

Table S 1. Detailed information about included studies.

Author/Year	Surgery	Regimen and total dosage			Number of patients			Gender (F/M)			Age			BMI		
		TXA	EACA	Placebo	TXA	EACA	Placebo	TXA	EACA	Placebo	TXA	EACA	Placebo	TXA	EACA	Placebo
Camarasa 2006	uTKA	20mg/kg IV	150mg/kg IV	Placebo	35	32	60	26/9	28/4	48/12	73	73	72			
Orpen 2005	uTKA	15mg/kg IV		Placebo	15		14	7/8		11/3	73		69			
Wong 2010	uTKA	1.5g IA; 3.0g IA		Placebo	31/33		35	25/6; 19/14		22/13	67/63.9		68.4	31.3/30.6		32.7
Rajesh 2012	uTKA	10mg/kg IV; 20mg/kg IV; 30mg/kg IV; 3.0g IA		Placebo	40/40/40/40/40		40	30/10; 29/11; 32/8; 33/7; 34/6		36/4	67.3/68.3/67.4/66.8/67.4		66.2	29.4/28.6/27.8/31.2/30.9		30.8
Shuvendu 2012	uTKA	0.5g IA		Placebo	25		25	15/10		16/9	66.04		66.56	27.1		26.8
Georgiadis 2013	uTKA	2.0g IA		Placebo	50		51	31/19		39/12	67		64.5	33.9		34.2
Iwai 2013*	uTKA	1.0g IV; 2.0g IV		Placebo	21/26		31				74.7/75		73.7	26.2/26.0		28.1
Paphon 2013	uTKA	0.5g IA		Placebo	45		45	40/5		43/2	68.1		66.2	27.3		26.3
Seo 2013	uTKA	1.5g IA; 1.5g IV		Placebo	50/50		50	45/5; 44/6		45/5	67.5/66.8		67.8	27.8/28.1		27.9
Aguilera 2014	uTKA	1.0g IA; 2.0g IV		Placebo	50/50		50	32/18; 38/12		32/18	72.53/72.49		73.68	30.9/30.2		30.1
Lin 2014	uTKA	1.0g IA		Placebo	40		40	33/7		35/5	71		69.7	28.9		24.5
Wang 2015	uTKA	0.5g IA		Placebo	30		30	21/9		24/6	64.9		64.97	27.8		28.3
Akgül 2016*	uTKA	20mg/kg IV		Placebo	35		35									
Tzatzairis 2016	uTKA	1.0g IA; 1.0g IV		Placebo	40/40		40	31/9; 33/7		31/9	69.55/69.1		68.58	32.6/32.6		31.6
Boese 2017	uTKA	2.0g IV	14.0 IV		95	92		69/26	71/21		64.97	66.12		35.5		34.7
Churehill 2016*	uTKA	1.0g IV	10.0g IV	Placebo	610	820	1492	392/218	527/293	956/536	65.8	63.9	63.9			
Song 2016	uTKA	1.5g IA; 30mg/kg IV		Placebo	50/50		50	44/6; 42/8		43/7	69.2/69.8		70.2	26.5/26.9		27.9
Stowers 2017	uTKA	1.5g IA; 1.5g IV		Placebo	60/51		23	32/28; 24/27		19/4	70/71		70	31.2/31.2		32.3
Sun 2016	uTKA	30mg/kg IV; 30mg/kg IV; 30mg/kg IV		Placebo	45/45/45		45	32/12; 28/17; 35/10		37/8	67.2/67.3/68.1		67.4	25.8/26.2/26.1		25.9
Ugudu 2016	uTKA	3.0g IA; 20mg/kg IV		Placebo	42/40		41	33/9; 29/11		35/6	69.4/70.6		66.4	30.8/31.1		30.2
Wang 2017	uTKA	1.0g IA; 1.0g IV		Placebo	50/50		50	36/14; 36/14		34/16	67.42/67.98		67.66	26.7/25.9		26.74
Yen 2017	uTKA	3.0g IA; 1.0g IV		Placebo	32/31		30	19/13; 27/4		24/6	69.13/69.66		70.87	28.1/28.4		28.26
Yuan 2017	uTKA	3.0g IA		Placebo	140		140	77/63		75/65	63.26		64.63	22.87		22.68
Arslan 2018	uTKA	1.5g IA		Placebo	50		50				66.1		68.5	30		30.4
Liu 2017	uTKA	10mg/kg IV; 15mg/kg IV		Placebo	75/75		74	41/34; 45/30		43/31	63.55/62.97		61.85	26.59/25.98		26.2
Hualda 2017	uTKA	1.0g IA; 1.0g IV		Placebo	30/30		30	19/11; 24/6		19/11	72.9/73.1		72.4			
Bradley 2019	uTKA	2.0g IV	5.0g IV		73	72		50/23	42/30		64.7	65.6		31.5	31.9	
Tile 2019*	uTKA	2.0g IA		Placebo	101		101	56/45		65/36	69.4		68.2	31.4		31.8
Zhang 2019	uTKA	6.0g IV; 20mg/kg IV		Placebo	59/57		59	51/8; 47/10		48/11	66.54/65.21		64.78	25.91/26.2		25.32
Kim 2020	uTKA	0.5g IA; 1.0g IA; 2.0g IA; 3.0g IA		Placebo	63/64/63/64		64	57/6; 59/5; 58/5; 56/8		58/6	68.3/71.1/69.9/67.5		67.2	27.4/27.6/28.5/27.2		26.9
Xue 2021	uTKA	15mg/kg IV; 30mg/kg IV		Placebo	53/50		53	40/13; 39/11		39/11	66.9/66.1		67	26.6		27.1
Guerreiro 2021	uTKA	1.0g IA	4.0g IA		30	30		22/8	20/10		67.97/68.67					
Lei 2021*	uTKA	15mg/kg IV		Placebo	248		157	206/42		138/19	58.48		56.96	23.9		24.1
Magi 2021	uTKA	1.0g IV		Placebo	243		68	148/95		39/29	68.8		67.6	32.7		33.3
Harper 2017*	uTKA	5.0g IA; 5.0g IA		Placebo		80/80	80		41/39; 45/35	44/36		65.2/66.0	64.2	31.5/30.1		30.6
Hobbs 2017*	uTKA	10.0g IV		Placebo		116	128					62.1	63.1			
Lum 2018*	uTKA	1.0g IV	5.0g IA	Placebo	204	183	177	105/99	99/84	106/71	65	62.7	61.9	30	30.2	30.2
Churchill 2016*	uTKA	10.0g IV		Placebo		25	25		21/4	15/10		65.2	66.6		33.5	31.1

