Supplementary material. Table 1: PRISMA 2009 Checklist.

Section/topic	#	Checklist item	Reported on page #
TITLE	-		
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	2
INTRODUCTION	-		
Rationale	3	Describe the rationale for the review in the context of what is already known.	3
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, 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.	4
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).	4
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	4
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
Risk of bias in 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.	4
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	4-5
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	4-5

Section/topic	#	Checklist item	Reported on page #				
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).	4				
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	4-5				
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.	5				
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.	5				
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	5				
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.					
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	5-6				
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	5				
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	5-6				
DISCUSSION	<u>1</u>						
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).	6-7				
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).	7-8				
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	8				
FUNDING	<u>.</u>						
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.	1,8				

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097. For more information, visit: <u>www.prisma-statement.org</u>.

Supplementary material.

Figure 1. Risk of bias assessment results. RCT assessed using RoB-2 instrument: A) traffic light plot, demonstrating scoring in each domain for each individual result; B) summary plot, demonstrating weighted distribution of scoring within each bias domain. NRSI assessed using ROBINS-I instrument: C) traffic light plot, D) summary plot.

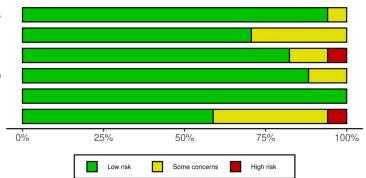
Abbreviations: RCT, randomized control trials; NRSI, non-randomized studies of interventions; RoB, Risk of Bias; ROBINS-I, Risk Of Bias In Non-randomized Studies.

				Risk of bia	as domains		
		D1	D2	D3	D4	D5	Overall
	Adriaensen (2017)	+	+	+	—	+	+
	Berger (2014)	+	-	+	-	+	-
	Boulet (2004)	-	+	-	+	+	-
	Bross-Soriano (2004)	+	+	-	-	+	-
	Busse (2013)	+	+	+	+	+	+
	Chervinsky (2007)	+	+	-	+	+	+
	Chylak (2008)	+	+	+	+	+	+
	Covelli (2015)	+	+	+	+	+	+
	Duh (2000)	+	+	+	+	+	+
	Ferguson (2017)	+	+	+	+	+	+
	Gelfand (2006)	+	+	+	+	+	+
	Han (2014)	+	-	+	+	+	-
	Howland (1996)	+	+	+	+	+	+
	lgarashi(2012)	+	+	+	+	+	+
	Kemp(2004)	+	+	×	+	+	×
	Kerwin (2019)	+	+	-	+	+	-
Study	Kim (2007)	+	+	+	+	+	+
Stu	Kothiwala (2021)	+	+	+	+	+	+
	Laforce (2013)	+	+	×	-	+	×
	Li (1999)	+	+	+	+	+	+
	Marple (2012)	+	+	+	+	+	+
	Maspero (2008)	+	+	+	+	+	+
	Maspero (2010)	+	-	+	+	+	-
	Moss (2017)	+	-	+	+	+	-
	Ratner (2006)	+	+	+	+	+	+
	Ratner (2009)	-	-	+	+	+	-
	Reed (1998)	+	-	+	+	+	-
	Rosenblut (2007)	+	+	+	+	+	+
	Rosenwasser (2008)	+	-	+	-	+	-
	Rotenberg (2011)	+	+	+	+	+	+
	Sheffer(2005)	+	-	+	+	+	+
	Tinklekman (1993)	+	+	+	+	+	+
	Weinstein (2014)	+	-	+	+	+	-
	Yuen (2013)	+	-	+	+	+	-

A)

Domains: D1: Bias arising from the randomization process. D2: Bias due to deviations from intended intervention. D3: Bias due to missing outcome data. D4: Bias in measurement of the outcome. D5: Bias in selection of the reported result.





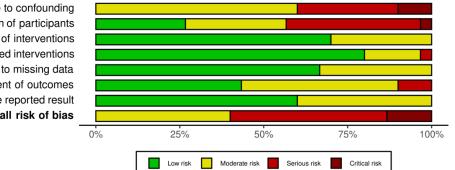
Bias arising from the randomization process Bias due to deviations from intended interventions Bias due to missing outcome data Bias in measurement of the outcome Bias in selection of the reported result **Overall risk of bias** C)

					Risk of bia	as domains			
ſ		D1	D2	D3	D4	D5	D6	D7	Overall
	Alsaadi (2012)	-	+	+	+	+	-	+	-
	Baan (2020)	-	X	+	-	-	X	+	×
	Behbehani (2005)	-	×	-	+	-	+	+	X
	Bui (2005)		-	+	+	+	-	+	
	Chang (2017)	X	X	+	-	-	-	-	-
	Davis (2016)	-	-	+	X	+	-	+	-
	Dereci (2015)	-	-	+	+	-	X	+	X
	Douglas (2019)	X	+	+	+	+	+	+	X
	Forwith (2011)	-	+	+	+	+	-	+	-
	Garbe (1997)	×	-	-	-	+	-	-	X
	Gonzalez (2010)	-	-	-	+	+	-	-	-
	Gunay (2019)	-	-	+	+	+	-	+	-
	Johnson (2012)	-	X	-	+	-	+	-	X
	Man (2013)	-	+	+	+	-	+	-	-
dy	Manji (2017)	-	-	+	+	+	-	+	-
Study	Marcus (2012)	-	+	+	+	-	+	-	-
	Martino (2015)	X	X	+	+	-	+	+	X
	Miller (2011)	-	X	-	+	+	-	-	X
	Mitchell (1999)	-	-	-	-	+	+	-	-
	Mohd Zain (2019)		X	-	+	+	-	-	
	Novak-Laus (2003)	-	X	+	+	+	-	+	-
	Ozkaya (2011)	-	X	-	-	+	+	+	X
	Ozturk (1998)		+	+	+	+	+	+	
	Seiberling (2013)	X	X	+	+	-	-	-	X
	Shroff (2018)	X	X	+	+	+	+	-	X
	Simsek (2016)	X	-	+	+	+	X	+	X
	Soudry (2016)	X		+	+	+	+	+	
	Spiliotopoulos (2007)	X	+	+	+	-	+	+	X
	Tirupati (2017)	-	X	-	+	+	+	-	X
	Yenigun (2018)	-	+	+	+	+	-	+	-
L		Domains: D1: Bias d	ue to confou	inding.					Udgement

D1: Bias due to confounding.
D2: Bias due to selection of participants.
D3: Bias in classification of interventions.
D4: Bias due to deviations from intended interventions.
D5: Bias due to missing data.
D6: Bias in measurement of outcomes.
D7: Bias in selection of the reported result.

