

Supplementary material Search strategy

PubMed

#1 ((((((tranexamic acid[MeSH Terms]) OR (tranexamic acid[Title/Abstract])) OR (tranexemic acid[Title/Abstract])) OR (Antifibrinolytic Agents[Title/Abstract])) OR (Cyklokapron[Title/Abstract])) OR (Transamin[Title/Abstract]))

#2 ((((((total shoulder arthroplasty[MeSH Terms]) OR (total shoulder arthroplasty[Title/Abstract])) OR (TSA[Title/Abstract])) OR (Total Shoulder Replacement[Title/Abstract])) OR (Shoulder Replacement[Title/Abstract])) OR (Shoulder Replacement Arthroplasty[Title/Abstract])) OR (Shoulder Arthroplasty[Title/Abstract]))

#3 #1 AND #2

Cochrane Library

#1 (tranexamic acid):ti,ab,kw OR (tranexemic acid):ti,ab,kw OR (Antifibrinolytic Agents):ti,ab,kw OR (Cyklokapron):ti,ab,kw OR ("transamin"):ti,ab,kw

#2 (total shoulder arthroplasty):ti,ab,kw OR (TSA):ti,ab,kw OR ("total shoulder replacement"): ti,ab,kw OR (Shoulder Replacement):ti,ab,kw OR (Shoulder Replacement Arthroplasty):ti,ab,kw

#3 #1 AND #2

Embase

#1 'tranexamic acid':ab,ti OR 'tranexemic acid':ab,ti OR 'antifibrinolytic agents':ab,ti OR cyklokapron:ab,ti OR transamin:ab,ti

#2 'total shoulder arthroplasty':ab,ti OR tsa:ab,ti OR 'total shoulder replacement':ab,ti OR 'shoulder replacement':ab,ti OR 'shoulder replacement arthroplasty':ab,ti OR 'shoulder arthroplasty':ab,ti

#3 #1 AND #2

Web of Science

#1 AB=(tranexamic acid OR TXA OR tranexemic acid OR Antifibrinolytic Agents OR Cyklokapron OR Transamin)

#2 AB=(total shoulder arthroplasty OR TSA OR Total Shoulder Replacement OR Shoulder Replacement OR Shoulder Replacement Arthroplasty OR Shoulder Arthroplasty)

#3 #1 AND #2

Supplementary table 1 Assessment of publication bias

Analyzed factor	Number of studies	Egger's test		Begg's test	
		T value	<i>P</i> value	z value	<i>P</i> value
Tatol Blood Loss (mL)	4	-0.56	0.634	0.34	0.734
Adverse Events	5	1.12	0.379	0.34	0.734
Hospital Length of Stay (d)	3	0.59	0.660	0.52	0.602
Operative Time (min)	3	-2.27	0.264	1.04	0.296