874
1267023415621751.5	Triamcinolone	1243638458607581.2	856132133843612.1(
0.09 (0.00, 60903990	0.00 (0.00, 18456638	Triester Glycerol Oxid	1.18 (0.00, 18011035
0.33 (0.00, 13853399	0.00 (0.00, 71797328	0.85 (0.00, 36947522	Zinc

Rank probability

Rank 1 is worst, rank N is best.

Drug	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10	Rank 11
Allicin	0.04	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.03	0.04
Aloe	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
Amlexanox	0	0	0	0.03	0.08	0.16	0.2	0.2	0.14	0.09	0.05
Benzydamine	0.07	0.06	0.06	0.05	0.05	0.05	0.03	0.02	0.03	0.03	0.04
Berberine gelatin	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.03	0.03	0.04
Chitosan	0.07	0.07	0.07	0.07	0.06	0.04	0.04	0.03	0.03	0.04	0.05
Clobetasol	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
Curcumin	0.06	0.05	0.05	0.05	0.05	0.04	0.05	0.02	0.03	0.04	0.05
Dexamethasone	0	0	0	0	0.01	0.04	0.08	0.13	0.18	0.2	0.15
Diosmectite	0.05	0.05	0.05	0.05	0.04	0.03	0.03	0.02	0.02	0.03	0.05
Doxycycline	0.07	0.13	0.19	0.2	0.16	0.13	0.06	0.03	0.01	0.01	0
Glycyrrhiza	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.03	0.03
Honey	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.04
Laser	0	0.01	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.07
Minocycline	0.05	0.05	0.05	0.04	0.06	0.04	0.03	0.03	0.03	0.03	0.04
Penicillin	0.27	0.2	0.14	0.11	0.1	0.07	0.05	0.03	0.02	0.01	0
Placebo	0	0	0	0	0.01	0.05	0.11	0.18	0.21	0.17	0.13
Probiotics	0.01	0.02	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.04
Silver nitrate	0.01	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.04
Triamcinolone	0	0	0	0	0	0	0	0	0	0	0
Triester Glycerol Oxide	0.06	0.05	0.06	0.03	0.04	0.03	0.03	0.02	0.03	0.03	0.03
Zinc	0.06	0.04	0.06	0.04	0.03	0.03	0.03	0.02	0.02	0.03	0.03

Rank 12	Rank 13	Rank 14	Rank 15	Rank 16	Rank 17	Rank 18	Rank 19	Rank 20	Rank 21	Rank 22
0.04	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04
0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.06	0.06	0.06	0.06
0.02	0.01	0	0	0	0	0	0	0	0	0
0.04	0.05	0.04	0.04	0.05	0.04	0.05	0.04	0.05	0.05	0.04
0.04	0.05	0.05	0.07	0.06	0.06	0.06	0.05	0.06	0.08	0.04
0.05	0.07	0.06	0.06	0.05	0.05	0.04	0.03	0.02	0.01	0
0.04	0.06	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.05	0.07
0.05	0.06	0.06	0.06	0.06	0.05	0.06	0.05	0.04	0.02	0
0.11	0.06	0.03	0.01	0	0	0	0	0	0	0
0.05	0.05	0.07	0.06	0.06	0.06	0.04	0.05	0.05	0.06	0.04
0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.03
0.04	0.05	0.05	0.06	0.06	0.07	0.06	0.06	0.05	0.05	0.12
0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.06	0.08
0.06	0.06	0.07	0.09	0.07	0.07	0.07	0.06	0.06	0.06	0.05
0.08	0.04	0.01	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0
0.06	0.05	0.07	0.07	0.07	0.07	0.06	0.05	0.05	0.04	0.07
0.01	0.01	0.03	0.04	0.06	0.08	0.1	0.16	0.16	0.18	0.15
0.04	0.05	0.06	0.06	0.05	0.06	0.06	0.05	0.06	0.05	0.07
0.04	0.05	0.05	0.05	0.07	0.05	0.06	0.05	0.05	0.04	0.08

Consistency check

Parameter	Median (95% CI)
Random Effects Standard Deviation	1.96 (0.12, 3.15)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Amlexanox.Clobetasold.Placebo.Aloe	1.01
d.Amlexanox.Placebo	1.00
d.Placebo.Allicin	1.01
d.Placebo.Aloe	1.01
d.Placebo.Benzydamine	1.04
d.Placebo.Berberinegelatin	1.03
d.Placebo.Chitosan	1.03
d.placebo.Curcumin	1.04
d.Placebo.Dexamethasoned.Placebo.Laser	1.00
d.Placebo.Diosmectite	1.01
d.Placebo.Doxycycline	1.07
d.Placebo.Glycyrrhiza	1.02
d.Placebo.Honey	1.01
d.Placebo.Laser	1.03
d.Placebo.Minocycline	1.03
d.Placebo.Penicillin	1.07
d.Placebo.Probiotics	1.01
d.Placebo.Silvernitrate	1.04
d.Placebo.Triamcinolone	1.08
d.Placebo.TriesterGlycerolOxide	1.02
d.Placebo.Zinc	1.04
sd.d	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 400,000
Thinning interval : 10
Inference samples : 80,000
Variance scaling factor : 2.5

2.Inconsistency Model

Summary estimates for adverse effect

The estimate values for adverse effect are given as risk difference (RD) and 95% confidence interval (CI). The table shows the pooled estimates based on the network meta-analysis during the treatment period for each study.

Allicin	Aloe	Amlexanox	Benzydamine	Berberine gelatin	Chitosan	Clobetasol	Curcumin	Dexamethasone
422265.84 (0.00, 158	0.00 (0.00, 85516421	352322334030296.5(	7.93 (0.00, 24350761	8319254259037634(	0.00 (0.00, 31049907	9104679845 85.53 (0.	0.00 (0.00, 98940324
0.00 (0.00, 35169296	Aloe	0.00 (0.00, 46947781	227137500 37.61 (0.0	0.00 (0.00, 52523810	1276407829341.87 ((	0.00 (0.00, 17986047	3283788.08 (0.00, 72	0.00 (0.00, 14341411
94650.94 (0.00, 8876	1690418104 29.87 (0.	Amlexanox	628631981602012 7(	987824.54 (0.00, 974	3085746148474565(	0.00 (0.00, 12062518	1385429157073808(	0.03 (0.00, 9.76)
0.00 (0.00, 6853820 5	0.00 (0.00, 1492979 8	0.00 (0.00, 47912728	Benzydamine	0.00 (0.00, 10188422	64.84 (0.00, 1733834	0.00 (0.00, 19104736	0.00 (0.00, 9087657 4	0.00 (0.00, 10714682
0.13 (0.00, 1064029 2	232495554.70 (0.00,	0.00 (0.00, 19267313	588523212625236 99(	Berberine gelatin	3303226729388048 8	0.00 (0.00, 43822414	5940410226565004(	0.00 (0.00, 64478781
0.00 (0.00, 1576714 9	0.00 (0.00, 90153895	0.00 (0.00, 15.19)	0.02 (0.00, 12528143	0.00 (0.00, 18664025	Chitosan	0.00 (0.00, 85933399	0.00 (0.00, 5897052 3	0.00 (0.00, 0.40)
128313640154.88 (0.	702965681435198(	151110011.76 (0.00,	361098628538808 9(	57782522975731 0(	19749517812388528	Clobetasol	2714470146350488(	5665357.22 (0.00, 12
0.00 (0.00, 1852985 3	0.00 (0.00, 3308817 5	0.00 (0.00, 47993683	8459.06 (0.00, 16504	0.00 (0.00, 13774533	593840.28 (0.00, 103	0.00 (0.00, 38549881	Curcumin	0.00 (0.00, 1423358.5
3593403.97 (0.00, 41	6065040763170.86 ((	31.43 (0.10, 21450.83	2660175175145271(	36984516.01 (0.00, 2	1223788287657877(	0.00 (0.00, 80397817	5292294015550308(	Dexamethasone
0.01 (0.00, 3045642 8	4674069.71 (0.00, 22	0.00 (0.00, 42645192	1598421728222236 (	0.03 (0.00, 41091319	1642266201505049 8	0.00 (0.00, 77447509	1173484159383 4.45	0.00 (0.00, 13651660
0.00 (0.00, 1566739 6	0.00 (0.00, 6438818 3	0.00 (0.00, 0.07)	0.01 (0.00, 17712484	0.00 (0.00, 91148672	7.70 (0.00, 3187614 2	0.00 (0.00, 75465437	0.00 (0.00, 6330247 8	0.00 (0.00, 0.00)
0.00 (0.00, 6083070 0	6155116.67 (0.00, 23	0.00 (0.00, 36805384	1350666592352402(	2.24 (0.00, 29028825	2774157572935234 8	0.00 (0.00, 32286278	3986507223495.19 ((	0.00 (0.00, 10493601
15871.16 (0.00, 2412	4811536802 7 (0.00,	0.01 (0.00, 20908061	7821574990462045(	99.78 (0.00, 1937091	1055843986218672 2	0.00 (0.00, 11213947	8618743338451650.(	0.00 (0.00, 70567479
0.00 (0.00, 7138598 1	0.00 (0.00, 6295348 2	0.00 (0.00, 386081.09	4273.99 (0.00, 28098	0.00 (0.00, 46374906	1035.85 (0.00, 35388	0.00 (0.00, 10788499	0.02 (0.00, 1717156 5	0.00 (0.00, 10191.69)
0.02 (0.00, 7498555 6	47591.94 (0.00, 1760	0.00 (0.00, 13745429	1682489299731846(	0.00 (0.00, 65371725	7738594369398322 0	0.00 (0.00, 22520979	7125119813 6.22 (0.0	0.00 (0.00, 27569399
0.00 (0.00, 4005751 7	0.00 (0.00, 7835694 4	0.00 (0.00, 2.53)	2366273 69.95 (0.00,	0.00 (0.00, 81190738	1868372 68.63 (0.00,	0.00 (0.00, 48025456	3567.16 (0.00, 25224	0.00 (0.00, 0.06)
1679696.94 (0.00, 17	2752512854747.20 ((	16.22 (0.38, 1524.01)	1131880683950559 1(	17241818.13 (0.00, 1	4664951532208321 7(	0.00 (0.00, 29655350	1991463676576192(	0.47 (0.01, 38.86)
69532.69 (0.00, 2920	4986968833044.5 (0.	16.68 (0.00, 2635201	1533336055288542 2(	18197313.67 (0.00, 1	2242950276535144(	0.00 (0.00, 20060009	7375572012944393(	0.36 (0.00, 58818271
3108811350585493.(	4290213495289475(	1065744093.79 (0.00	8774605500063984(	19941280902907 7.(	1048520260334687(	94.99 (0.00, 8737841	2939019033168558 5	2581266 5.84 (0.00, 2
0.01 (0.00, 6300034 6	828.65 (0.00, 151351	0.00 (0.00, 31323559	1375121235334966	0.00 (0.00, 12831286	4985510803540593(	0.00 (0.00, 75976960	1038707174.14 (0.00	0.00 (0.00, 63412111
0.00 (0.00, 3359002 5	0.00 (0.00, 5049053 8	0.00 (0.00, 14361159	407933.33 (0.00, 322	0.00 (0.00, 30855035	4264218.97 (0.00, 95	0.00 (0.00, 31550031	4.76 (0.00, 4570389 7	0.00 (0.00, 14230969
143163495795085 1(	7856356161595001 0(	5432267777.05 (0.00	3580167111141893(	7257766948321137 7	1279526342793164 1	1950.60 (0.00, 29213	3341401278637459(	14194097 1.11 (0.00,