Critical





Bias due to confounding Bias due to selection of participants Bias in classification of interventions Bias due to deviations from intended interventions Bias due to missing data Bias in measurement of outcomes Bias in selection of the reported result **Overall risk of bias**

Supplementary material.

Figure 2. Sensitivity analyses for A,B) glaucoma incidence; C) OHT incidence; D) endpoint IOP difference between ICS or INS users and controls; E) change in IOP after ICS or INS use compared to pre-treatment baseline.

Abbreviations: CI, confidence interval; OHT, ocular hypertension; IOP, intraocular pressure; ICS, inhalational corticosteroids; INS, intranasal corticosteroids; RCT, randomized control trial; NRSI, non-randomized study of interventions.

	Corticoste	eroids	Cont	rol		Risk Difference	Risk Difference
Study or Subgroup	Events		Events		Weight	M-H, Fixed, 95% Cl	M–H, Fixed, 95% Cl
5.1.1 RCT ICS							
Covelli 2015	0	71	1	72	0.8%	-0.01 [-0.05, 0.02]	
Gelfand 2005	0	176	0	58	1.0%	0.00 [-0.02, 0.02]	+
Li 1999	0	64	0	64	0.7%	0.00 [-0.03, 0.03]	+
Novak-Laus 2003	0	15	0	15	0.2%	0.00 [-0.12, 0.12]	
Reed 1998	0	384	0	363	4.3%	0.00 [-0.01, 0.01]	+
Tinkelman 1993 Subtotal (95% CI)	0	102 812	0	93 665	1.1% 8.1%	0.00 [-0.02, 0.02] - 0.00 [-0.01, 0.01]	ŧ
Total events	0		1				
Heterogeneity: Chi ² =	= 0.74, df =	5 (P = 0)	98); I ² =	0%			
Test for overall effect	z = 0.37 (P = 0.71)				
5.1.2 RCT INS							
Howland 1996	0	77	0	77	0.9%	0.00 [-0.03, 0.03]	+
Maspero 2008 Subtotal (95% CI)	0	85 162	0	43 120	0.7% 1.5%	0.00 [-0.04, 0.04] 0.00 [-0.02, 0.02]	↓
Total events	0		0				
Heterogeneity: Chi ² =	- 0 00 df -	1/D 1	$001 \cdot 1^2 =$	∩0∕			
Test for overall effect				0%			
5.1.3 NRSI ICS		P = 1.00		076			
)	16592 16592		-0.00 [-0.00, -0.00] - 0.00 [-0.00, -0.00]	
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI)	:: Z = 0.00 (I	P = 1.00 4928)	16592			-
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not a	:: Z = 0.00 () 12 12 pplicable	4928 4928 4928	76	16592			-
5.1.3 NRSI ICS Chang 2017	:: Z = 0.00 () 12 12 pplicable	4928 4928 4928	76	16592			
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect 5.1.4 NRSI INS	:: Z = 0.00 () 12 12 pplicable	4928 4928 4928	76	16592			
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect	12 12 12 12 12 12 12 12 12 12 12 12 12 1	4928 4928 4928 9928 P = 0.01	76 76	16592 16592	87.4%	-0.00 [-0.00, -0.00]	
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect 5.1.4 NRSI INS Mohd Zain 2019	12 12 12 12 12 12 12 12 12 12 12 12 12 1	P = 1.00 4928 4928 4928 P = 0.01 271	76 76	16592 16592 244	87.4% 3.0%	-0.00 [-0.00, -0.00]	•
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not aj Test for overall effect 5.1.4 NRSI INS Mohd Zain 2019 Subtotal (95% CI)	t: Z = 0.00 (12 12 pplicable t: Z = 2.45 (16 16 pplicable	4928 4928 4928 4928 9 = 0.01 271 271	76 76 76 7 7 7	16592 16592 244	87.4% 3.0%	-0.00 [-0.00, -0.00]	•
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not aj Test for overall effect 5.1.4 NRSI INS Mohd Zain 2019 Subtotal (95% CI) Total events Heterogeneity: Not aj	t: Z = 0.00 (12 12 pplicable t: Z = 2.45 (16 16 pplicable	4928 4928 4928 4928 9 = 0.01 271 271	76 76 76 7 7 7	16592 16592 244 244	87.4% 3.0%	-0.00 [-0.00, -0.00]	
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect 5.1.4 NRSI INS Mohd Zain 2019 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect	t: Z = 0.00 (12 12 pplicable t: Z = 2.45 (16 16 pplicable	P = 1.00 4928 4928 4928 $P = 0.01$ 271 271 $P = 0.09$	76 76 76 7 7 7	16592 16592 244 244	87.4% 3.0% 3.0%	-0.00 [-0.00, -0.00] 0.03 [-0.00, 0.07] 0.03 [-0.00, 0.07]	
5.1.3 NRSI ICS Chang 2017 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect 5.1.4 NRSI INS Mohd Zain 2019 Subtotal (95% CI) Total events Heterogeneity: Not a Test for overall effect Total (95% CI)	t: Z = 0.00 (1 12 12 pplicable t: Z = 2.45 (1 16 16 pplicable t: Z = 1.70 (1 28	P = 1.00 4928 4928 4928 P = 0.01 271 2	76 76 7 7 7 9	16592 16592 244 244 17621	87.4% 3.0% 3.0%	-0.00 [-0.00, -0.00] 0.03 [-0.00, 0.07] 0.03 [-0.00, 0.07]	

B)

