

**Supplementary Table 1. Detailed explanation of the 11 variables of the modified frailty index.**

mFI-11	Explanation
1. Myocardial infarction	History of myocardial infarction
2. Cardiac problems	History of angina or percutaneous coronary intervention
3. Congestive heart failure	History of congestive heart failure
4. Cerebrovascular problems	History of transient ischemic attack or cerebrovascular accident without neurological deficit
5. History of stroke	History of cerebrovascular accident with neurological deficit
6. Decreased peripheral pulses	History of peripheral vascular disease or ischemic rest pain
7. Respiratory problems	History of COPD disease or pneumonia
8. History of diabetes mellitus	History of diabetes mellitus
9. Nonindependent functional status	Changes in everyday activity problems with bathing; problems with carrying; out personal grooming; problems getting dressed; problems cooking, problems going out alone
10. Clouding or delirium	History of impaired sensorium
11. Arterial hypertension	History of hypertension requiring medication

mFI-11: modified 11-item frailty index, COPD:chronic obstructive pulmonary disease

**Supplementary Table 2** Comparison of different variables in predicting admission to ICU, anastomotic fistula, 6-month mortality,1-year mortality.

<b>Outcomes</b>	<b>AUC (95% CI)</b>
<b>Admission to ICU</b>	
mFI-11	0.776 (0.732-0.820)
TNM	0.659 (0.612-0.705)
PNI	0.559 (0.509-0.608)
<b>Anastomotic fistula</b>	
mFI-11	0.877 (0.815-0.939)
TNM	0.824 (0.751-0.896)
PNI	0.607 (0.500-0.715)
<b>6-month mortality</b>	
mFI-11	0.759 (0.678-0.840)
TNM	0.733 (0.655-0.812)
PNI	0.668 (0.591-0.744)
<b>1-year mortality</b>	
mFI-11	0.731 (0.672-0.790)
TNM	0.643 (0.582-0.704)
PNI	0.598 (0.538-0.657)

mFI-11: 11-Item Modified frailty index; ICU : intensive care unit; TNM: Tumor-node-metastases; PNI: Prognostic nutritional index;

**Supplementary Table 3. Univariate and multivariate logistic regression analysis of 1-year mortality in two groups of patients.**

Variables	Univariable analysis			Multivariable analysis		
	B	OR (95% CI)	P value	B	OR (95% CI)	P value
Age, >75 vs. 65~75, years	0.311	1.365(0.855-2.189)	0.193			
Drinker, yes vs. no	-0.003	0.997(0.444-2.241)	0.994			
Serum albumin, per g/L	-0.063	0.939(0.904-0.974)	<b>0.001</b>	-0.532	0.923(0.900-0.954)	<b>0.023</b>
PNI	-0.064	0.938(0.904-0.988)	<b>0.001</b>	-0.251	0.925(0.902-0.964)	<b>0.021</b>
TNM stage, II vs. I	0.381	1.683(0.398-1.965)	0.414			
TNM stage, III vs. I	0.326	1.770(1.424-5.397)	<b>0.004</b>	0.324	1.423(1.004-3.453)	<b>0.005</b>
TNM stage, IV vs. I	0.164	1.176(1.069-2.445)	<b>0.041</b>	0.683	2.422(1.524-5.292)	<b>0.032</b>
ASA grade, II vs. I	1.041	2.084(1.275-15.935)	<b>0.003</b>	1.134	1.412(1.053-2.637)	<b>0.042</b>
ASA grade, III vs. I	1.064	1.190(1.147-9.621)	<b>0.008</b>	1.124	2.577(1.656-3.487)	<b>0.011</b>
ASA grade, IV vs. I	1.854	5.315(2.577-25.973)	<b>0.013</b>	1.412	1.456(1.077-3.747)	<b>0.041</b>
Gastrectomy, DG vs. TG	0.521	0.526(0.644-1.464)	0.864			
Gastrectomy, PG vs. TG	0.463	0.747(0.145-2.568)	0.876			
Surgical approach, Laparoscopy vs. Open	0.235	0.648(0.352-1.963)	0.466			
Surgical approach, Robotic surgery vs. Open	0.537	0.865(0.123-1.274)	0.599			
Surgery duration, per min	-0.262	1.574(0.999-1.882)	0.355			
mFI-11, mFI-11 <sup>High</sup> vs. mFI-11 <sup>Low</sup>	0.807	2.241(1.370-3.666)	<b>0.001</b>	0.931	4.432(2.599-6.343)	<b>0.003</b>

ASA: American Society of Anesthesiologists; BMI: Body mass index; TNM: Tumor- node-metastases; DG: Distal partial gastrectomy; TG: Total gastrectomy; PG: Proximal partial gastrectomy; PNI: Prognostic nutritional index; mFI-11:11-Item Modified frailty index; IGA: Intravenous general anesthesia; IIA:Intravenous inhalation anesthesia. *P* less than 0.05 is marked as bold.