107.84 (0.00, 499235	2525997735344041.(	215.94 (0.00, 107200	0.00 (0.00, 26700287	925756714828 62.42	58.99 (0.00, 3721806	648418690.41 (0.00,	0.00 (0.00, 20214264	0.00 (0.00, 86961249
0.00 (0.00, 21485820	72339264193.05 (0.0	0.00 (0.00, 62241819	0.00 (0.00, 18457147	17361060466.26 (0.0	0.00 (0.00, 2296677(	3142.31 (0.00, 21042	0.00 (0.00, 30176530	0.00 (0.00, 45807097
255690.79 (0.00, 234	9274341205726311(	3567619.48 (0.00, 18	71.56 (0.00, 1089817	53452194804731100	29931781.79 (0.00, 2	3898944829886.85 ((	0.06 (0.00, 2.62)	0.06 (0.00, 10246570
0.00 (0.00, 57627105	102.85 (0.00, 148140	0.00 (0.00, 33743220	0.00 (0.00, 22728826	0.00 (0.00, 10161871	0.00 (0.00, 10410254	0.00 (0.00, 17917877	0.00 (0.00, 29394322	0.00 (0.00, 13629937
36.24 (0.00, 3497684	10405257699561153	0.45 (0.00, 15478135	0.01 (0.00, 15339951	3509952562443721.9	3670.84 (0.00, 43765	23263501269.31 (0.0	0.00 (0.00, 10690893	0.00 (0.00, 39028659
0.00 (0.00, 10421091	0.13 (0.00, 34716064	0.00 (0.00, 37443659	0.00 (0.00, 45056964	0.00 (0.00, 28510690	0.00 (0.00, 18011418	0.00 (0.00, 40591800	0.00 (0.00, 0.73)	0.00 (0.00, 18672.42)
11608982839196.32	272057155773148855	452367009828209.56	1664750771 31.28 (0.	201582146252067841	184044196190705121	10580588220554398	7684937.76 (0.00, 28	9480048.15 (0.00, 10
0.00 (0.00, 55255439	111307.02 (0.00, 467	0.00 (0.00, 79829125	0.00 (0.00, 38146187	62.13 (0.00, 3327582	0.00 (0.00, 54681853	0.00 (0.00, 28385228	0.00 (0.00, 2800430.2	0.00 (0.00, 11830219
10046297.76 (0.00, 8	29731333223596117	137177321.58 (0.00,	2580.25 (0.00, 30286	192931333975109851	1037278703.89 (0.00	171547339584864.66	2.11 (0.03, 188.98)	2.78 (0.00, 38246120
Diosmectite	590242036700167365	5.42 (0.00, 28203600	0.01 (0.00, 57728881	702925166393233.66	2769.58 (0.00, 26058	2374673024.05 (0.00	0.00 (0.00, 25799331	0.00 (0.00, 20603297
0.00 (0.00, 38737556	Doxycycline	0.00 (0.00, 53831891	0.00 (0.00, 21534360	0.00 (0.00, 15421582	0.00 (0.00, 12985025	0.00 (0.00, 12241276	0.00 (0.00, 0.00)	0.00 (0.00, 26435484
0.18 (0.00, 21691037	20952522014284008	Glycyrrhiza	0.00 (0.00, 87711740	81030406889873.20	56.74 (0.00, 6207405	234976443.60 (0.00,	0.00 (0.00, 17721672	0.00 (0.00, 24081971
78.14 (0.00, 1110167	29625736141736714	4468.12 (0.00, 14782	Honey	637755382519710400	81577.96 (0.00, 3356	6825972172324.43 ((	0.00 (0.00, 12641805	0.00 (0.00, 14547716
0.00 (0.00, 15206544	2285.60 (0.00, 22022	0.00 (0.00, 49785358	0.00 (0.00, 11277612	Laser	0.00 (0.00, 36815139	0.00 (0.00, 19510622	0.00 (0.00, 9951.34)	0.00 (0.00, 21112247
0.00 (0.00, 22055068	39194915399782136	0.02 (0.00, 22290805	0.00 (0.00, 53211533	115049584131465.19	Minocycline	720562279.42 (0.00,	0.00 (0.00, 61741669	0.00 (0.00, 10344326
0.00 (0.00, 40702659	473469603.85 (0.00,	0.00 (0.00, 11914176	0.00 (0.00, 32360757	385996.09 (0.00, 330	0.00 (0.00, 33791706	Penicillin	0.00 (0.00, 0.09)	0.00 (0.00, 30548293
4644117.45 (0.00, 39	12530445733428424	66217780.24 (0.00, 3	1210.79 (0.00, 15158	87461960743938740	450965706.27 (0.00,	69903980918295.03	Placebo	1.16 (0.00, 17422983
19392642.18 (0.00, 1	41732280048372270	1699347270.69 (0.00	374.98 (0.00, 948011	33548849683196087	3281786041.93 (0.00	1743295870329441.8	0.86 (0.00, 13943935	Probiotics
846290194869256.40	26396694894963490	1984214794461827.9	4414807211254.01 ((	15405423831752270	27847358818383263	49446521458528973	58129989.22 (0.00, 4	82639354.19 (0.00, 5
0.01 (0.00, 59169732	143243715429094.06	0.06 (0.00, 35781368	0.00 (0.00, 11775026	1942652597739.67 ((	0.00 (0.00, 67477018	2667555.10 (0.00, 53	0.00 (0.00, 11870547	0.00 (0.00, 14991748
0.00 (0.00, 98369996	6265418.14 (0.00, 49	0.00 (0.00, 75143991	0.00 (0.00, 11328819	184.34 (0.00, 115343	0.00 (0.00, 31104613	0.00 (0.00, 30363112	0.00 (0.00, 50507170	0.00 (0.00, 12275404
28362475570668657	16609684621031662	22953913588811305	82520788628524.17	36126491352282154	30670697403123348	39534096437820520	300661221.92 (0.00,	31593602259.83 (0.0

0.00 (0.00, 5846512	124.87 (0.00, 780648	193069516	29180.37	0.00 (0.00, 70672695
0.00 (0.00, 5432156	9.00 (0.00, 106585	23	2442336.80 (0.00,	0.00 (0.00, 13156973
0.00 (0.00, 1529066	4926651.40 (0.00, 10	3248979	047599346	0.00 (0.00, 55686587
0.00 (0.00, 1200446	4.00 (0.00, 1156525	5.00 (0.00, 1397962	7.00 (0.00,	16161415
0.00 (0.00, 6020639	3.64 (0.00, 11963	3448573	0974180.96	0.00 (0.00, 15977221
0.00 (0.00, 1169.44)	0.00 (0.00, 1.35)	0.00 (0.00, 9085580	9.00 (0.00,	31654437
0.01 (0.00, 5109682	3	1025608602205931.4	0367988301283230	0.00 (0.00, 24485696
0.00 (0.00, 3573402	7.00 (0.00, 2074116	8.21 (0.00, 5699392	1.00 (0.00,	11558009
0.00 (0.00, 5844836	4	3673787	35.54 (0.00,	12571685100086012
0.00 (0.00, 2333121	7	133.92 (0.00, 17090	4	8316068628224.52 ((
0.00 (0.00, 1005094	.1	0.00 (0.00, 6594224	4	0.00 (0.00, 16230468
0.00 (0.00, 7189050	6	16.26 (0.00, 158550	0	3920557116019.13 ((
0.00 (0.00, 5243685	0	1119936.10 (0.00, 77		2200292789323933
0.00 (0.00, 2614924	2	0.00 (0.00, 1440916	2	0.01 (0.00, 2490654
0.00 (0.00, 6192578	3	200.51 (0.00, 25477	3	2684234756549.01 ((
0.00 (0.00, 1331873	0	0.00 (0.00, 4121780	0	53414.33 (0.00, 8599
0.00 (0.00, 2575019	7	160532814.00 (0.00,		5228772275329666
0.00 (0.00, 2758159	0	6875644.56 (0.00, 4		2231021920091714
0.00 (0.00, 2758144	0	0.00 (0.00, 2548435	0	Triester Glycerol Oxid
0.00 (0.00, 1925844	0	0.00 (0.00, 2548435	0	Triamcinolone
0.00 (0.00, 2750205	2	Silver nitrate		
49.39 (0.00, 4101602	4386551132158494	0	8592841948046783	Zinc

Inconsistency Factors

Cycle	Median (95% CI)
Aloe , Chitosan , Placebo , Triamcinolone	0.06 (-3.99, 3.92)
Aloe , Curcumin , Placebo , Triamcinolone	-0.04 (-3.96, 3.89)
Aloe , Doxycycline , Placebo , Triamcinolone	-0.04 (-3.80, 3.90)
Aloe , Honey , Placebo , Triamcinolone	0.03 (-3.92, 3.97)
Aloe , Laser , Placebo , Triamcinolone	-0.02 (-4.02, 4.01)
Aloe , Placebo , Probiotics , Triamcinolone	-0.06 (-4.11, 3.80)
Aloe , Honey , Placebo , Silver nitrate , Triamcinolone	-0.06 (-4.01, 3.89)
Aloe , Placebo , Triamcinolone	-0.01 (-6.14, 3.81)
Aloe , Placebo , Triamcinolone	-0.01 (-6.14, 3.81)
Aloe , Placebo , Triamcinolone	-0.01 (-6.14, 3.81)

Variance Calculation

Parameter	Median (95% CI)
Random Effects Standard Deviation	1.89 (0.04, 3.15)
Inconsistency Standard Deviation	1.62 (0.11, 3.13)

Convergence Diagnostics

Convergence is assessed using the Brooks-Gelman-Rubin method. This method compares within-chain and between-chain variance to calculate the Potential Scale Reduction Factor (PSRF). A PSRF close to one indicates approximate convergence has been reached.