,	Corticost	eroids	Cont	rol		Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M–H, Fixed, 95% Cl
6.1.1 RCT ICS							
Covelli 2015	0	71	1	72	0.6%	-0.01 [-0.05, 0.02]	
Gelfand 2005	0	176	0	58	0.7%	0.00 [-0.02, 0.02]	
Li 1999	0	64	0	64	0.5%	0.00 [-0.03, 0.03]	
Novak–Laus 2003	0	15	0	15	0.1%	0.00 [-0.12, 0.12]	
Reed 1998	0	384	0	363	3.1%	0.00 [-0.01, 0.01]	+
Sheffer 2005	2	10890	2	10773	90.8%	-0.00 [-0.00, 0.00]	
Tinkelman 1993	0	102	0	93	0.8%	0.00 [-0.02, 0.02]	
Subtotal (95% CI)		11702		11438	96.7%	-0.00 [-0.00, 0.00]	
Total events	2		3				
Heterogeneity: Chi ² =	= 0.73, df =	6 (P = 0	.99); I ² =	0%			
Test for overall effect	: Z = 0.30 (P = 0.76)				
6.1.2 RCT INS							
Howland 1996	0	77	0	77	0.6%	0.00 [-0.03, 0.03]	
Maspero 2008	0	85	0	43	0.5%	0.00 [-0.04, 0.04]	
Subtotal (95% CI)		162		120	1.1%	0.00 [-0.02, 0.02]	
Total events	0		0				
Heterogeneity: Chi ² =	= 0.00, df =	1 (P = 1)	$.00); I^2 =$	0%			
Test for overall effect	z = 0.00 (P = 1.00)				
6.1.4 NRSI INS							
Mohd Zain 2019	16	271	7	244	2.2%	0.03 [-0.00, 0.07]	+
Subtotal (95% CI)		271		244	2.2%	0.03 [-0.00, 0.07]	
Total events	16		7				
Heterogeneity: Not a	oplicable						
Test for overall effect	Z = 1.70 (P = 0.09)				
Total (95% CI)		12135		11802	100.0%	0.00 [-0.00, 0.00]	
Total events	18		10				
Heterogeneity: Chi ² =	= 12.94, df =	= 9 (P =	0.17); I ²	= 30%			
Test for overall effect	: Z = 1.16 (P = 0.25)				-0.1 -0.05 0 0.05 0.1 Favours [corticosteroids] Favours [control]
Test for subgroup dif	ferences: C	hi ² = 2.9	0, df = 2	(P = 0.2)	$(3), I^2 = 3$	1.1%	ravours (controsteroius) ravours (control)

C)

