

**Supplement Table S1.** Comparison of ERCP status in patients according to BAR, NLR, CRP, and TG2018.

Factor	ERCP		p
	No (n=155)	Yes (n=325)	
BAR	4.09 (1.12-111.11)	3.73 (1.00-24.37)	0.006
NLR	10.04 (0.95-194.20)	9.59 (0.67-88.45)	0.866
CRP	4.72 (0.04-26.15)	2.92 (0.03-31.02)	0.035
TG2018	2 (1-3)	1 (1-3)	0.102

Abbreviations: ERCP; Endoscopic retrograde choangiopancreatography, BAR; blood urea nitrogen to albumin ratio, NLR; neutrophil to lymphocyte ratio, CRP; c-reactive protein, TG2018; tokyo guideline 2018,.

**Supplement Table S2.** Comparison of clinical outcomes according to TG2018 grade.

	Grade 1 (n=254)	Grade 2 (n=120)	Grade 3 (n=108)	P
Intensive care	8 (3.1%)	12 (10.0%)	61 (56.5%)	0.000
Long-term hospital stays	33 (13.0%)	30 (25.0%)	48 (44.4%)	0.000
PTBD	17 (6.7%)	9 (7.5%)	23 (21.3%)	0.000
Endotracheal intubation	1 (0.4%)	0	13 (12.0%)	0.000

Abbreviations: PTBD; percutaneous transhepatic bile drainage

**Supplement Table S3.** Comparison of BAR, NLR, CRP according to TG2018 grade.

	Grade 1 (n=254)	Grade 2 (n=120)	Grade 3 (n=108)	P
BAR	3.24 (1.00-24.37)	4.33 (1.47-23.82)	6.34 (1.23-111.11)	0.000
NLR	6.74 (0.76-79.92)	12.74 (0.67-81.33)	15.66 (0.81-194.20)	0.000
CRP	1.16 (0.03-26.15)	5.61 (0.11-30.14)	7.53 (0.03-31.02)	0.000

Abbreviations: BAR; blood urea nitrogen to albumin ratio, NLR; neutrophil to lymphocyte ratio, CRP; c-reactive protein,