Parameter	PSRF
d.Allicin.Placebo	1.05
d.Aloe.Triamcinolone	1.46
d.Amlexanox.Clobetasol	1.01
d.Benzydamine.Doxycycline	1.05
d.Honey.Silvernitrate	1.03
d.Placebo.Aloe	1.21
d.Placebo.Amlexanox	1.00
d.Placebo.Berberinegelatin	1.01
d.Placebo.Dexamethasone	1.00
d.Placebo.Diosmectite	1.01
d.Placebo.Glycyrrhiza	1.06
d.Placebo.Minocycline	1.03
d.Placebo.Penicillin	1.12
d.Placebo.Zinc	1.03
d.Triamcinolone.Benzydamine	1.06
d.Triamcinolone.Chitosan	1.00
d.Triamcinolone.Curcumin	1.06
d.Triamcinolone.Honey	1.02
d.Triamcinolone.Laser	1.02
d.Triamcinolone.Probiotics	1.21
d.Triamcinolone.TriesterGlycerolOxide	1.02
w.Aloe.Placebo.Chitosan.Triamcinolone	1.01
w.Aloe.Placebo.Curcumin.Triamcinolone	1.01
w.Aloe.Placebo.Doxycycline.Triamcinolone	1.00
w.Aloe.Placebo.Honey.Triamcinolone	1.01
w.Aloe.Placebo.Laser.Triamcinolone	1.00
w.Aloe.Placebo.Probiotics.Triamcinolone	1.00
w.Aloe.Placebo.Silvernitrate.Honey.Triamcinolone	1.00
w.Aloe.Placebo.Triamcinolone	1.04
w.Aloe.Placebo.Triamcinolone	1.04
w.Aloe.Placebo.Triamcinolone	1.04
sd.d	1.08
sd.w	1.00

Number of chains : 4
Tuning iterations : 20,000
Simulation iterations : 400,000
Thinning interval : 10
Inference samples : 80,000
Variance scaling factor : 2.5

3. Node-splitting analysis

Node-splitting analysis of inconsistency

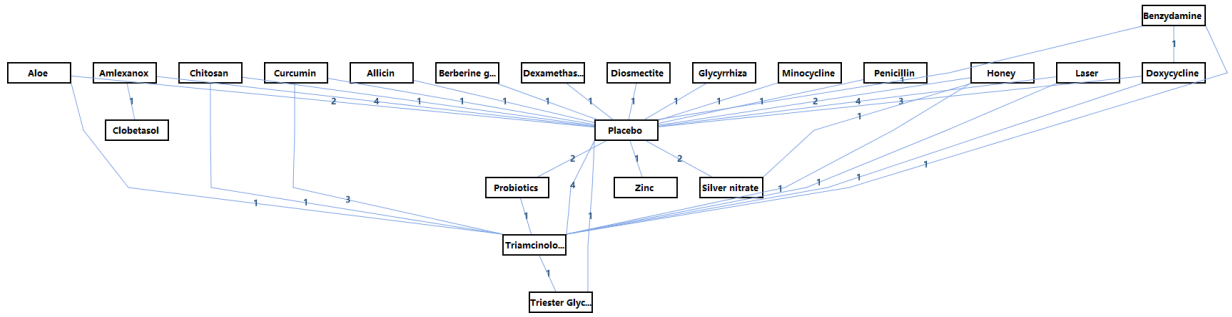
Inconsistency between direct and indirect estimates was estimated in the Node-Splitting Model. When P values is above 0.05 in a comparison, there is evidence of statistical inconsistency.

Name	Direct Effect	Indirect Effect	Overall	P-Value
Aloe , Triamcinolone	-7.97 (-98.59, 62.61)	-29.79 (-102.07, 29.72)	-33.64 (-111.19, 51.35)	0.68
Chitosan , Placebo	15.27 (-37.06, 90.03)	-23.90 (-88.20, 19.82)	3.17 (-58.49, 57.88)	0.29
Chitosan , Triamcinolone	-28.60 (-100.11, -1.28)	-8.02 (-115.88, 79.01)	-48.98 (-129.63, -2.47)	0.64
Curcumin , Placebo	10.33 (-57.81, 126.83)	67.85 (2.94, 136.18)	7.21 (-58.66, 63.56)	0.39
Curcumin , Triamcinolone	-23.70 (-109.95, 28.63)	-37.13 (-103.98, 99.51)	-45.74 (-126.10, 18.07)	0.98
Doxycycline , Triamcinolone	-12.94 (-79.78, 55.58)	-77.96 (-142.00, -23.35)	-71.28 (-146.09, -24.16)	0.11
Honey , Silver nitrate	9.92 (-69.05, 66.54)	10.79 (-60.43, 97.38)	6.08 (-89.64, 105.83)	0.99
Honey , Triamcinolone	-12.53 (-85.19, 71.54)	-33.08 (-122.74, 53.40)	-25.04 (-124.83, 74.14)	0.65
Laser , Placebo	10.72 (-28.23, 76.36)	17.62 (-63.93, 99.16)	18.47 (-19.78, 81.38)	0.98
Laser , Triamcinolone	-16.10 (-79.47, 40.59)	-27.12 (-100.02, 37.27)	-31.34 (-108.31, 38.93)	0.78
Placebo , Probiotics	-27.06 (-84.79, 27.66)	-48.86 (-134.73, 48.69)	-21.16 (-89.50, 30.03)	0.7
Placebo , Triamcinolone	-16.95 (-125.56, 40.66)	-56.37 (-155.35, -1.52)	-52.12 (-117.84, -7.89)	0.57
Probiotics , Triamcinolone	-15.04 (-104.14, 55.00)	-29.65 (-98.36, 100.12)	-29.32 (-112.50, 35.05)	0.94

4. Network structure

Network structure of sensitivity analysis

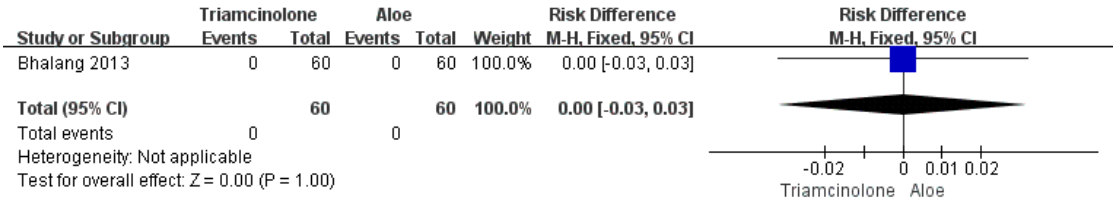
36 RCTs involving 22 local interventions were included in the sensitivity analysis considering the adverse effect.

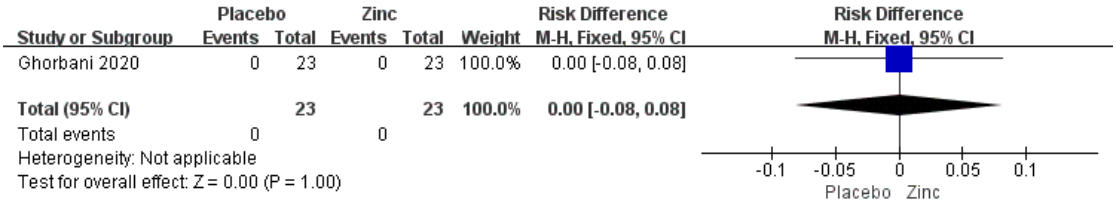


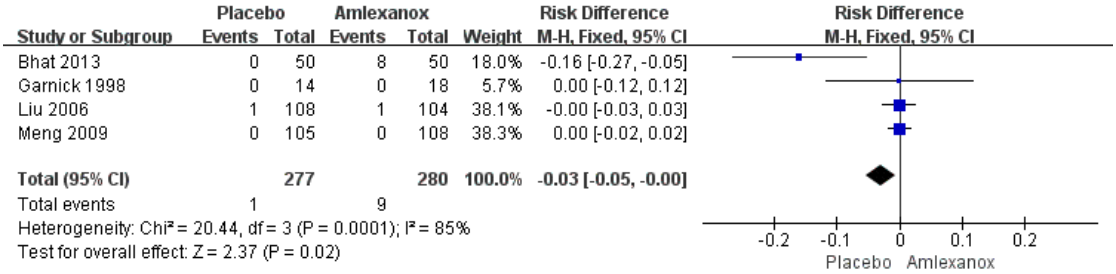
5. Pairwise meta-analysis

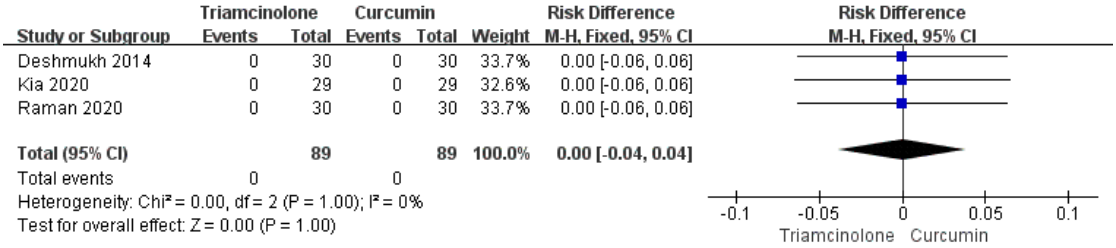
Pairwise meta-analysis of adverse effect

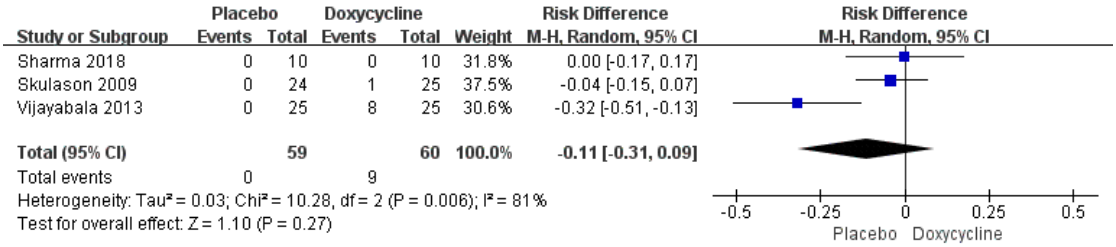
Adverse effect were measured by risk difference (RD) and 95% confidence interval (CI).

