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	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Bagnenko 2011	1	22	3	25	2.2%	0.38 [0.04, 3.38]	· · · · · · · · · · · · · · · · · · ·
Biggs 1976	2	103	4	97	3.7%	0.47 [0.09, 2.51]	
Von Holstein 1987	2	72	4	82	3.8%	0.57 [0.11, 3.02]	
Cormack 1973	3	76	3	74	4.3%	0.97 [0.20, 4.67]	
Tavakoli 2018	3	271	6	139	5.6%	0.26 [0.07, 1.01]	
Hawkey 2001	4	103	5	103	6.3%	0.80 [0.22, 2.89]	
Saidi 2017	4	67	9	64	8.3%	0.42 [0.14, 1.31]	
Bergqvist 1980	7	25	8	25	14.5%	0.88 [0.37, 2.05]	
Engqvist 1979	11	76	12	73	18.5%	0.88 [0.41, 1.87]	
Barer 1983	16	256	35	260	32.8%	0.46 [0.26, 0.82]	
Total (95% CI)		1071		942	100.0%	0.59 [0.43, 0.82]	•
Total events	53		89				-
Heterogeneity, Tau ² =	$= 0.00^{\circ}$ Chi ² =	= 5 22 r	df = 9 (P	= 0.81	$1^{\circ} _{1}^{2} = 0\%$	(+ + + + +
Test for overall effect	'		`			-	0.05 0.2 1 5 2 Favours tranexamic acid Favours placebo

1. All cause mortality random

	Tranexami		Place			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Bagnenko 2011	1	22	3	25	3.1%	0.38 [0.04, 3.38]	· · · · · · · · · · · · · · · · · · ·
Biggs 1976	2	103	4	97	4.5%	0.47 [0.09, 2.51]	
Von Holstein 1987	2	72	4	82	4.1%	0.57 [0.11, 3.02]	
Cormack 1973	3	76	3	74	3.3%	0.97 [0.20, 4.67]	
Tavakoli 2018	3	271	6	139	8.7%	0.26 [0.07, 1.01]	
Hawkey 2001	4	103	5	103	5.5%	0.80 [0.22, 2.89]	
Saidi 2017	4	67	9	64	10.1%	0.42 [0.14, 1.31]	
Bergqvist 1980	7	25	8	25	8.8%	0.88 [0.37, 2.05]	_
Engqvist 1979	11	76	12	73	13.5%	0.88 [0.41, 1.87]	
Barer 1983	16	256	35	260	38.2%	0.46 [0.26, 0.82]	
Total (95% CI)		1071		942	100.0%	0.57 [0.42, 0.79]	•
Total events	53		89				-
Heterogeneity. $Chi^2 =$	5.22. df = 9	$\theta (P = 0)$	$81): ^2 =$	0%			+
Test for overall effect	· ·						0.05 0.2 1 5 20
							Favours tranexamic acid Favours placebo

2. All cause mortality fixed

3. Re-bleeding random

	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Bagnenko 2011	2	22	5	25	2.6%	0.45 [0.10, 2.11]	
Saidi 2017	4	67	12	64	5.0%	0.32 [0.11, 0.94]	
Hawkey 2001	9	103	10	103	7.5%	0.90 [0.38, 2.12]	
Von Holstein 1987	10	69	19	72	10.8%	0.55 [0.28, 1.10]	
Tavakoli 2018	20	271	13	139	11.4%	0.79 [0.40, 1.54]	
Cormack 1973	15	76	20	74	13.9%	0.73 [0.41, 1.31]	
Engqvist 1979	23	76	29	73	20.6%	0.76 [0.49, 1.19]	
Barer 1983	58	256	51	260	28.2%	1.16 [0.83, 1.61]	
Total (95% CI)		940		810	100.0%	0.79 [0.61, 1.02]	◆
Total events	141		159				
Heterogeneity. Tau ² =	= 0.03; Chi ² =	9.14, 0	df = 7 (P	= 0.24	l); I ² = 23	%	
Test for overall effect							0.05 0.2 1 5 20 Favours transexamic acid Favours placebo

