

Table1 Characteristics of patients with SSI in Training and validation cohorts

Variables	Training cohort	Validation cohort	P value
Patients	601	162	-
Gender			0.638
Male	453(75.4%)	125(77.2%)	
female	148(24.6%)	37(22.8%)	
Age (years) #	61(55-68)	60(52-67)	0.076
BMI (kg/m ²) #	22.1(19.8-24.5)	22.1(20.1-24.6)	0.756
Hypertension			0.576
No	508(84.5%)	134(82.7%)	
Yes	93(15.5%)	28(17.3%)	
Diabetes mellitus			0.385
No	560(93.2%)	154(95.1%)	
Yes	41(6.8%)	8(4.9%)	
Cardiovascular disease			0.678
No	555(92.3%)	148(91.4%)	
Yes	46(7.7%)	14(8.6%)	
Pulmonary disease			0.826
No	561(93.3%)	152(93.8%)	
Yes	40(6.7%)	10(6.2%)	
Abdominal surgery history			0.323
No	526(87.5%)	137(84.6%)	
Yes	75(12.5%)	35(15.4%)	
ASA			0.047
1	8(1.3%)	7(4.3%)	
2	528(87.9%)	136(84.0%)	
3	65(10.8%)	19(11.7%)	
Laboratory tests			
Preoperative white blood cell count($\times 10^9/L$) #	5.3(4.2-6.5)	5.4(4.4-6.5)	0.712
Preoperative lymphocyte count($\times 10^9/L$) #	1.3(1.0-1.7)	1.3(1.1-1.6)	0.650
Preoperative hemoglobin(g/L) #	129.00(99.00-147.00)	132.00(110.75-146.25)	0.175
Preoperative albumin(g/L) #	38.6 (35.5-41.5)	42.0(39.5-45.6)	< 0.001
Operation time (min) #	240 (200-290)	247(210-300)	0.314
Blood loss (ml) #	100 (50-200)	100(95-200)	0.086
Operation method			< 0.001
Robotic-assisted surgery	155(25.8%)	9(5.6%)	
Laparoscopic surgery	275(45.8%)	86(53.1%)	
Open surgery	171(28.5%)	67(41.4%)	
Total gastrectomy			0.956
No	325(54.1%)	88(54.3%)	
Yes	276(45.9%)	74(45.7%)	

Reconstruction			0.010
B-I	76(12.6%)	7(4.3%)	
B-II	227(37.8%)	77(47.5%)	
Roux-en-Y	278(46.3%)	72(44.4%)	
other	20(3.3%)	6(3.7%)	
Combined resection			0.176
No	539(89.7%)	151(93.2%)	
Yes	62(10.3%)	11(6.8%)	
Lymphadenectomy			0.204
D1	38(6.3%)	6(3.7%)	
D2	563(93.7%)	156(96.3%)	
Tumor location			0.919
Lower	306(50.9%)	85(52.5%)	
Middle	184(30.6%)	47(29.0%)	
Upper	111(18.5%)	30(18.5%)	
Tumor diameter #	4.0(3.0-6.0)	4.0(2.5-5.5)	0.075
Tumor stage			0.310
1	137(22.8%)	35(21.6%)	
2	143(23.8%)	48(29.6%)	
3	321(53.4%)	79(48.8%)	
perioperative blood transfusion			0.071
No	457(76.0%)	134(82.7%)	
Yes	144(24.0%)	28(17.3%)	
Duration of prophylactic antibiotics			0.179
≤ 2 days	169(28.1%)	37(22.8%)	
> 2 days	432(71.9%)	125(77.2%)	

ASA, American Society of Anesthesiologist; BMI, Body Mass Index; # median (IQR); SSI, surgical site infection