•)	.		. .			B: 1 B:00	
Church and Carbonna	Corticoste		Contr		W	Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	weight	M-H, Fixed, 95% Cl	M–H, Fixed, 95% Cl
7.2.1 RCT ICS IOP inc							
Duh 2020	10	231	2	81	8.3%	0.02 [-0.02, 0.06]	+
Ferguson 2017	0	303	1	307	21.0%	-0.00 [-0.01, 0.01]	+
Kerwin 2019	7	186	3	125	10.3%	0.01 [-0.02, 0.05]	+
Moss 2017	0	1	0	1	0.1%	0.00 [-0.85, 0.85]	
Subtotal (95% CI)	0	721	Ŭ	514	39.7%	0.01 [-0.01, 0.02]	
	17		6	511	551170	0.01[0.01, 0.02]	
Total events	17		6				
Heterogeneity: Chi ² =				30%			
Test for overall effect:	Z = 0.77 (F	P = 0.44))				
7.2.2 RCT ICS IOP >2	1						
Kemp 2004	0	212	1	108	9.9%	-0.01 [-0.03, 0.01]	+
Kerwin 2019	5	186	4	125	10.3%	-0.01 [-0.04, 0.03]	+
Li 1999	2	64	3	64	4.4%	-0.02 [-0.08, 0.05]	
	2		2		4.4% 24.6%		
Subtotal (95% CI)		462		297	24.0%	-0.01 [-0.03, 0.01]	
Total events	7		8				
Heterogeneity: $Chi^2 =$	0.08, df =	2 (P = 0.	96); $I^2 =$	0%			
Test for overall effect:	Z = 0.77 (F	P = 0.44))				
	X ²	.,					
7.2.3 RCT ICS IOP >2	2						
		1 5	0	1 6	1 00/		
Novak-Laus 2003	4	15	0	15	1.0%	0.27 [0.03, 0.50]	
Subtotal (95% CI)		15		15	1.0%	0.27 [0.03, 0.50]	
Total events	4		0				
Heterogeneity: Not ap	plicable						
Test for overall effect:	•	P = 0.03))				
or or or on one of the		5.05)					
7.2.4 RCT INS IOP inc	rease						
		-	~	-	0 10	0.001.005.005	
Adriaensen 2017	0	1	0	1	0.1%	0.00 [-0.85, 0.85]	
Han 2014	0	13	0	12	0.9%	0.00 [-0.14, 0.14]	
Igarashi 2012	0	1	0	1	0.1%	0.00 [-0.85, 0.85]	
Marple 2011	1	26	0	26	1.8%	0.04 [-0.06, 0.14]	- -
Rosenwasser 2008	0	1	1	1		-1.00 [-1.85, -0.15]	←─────────────────────────────────────
Rotenberg 2011	0	21	0	39	1.9%	0.00 [-0.07, 0.07]	
Weinstein 2014	1	197	0	48	5.3%	0.01 [-0.03, 0.04]	Ť
Subtotal (95% CI)		260		128	10.1%	0.00 [-0.03, 0.04]	•
Total events	2		1				
Heterogeneity: $Chi^2 =$	5.88. df =	6 (P = 0.	44): $I^2 =$	0%			
Test for overall effect:	,			0,0			
rest for overall effect.	2 = 0.14 (1	- 0.05)					
7.2.5 RCT INS IOP > 2	0						
				-			
Ratner 2006	6	17	3	6	0.6%	-0.15 [-0.61, 0.31]	
Subtotal (95% CI)		17		6	0.6%	-0.15 [-0.61, 0.31]	
Total events	6		3				
Heterogeneity: Not ap			5				
Test for overall effect:		P = 0 53					
rescrot overall effect.	2 - 0.03 (F	- 0.33)					
	2						
7.2.6 RCT INS IOP >2				_			
	0	8	0	8	0.6%	0.00 [-0.21, 0.21]	
Kothiwala 2021	0			201	20.8%	0.02 [0.01, 0.03]	
	12	605	0	201	20.0/0		
Rosenblut 2007		605 613	0	209	21.4%	0.02 [0.00, 0.03]	•
Rosenblut 2007 Subtotal (95% CI)	12		0				•
Rosenblut 2007 Subtotal (95% CI) Total events	12 12	613	0	209			•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² =	12 12 0.04, df =	613 1 (P = 0.	0 85); I ² =	209			•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² =	12 12 0.04, df =	613 1 (P = 0.	0 85); I ² =	209			•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect:	12 12 0.04, df = Z = 2.64 (F	613 1 (P = 0.	0 85); I ² =	209			•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect:	12 12 0.04, df = Z = 2.64 (F	613 1 (P = 0.	0 85); I ² =	209			•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind	12 12 0.04, df = Z = 2.64 (F	613 1 (P = 0. P = 0.008	0 85); I ² = 8)	209 0%	21.4%	0.02 [0.00, 0.03]	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP inc Dereci 2015	12 12 0.04, df = Z = 2.64 (F	613 1 (P = 0. P = 0.008 38	0 85); I ² =	209 0% 40	21.4% 2.7%	0.02 (0.00, 0.03)	
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP inc Dereci 2015 Subtotal (95% CI)	12 12 0.04, df = Z = 2.64 (F crease 0	613 1 (P = 0. P = 0.008	0 85); I ² = 8) 0	209 0%	21.4%	0.02 [0.00, 0.03]	•
Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP inc Dereci 2015 Subtotal (95% CI) Total events	12 12 0.04, df = Z = 2.64 (F crease 0 0	613 1 (P = 0. P = 0.008 38	0 85); I ² = 8)	209 0% 40	21.4% 2.7%	0.02 (0.00, 0.03)	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap	12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable	613 1 (P = 0. P = 0.008 38 38 38	0 85); I ² = 8) 0 0	209 0% 40	21.4% 2.7%	0.02 (0.00, 0.03)	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap	12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable	613 1 (P = 0. P = 0.008 38 38 38	0 85); I ² = 8) 0 0	209 0% 40	21.4% 2.7%	0.02 (0.00, 0.03)	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap	12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable	613 1 (P = 0. P = 0.008 38 38 38	0 85); I ² = 8) 0 0	209 0% 40	21.4% 2.7%	0.02 (0.00, 0.03)	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP inc Dereci 2015 Subtotal (95% CI)	12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable	613 1 (P = 0. P = 0.008 38 38 38	0 85); I ² = 8) 0 0	209 0% 40 40	21.4% 2.7%	0.02 (0.00, 0.03)	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap Test for overall effect: Total (95% CI)	12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable Z = 0.00 (F	613 $1 (P = 0.008)$ $P = 0.008$ 38 38 38 $P = 1.000$	0 85); $I^2 = 8)$ 0 0	209 0% 40 40	21.4% 2.7% 2.7%	0.02 [0.00, 0.03] 0.00 [-0.05, 0.05] 0.00 [-0.05, 0.05]	•
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap Test for overall effect: Total (95% CI) Total events	12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable Z = 0.00 (F 48	613 1 (P = 0. 2 = 0.008 38 38 2 = 1.00) 2126	$\begin{pmatrix} 0 \\ 85 \end{pmatrix}; l^2 = \\ 8 \end{pmatrix}$ 0 0 18	209 0% 40 40 40	21.4% 2.7% 2.7% 100.0%	0.02 [0.00, 0.03] 0.00 [-0.05, 0.05] 0.00 [-0.05, 0.05]	
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP inc Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap Test for overall effect: Total (95% CI) Total events Heterogeneity: Chi ² =	12 12 12 Z = 2.64 (F crease 0 0 0 0 0 0 0 0 0 2 = 0.00 (F 48 22.38, df =	613 1 (P = 0. 2 = 0.008 38 38 2 = 1.00) 2126 = 18 (P =	$ \begin{array}{c} 0 \\ 85); l^2 = \\ 8) \\ 0 \\ 0 \\ 18 \\ 0.22); l^2 \end{array} $	209 0% 40 40 40	21.4% 2.7% 2.7% 100.0%	0.02 [0.00, 0.03] 0.00 [-0.05, 0.05] 0.00 [-0.05, 0.05]	
Rosenblut 2007 Subtotal (95% CI) Total events Heterogeneity: Chi ² = Test for overall effect: 7.2.7 NRSI ICS IOP ind Dereci 2015 Subtotal (95% CI) Total events Heterogeneity: Not ap Test for overall effect: Total (95% CI) Total events	12 12 12 0.04, df = Z = 2.64 (F crease 0 0 plicable Z = 0.00 (F 48 22.38, df = Z = 1.23 (F	613 1 (P = 0. P = 0.008 38 38 P = 1.00) 2126 = 18 (P = P = 0.22)	$ \begin{array}{c} 0 \\ 85); \ ^{2} = \\ 8) \\ 0 \\ 0 \\ 18 \\ 0.22); \ ^{2} \end{array} $	209 0% 40 40 40 1209 f = 20%	21.4% 2.7% 2.7%	0.02 [0.00, 0.03] 0.00 [-0.05, 0.05] 0.00 [-0.05, 0.05] 0.01 [-0.00, 0.02]	-1 -0.5 0 0.5 Favours [corticosteroids] Favours [control]

 $I^2 = 39.2\%$

D)