uTKA, unilateral total knee arthroplasty; IA, intra-articular; IV, intravenous; TXA, tranexamic acid; EACA, epsilon-aminocaproic acid; F/M, female/male; *, non-RCTs.

Aguilera 2014	?	+	+	+	+	+	?
Arslan 2018	+	?	+	+	+	+	?
Boese 2017	+	+	+	+	+	+	?
Bradley 2019	+	-	+	?	+	+	?
Camarasa 2006	+	+	+	+	+	+	?
Georgiadis 2013	+	+	+	+	+	+	?
Guerreiro 2021	+	+	+	+	+	+	?
Hualda 2017	+	?	?	?	+	+	?
Kim 2020	+	?	+	+	+	+	?
Lin 2014	+	-	?	?	+	+	?
Liu 2017	+	?	?	?	+	+	?
Magill 2021	+	-	?	?	+	+	?
Orpen 2005	?	+	+	+	+	?	?
Paphon 2013	+	+	+	+	+	+	?
Rajesh 2012	+	+	+	+	+	+	?
Seo 2013	+	+	?	?	+	+	?
Shwendu 2012	+	-	+	+	+	+	?
Song 2016	+	+	+	+	+	+	?
Stowers 2017	+	+	+	+	+	+	+
Sun 2016	+	?	?	?	+	+	?
Tzatzaris 2016	+	?	?	?	+	+	?
Ugurlu 2016	+	?	?	?	+	+	?
Wang 2015	+	+	+	+	+	+	?
Wang 2017	+	+	+	+	+	+	+
Wong 2010	+	+	+	+	+	+	?
Xue 2021	+	+	+	+	+	+	?
Yen 2017	+	+	+	+	+	+	?
Yuan 2017	+	?	+	+	+	+	?
Zhang 2019	+	+	+	+	+	+	?

Random sequence generation (selection bias)
Allocation concealment (selection bias)
Blinding of participants and personnel (performance bias)
Blinding of outcome assessment (detection bias)
Incomplete outcome data (attrition bias)
Selective reporting (reporting bias)
Other bias