4. Re- bleeding fixed

	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Bagnenko 2011	2	22	5	25	2.9%	0.45 [0.10, 2.11]	· · · · · · · · · · · · · · · · · · ·
Saidi 2017	4	67	12	64	7.5%	0.32 [0.11, 0.94]	
Hawkey 2001	9	103	10	103	6.1%	0.90 [0.38, 2.12]	
Von Holstein 1987	10	69	19	72	11.4%	0.55 [0.28, 1.10]	
Tavakoli 2018	20	271	13	139	10.5%	0.79 [0.40, 1.54]	
Cormack 1973	15	76	20	74	12.4%	0.73 [0.41, 1.31]	
Engqvist 1979	23	76	29	73	18.1%	0.76 [0.49, 1.19]	
Barer 1983	58	256	51	260	31.0%	1.16 [0.83, 1.61]	
Total (95% CI)		940		810	100.0%	0.82 [0.67, 1.01]	•
Total events	141		159				-
Heterogeneity: $Chi^2 =$	9.14, df = 7	(P = 0.	24); I ² =	23%			
Test for overall effect	: Z = 1.86 (P	= 0.06)	.,				0.05 0.2 1 5 2'0 Favours transexamic acid Favours placebo

5. Surgical interventions random

	Tranexami		Place			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% Cl
Saidi 2017	0	67	0	64		Not estimable	
Bagnenko 2011	2	22	4	25	6.5%	0.57 [0.11, 2.81]	
Tavakoli 2018	8	271	2	139	6.9%	2.05 [0.44, 9.53]	
Von Holstein 1987	3	72	15	82	9.5%	0.23 [0.07, 0.76]	
Hawkey 2001	5	103	6	103	10.0%	0.83 [0.26, 2.64]	
Biggs 1976	7	103	21	97	14.2%	0.31 [0.14, 0.71]	_ -
Engqvist 1979	10	76	18	73	15.7%	0.53 [0.26, 1.08]	
Bergqvist 1980	11	25	10	25	16.5%	1.10 [0.57, 2.11]	_ _ _
Barer 1983	47	256	40	260	20.7%	1.19 [0.81, 1.75]	
Total (95% CI)		995		868	100.0%	0.70 [0.43, 1.13]	•
Total events	93		116				
Heterogeneity: Tau ² =	= 0.25: Chi ² =	17.47.	df = 7 (P = 0.0	$ 1 : ^2 = 6$	50%	
Test for overall effect					-9.		0.005 0.1 1 10 200 Favours transexamic acid Favours placebo

6. Surgical interventions fixed

	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M–H, Fixed, 95% Cl
Saidi 2017	0	67	0	64		Not estimable	
Bagnenko 2011	2	22	4	25	3.2%	0.57 [0.11, 2.81]	
Tavakoli 2018	8	271	2	139	2.3%	2.05 [0.44, 9.53]	
Von Holstein 1987	3	72	15	82	12.1%	0.23 [0.07, 0.76]	
Hawkey 2001	5	103	6	103	5.2%	0.83 [0.26, 2.64]	
Biggs 1976	7	103	21	97	18.6%	0.31 [0.14, 0.71]	
Engqvist 1979	10	76	18	73	15.8%	0.53 [0.26, 1.08]	
Bergqvist 1980	11	25	10	25	8.6%	1.10 [0.57, 2.11]	
Barer 1983	47	256	40	260	34.2%	1.19 [0.81, 1.75]	
Total (95% CI)		995		868	100.0%	0.78 [0.61, 1.01]	•
Total events	93		116				
Heterogeneity. $Chi^2 =$	17.47. df =	7 (P = 0)	0.01); l ² -	= 60%			$\frac{1}{0.05}$ $\frac{1}{0.2}$ $\frac{1}{1}$ $\frac{1}{5}$ $\frac{1}{20}$
Test for overall effect							0.'05 0.'2 1 5 2'0 Favours transexamic acid Favours placebo