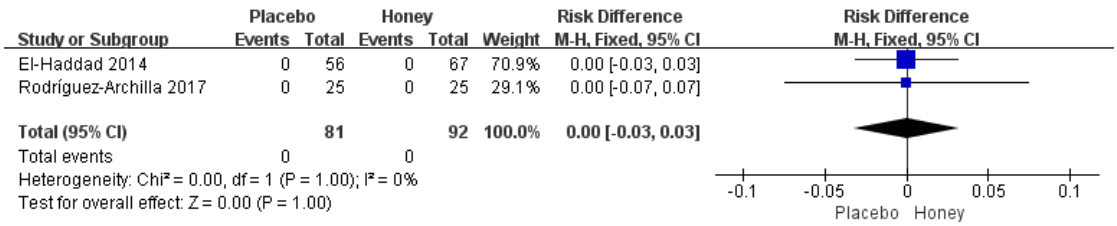


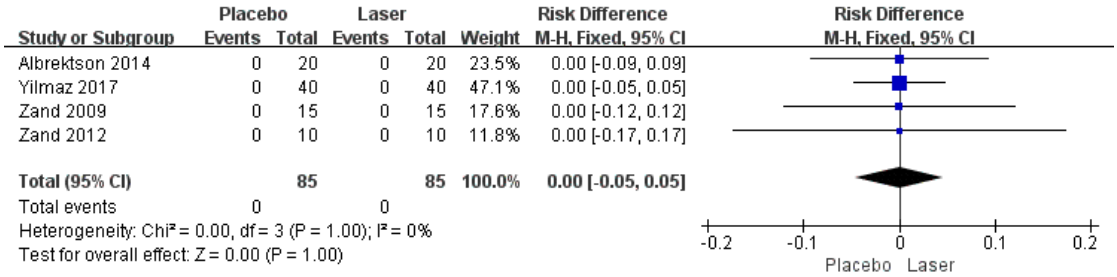


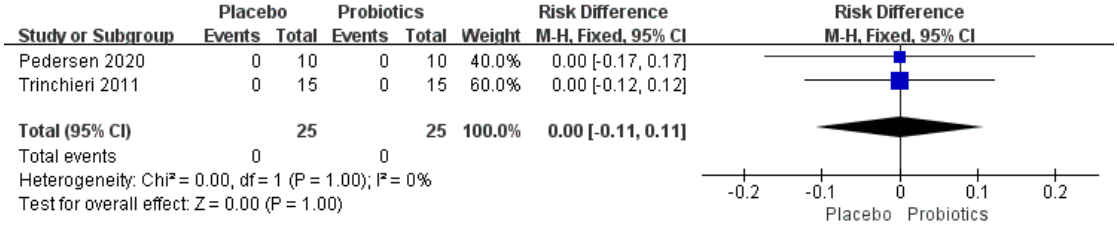


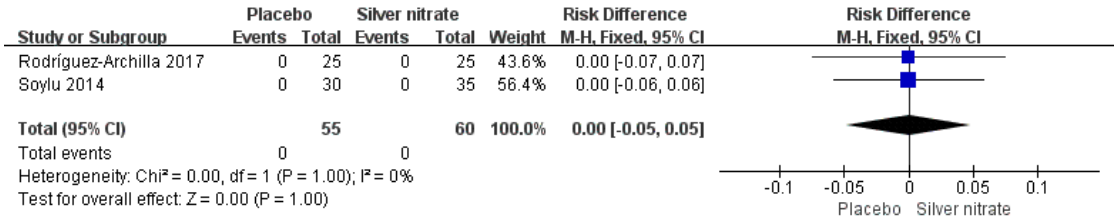


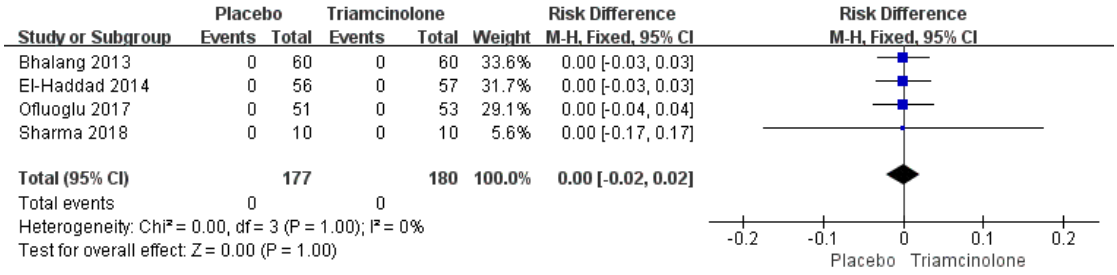


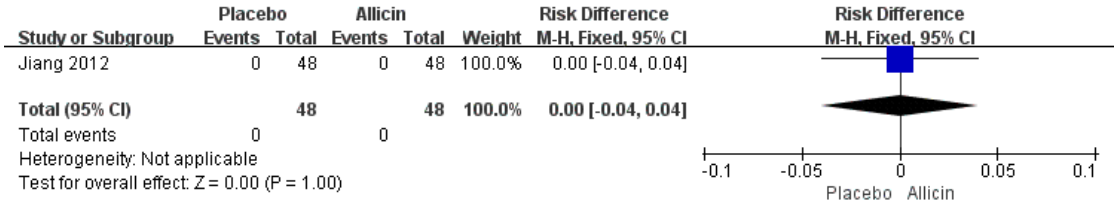

Placebo
Honey
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
El-Haddad 2014 0 56 0 67 70.9% 0.00 [-0.03, 0.03]
Rodríguez-Archilla 2017 0 25 0 25 29.1% 0.00 [-0.07, 0.07]
Total (95% CI) 81 92 100.0% 0.00 [-0.03, 0.03]
Total events 0 0
Heterogeneity: Chi² = 0.00, df = 1 (P = 1.00); I² = 0%
Test for overall effect: Z = 0.00 (P = 1.00)
-0.1 -0.05 0 0.05 0.1
Placebo Honey

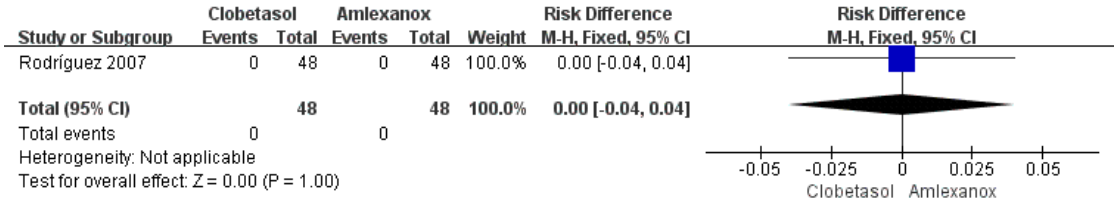

Placebo
Laser
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
Albrektson 2014 0 20 0 20 23.5% 0.00 [-0.09, 0.09]
Yilmaz 2017 0 40 0 40 47.1% 0.00 [-0.05, 0.05]
Zand 2009 0 15 0 15 17.6% 0.00 [-0.12, 0.12]
Zand 2012 0 10 0 10 11.8% 0.00 [-0.17, 0.17]
Total (95% CI) 85 85 100.0% 0.00 [-0.05, 0.05]
Total events 0 0
Heterogeneity: Chi² = 0.00, df = 3 (P = 1.00); I² = 0%
Test for overall effect: Z = 0.00 (P = 1.00)
-0.2 -0.1 0 0.1 0.2
Placebo Laser


Placebo
Probiotics
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
Pedersen 2020 0 10 0 10 40.0% 0.00 [-0.17, 0.17]
Trinchieri 2011 0 15 0 15 60.0% 0.00 [-0.12, 0.12]
Total (95% CI) 25 25 100.0% 0.00 [-0.11, 0.11]
Total events 0 0
Heterogeneity: Chi² = 0.00, df = 1 (P = 1.00); I² = 0%
Test for overall effect: Z = 0.00 (P = 1.00)
-0.2 -0.1 0 0.1 0.2
Placebo Probiotics


Placebo
Silver nitrate
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
Rodríguez-Archilla 2017 0 25 0 25 43.6% 0.00 [-0.07, 0.07]
Soylu 2014 0 30 0 35 56.4% 0.00 [-0.06, 0.06]
Total (95% CI) 55 60 100.0% 0.00 [-0.05, 0.05]
Total events 0 0
Heterogeneity: Chi² = 0.00, df = 1 (P = 1.00); I² = 0%
Test for overall effect: Z = 0.00 (P = 1.00)
-0.1 -0.05 0 0.05 0.1
Placebo Silver nitrate

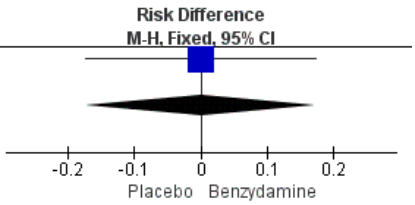

Placebo
Triamcinolone
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
Bhalang 2013 0 60 0 60 33.6% 0.00 [-0.03, 0.03]
El-Haddad 2014 0 56 0 57 31.7% 0.00 [-0.03, 0.03]
Ofluoglu 2017 0 51 0 53 29.1% 0.00 [-0.04, 0.04]
Sharma 2018 0 10 0 10 5.6% 0.00 [-0.17, 0.17]
Total (95% CI) 177 180 100.0% 0.00 [-0.02, 0.02]
Total events 0 0
Heterogeneity: Chi² = 0.00, df = 3 (P = 1.00); I² = 0%
Test for overall effect: Z = 0.00 (P = 1.00)
-0.2 -0.1 0 0.1 0.2
Placebo Triamcinolone


Placebo
Allicin
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
Jiang 2012 0 48 0 48 100.0% 0.00 [-0.04, 0.04]
Total (95% CI) 48 48 100.0% 0.00 [-0.04, 0.04]
Total events 0 0
Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)
-0.1 -0.05 0 0.05 0.1
Placebo Allicin


Clobetasol
Amlexanox
Risk Difference
Risk Difference
Study or Subgroup
Events Total Events Total Weight M-H, Fixed, 95% CI
M-H, Fixed, 95% CI
Rodríguez 2007 0 48 0 48 100.0% 0.00 [-0.04, 0.04]
Total (95% CI) 48 48 100.0% 0.00 [-0.04, 0.04]
Total events 0 0
Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)
-0.05 -0.025 0 0.025 0.05
Clobetasol Amlexanox

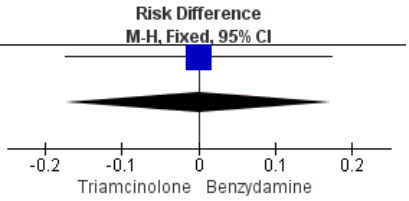
Study or Subgroup	Placebo Events	Total	Benzydamine Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Sharma 2018	0	10	0	10	100.0%	0.00 [-0.17, 0.17]
Total (95% CI)		**10**		**10**	**100.0%**	**0.00 [-0.17, 0.17]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