1	Cortic	osteroid	s		Control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
9.1.1 RCT ICS									
Moss 2017	14.7	2.4	10	14.8	3.8	10		-0.10 [-2.89, 2.69]	
Subtotal (95% CI)			10			10	0.2%	-0.10 [-2.89, 2.69]	
Heterogeneity: Not ap	plicable								
Test for overall effect:	Z = 0.07	(P = 0.94)	ł)						
9.1.2 RCT INS									
Kothiwala 2021	16.26	2.59	33	16.21	2.69	33	0.8%	0.05 [-1.22, 1.32]	
Rotenberg 2011	13.1436	2.3522	39	13.1	2.8	21	0.7%	0.04 [-1.36, 1.45]	
Yuen 2013	16.3	4.8	9	16	3	10	0.1%	0.30 [-3.35, 3.95]	· · · · · · · · · · · · · · · · · · ·
Subtotal (95% CI)			81			64	1.6%	0.06 [-0.85, 0.98]	
Heterogeneity: Tau ² =	0.00; Chi	$^{2} = 0.02$	df = 2	(P = 0.	99); I ² =	0%			
Test for overall effect:	Z = 0.14	(P = 0.89)))						
9.1.3 NRSI ICS									
Alsaadi 2012	14	3.3	69	14	2.9	24	0.7%	0.00 [-1.40, 1.40]	
Emin 2011	13.1	0.5378	266	12.65	0.6518	160	92.7%	0.45 [0.33, 0.57]	
Gunay 2019	15.9	1.9	31	15.8	1.5	22	1.6%	0.10 [-0.82, 1.02]	
Subtotal (95% CI)			366			206	95.0%	0.44 [0.32, 0.56]	♦
Heterogeneity: Tau² =	0.00; Chi	$^{2} = 0.94$	df = 2	(P = 0.	63); I ² =	0%			
Test for overall effect:	Z = 7.29	(P < 0.00)	0001)						
9.1.4 NRSI INS									
Mohd Zain 2019	15.24	2.314	50	13.91	1.858	45	1.9%	1.33 [0.49, 2.17]	
Ozkaya 2011	17	4.3529	150	15.95	3.3588	90	1.4%	1.05 [0.07, 2.03]	
Subtotal (95% CI)			200			135	3.3%	1.21 [0.57, 1.85]	•
Heterogeneity: Tau ² =	0.00; Chi	$^{2} = 0.18$	df = 1	(P = 0.	67); $I^2 =$	0%			
Fest for overall effect:	Z = 3.72	(P = 0.00)	002)		.,				
Total (95% CI)			657			415	100.0%	0.46 [0.34, 0.57]	•
Heterogeneity: Tau ² =	0.00 [.] Chi	$^{2} = 7.43$	df = 8	(P = 0)	$(49) \cdot ^2 =$				· · · · · · · · · · · · · · · · · · ·
Test for overall effect:				0 .		0,0			-4 -2 0 2
Test for subgroup diff				= 3 (P =	0 10) I ²	= 52 4	%		Corticosteroids Control
rest for subgroup uni	crences. c	- 0	, ur –		0.10), 1	- 52.4	/0		

E)

1	B	efore			After			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
8.2.1 RCT ICS									
Moss 2017	14.3	3	10	14.7	2.4	10	1.4%	. , .	
Novak-Laus 2003	17.1	3.1	30	17.3	3.2	30	3.2%		
Subtotal (95% CI)			40			40	4.6%	-0.26 [-1.59, 1.06]	
Heterogeneity: Tau ² =				(P = 0.89)); $I^2 = 0\%$				
Test for overall effect	: Z = 0.39 (P = 0.70))						
8.2.2 RCT INS									
Kothiwala 2021	16.315	2.47	33	16.26	2.59	33	5.5%	0.05 [-1.17, 1.28]	
Ratner 2009	14.6608	2.4961	251	14.9007	2.4138	251	44.2%	-0.24 [-0.67, 0.19]	
Rotenberg 2011	13.2077	2.7431	39	13.1436	2.3522	39	6.3%	0.06 [-1.07, 1.20]	
Yuen 2013	15.8	4.6	9	16.3	4.8	9	0.4%		
Subtotal (95% CI)			332			332	56.4%	-0.18 [-0.56, 0.20]	•
Heterogeneity: Tau ² = Test for overall effect	,	,		(P = 0.94)); $I^2 = 0\%$				
8.2.3 NRSI ICS									
Simsek 2016	13.755	1 8264	50	13.8	1.7129	50	16.9%	-0.04 [-0.74, 0.65]	
Subtotal (95% CI)	13.735	1.0204	50	15.0	1.7125	50		-0.04 [-0.74, 0.65]	
Heterogeneity: Not ap	plicable							• • • • • • • • • • • •	Ť
Test for overall effect		(P = 0.90)))						
8.2.4 NRSI INS									
Bui 2005	15.4	4.3	12	18	3.8	12	0.8%	-2.60 [-5.85, 0.65]	·
Forwith 2011	15	3.1	89	14.3	3.3	89	9.2%	0.70 [-0.24, 1.64]	
Man 2013	13.3	2.9	23	13.3	2.8	23	3.0%	0.00 [-1.65, 1.65]	
Yenigun 2018	16.9	2.035	29	16.75	1.6432	29	9.0%	0.15 [-0.80, 1.10]	_
Subtotal (95% CI)			153			153	22.0%	0.20 [-0.55, 0.95]	
Heterogeneity: Tau ² =				(P = 0.26)); $I^2 = 24$	%			
Test for overall effect	Z = 0.52 ((P = 0.60))						
Total (95% CI)			575			575	100.0%	-0.06 [-0.35, 0.22]	•
Heterogeneity: Tau ² =	= 0.00; Chi ²	$^{2} = 5.95$.	df = 1	0 (P = 0.8)	2); $I^2 = 0$	%			
									-4 -2 0 2 4 Before After
Test for overall effect									

Supplementary material.

Figure 3. Sensitivity analyses for comparing adult and pediatric populations (respectively) for A,B) glaucoma incidence; C,D) OHT incidence; E,F) endpoint IOP difference between ICS or INS users and controls; G,H) change in IOP after ICS or INS use compared to pre-treatment baseline.

Abbreviations: CI, confidence interval; OHT, ocular hypertension; IOP, intraocular pressure; ICS, inhalational corticosteroids; INS, intranasal corticosteroids; RCT, randomized control trial; NRSI, non-randomized study of interventions.

