

Supplementary Table 2. Baseline characteristics according to estimated threshold of neutrophil/lymphocyte ratio > 2.78

	Low group	High group	Before IPW		After IPW	
	(N=77,129)	(N=24,923)	P-value	AS D	P-value	AS D
C-reactive protein/albumin ratio	0.16 (0.07, 0.44)	0.80 (0.16, 5.09)	<0.001	52.1		
Neutrophil/lymphocyte ratio	1.60 (1.23, 2.03)	4.00 (3.23, 5.79)	<0.001	98.4		
Platelet/lymphocyte ratio	6.72 (5.34, 8.43)	13.65 (10.37, 19.31)	<0.001	94.7		
Modified Glasogow prognostic score			<0.001	73.6		
0	72221 (93.6)	16519 (66.3)				
1	4130 (5.4)	5405 (21.7)				
2	778 (1.0)	2999 (12.0)				
Male	37557 (48.7)	13515 (54.2)	<0.001	11.1	0.03	1.9
Age	55.8 (±14.9)	57.2 (±16.4)	<0.001	9.5	0.1	1.4
Body mass index	24.5 (±3.6)	23.5 (±3.7)	<0.001	26.4	0.43	0.8
ASA physical classification						
I	27907 (36.2)	6217 (24.9)	<0.001	24.6	0.25	1
II	44276 (57.4)	14129 (56.7)	0.05	1.4	0.81	0.2
III	4754 (6.2)	4101 (16.5)	<0.001	32.9	0.11	1.4
IV	181 (0.2)	362 (1.5)	<0.001	13.3	0.95	0.1
V	11 (0.0)	114 (0.5)	<0.001	9.1	0.04	4
Habitual risk factor						
Current alcohol	16099 (20.9)	4061 (16.3)	<0.001	11.8	0.23	1.1
Current smoking	6565 (8.5)	2024 (8.1)	0.06	1.4	0.44	0.7
Previous disease						
Hypertension	23751 (30.8)	8551 (34.3)	<0.001	7.5	0.78	0.2
Diabetes	10223 (13.3)	4644 (18.6)	<0.001	14.7	0.02	2
Chronic kidney disease	1459 (1.9)	1260 (5.1)	<0.001	17.3	0.32	0.9
Dialysis	340 (0.4)	449 (1.8)	<0.001	13	0.28	1.1
Stroke	1928 (2.5)	1115 (4.5)	<0.001	10.8	0.41	0.7
Coronary artery disease	2065 (2.7)	825 (3.3)	<0.001	3.7	0.94	0.1
Heart failure	274 (0.4)	239 (1.0)	<0.001	7.5	0.18	1.4
Arrhythmia	1375 (1.8)	756 (3.0)	<0.001	8.2	0.39	0.8
Peripheral artery disease	219 (0.3)	233 (0.9)	<0.001	8.4	0.77	0.3
Aortic disease	359 (0.5)	190 (0.8)	<0.001	3.8	0.76	0.3
Valvular heart disease	123 (0.2)	80 (0.3)	<0.001	3.3	0.96	<0.1
Chronic obstructive pulmonary disease	1744 (2.3)	775 (3.1)	<0.001	5.3	0.77	0.2
Preoperative blood laboratory tests						
Hemoglobin, g/dl	13.4 (±0.9)	12.5 (±2.1)	<0.001	47.8	<0.001	5.1
Creatinine, mg/dL	0.9 (±0.9)	1.1 (±1.4)	<0.001	16.5	0.79	0.2
Operative variables						
General anesthesia	62494 (81.0)	19920 (79.9)	<0.001	2.8	0.001	2.6
Emergency operation	3497 (4.5)	5024 (20.2)	<0.001	48.9	0.003	2.8
Operation duration, min	133.5 (±98.4)	142.8 (±115.6)	<0.001	8.6	0.13	1.4
Intraoperative transfusion	2655 (3.4)	2275 (9.1)	<0.001	23.6	0.38	0.8
Intraoperative inotropics infusion	7088 (9.2)	4158 (16.7)	<0.001	22.5	0.34	0.9
Surgical risk						

Mild	23420 (30.4)	5474 (22.0)	<0.001	19.2	0.77	0.3
Intermediate	49727 (64.5)	17567 (70.5)	<0.001	12.9	0.62	0.4
High	3982 (5.2)	1882 (7.6)	<0.001	9.8	0.7	0.4
Surgery types			<0.001	21.8		
Neuroendocrine	607 (0.8)	147 (0.6)				
Lung	6807 (8.8)	2059 (8.3)				
Head & Neck	10229 (13.3)	3132 (12.6)				
Breast	908 (1.2)	271 (1.1)				
Stomach	1017(1.3)	447 (1.8)				
Hepatobiliary	4967 (6.4)	2237 (9.0)				
Colorectal	9031 (11.7)	4021 (16.1)				
Urology	10308 (13.4)	2351 (9.4)				
Gynecology	5628 (7.3)	2265 (9.1)				
Bone & Skin etc	27627 (35.8)	7993 (32.1)				

Data are presented as n (%) or mean (\pm standard deviation) or median (Q1, Q3)

Surgical risk was stratified according to 2014 European Society of Cardiology/European Society of Anaesthesiology guidelines

IPW, inverse probability of weighting; ASD, absolute standardized mean difference; ASA, American Society of Anesthesiologists