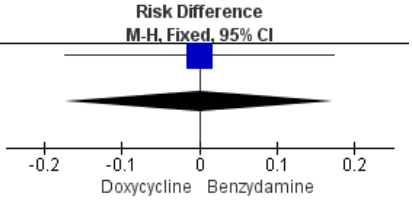
Study or Subgroup	Triamcinolone Events	Total	Benzydamine Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Sharma 2018	0	10	0	10	100.0%	0.00 [-0.17, 0.17]
Total (95% CI)		**10**		**10**	**100.0%**	**0.00 [-0.17, 0.17]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



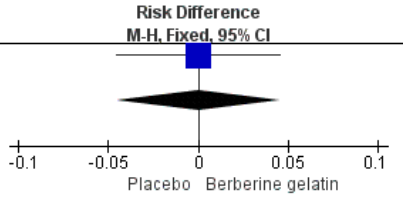
Study or Subgroup	Doxycycline Events	Total	Benzydamine Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Sharma 2018	0	10	0	10	100.0%	0.00 [-0.17, 0.17]
Total (95% CI)		**10**		**10**	**100.0%**	**0.00 [-0.17, 0.17]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



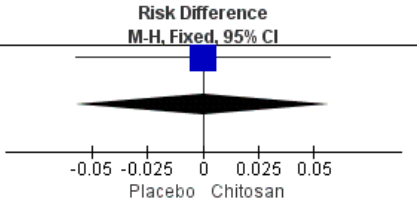
Study or Subgroup	Placebo Events	Total	Berberine gelatin Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Jiang and Zhu 2013	0	42	0	42	100.0%	0.00 [-0.05, 0.05]
Total (95% CI)		**42**		**42**	**100.0%**	**0.00 [-0.05, 0.05]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



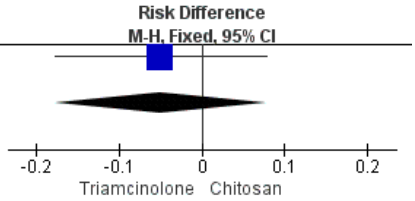
Study or Subgroup	Placebo Events	Total	Chitosan Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Shao 2020	0	32	0	34	100.0%	0.00 [-0.06, 0.06]
Total (95% CI)		**32**		**34**	**100.0%**	**0.00 [-0.06, 0.06]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



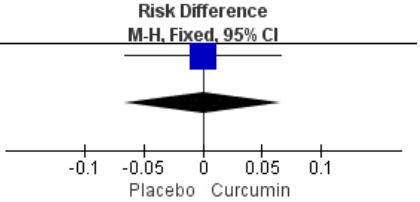
Study or Subgroup	Triamcinolone Events	Total	Chitosan Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Rahmani 2018	0	20	1	20	100.0%	-0.05 [-0.18, 0.08]
Total (95% CI)		**20**		**20**	**100.0%**	**-0.05 [-0.18, 0.08]**
Total events	0		1			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.77 (P = 0.44)



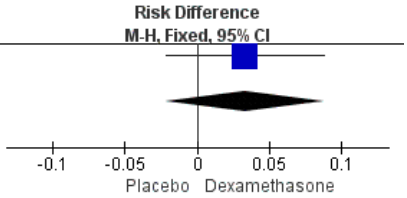
Study or Subgroup	Placebo Events	Total	Curcumin Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Manifar 2012	0	29	0	28	100.0%	0.00 [-0.07, 0.07]
Total (95% CI)		**29**		**28**	**100.0%**	**0.00 [-0.07, 0.07]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



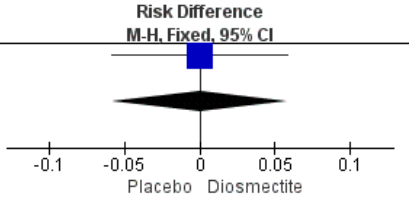
Study or Subgroup	Placebo Events	Total	Dexamethasone Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Liu 2012	8	120	4	120	100.0%	0.03 [-0.02, 0.09]
Total (95% CI)		**120**		**120**	**100.0%**	**0.03 [-0.02, 0.09]**
Total events	8		4			

Heterogeneity: Not applicable
Test for overall effect: Z = 1.19 (P = 0.23)



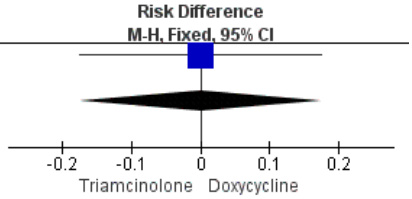
Study or Subgroup	Placebo Events	Total	Diosmectite Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Jiang and Yang 2013	0	30	0	35	100.0%	0.00 [-0.06, 0.06]
Total (95% CI)		**30**		**35**	**100.0%**	**0.00 [-0.06, 0.06]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



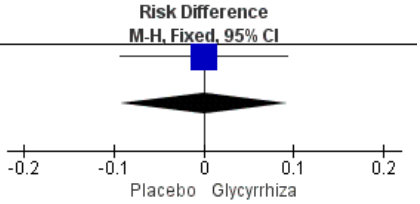
Study or Subgroup	Triamcinolone Events	Total	Doxycycline Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Sharma 2018	0	10	0	10	100.0%	0.00 [-0.17, 0.17]
Total (95% CI)		**10**		**10**	**100.0%**	**0.00 [-0.17, 0.17]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



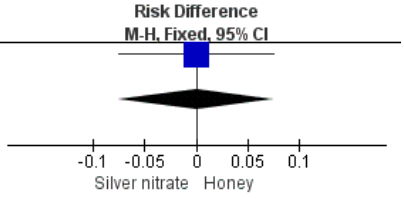
Study or Subgroup	Placebo Events	Total	Glycyrrhiza Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Raeesi 2015	0	20	0	20	100.0%	0.00 [-0.09, 0.09]
Total (95% CI)		**20**		**20**	**100.0%**	**0.00 [-0.09, 0.09]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



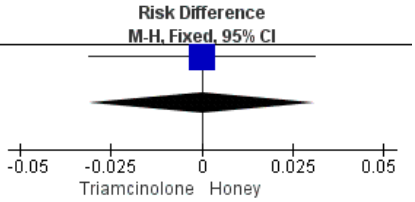
Study or Subgroup	Silver nitrate Events	Total	Honey Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Rodríguez-Archilla 2017	0	25	0	25	100.0%	0.00 [-0.07, 0.07]
Total (95% CI)		**25**		**25**	**100.0%**	**0.00 [-0.07, 0.07]**
Total events	0		0			

Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)



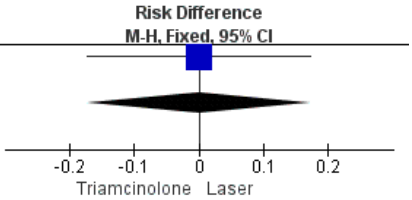
Study or Subgroup	Triamcinolone Events	Total	Honey Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
El-Haddad 2014	0	57	0	67	100.0%	0.00 [-0.03, 0.03]
Total (95% CI)		**57**		**67**	**100.0%**	**0.00 [-0.03, 0.03]**
Total events	0		0			

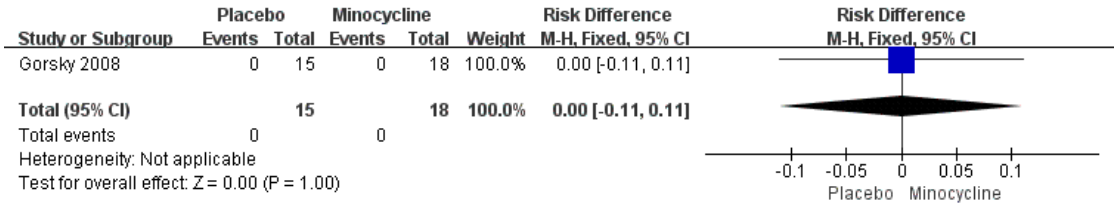
Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)

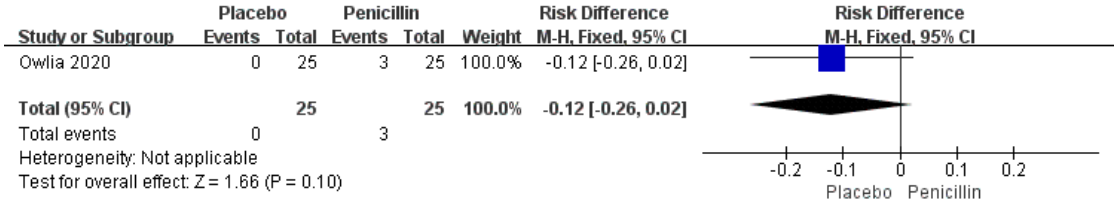


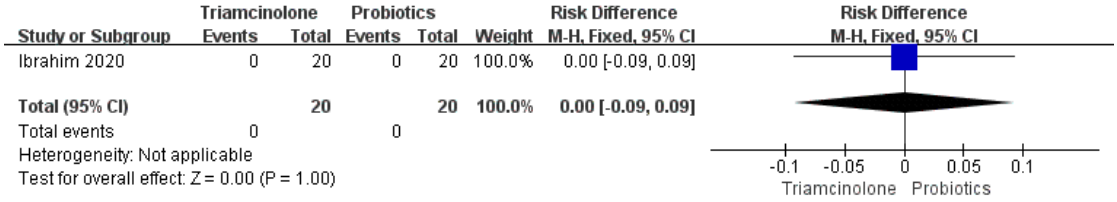
Study or Subgroup	Triamcinolone Events	Total	Laser Events	Total	Weight	Risk Difference M-H, Fixed, 95% CI
Tezel 2009	0	10	0	10	100.0%	0.00 [-0.17, 0.17]
Total (95% CI)		**10**		**10**	**100.0%**	**0.00 [-0.17, 0.17]**
Total events	0		0			

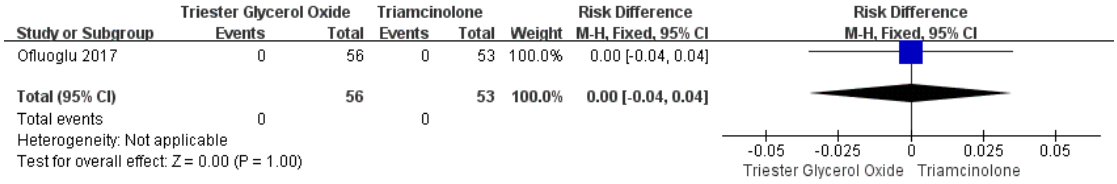
Heterogeneity: Not applicable
Test for overall effect: Z = 0.00 (P = 1.00)