-	Corticost	eroids	Cont	rol		Risk Difference	Risk Difference
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% Cl	M–H, Fixed, 95% Cl
10.1.1 RCT ICS							
Covelli 2015	0	71	1	72	0.6%	-0.01 [-0.05, 0.02]	
Li 1999	0	64	0	64	0.5%	0.00 [-0.03, 0.03]	
Novak-Laus 2003	0	15	0	15	0.1%	0.00 [-0.12, 0.12]	
Reed 1998	0	384	0	363	3.2%	0.00 [-0.01, 0.01]	<u>+</u>
Sheffer 2005 Subtotal (95% CI)	2	10890 11424	2	10773 11287	92.7% 97.1%	-0.00 [-0.00, 0.00] - 0.00 [-0.00, 0.00]	
Total events	2		3				
Heterogeneity: Chi ² = Test for overall effect	,		/ /	0%			
10.1.2 RCT INS							
Howland 1996	0	77	0	77	0.7%	0.00 [-0.03, 0.03]	
Subtotal (95% CI)		77		77	0.7%	0.00 [-0.03, 0.03]	
Total events	0		0				
Heterogeneity: Not ap	oplicable						
Test for overall effect	z = 0.00 (P = 1.00)				
10.1.3 NRSI ICS							
Subtotal (95% CI)		0		0		Not estimable	
Total events	0		0				
Heterogeneity: Not ap Test for overall effect		able					
10.1.4 NRSI INS							
Mohd Zain 2019 Subtotal (95% CI)	16	271 271	7	244 244	2.2% 2.2%	0.03 [-0.00, 0.07] 0.03 [-0.00, 0.07]	
Total events Heterogeneity: Not a Test for overall effect		R — 0.00)	7				
Test for overall effect	Z = 1.70 (P = 0.09	,				
Total (95% CI)		11772		11608	100.0%	0.00 [-0.00, 0.00]	
Total events	18		10				
Heterogeneity: Chi ² =	= 13.33, df =	= 6 (P = 0	0.04); I ²	= 55%		-	-0.1 -0.05 0 0.05 0.1
Test for overall effect	7 - 122(P = 0.22	1				Favours [corticosteroids] Favours [control]

B)

Study or Subgroup	Corticost Events		Cont Events		Woight	Risk Difference M-H, Fixed, 95% CI	Risk Difference M–H, Fixed, 95% Cl
10.1.1 RCT ICS	Lvents	TULAI	Lvents	TULAT	weight	M-11, Fixed, 95% CI	
Covelli 2015	0	71	1	72	0.6%	-0.01 [-0.05, 0.02]	
Li 1999	Ő	64	0		0.5%	0.00 [-0.03, 0.03]	
Novak-Laus 2003	0 0	15	0		0.1%	0.00 [-0.12, 0.12]	
Reed 1998	0	384	0		3.2%	0.00 [-0.01, 0.01]	+
Sheffer 2005	2	10890	2	10773	92.7%	-0.00 [-0.00, 0.00]	
Subtotal (95% CI)		11424		11287	97.1%	-0.00 [-0.00, 0.00]	T
Total events	2		3				
Heterogeneity: Chi ² Test for overall effec				0%			
10.1.2 RCT INS							
Howland 1996 Subtotal (95% CI)	0	77 77	0	77 77	0.7% 0.7%	0.00 [-0.03, 0.03] 0.00 [-0.03, 0.03]	
Total events	0		0				
Heterogeneity: Not a	pplicable						
Test for overall effec	t: $Z = 0.00$ (P = 1.00)				
10.1.3 NRSI ICS							
Subtotal (95% CI)		0		0		Not estimable	
Total events	0		0				
Heterogeneity: Not a Test for overall effec		able					
10.1.4 NRSI INS							
Mohd Zain 2019 Subtotal (95% CI)	16	271 271	7	244 244	2.2% 2.2%	0.03 [-0.00, 0.07] 0.03 [-0.00, 0.07]	
Total events	16		7				
Heterogeneity: Not a	pplicable						
Test for overall effec	t: $Z = 1.70$ (P = 0.09)				
Total (95% CI)		11772		11608	100.0%	0.00 [-0.00, 0.00]	
Total events	18		10				
Heterogeneity: Chi ²				= 55%			-0.1 -0.05 0 0.05 0.1
Test for overall effec							

C)

Study or Subgroup	Corticoster Events		Cont Events		Weight	Risk Difference M-H, Fixed, 95% CI	Risk Difference M-H, Fixed, 95% Cl
10.3.1 RCT ICS IOP in					-		
Duh 2020	10	231	2	81	6.3%	0.02 [-0.02, 0.06]	-
Ferguson 2017	0	303	1	307	16.1%	-0.00 [-0.01, 0.01]	
Kerwin 2019	7	186	- 3	125	7.9%	0.01 [-0.02, 0.05]	
Moss 2017	0	100	0	1	0.1%	0.00 [-0.85, 0.85]	
Subtotal (95% CI)	Ũ	721	0	514	30.3%	0.01 [-0.01, 0.02]	
Total events	17		6		00.070		
Heterogeneity: Chi ² = Test for overall effect:	4.30, df = 3		23); I ² =	30%			
10.3.2 RCT ICS IOP >	21						
Cemp 2004	0	212	1	108	7.5%	-0.01 [-0.03, 0.01]	+
Kerwin 2019	5	186	4	125	7.9%	-0.01 [-0.04, 0.03]	+
i 1999	2	64	3	64	3.4%	-0.02 [-0.08, 0.05]	
Subtotal (95% CI)		462		297	18.8%	-0.01 [-0.03, 0.01]	
otal events	7		8				
leterogeneity: Chi ² = Test for overall effect:				0%			
0.3.3 RCT ICS IOP >							
Novak-Laus 2003	4	15	0	15	0.8%	0.27 [0.03, 0.50]	
Subtotal (95% CI)		15		15	0.8%	0.27 [0.03, 0.50]	
Total events	4		0				
Heterogeneity: Not ap Test for overall effect:	•	= 0.03))				
LO.3.4 RCT INS IOP in							
Adriaensen 2017	0	1	0	1	0.1%	0.00 [-0.85, 0.85]	
lan 2014	0	13	0	12	0.7%	0.00 [-0.14, 0.14]	
garashi 2012	0	1	0	1	0.1%	0.00 [-0.85, 0.85]	
aForce 2012	7	734	1	362	25.6%	0.01 [-0.00, 0.02]	•
Marple 2011	1	26	0	26	1.4%	0.04 [-0.06, 0.14]	
Rosenwasser 2008	0	1	1	1	0.1%	-1.00 [-1.85, -0.15]	←────
Rotenberg 2011	0	21	0	39	1.4%	0.00 [-0.07, 0.07]	
Weinstein 2014	1	197	0	48	4.1%	0.01 [-0.03, 0.04]	+
Subtotal (95% CI)		994	-	490	33.3%	0.01 [-0.01, 0.02]	
Total events Heterogeneity: Chi ² = Test for overall effect:				0%			
10.3.5 RCT INS IOP >							
Ratner 2006	6	17	3	6		-0.15 [-0.61, 0.31]	
Subtotal (95% CI)		17		6	0.5%	-0.15 [-0.61, 0.31]	
Total events Heterogeneity: Not ap Test for overall effect:		= 0.53)	3				
10.3.6 RCT INS IOP >	22						
(othiwala 2021	0	8	0	8	0.4%	0.00 [-0.21, 0.21]	
Rosenblut 2007	12	605	0	201	15.9%	0.02 [0.01, 0.03]	
Subtotal (95% CI)		613	5	209	16.3%	0.02 [0.00, 0.03]	•
Total events	12		0			,	ľ
Heterogeneity: Chi ² = Test for overall effect:	0.04, df = 1		85); I ² =	0%			
LO.3.7 NRSI ICS IOP in Subtotal (95% CI)		0		0		Not estimable	
Fotal events Heterogeneity: Not ap Fest for overall effect:	•	ble	0				
Fotal (95% CI)		2822		1521	100.0%	0.01 [-0.00, 0.01]	
Total (95% CI) Total events	55	2022	19	1221	100.0%	0.01 [-0.00, 0.01]	
Heterogeneity: $Chi^2 =$		18 /D		2 - 200			
				= 20%	,		-1 -0.5 0 0.5
Test for overall effect: Test for subgroup diff				(P = 0	.08), $I^2 = -$	49.3%	Favours [corticosteroids] Favours [control]

