Supplementary data

Table 3. All complications: univariate and multivariable binary logistic regression

	Univariate unadjusted analysis		Multivariable adjusted analysis	
	Risk ratio (95% CI)	p-value	Risk ratio (95% CI)	p-value
Age group				
< 55	0.69 (0.38–1.3)	0.2	0.87 (0.45–1.7)	0.7
55–64.9	0.44 (0.25–0.75)	0.003	0.55 (0.31–0.97)	0.04
65–74.9	0.78 (0.52–1.2)	0.2	0.89 (0.58–1.4)	0.6
75–84.9	0.77 (0.51–1.2)	0.2	0.80 (0.53–1.2)	0.3
≥ 85	Reference		Reference	
Sex				
Male	0.61 (0.46–0.80)	< 0.001	0.63 (0.47–0.84)	0.002
Female	Reference		Reference	
ASA grade				
1	Reference		Reference	
2	1.2 (0.75–1.9)	0.4	0.98 (0.60–1.6)	0.9
3	1.5 (0.94–2.5)	0.09	1.2 (0.69–1.9)	0.6
4/5	2.3 (0.83–6.2)	0.1	1.7 (0.63–4.8)	0.3
Indication for surgery				
Osteoarthritis	Reference		Reference	
Rotator cuff tear	1.7 (1.3–2.2)	< 0.001	1.1 (0.77–1.7)	0.6
Inflammatory arthritis	1.4 (0.79–2.3)	0.3	1.0 (0.58–1.8)	1.0
Avascular necrosis	2.7 (1.6–4.7)	< 0.001	2.3 (1.3–4.2)	0.005
Acute trauma	0.93 (0.57–1.5)	0.8	0.52 (0.30–0.88)	0.02
Trauma sequelae	2.4 (1.6–3.5)	< 0.001	1.6 (1.0–2.5)	0.04
Other	0.93 (0.33–2.5)	0.9	0.76 (0.27–2.1)	0.6
Lead surgeon grade				
Consultant	Reference		Reference	
Other	0.90 (0.61–1.3)	0.9	0.93 (0.63–1.4)	0.7
Operation type				
Total shoulder arthroplasty	Reference		Reference	
Resurfacing arthroplasty	0.33 (0.20–0.57)	< 0.001	0.42 (0.24–0.73)	0.002
Reverse shoulder arthroplasty	1.6 (1.2–2.1)	0.001	1.6 (1.1–2.5)	0.02
Stemmed hemiarthroplasty	1.5 (1.1–2.1)	0.01	1.8 (1.2–2.7)	0.006
Fixation type				
Cemented	Reference		Reference	
Uncemented	0.75 (0.55–1.0)	0.08	0.76 (0.53–1.1)	0.1
Hybrid	1.0 (0.72–1.38)	1.0	1.0 (0.71–1.5)	0.9
Surgical approach				
Deltopectoral	Reference		Reference	
Superior	0.68 (0.48–0.95)	0.02	0.56 (0.39–0.80)	0.001
Deltoid split	1.1 (0.58–2.0)	0.9	0.83 (0.45–1.6)	0.6
Posterior	0.99 (0.24–4.0)	1.0	1.1 (0.27–4.6)	0.9
Deltoid detachment	0.82 (0.11–5.9)	0.8	0.80 (0.11–5.9)	0.8
Rotator cuff condition				
Normal	Reference		Reference	
Attenuated	1.4 (1.0–1.9)	0.04	1.1 (0.83–1.6)	0.4
Torn	1.8 (1.4–2.4)	< 0.001	1.2 (0.82–1.8)	0.3
Repaired	0.66 (0.27–1.6)	0.4	0.55 (0.22–1.4)	0.2

Table 4. Fracture complications: univariate and multivariable binary logistic regression

	Univariate unadjusted analysis		Multivariable adjusted analysis	
	Risk ratio (95% CI)	p-value	Risk ratio (95% CI)	p-value
Age group				
< 55	0.45 (0.21–0.99)	0.05	0.63 (0.27–1.5)	0.3
55–64.9	0.32 (0.16–0.64)	0.001	0.43 (0.21–0.86)	0.02
65–74.9	0.63 (0.39–1.0)	0.06	0.72 (0.44–1.2)	0.2
75–84.9	0.69 (0.43–1.1)	0.1	0.72 (0.44–1.2)	0.2
≥ 85	Reference		Reference	
Sex				
Male	0.47 (0.32–0.69)	< 0.001	0.51 (0.35–0.75)	0.001
Female	Reference		Reference	
ASA grade				
1	Reference		Reference	
2	1.9 (0.94–3.9)	0.08	1.4 (0.68–2.9)	0.4
3	2.4 (1.1–5.0)	0.02	1.6 (0.73–3.3)	0.3
4/5	1.1 (0.13–8.4)	1.0	0.7 (0.08–5.4)	0.7
Indication for surgery				
Osteoarthritis	Reference		Reference	
Rotator cuff tear	1.8 (1.3–2.6)	< 0.001	1.1 (0.67–1.7)	0.8
Inflammatory arthritis	1.6 (0.9–3.1)	0.1	1.2 (0.61–2.3)	0.6
Avascular necrosis	2.4 (1.1–4.9)	0.02	2.1 (0.95–4.5)	0.07
Acute trauma	1.2 (0.70–2.1)	0.5	0.61 (0.33–1.1)	0.1
Trauma sequelae	2.6 (1.6–4.3)	< 0.001	1.7 (0.99–2.9)	0.06
Other	1.2 (0.36–3.7)	0.8	0.95 (0.29–3.1)	0.9
Lead surgeon grade				
Consultant	Reference		Reference	
Other	0.76 (0.46–1.3)	0.3	0.78 (0.46–1.3)	0.8
Operation type				
Total shoulder arthroplasty	Reference		Reference	
Resurfacing arthroplasty	0.06 (0.02–0.25)	< 0.001	0.08 (0.02–0.32)	< 0.001
Reverse shoulder arthroplasty	1.6 (1.2–2.3)	0.005	1.4 (0.83–2.3)	0.2
Stemmed hemiarthroplasty	1.7 (1.1–2.5)	0.01	1.9 (1.2–3.2)	0.01
Fixation type				
Cemented	Reference		Reference	
Uncemented	0.67 (0.45–0.99)	0.04	0.78 (0.50–1.2)	0.3
Hybrid	1.0 (0.68–1.5)	1.0	1.1 (0.72–1.8)	0.6
Surgical approach				
Deltopectoral	Reference		Reference	
Superior	0.74 (0.49–1.1)	0.2	0.63 (0.41–0.97)	0.04
Deltoid split	1.1 (0.49–2.3)	0.9	0.82 (0.38–1.8)	0.6
Posterior	0.78 (0.11–5.7)	0.8	0.89 (0.12–6.6)	0.9
Deltoid detachment	1.3 (0.18–9.5)	0.8	1.2 (0.16–8.9)	0.9
Rotator cuff condition				
Normal	Reference		Reference	
Attenuated	1.6 (1.1–2.3)	0.02	1.3 (0.85–1.9)	0.2
Torn	2.2 (1.6–3.0)	< 0.001	1.6 (0.95–2.6)	0.08
Repaired	0.93 (0.34–2.6)	0.9	0.72 (0.25–2.0)	0.5