7. Frequency of blood transfusion random

	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Tavakoli 2018	10	271	2	139	0.2%	2.56 [0.57, 11.54]	
Cormack 1973	8	76	11	74	0.8%	0.71 [0.30, 1.66] 👎	· · · · · · · · · · · · · · · · · · ·
Engqvist 1979	21	76	30	73	2.7%	0.67 [0.43, 1.06]	
Von Holstein 1987	47	72	54	82	10.6%	0.99 [0.79, 1.25]	
Hawkey 2001	58	103	64	103	10.8%	0.91 [0.72, 1.14]	
Biggs 1976	77	103	71	97	20.7%	1.02 [0.87, 1.20]	_
Barer 1983	140	225	133	219	25.8%	1.02 [0.88, 1.19]	_
Bergqvist 1980	24	25	23	25	28.3%	1.04 [0.91, 1.20]	
Total (95% CI)		951		812	100.0%	1.00 [0.93, 1.08]	•
Total events	385		388				
Heterogeneity: Tau ² =	= 0.00; Chi ² =	= 6.73, (df = 7 (P	= 0.46	$5); ^2 = 0\%$; -	
Test for overall effect	: Z = 0.00 (P	= 1.00)					0.5 0.7 I 1.5 2 Favours tranexamic acid Favours placebo

8. Frequency of blood transfusion fixed

	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M–H, Fixed, 95% Cl
Tavakoli 2018	10	271	2	139	0.7%	2.56 [0.57, 11.54]	
Cormack 1973	8	76	11	74	2.9%	0.71 [0.30, 1.66]	· · · · · · · · · · · · · · · · · · ·
Engqvist 1979	21	76	30	73	7.9%	0.67 [0.43, 1.06]	_
Von Holstein 1987	47	72	54	82	13.0%	0.99 [0.79, 1.25]	
Hawkey 2001	58	103	64	103	16.4%	0.91 [0.72, 1.14]	
Biggs 1976	77	103	71	97	18.8%	1.02 [0.87, 1.20]	
Barer 1983	140	225	133	219	34.6%	1.02 [0.88, 1.19]	_ - _
Bergqvist 1980	24	25	23	25	5.9%	1.04 [0.91, 1.20]	_
Total (95% CI)		951		812	100.0%	0.98 [0.89, 1.06]	•
Total events	385		388				
Heterogeneity: Chi ² =	6.73, df = 7	P = 0.4	46); I ² =	0%			
Test for overall effect:	Z = 0.57 (P	= 0.57)	·				0.5 0.7 I I.5 2 Favours tranexamic acid Favours placebo

9. Thromboembolic events random

	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% Cl
Cormack 1973	0	76	0	74		Not estimable	
Bagnenko 2011	0	22	0	25		Not estimable	
Saidi 2017	0	67	0	64		Not estimable	
Von Holstein 1987	1	72	0	82	18.6%	3.41 [0.14, 82.44]	
Engqvist 1979	4	76	2	73	37.9%	1.92 [0.36, 10.17]	_
Tavakoli 2018	3	271	б	139	43.5%	0.26 [0.07, 1.01]	
Total (95% CI)		584		457	100.0%	0.89 [0.17, 4.59]	
Total events	8		8				
Heterogeneity. Tau ² =	= 1.12; Chi ² =	4.43, 0	#f = 2 (P	= 0.11	l); l ² = 55	%	
Test for overall effect:							0.001 0.1 1 10 1000 Favours tranexamic acid Favours placebo

