

## Supplemental Digital Content 5A: Acute Kidney Injury Risk by Weighted Preoperative Risk Score in the

Derivation Set (n = 70,929)

Preoperative Weighted Risk Score	Number of cases	Cumulative Percent of Cohort (%)	Number of Cases with Postoperative AKI	Observed proportion with Postoperative AKI (%)	Expected probability (%)	Risk Quartile	Number of cases, n (%)	Number of Cases with Postoperative AKI	Observed proportion (%)	Expected probability (%)
1	3	0	0	0	0	1	14,521 (20.4%)	254	1.7	2.2
2	260	0.4	1	0.4	1.0					
3	739	1.4	4	0.5	1.2					
4	1,245	3.2	14	1.1	1.4					
5	2,558	6.8	41	1.6	1.8					
6	4,293	12.8	69	1.6	2.3					
7	5,423	20.5	125	2.3	2.8					
8	6,553	29.7	237	3.6	3.5	2	20,372 (28.7%)	935	4.6	4.5
9	6,930	39.5	305	4.4	4.4					
10	6,889	49.2	393	5.7	5.5	3	15,255 (21.5%)	1,188	7.8	7.5
11	7,687	60.0	535	7.0	6.7					
12	7,658	70.7	653	8.6	8.4	4	20,781 (29.3%)	3,700	17.8	17.8
13	6,444	79.8	677	10.5	10.6					
14	5,065	86.9	674	13.3	13.1					
15	3,605	92.0	641	17.8	16.7					
16	2,463	95.5	583	23.7	22.4					
17	1,516	97.6	431	28.4	29.0					
18	883	98.9	335	37.9	37.9					
19	482	99.5	197	40.9	47.1					
20	208	99.8	111	53.4	55.9					
21	80	100	37	46.3	66.5					
22	30	100	9	30.0	74.5					
23	5	100	5	100	80.3					

**Supplemental Digital Content 5B: Acute Kidney Injury Risk by Weighted Preoperative Risk Score in the**

**Validation Set (n = 36,497)**

Preoperative Weighted Risk Score	Number of cases	Cumulative Percent of Cohort (%)	Number of Cases with Postoperative AKI	Observed proportion with Postoperative AKI (%)	Expected probability (%)	Risk Quartile	Number of cases, n (%)	Number of Cases with Postoperative AKI	Observed proportion (%)	Expected probability (%)
1	6	0	0	0	0	1	7,409 (20.3%)	159	2.1	2.5
2	112	0.3	0	0	1.0					
3	367	1.3	3	0.8	1.3					
4	672	3.2	8	1.2	1.7					
5	1,289	6.7	26	2.0	2.0					
6	2,159	12.6	43	2.0	2.5					
7	2,804	20.3	79	2.8	3.1					
8	3,410	29.6	109	3.2	3.7	2	10,575 (29.0%)	495	4.7	4.6
9	3,544	39.4	161	4.5	4.6					
10	3,621	49.3	225	6.2	5.5					
11	3,839	59.8	285	7.4	6.7	3	7,721 (21.2%)	591	7.7	7.4
12	3,882	70.4	306	7.9	8.2					
13	3,365	79.7	336	10.0	10.4	4	10,792 (29.6%)	1,872	17.3	17.3
14	2,664	86.9	365	13.7	12.9					
15	1,824	91.9	306	16.8	16.5					
16	1,240	95.3	286	23.1	21.7					
17	810	97.6	228	28.1	28.3					
18	464	98.8	163	35.1	35.5					
19	247	99.5	110	44.5	44.9					
20	104	99.8	42	40.4	53.2					
21	53	99.9	25	47.2	60.4					
22	19	100	10	52.6	69.9					
23	2	100	1	50.0	72.0					

Supplemental Digital Content 5C: Calibration Plots for Weighted Preoperative Risk Score Models, Derivation and

Validation Datasets