D)

/ Study or Subgroup	Corticostero Events		Contro		Woight	Risk Difference M-H, Fixed, 95% Cl	Risk Difference M–H, Fixed, 95% Cl
10.4.1 RCT ICS IOP in		ισται	Events	σιαι	weight	M-n, rixeu, 95% Ci	M-H, Fixed, 55% Cl
Subtotal (95% CI)	lereuse	0		0		Not estimable	
Fotal events	0	•	0	•			
Heterogeneity: Not ap			•				
Test for overall effect:		e					
10.4.2 RCT ICS IOP >	21						
Subtotal (95% CI)		0		0		Not estimable	
Total events	0		0				
Heterogeneity: Not ap	plicable						
Test for overall effect:	Not applicabl	e					
10.4.3 RCT ICS IOP >	22						
Subtotal (95% CI)		0		0		Not estimable	
Total events	0		0				
Heterogeneity: Not ap							
Test for overall effect:	Not applicabl	e					
10.4.4 RCT INS IOP ii	ncrease						
Subtotal (95% CI)		0		0		Not estimable	
Fotal events	0		0				
Heterogeneity: Not ap							
Test for overall effect:	Not applicabl	e					
10.4.5 RCT INS IOP >	·20						
Subtotal (95% CI)		0		0		Not estimable	
Fotal events	0		0				
Heterogeneity: Not ap	•						
Test for overall effect:	Not applicabl	e					
10.4.6 RCT INS IOP >	22			-			
Subtotal (95% CI)		0		0		Not estimable	
Fotal events	0		0				
Heterogeneity: Not ap Fest for overall effect:		•					
rest for overall effect:	ποι αρρικαρί	e					
10.4.7 NRSI ICS IOP i			-		100.00	0.001.007.007	
Dereci 2015 Subtotal (95% CI)	0	38 38	0		100.0% 100.0%	0.00 [-0.05, 0.05] 0.00 [-0.05, 0.05]	
Fotal events	0	50	0	40	100.0%	0.00 [-0.03, 0.03]	Ţ
Heterogeneity: Not ap	-		0				
Test for overall effect:		1.00))				
Fotal (95% CI)		38		40	100.0%	0.00 [-0.05, 0.05]	
Total events	0	50	0		10010/0		Ţ
Heterogeneity: Not ap	-		v				
Fest for overall effect:		1.00))				-1 -0.5 0 0.5
Test for subgroup dif	,	,					Favours [corticosteroids] Favours [control]

	Cortic	osteroid	s	C	ontrol			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
11.1.1 RCT ICS									
Moss 2017 Subtotal (95% CI)	14.7	2.4	10 10	14.8	3.8	10 10	6.9% 6.9%	-0.10 [-2.89, 2.69] -0.10 [-2.89, 2.69]	
Heterogeneity: Not app	olicable								
Test for overall effect:	Z = 0.07 (P = 0.94	.)						
11.1.2 RCT INS									
Kothiwala 2021	16.26	2.59	33	16.21	2.69	33	18.4%	0.05 [-1.22, 1.32]	
Rotenberg 2011	13.1436	2.3522	39	13.1	2.8	21	16.8%		
Yuen 2013 Subtotal (95% CI)	16.3	4.8	9 81	16	3	10 64	4.4% 39.7%		
Heterogeneity: Tau ² =	0.00; Chi ²	= 0.02,	df = 2	(P = 0.9)	99); I ² =	= 0%			
Test for overall effect:	Z = 0.14 (P = 0.89)						
11.1.3 NRSI ICS									
Shroff 2018	15.31	3.27	200	13.39	1.95	200	28.9%	1.92 [1.39, 2.45]	
Subtotal (95% CI)			200			200	28.9%	1.92 [1.39, 2.45]	•
Heterogeneity: Not app									
Test for overall effect:	Z = 7.13 (P < 0.00	001)						
11.1.4 NRSI INS									
Mohd Zain 2019	15.24	2.314		13.91	1.858	45	24.5%		——————————————————————————————————————
Subtotal (95% CI)			50			45	24.5%	1.33 [0.49, 2.17]	
Heterogeneity: Not ap									
Test for overall effect:	Z = 3.10 (P = 0.00	2)						
Total (95% CI)			341			319	100.0%	0.90 [0.08, 1.73]	
Heterogeneity: Tau ² =	0.54; Chi ²	= 13.10), df =	5 (P = 0)	.02); I ²	= 62%			-4 -2 0 2 4
Test for overall effect:	1	D 0.07							-4 -2 0 2 4

F)