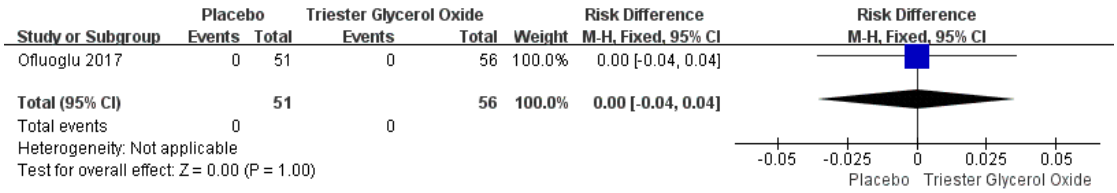












Comparison	NO. of included study	Heterogeneity (I^2)	Combined effect [RD (95%CI)]
Allicin vs			
Placebo	1	NA	0.00 (-0.04, 0.04)
Aloe vs			
Placebo	2	0%	0.00 (-0.03,0.03)
Triamcinolone	1	NA	0.00 (-0.03, 0.03)
Amlexanox vs			
Placebo	4	85%	-0.03 (-0.05, -0.00)
Clobetasol	1	NA	0.00 (-0.04, 0.04)
Benzydamine vs			
Placebo	1	NA	0.00 (-0.17, 0.17)
Doxycycline	1	NA	0.00 (-0.17, 0.17)
Triamcinolone	1	NA	0.00 (-0.17, 0.17)
Berberine gelatin vs			
Placebo	1	NA	0.00 (-0.05, 0.05)
Chitosan vs			

Placebo	1	NA	0.00 (-0.06, 0.06)
Triamcinolone	1	NA	-0.05 (-0.18, 0.08)
Curcumin vs			
Triamcinolone	3	0%	0.00 (-0.04,0.04)
Placebo	1	NA	0.00 (-0.07, 0.07)
Dexamethasone vs			
Placebo	1	NA	0.03 (-0.02, 0.09)
Diosmectite vs			
Placebo	1	NA	0.00 (-0.06, 0.06)
Doxycycline vs			
Placebo	3	81%	-0.11 (-0.31, 0.09)
Triamcinolone	1	NA	0.00 (-0.17, 0.17)
Glycyrrhiza vs			
Placebo	1	NA	0.00 (-0.09, 0.09)
Honey			
Placebo	2	0%	0.00 (-0.03, 0.03)
Silver nitrate	1	NA	0.00 (-0.07, 0.07)
Triamcinolone	1	NA	0.00 (-0.03, 0.03)
Laser vs			
Placebo	4	0%	0.00 (-0.05, 0.05)
Triamcinolone	1	NA	0.00 (-0.17, 0.17)
Minocycline			
Placebo	1	NA	0.00 (-0.11, 0.11)
Penicillin			
Placebo	1	NA	-0.12 (-0.26, 0.02)
Probiotics vs			
Placebo	2	0%	0.00 (-0.11, 0.11)
Triamcinolone	1	NA	0.00 (-0.09, 0.09)
Silver nitrate vs			
Placebo	2	0%	0.00 (-0.05, 0.05)
Triamcinolone vs			
Placebo	4	0%	0.00 (-0.02, 0.02)
Triester Glycerol Oxide	1	NA	0.00 (-0.04, 0.04)
Triester Glycerol Oxide vs			
Placebo	1	NA	0.00 (-0.04, 0.04)
Zinc vs			
Placebo	1	NA	0.00 (-0.08, 0.08)

RD, risk difference; CI, confidence interval; NA, not applicable.

Hematologic values

4 RCTs included in the study reported on the blood levels of the intervention drug or blood laboratory findings.

Interventions	Total	Hematologic values
Dexamethasone	114	Blood level<0.502 ng/mL
Aloe	60	No significant differences between the blood test values before and after 7 days of application
Allicin	48	None of the hematologic values at day 6 were considered clinically abnormal
Amlexanox	108	None of the hematologic values were considered clinically abnormal

Chapter S5 Relapse

4 included articles described the role of interventions on RAS recurrence. Because different criteria were used for evaluation, only descriptive studies were performed.

Interventions	Total	Relapse
Probiotics	Adult Group: 30 Children group :30	Adult Group (Outbreak frequency/6 months) Probiotics: 3.33 (0.64) Placebo: 3.65 (0.32) Children group (Outbreak frequency/6 months) Probiotics: 2.65 (0.54) Placebo: 3.65 (0.62)
Chlorhexidine	38	Total ulcer numbers (6 weeks): Chlorhexidine: 7.54±6.52 Placebo: 8.32±5.52 Interval between ulcers (6 weeks): Chlorhexidine: 7.26±8.61 Placebo:3.86±2.05
Benzydamine	18	Number of new ulcers (3 months) Benzydamine: 7 (2-33) Placebo: 8 (2-20)
Chlorhexidine	18	Number of new ulcers (3 months) Chlorhexidine: 6.5 (3-20) Placebo: 8 (2-20)
Triamcinolone	26	No. of new ulcers (8 months) Placebo: 7.81 Triamcinolone acetonide in orabase : 7.00 Triamcinolone acetonide in watery base : 6.42

FigureS1 Risk of bias graph

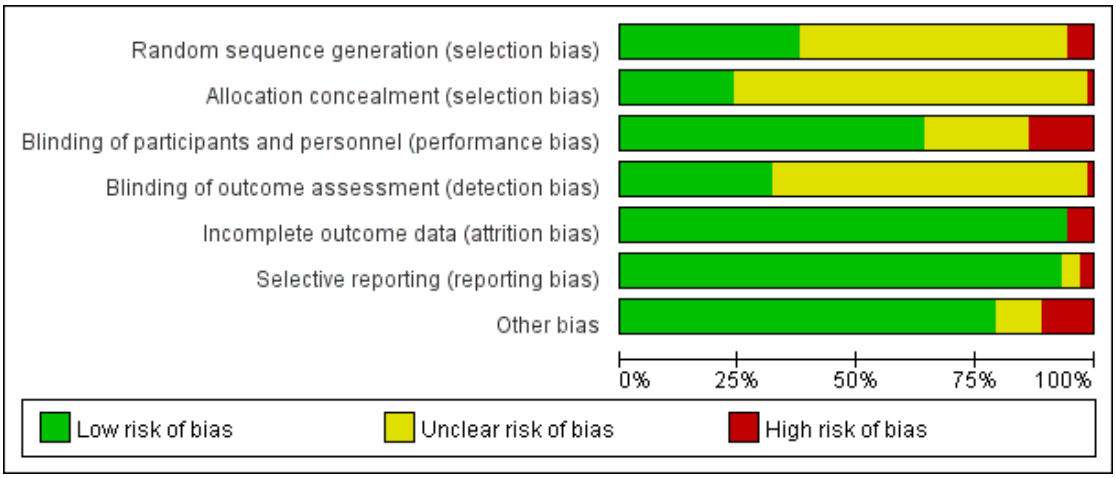
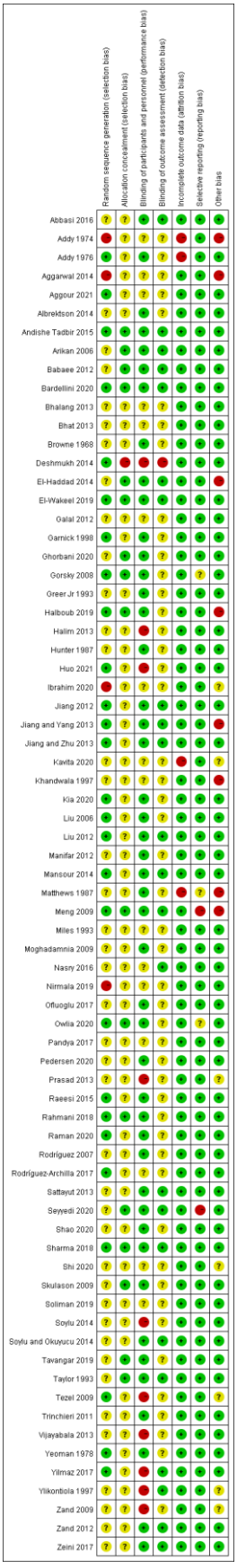