10. Thromboembolic event fixed

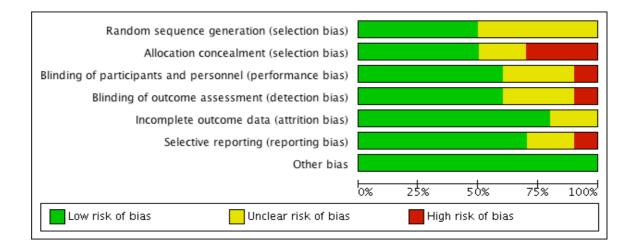
	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M–H, Fixed, 95% Cl
Cormack 1973	0	76	0	74		Not estimable	
Bagnenko 2011	0	22	0	25		Not estimable	
Saidi 2017	0	67	0	64		Not estimable	
Von Holstein 1987	1	72	0	82	4.5%	3.41 [0.14, 82.44]	
Engqvist 1979	4	76	2	73	19.5%	1.92 [0.36, 10.17]	
Tavakoli 2018	3	271	б	139	76.0%	0.26 [0.07, 1.01]	
Total (95% CI)		584		457	100.0%	0.72 [0.30, 1.73]	•
Total events	8		8				-
Heterogeneity. $Chi^2 =$	4.43, df = 2	(P = 0.	11); ² =	55%			
Test for overall effect							0.001 0.1 1 10 1000 Favours tranexamic acid Favours placebo

11. Thrombophlebitis random

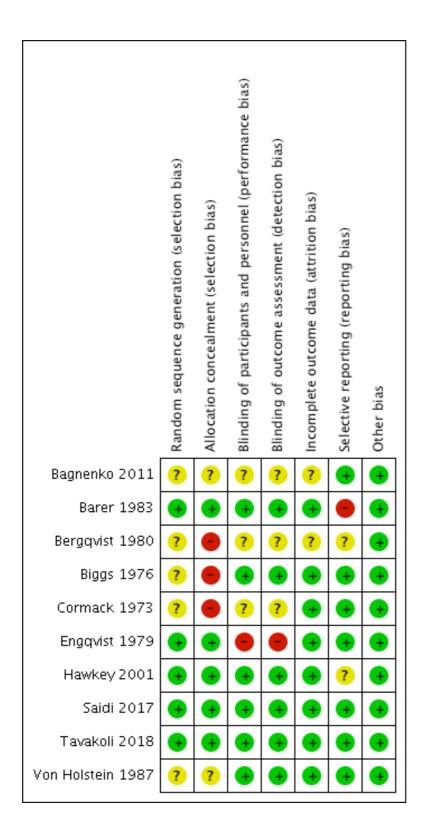
	Tranexami	c acid	Place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Von Holstein 1987	2	72	0	82	25.5%	5.68 [0.28, 116.50]	
Biggs 1976	3	103	2	97	74.5%	1.41 [0.24, 8.27]	
Total (95% CI)		175		179	100.0%	2.02 [0.44, 9.26]	-
Total events	5		2				
Heterogeneity: Tau ² = Test for overall effect:				= 0.43); ² = 0%	;	0.002 0.1 1 10 500 Favours tranexamic acid Favours placebo

12. Thrombophlebitis fixed

	Tranexamic acid		Placebo		Risk Ratio		Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M–H, Fixed, 95% Cl
Von Holstein 1987	2	72	0	82	18.5%	5.68 [0.28, 116.50]	
Biggs 1976	3	103	2	97	81.5%	1.41 [0.24, 8.27]	
Total (95% CI)		175		179	100.0%	2.20 [0.51, 9.50]	-
Total events	5		2				
Heterogeneity. Chi ² = 0.62, df = 1 (P = 0.43); $I^2 = 0\%$							
Test for overall effect:	Z = 1.06 (P	= 0.29)					0.002 0.1 1 10 500 Favours tranexamic acid Favours placebo



Risk of bias graph: review authors' judgements about each risk of bias item presented as percentages across all included studies.



Risk of bias summary: review authors' judgements about each risk of bias item for each included study.