,	Corti	icostero	ids		Control			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
11.2.1 RCT ICS			•			•		No	
Subtotal (95% CI)			0			0		Not estimable	
Heterogeneity: Not ap									
Test for overall effect	: Not app	plicable							
11.2.2 RCT INS									
Subtotal (95% CI)			0			0		Not estimable	
Heterogeneity: Not ap	plicable								
Test for overall effect	: Not app	plicable							
11.2.3 NRSI ICS									
Alsaadi 2012	14	3.3	69	14	2.9	24	0.7%	0.00 [-1.40, 1.40]	
Emin 2011	13.1	0.5378	266	12.65	0.6518	160	96.2%	0.45 [0.33, 0.57]	
Gunay 2019	15.9	1.9	31	15.8	1.5	22	1.6%	0.10 [-0.82, 1.02]	
Subtotal (95% CI)			366			206	98.6%	0.44 [0.32, 0.56]	♦
Heterogeneity: Tau ² =	= 0.00; C	$Chi^2 = 0.$	94, df =	= 2 (P =	0.63); I ²	= 0%			
Test for overall effect	: Z = 7.2	29 (P < 0	0.00001	.)					
11.2.4 NRSI INS									
Ozkaya 2011	17	4.3529	150	15.95	3.3588	90	1.4%	1.05 [0.07, 2.03]	
Subtotal (95% CI)			150			90	1.4%	1.05 [0.07, 2.03]	
Heterogeneity: Not ap	plicable								
Test for overall effect	Z = 2.0	09 (P = 0)	0.04)						
Total (95% CI)			516			296	100.0%	0.45 [0.33, 0.57]	◆
Heterogeneity: Tau ² =	= 0.00; C	chi ² = 2.	39, df =	= 3 (P =	0.50); I ²	= 0%			-4 -2 0 2
Test for overall effect	: Z = 7.4	9 (P < 0	.00001	.)					-4 -2 0 2 Corticosteroids Control
Test for subgroup dif	ferences	: Chi ² =	1.45, d	f = 1 (F	P = 0.23)	$1^2 = 3$	1.2%		Controsteroius Controi

G)

	B	efore		A	After			Mean Difference	Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI	
11.3.1 RCT ICS										
Chylack 2009	14.8	3	785	16.31	3.088	785	14.5%	-1.51 [-1.81, -1.21]		
Moss 2017	14.3	3	10	14.7	2.4	10	5.5%	-0.40 [-2.78, 1.98]		
Novak-Laus 2003	17.1	3.1	30	17.3	3.2	30	8.5%	-0.20 [-1.79, 1.39]		
Subtotal (95% CI)			825		_	825	28.5%	-1.09 [-1.99, -0.18]		
Heterogeneity: Tau ² =				(P = 0.20)	; $I^2 = 39$	%				
Test for overall effect	:: Z = 2.36 ((P = 0.02)	2)							
11.3.2 RCT INS										
Kothiwala 2021	16.315	2.47	33	16.26	2.59	33	10.3%	0.05 [-1.17, 1.28]		
Rotenberg 2011	13.2077			13.1436		39	10.7%	0.06 [-1.07, 1.20]	_	
Yuen 2013	15.8	4.6	9	16.3	4.8	9	2.2%	-0.50 [-4.84, 3.84]		
Subtotal (95% CI)			81			81	23.3%	0.04 [-0.78, 0.86]		
Heterogeneity: Tau ² =	= 0.00; Chi ²	$^{2} = 0.06$,	df = 2	(P = 0.97)	; $I^2 = 0\%$	5				
Test for overall effect	Z = 0.10	(P = 0.92)	2)							
11.3.3 NRSI ICS										
Simsek 2016	13.755	1.8264	50	13.8	1.7129	50	13.0%	-0.04 [-0.74, 0.65]		
Subtotal (95% CI)			50			50	13.0%	-0.04 [-0.74, 0.65]	•	
Heterogeneity: Not ap	oplicable									
Test for overall effect	Z = 0.13	(P = 0.90)))							
11.3.4 NRSI INS										
Bui 2005	15.4	4.3	12	18	3.8	12	3.6%	-2.60 [-5.85, 0.65]	·	
Forwith 2011	15	3.1	89	14.3	3.3	89	11.8%	0.70 [-0.24, 1.64]	+	
Man 2013	13.3	2.9	23	13.3	2.8	23	8.2%	0.00 [-1.65, 1.65]		
Yenigun 2018	16.9	2.035	29	16.75	1.6432	29	11.7%	0.15 [-0.80, 1.10]		
Subtotal (95% CI)			153			153	35.3%	0.20 [-0.55, 0.95]	•	
Heterogeneity: Tau ² =				(P = 0.26)	; $I^2 = 24$	%				
Test for overall effect	:: Z = 0.52 ((P = 0.60)))							
Total (95% CI)			1109			1109	100.0%	-0.26 [-0.96, 0.45]	-	
Heterogeneity: Tau ² =	= 0.87; Chi ²	$^{2} = 45.64$	4, df =	10 (P < 0.0	00001);	$^{2} = 78^{2}$	%			
Test for overall effect									–4 –2 Ó Ż Before After	
Test for subgroup dif	foroncos C	ы ² — г -	0 4 df _	2(P - 0.1)	F) 12	42 00/			Delute Alter	

H)

-,	В	efore			After			Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI		
11.4.1 RCT ICS											
Subtotal (95% CI)			0			0		Not estimable			
Heterogeneity: Not appl	licable										
Test for overall effect: N	lot appli	cable									
11.4.2 RCT INS											
Ratner 2009	14.6608	2.4961	251	14.9007	2.4138	251	100.0%	-0.24 [-0.67, 0.19]			
Subtotal (95% CI)			251			251	100.0%	-0.24 [-0.67, 0.19]			
Heterogeneity: Not appl	licable										
Test for overall effect: Z	Z = 1.09	(P = 0.27)	7)								
11.4.3 NRSI ICS											
Subtotal (95% CI)			0			0		Not estimable			
Heterogeneity: Not appl	licable		-			-					
Test for overall effect: N		cable									
11.4.4 NRSI INS											
Subtotal (95% CI)			0			0		Not estimable			
Heterogeneity: Not appl											
Test for overall effect: N	Not appli	cable									
Total (95% CI)			251			251	100.0%	-0.24 [-0.67, 0.19]	•		
Heterogeneity: Not appl	licable									-+	
Test for overall effect: Z		(P = 0.27)	7)						-4 -2 0 2	4	
Test for subgroup diffe									Before After		