

Supplementary data

Table 3. Patient and procedure related unadjusted and adjusted risk of death at 90 days using a Cox regression model and robust variance estimation to account for bilateral cases, reported to the Norwegian Arthroplasty Register 2005–2018

	Unadjusted HR (95%CI)	p-value	Adjusted HR (95%CI)	p-value
Age				
≤ 64 years	1		1	
65–74 years	0.9 (0.3–2.7)	0.9	0.9 (0.3–3.1)	0.8
≥ 75 years	3.0 (1.2–7.6)	0.02	3.0 (1.1–7.9)	0.03
Sex				
Male	1		1	
Female	0.8 (0.4–1.7)	0.6	0.8 (0.4–1.6)	0.6
ASA class				
1–2	1		1	
3–4	5.6 (2.7–12)	< 0.001	5.6 (2.5–12)	< 0.01
Diagnosis				
Primary osteoarthritis	1		1	
Acute fracture	3.4 (1.1–11)	0.04	3.4 (1.2–9.5)	0.02
Fracture sequelae	2.8 (0.8–9.6)	0.1	2.8 (1.0–8.3)	0.06
Rotator cuff arthropathy	0.8 (0.1–6.6)	0.8	0.9 (0.1–8.0)	0.9
Inflammatory arthritis	0.9 (0.9–8.3)	0.9	0.8 (0.1–6.6)	0.9
Other	4.0 (0.8–21)	0.1	4.0 (0.8–21)	0.09
Arthroplasty type				
TSA	1		1	
RSA	0.4 (0.1–1.6)	0.2	0.4 (0.1–1.2)	0.1
HSA	1.7 (0.4–6.8)	0.4	1.7 (0.5–5.8)	0.4
Other	0.8 (0.1–7.2)	0.8	0.7 (0.1–7.4)	0.8
Cemented humeral stem				
Yes	1		1	
No	0.9 (0.4–1.9)	0.8	0.9 (0.4–1.8)	0.7
Duration of surgery in min.				
≤ 90	1		1	
91–120	1.0 (0.5–1.9)	1.0	1.1 (0.6–2.2)	0.7
≥ 120	0.6 (0.3–1.3)	0.2	0.7 (0.3–1.5)	0.3
Time period				
2005–2010	1		1	
2011–2013	0.7 (0.3–1.5)	0.4	0.7 (0.3–1.6)	0.4
2014–2016	1.0 (0.5–2.2)	1.0	1.0 (0.5–2.1)	1.0
2016–2018	1.4 (0.6–3.6)	0.4	1.4 (0.6–3.6)	0.4

TSA = total shoulder arthroplasty, RSA = reverse shoulder arthroplasty, SHA = stemmed hemiarthroplasty.

Table 4. Risk of death at 90 days stratified by risk groups defined by age and ASA class, adjusted for age, sex, ASA class, diagnosis, arthroplasty type, use of cement in humerus, duration of surgery and time period, Cox regression model using robust variance estimation, shoulder arthroplasties reported to the Norwegian Arthroplasty Register 2005–2018

Risk group ^a	No thromboprophylaxis		Thromboprophylaxis		HR ^b (95% CI)	p-value
	Deaths at 90 days	At risk at 90 days	Deaths at 90 days	At risk at 90 days		
Low	0	1,082	4	2,098	– ^c	
Intermediate	6	667	15	1,355	1.4 (0.5–3.6)	0.5
High	9	179	16	406	0.9 (0.4–2.2)	0.9

^a Risk group defined as Low = age < 80 years and ASA ≤ 2, Intermediate = age ≥ 80 or ASA ≥ 3, High = age ≥ 80 and ASA ≥ 3.
^b Cox adjusted hazard ratio (HR) with no thromboprophylaxis as reference
^c In the no thromboprophylaxis group there were no deaths in the low-risk group and HR is not calculated.

Table 5. Kaplan–Meier (K–M) estimated risk of revision at 1 year due to all causes and due to infection, shoulder arthroplasties reported to the Norwegian Arthroplasty Register 2005–2018

Revision at 1 year	Use of thromboprophylaxis	Revisions at 1 year	At risk at 1 year	K–M % revision (95% CI)	Adjusted HR (95% CI)	p-value
All causes	Yes	63	1,694	3.3 (2.5–4.1)	1 (ref.)	
	No	92	3,407	2.4 (2.0–2.8)	0.8 (0.6–1.1)	0.2
Due to infection	Yes	13	1,694	0.7 (0.3–1.1)	1 (ref.)	
	No	16	3,407	0.4 (0.2–0.6)	0.6 (0.3–1.2)	0.2

Cox adjusted HR with robust variance estimates adjusted for age, sex, ASA class, diagnosis, arthroplasty type, use of cement in humerus, duration of surgery and time period.