**Supplementary Table 4. Univariate and multivariate logistic regression analysis of 6-month mortality in two groups of patients.**

Variables	Univariable analysis			Multivariable analysis		
	B	OR (95% CI)	P value	B	OR (95% CI)	P value
Age, >75 vs. 65~75, years	0.090	0.798(1.094-2.183)	0.798			
Drinker, yes vs. no	-0.108	0.898(0.272-2.976)	0.860			
Serum albumin, per g/L	-0.909	0.909(0.864-0.956)	<b>&lt;0.001</b>	0.013	0.936(0.325-0.999)	<b>0.002</b>
PNI	-0.901	0.902(0.852-0.982)	<b>&lt;0.001</b>	0.041	0.932(0.554-0.942)	<b>0.014</b>
TNM stage, II vs. I	0.802	1.423(0.897-3.463)	0.546			
TNM stage, III vs. I	0.221	1.647(1.003-4.843)	<b>0.041</b>	0.365	1.122(0.798-2.525)	0.424
TNM stage, IV vs. I	0.341	2.532(1.568-5.225)	<b>0.032</b>	0.415	1.041(0.698-1.464)	0.221
ASA grade, II vs. I	0.531	1.436(1.053-5.141)	<b>0.024</b>	0.643	1.001(0.888-2.642)	0.471
ASA grade, III vs. I	0.421	1.024(0.999-1.532)	0.755			
ASA grade, IV vs. I	0.749	0.523(0.377-2.579)	0.964			
Gastrectomy, DG vs. TG	0.677	0.571(0.116-1.554)	0.632			
Gastrectomy, PG vs. TG	0.346	0.346(0.110-1.485)	0.414			
Surgical approach, Laparoscopy vs. Open	0.586	0.865(0.412-1.994)	0.376			
Surgical approach, Robotic surgery vs. Open	0.124	0.684(0.346-2.575)	0.447			
Surgery duration, per min	0.574	1.463(0.992-1.808)	0.857			
mFI-11, mFI-11 <sup>High</sup> vs. mFI-11 <sup>Low</sup>	1.320	3.744(2.012-6.969)	<b>&lt;0.001</b>	0.887	2.438(1.075-5.484)	<b>0.033</b>

ASA: American Society of Anesthesiologists; BMI: Body mass index; TNM: Tumor- node-metastases; DG: Distal partial gastrectomy; TG: Total gastrectomy; PG: Proximal partial gastrectomy; PNI: Prognostic nutritional index; mFI-11:11-Item Modified frailty index; IGA: Intravenous general anesthesia; IIA:Intravenous inhalation anesthesia. *P* less than 0.05 is marked as bold.

**Supplementary Table 5. Univariate and multivariate logistic regression analysis of anastomotic fistula in two groups of patients.**