Figure S2 Risk of bias summary for individual studies



Funnel plots

Figure S3 Funnel plot for healing effect

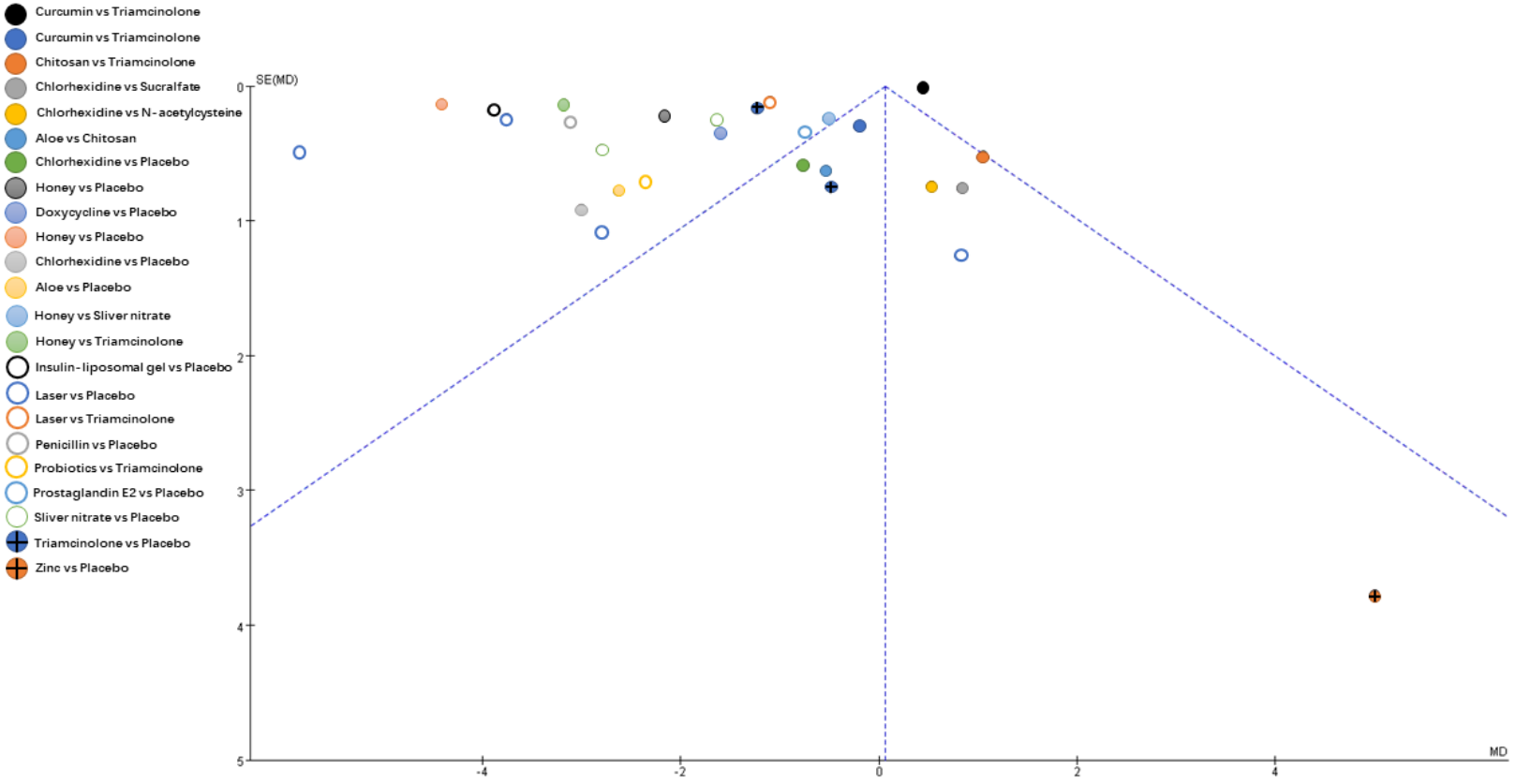


Figure S4 Funnel plot for size-reducing effect

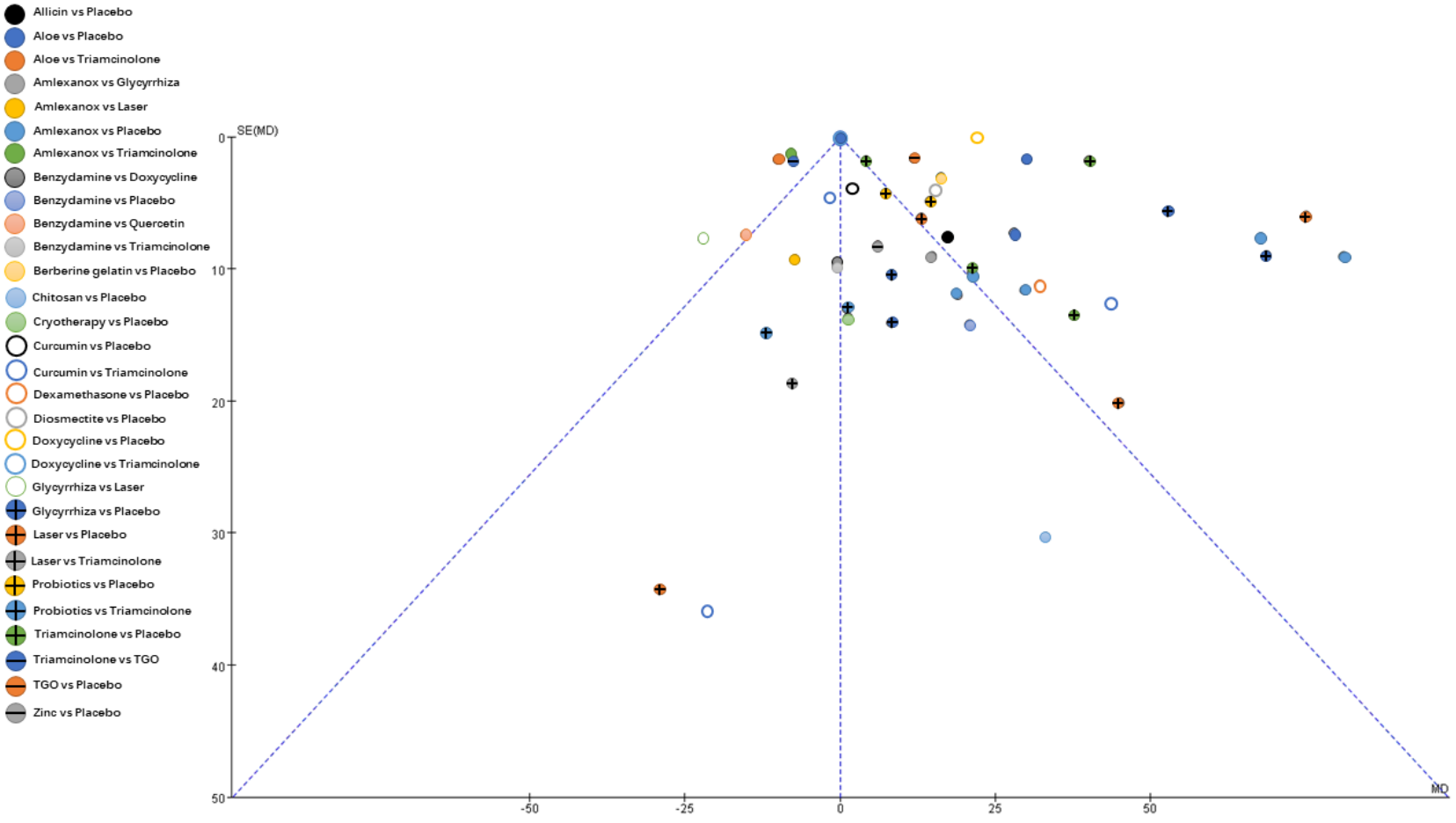


Figure S5 Funnel plot for symptom-reducing effect

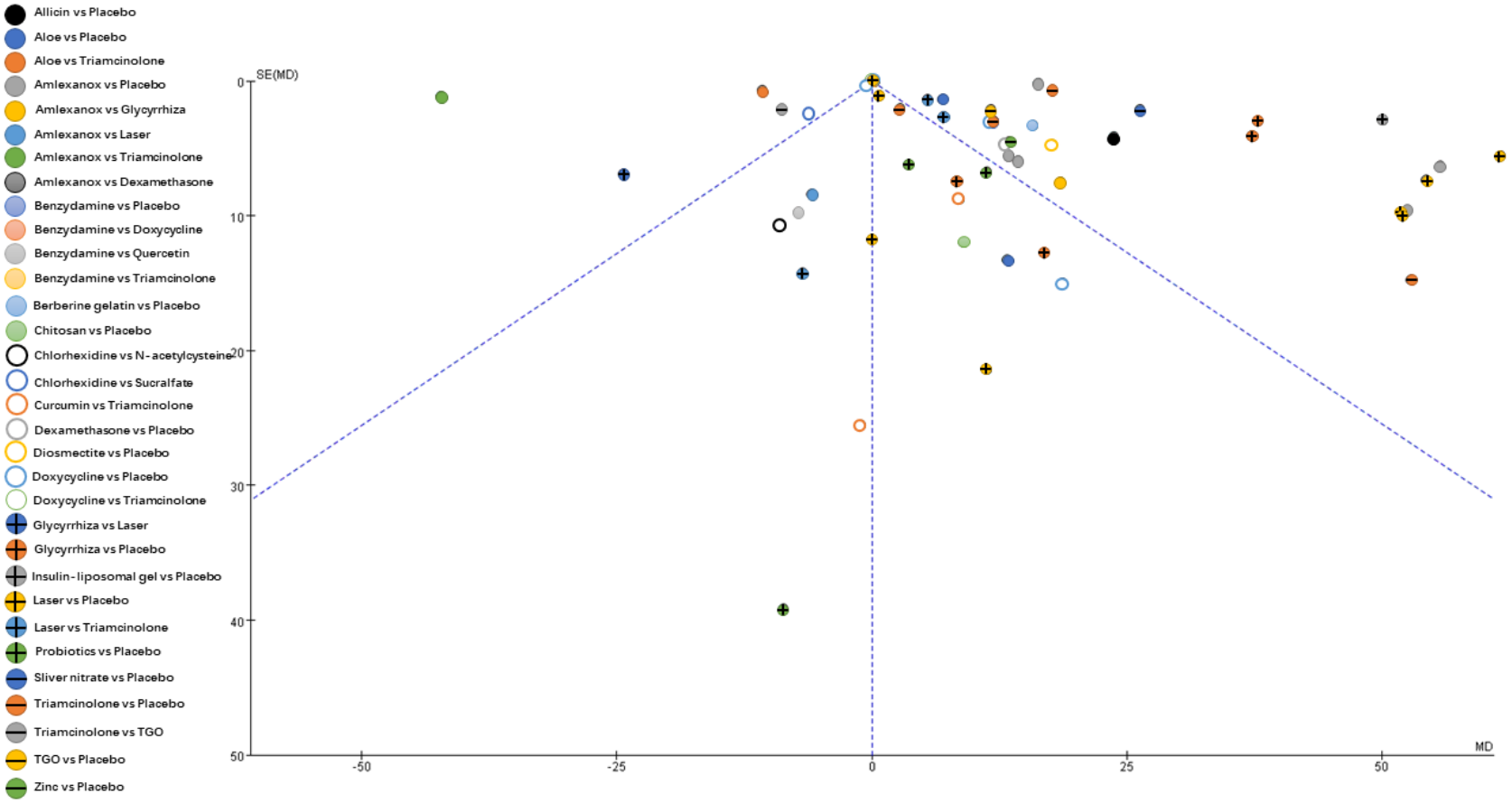


Figure S6 Funnel plot for adverse effect

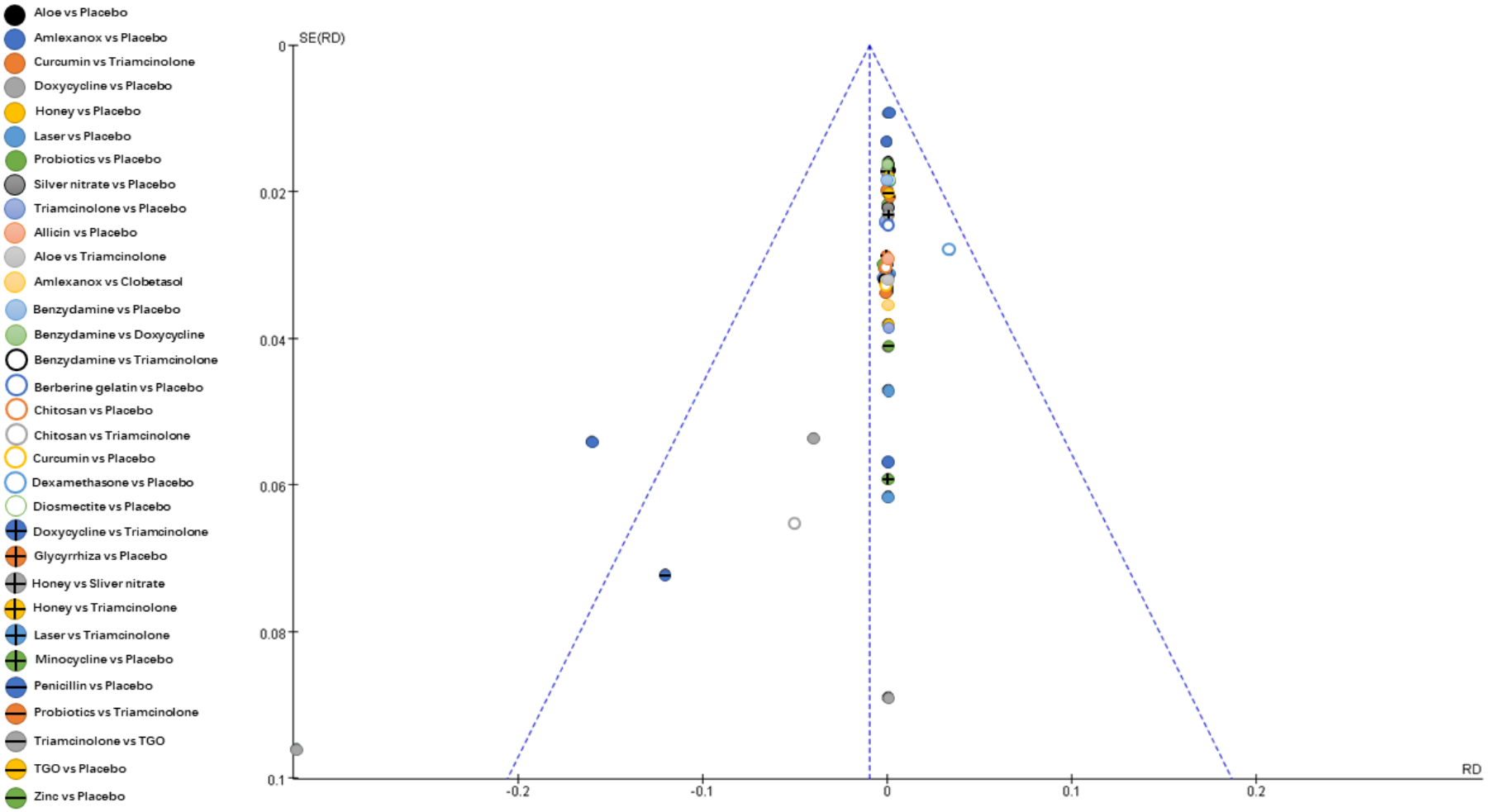


Figure S7 Network structure of sensitivity analysis

Network structure of sensitivity analysis. 69 RCTs were considered in sensitivity analysis for the four outcomes. (a) Healing effect, data from 26 RCTs (1306 participants) with 20 pairwise comparisons among 18 interventions were pooled. (b) Size-reducing effect, data from 37 RCTs (3587 participants) with 30 pairwise comparisons among 19 interventions were pooled. (c) Symptom-reducing effect, data from 46 RCTs (4020 participants) with 32 pairwise comparisons among 23 interventions were pooled. (d) Adverse effect, data from 36 RCTs (2787 participants) with 32 pairwise comparisons among 22 interventions were pooled. Nodes and edges are weighted according to volume of studies including that treatment or comparison.

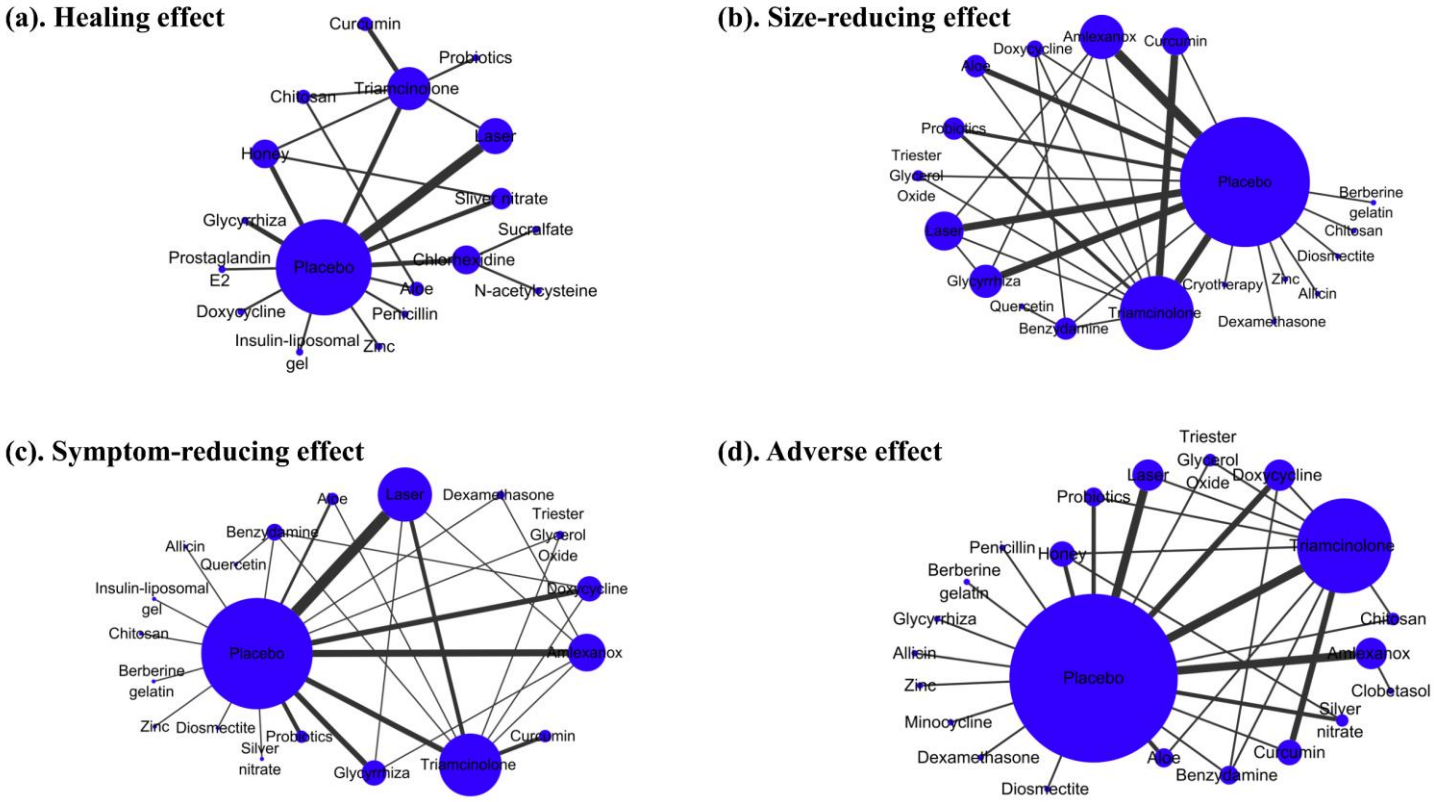


Table S11 PRISMA NMA Checklist of Items

Section/Topic	Item #	Checklist Item	Reported on Page #
TITLE			
Title	1	Identify the report as a systematic review *incorporating a network meta-analysis (or related form of meta-analysis).*	1
ABSTRACT			
Structured summary	2	Provide a structured summary including: **Background, Methods, Results, Discussion/Conclusions, and Other.**	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known*, including mention of why a network meta-analysis has been conducted.*	3-4
Objectives	4	Provide an explicit statement of questions being addressed, with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3-4
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists and if and where it can be accessed (e.g., Web address); and, if available, provide registration information, including registration number.	4
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	4
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	4
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Table S1-S5
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	Fig. 1
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate)	4-6

		and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	4-6
Geometry of the network	**S1**	Describe methods used to explore the geometry of the treatment network under study and potential biases related to it. This should include how the evidence base has been graphically summarized for presentation, and what characteristics were compiled and used to describe the evidence base to readers.	5
Risk of bias within individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	5
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	5
Planned methods of analysis	14	Describe the methods of handling data and combining results of studies for each network meta-analysis. This should include, but not be limited to: • *Handling of multi-arm trials;* • *Selection of variance structure;* • *Selection of prior distributions in Bayesian analyses; and* • *Assessment of model fit.*	5
