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**Supplemental Table 1: 30-day mortality in various categories of orthopedic surgery patients N=3089\***

Category	Mortality at 30 days	
	n/N	% (95% CI)
<b>All orthopedic surgery patients</b>	62/3089	2.0 (1.6-2.6)
No MINS	26/2722	1.0 (0.7-1.4)
MINS	36/367	9.8 (7.2-13.3)
p-value	<0.001	
Odds ratio (95% CI)	11.28 (6.72-18.92)	
<b>Traumatic pelvic injuries<sup>†</sup></b>	2/17	11.8 (3.3-34.3)
No MINS	1/11	9.1 (1.6-37.7)
MINS	1/6	16.7 (3.0-56.4)
p-value	1.000	
Odds ratio (95% CI)	2.00 (0.10-39.08)	
<b>Traumatic hip injuries<sup>‡</sup></b>	20/451	4.4 (2.9-6.8)
No MINS	5/352	1.4 (0.6-3.3)
MINS	15/99	15.2 (9.4-23.5)
p-value	<0.001	
Odds ratio (95% CI)	12.39 (4.38-35.06)	
<b>Non-traumatic hip/pelvic injuries§</b>	5/805	0.6 (0.3-1.4)
No MINS	4/737	0.5 (0.2-1.4)

MINS	1/68	1.5 (0.3-7.9)
p-value	0.358	
Odds ratio (95% CI)	2.74 (0.30-24.82)	
<b>Total Knee arthroplasty</b>	4/1285	0.3 (0.1-0.8)
No MINS	3/1219	0.2 (0.08-0.7)
MINS	1/66	1.5 (0.3-8.1)
p-value	0.190	
Odds ratio (95% CI)	6.24 (0.64-60.78)	
<b>Above knee or lower leg amputation</b>	11/135	8.1 (4.6-14.0)
No MINS	2/81	2.5 (0.7-8.6)
MINS	9/54	16.7 (9.0-28.7)
p-value	0.007	
Odds ratio (95% CI)	7.90 (1.63-38.18)	

\* Patients who were lost before their 30 day follow-up are not included in this table (N=3 orthopedic patients).

† Defined as patients with “major hip or pelvic surgery” and surgery for an acute fracture of the pelvis.

‡ Defined as patients with “major hip or pelvic surgery” and surgery for an acute fracture of the hip.

§ Defined as patients with “major hip or pelvic surgery” and NOT surgery for an acute fracture.

**Supplemental Table 2. Frequency of MINS across various orthopedic surgeries**

	<b>Number of Patients</b>	<b>Number of patients with MINS (%)</b>	<b>95% CI</b>
Major hip or pelvic surgery	1313	184 (14.0)	(12.2-16.0)
Internal fixation of femur	360	63 (17.5)	(13.9-21.8)
Knee arthroplasty	1286	66 (5.1)	(4.1-6.5)
Above knee amputation	64	25 (39.1)	(28.1-51.3)
Lower leg amputation	71	29 (40.8)	(30.2-52.5)

MINS: myocardial injury in non-cardiac surgery

**Supplemental Table 3. Cardiovascular outcomes at 30-days for orthopedic surgery patients (N=3079)\***

Outcome	No MINS N=2714		MINS N=365	MINS with peak trop $\geq$ 0.04 fulfilling Universal Definition of MI <sup>†</sup> N=147		MINS with peak trop $\geq$ 0.04 and NOT fulfilling Universal Definition of MI <sup>†</sup> N=135*	
	n (%)	n (%)	Unadjusted OR (95% CI) <sup>‡</sup>	n (%)	Unadjusted OR (95% CI) <sup>‡</sup>	n (%)	Unadjusted OR (95% CI) <sup>‡</sup>
Nonfatal cardiac arrest	2 (0.07)	4 (1.1)	15.02 (2.74-82.32)	4 (2.7)	37.93 (6.89-208.81)	0 (0.0)	-
Congestive heart failure	33 (1.2)	48 (13.2)	12.30 (7.78-19.45)	28 (19.0)	19.12 (11.18-32.67)	15 (11.1)	10.16 (5.37-19.20)
Stroke	11 (0.4)	5 (1.4)	3.41 (1.18-9.88)	2 (1.4)	3.39 (0.74-15.43)	3 (2.2)	5.58 (1.54-20.26)
Coronary revascularization	1 (0.04)	5 (1.4)	37.68 (4.39-323.43)	5 (3.4)	95.53 (11.09-823.10)	0 (0.0)	-
Mortality <sup>§</sup>	26/2722 (1.0)	36/367 (9.8)	11.28 (6.72-18.92)	22/147 (15.0)	18.25 (10.06-33.10)	9/136 (6.6)	7.35 (3.37-16.01)

MINS: myocardial injury in non-cardiac surgery; TnT: troponin T; MI: myocardial infarction; OR: odds ratio; CI: confidence interval

\*Patients who were lost to follow-up before their 30-day follow-up are not included in this table (N=13)

<sup>†</sup> Third Universal Definition of MI<sup>14</sup>: Evidence of myocardial necrosis in a clinical setting consistent with acute myocardial ischemia and the detection of a rise and/or fall of a cardiac biomarker value (preferable cTn) with at least one value above the 99<sup>th</sup> percentile upper reference limit (URL) and with at least one of the following: symptoms of ischemia, new or presumed-new ST segment or T-wave changes or new left bundle branch block on ECG, development of pathologic Q-wave changes on ECG, imaging evidence of new loss of viable myocardium or new regional wall motion abnormality, or identification of an intracoronary thrombus by angiography or autopsy

<sup>‡</sup> compared to patients who did not have MINS<sup>§</sup> including the 10 patients with mortality information at 30 days, but no other event info. N=3089

**Supplemental Table 4. Clinical features of orthopedic surgery patients with MINS and a peak troponin  $\geq 0.04$  ng/ml (n=283)\***

Clinical Features	Prevalence of feature (%)
Ischemic symptoms	
chest discomfort	35 (12.4)
neck, jaw, or arm discomfort	1 (0.4)
dyspnea	21 (7.4)
pulmonary edema	14 (4.9)
any of the above	53 (18.7)
New Q waves	5 (1.8)
ST elevation	6 (2.1)
ST depression	57 (20.1)
T wave inversion	75 (26.5)
New LBBB	4 (1.4)
New WMA on echocardiography	2 (0.7)
Presumed new WMA on echocardiography (N=110 had echocardiography performed)	37 (13.1)
New FD on nuclear imaging	0 (0.0)
Presumed new FD on nuclear imaging (N=2 who had nuclear imaging performed)	1 (0.4)

MINS: myocardial injury in non-cardiac surgery; LBBB: left bundle branch block;  
WMA: wall motion abnormality; FD: fixed defect

\*for patient with multiple MINS episodes with troponin  $\geq 0.04$  ng/ml, we have used the first episode

**Supplemental Table 5. 30-day mortality in orthopedic surgery patients\***

Category	Vascular death within 30 days	
	n/N	% (95% CI)
All orthopedic surgery patients	42/3089	1.4 (1.0-1.8)
	Nonvascular death within 30 days	
	n/N	% (95% CI)
All orthopedic surgery patients	20/3089	0.6 (0.4-1.0)

\*Patients who were lost to follow up prior to 30-days were censored from this table (n=3)

**Supplemental Table 6:**

<b>Timing of troponin measurement:</b>	<b>N=3092</b>
6-12 hours post-op, n (%)	2405 (77.8)
Day 1 post-op, n (%)	2840 (91.8)
Day 2 post-op, n (%)	2758 (89.2)
Day 3 post-op, n (%)	2460 (79.6)