Variables	Univariable analysis			Multivariable analysis		
	B	OR (95% CI)	P value	B	OR (95% CI)	P value
Age, >75 vs. 65~75, years	0.934	2.544(1.271-5.096)	<b>0.008</b>	0.883	2.418(1.202-4.865)	<b>0.013</b>
Drinker, yes vs. no	-0.253	0.815(0.191-3.470)	0.782			
Serum albumin, per g/L	-0.714	0.929(0.876-0.986)	<b>0.015</b>	-0.881	0.907(0.484-1.696)	0.759
PNI	-0.715	0.928(0.872-0.989)	<b>0.014</b>	0.062	0.567(0.214-1.481)	0.846
TNM stage, II vs. I	-0.663	0.515(0.176-1.508)	0.226			
TNM stage, III vs. I	0.377	1.458(0.555-3.830)	0.445			
TNM stage, IV vs. I	0.573	1.774(0.556-5.686)	0.333			
ASA grade, II vs. I	0.414	1.344(0.892-1.976)	0.323			
ASA grade, III vs. I	0.532	1.863(1.083-2.574)	<b>0.004</b>	0.214	1.533(1.213-4.743)	<b>0.003</b>
ASA grade, IV vs. I	0.468	2.633(0.463-4.685)	0.264			
Gastrectomy, DG vs. TG	0.463	0.634(0.114-1.643)	0.623			
Gastrectomy, PG vs. TG	0.865	0.976(0.174-1.565)	0.246			
Surgical approach, Laparoscopy vs. Open	0.234	0.522(0.736-1.468)	0.358			
Surgical approach, Robotic surgery vs. Open	1.033	0.978(0.463-1.865)	0.753			
Surgery duration, per min	-0.001	0.999(0.994-1.005)	0.850			
mFI-11, mFI-11 <sup>High</sup> vs. mFI-11 <sup>Low</sup>	1.001	3.008(1.439-6.288)	<b>0.003</b>	1.048	2.852(1.357-5.994)	<b>0.006</b>

ASA: American Society of Anesthesiologists; BMI: Body mass index; TNM: Tumor- node-metastases; DG: Distal partial gastrectomy; TG: Total gastrectomy; PG: Proximal partial gastrectomy; PNI: Prognostic nutritional index; mFI-11:11-Item Modified frailty index; IGA: Intravenous general anesthesia; IIA:Intravenous inhalation anesthesia. *P* less than 0.05 is marked as bold.

**Supplementary Table 6. Univariate and multivariate logistic regression analysis of admission to ICU in two groups of patients.**

Variables	Univariable analysis			Multivariable analysis		
	B	OR (95% CI)	P value	B	OR (95% CI)	P value
Age, >75 vs. 65~75, years	1.091	2.977(2.088-4.245)	< <b>0.001</b>	0.914	2.495(1.723-3.613)	< <b>0.001</b>
Drinker, yes vs. no	0.026	1.026(0.538-1.957)	0.938			
Serum albumin, per g/L	-0.044	0.957(0.928-0.987)	<b>0.006</b>	-0.018	0.718(0.439-0.909)	<b>0.012</b>
PNI	-0.045	0.959(0.922-0.989)	<b>0.005</b>	-0.019	0.719(0.438-0.902)	<b>0.041</b>
TNM stage, II vs. I	-0.344	1.079(0.434-1.156)	0.609			
TNM stage, III vs .I	0.147	1.158(0.708-1.896)	0.559			
TNM stage, IV vs. I	0.756	2.129(1.185-3.825)	<b>0.011</b>	0.345	1.356(1.008-4.637)	<b>0.031</b>
ASA grade, II vs. I	1.284	1.424(1.004-1.784)	<b>0.032</b>	0.980	1.643(0.463-1.976)	0.318
ASA grade, III vs. I	1.342	1.637(1.053-3.749)	<b>0.009</b>	0.506	2.344(1.796-4.785)	<b>0.022</b>
ASA grade, IV vs. I	2.637	2.754(1.057-3.763)	<b>0.046</b>	0.602	2.865(1.092-3.853)	<b>0.018</b>
Gastrectomy, DG vs. TG	-0.204	0.815(0.563-1.180)	0.279			
Gastrectomy, PG vs. TG	0.597	0.812(0.152-0.849)	<b>0.010</b>	0.671	0.312(0.111-1.764)	0.357
Surgical approach, Laparoscopy vs. Open	-0.606	0.546(0.277-1.076)	0.080			
Surgical approach, Robotic surgery vs. Open	0.435	0.791(0.134-1.794)	0.066			
Surgery duration, per min	-0.001	0.999(0.996-1.001)	0.378			
mFI-11, mFI-11 <sup>High</sup> vs. mFI-11 <sup>Low</sup>	0.989	2.688(1.795-4.026)	< <b>0.001</b>	0.722	2.058(1.188-3.563)	<b>0.010</b>

ASA: American Society of Anesthesiologists; BMI: Body mass index; TNM: Tumor- node-metastases; DG: Distal partial gastrectomy; TG: Total gastrectomy; PG: Proximal partial gastrectomy; PNI: Prognostic nutritional index; mFI-11:11-Item Modified frailty index; IGA: Intravenous general anesthesia; IIA:Intravenous inhalation anesthesia. *P* less than 0.05 is marked as bold.