Assessment of Inconsistency	**S2**	Describe the statistical methods used to evaluate the agreement of direct and indirect evidence in the treatment network(s) studied. Describe efforts taken to address its presence when found.	5
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	5
Additional analyses	16	Describe methods of additional analyses if done, indicating which were pre-specified. This may include, but not be limited to, the following: • Sensitivity or subgroup analyses; • Meta-regression analyses; • *Alternative formulations of the treatment network; and* • *Use of alternative prior distributions for Bayesian analyses (if applicable).*	5

RESULTS†			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	6
Presentation of network structure	**S3**	Provide a network graph of the included studies to enable visualization of the geometry of the treatment network.	Fig. 2
Summary of network geometry	**S4**	Provide a brief overview of characteristics of the treatment network. This may include commentary on the abundance of trials and randomized patients for the different interventions and pairwise comparisons in the network, gaps of evidence in the treatment network, and potential biases reflected by the network structure.	7-9
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	Table S4
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment.	Figure S1-S2
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: 1) simple summary data for each intervention group, and 2) effect estimates and confidence intervals.	Table S6
Synthesis of results	21	Present results of each meta-analysis done, including confidence/credible intervals. If additional summary measures were explored (such as treatment rankings), these should also be presented.	7-8
Exploration for inconsistency	**S5**	Describe results from investigations of inconsistency. This may include such information as measures of model fit to compare consistency and inconsistency models, *P* values from statistical tests, or summary of inconsistency estimates from different parts of the treatment network.	11
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies for the evidence base being studied.	8
Results of additional analyses	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression analyses*, alternative network geometries studied, alternative choice of prior distributions for*	8-9

		Bayesian analyses, and so forth).	
DISCUSSION			
Summary of evidence	24	Summarize the main findings, including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy-makers).	15-17
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review level (e.g., incomplete retrieval of identified research, reporting bias). *Comment on the validity of the assumptions, such as transitivity and consistency. Comment on any concerns regarding network geometry (e.g., avoidance of certain comparisons).*	17
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	17
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. This should also include information regarding whether funding has been received from manufacturers of treatments in the network and/or whether some of the authors are content experts with professional conflicts of interest that could affect use of treatments in the network.	17