

Supplementary Table 1. Factors Associated with Successful Drainage

Factor	Initial EBD	
	Crude OR (95% CI)	Adjusted OR (95% CI)
Sex		
Female	Reference	Reference
Male	1.66 (0.71–3.89)	1.47 (0.56–3.91)
Age at treatment	0.98 (0.94–1.02)	0.99 (0.94–1.04)
BMI	1.03 (0.92–1.17)	1.05 (0.92–1.21)
Smoking	1.06 (0.45–2.50)	1.23 (0.45–3.36)
Underlying disease		
Hypertension	0.53 (0.23–1.24)	0.38 (0.13–1.08)
Diabetes	0.68 (0.22–2.09)	0.66 (0.18–2.40)
Bismuth type		
I/II	2.11 (0.41–10.87)	4.54 (0.76–26.94)
IIIa/IIIb	1.10 (0.45–2.71)	1.11 (0.41–3.00)
IV	Reference	Reference
Total bilirubin	1.07 (1.01–1.14)	1.09 (1.02–1.18)
PT INR	0.07 (0.01–0.81)	0.08 (0.00–1.63)
Albumin	1.83 (0.92–3.62)	1.62 (0.72–3.65)
Emergent procedure	0.11 (0.01–0.99)	0.05 (0.00–0.87)
Treatment		
No treatment	Reference	Reference
Treatment	0.86 (0.58–1.27)	0.91 (0.61–1.37)
Stent type and number		
Bilateral metal stents	1.31 (0.54–3.18)	1.17 (0.44–3.14)
Multiple plastic stents	Reference	Reference

Adjusted for BMI, bismuth type (I/II, IIIa/IIIb and IV), time varying total bilirubin, PT INR, and albumin.

EBD, endoscopic biliary drainage; OR, odds ratio; CI, confidence interval; BMI, body mass index; PT, prothrombin time; INR, international normalized ratio.

Supplementary Table 2. Factors Associated with Cholangitis

Factor	Overall EBD	
	Crude HR (95% CI)	Adjusted HR (95% CI)
Sex		
Female	1.64 (0.98–2.75)	1.42 (0.89–2.26)
Male	Reference	Reference
Age	1.00 (0.98–1.02)	0.99 (0.97–1.01)
BMI	1.02 (0.96–1.08)	1.05 (0.99–1.11)
Smoking	0.70 (0.42–1.16)	0.77 (0.48–1.24)
Underlying disease		
Hypertension	1.21 (0.71–2.04)	1.05 (0.63–1.73)
Diabetes	0.90 (0.28–2.86)	0.88 (0.32–2.44)
Bismuth type		
I/II	Reference	Reference
IIIa/IIIb	1.37 (0.57–3.30)	1.19 (0.51–2.78)
IV	1.35 (0.61–2.99)	1.23 (0.56–2.71)
Total bilirubin	1.02 (0.99–1.05)	1.02 (0.99–1.05)
PT INR	2.46 (0.91–6.66)	1.55 (0.56–4.28)
Albumin	0.61 (0.42–0.88)	0.67 (0.47–0.95)
Emergent procedure	1.45 (0.75–2.81)	0.70 (0.22–2.21)
Treatment		
No treatment	Reference	Reference
Treatment	1.42 (0.80–2.53)	1.67 (0.97–2.86)
Stent type and number		
Bilateral metal stents	Reference	Reference
Multiple plastic stents	1.93 (1.14–3.25)	2.08 (1.21–3.58)

Adjusted for BMI, bismuth type (I/II, IIIa/IIIb and IV), time varying total bilirubin, PT INR, and albumin.

EBD, endoscopic biliary drainage; HR, hazard ratio; CI, confidence interval; BMI, body mass index; PT, prothrombin time; INR, international normalized ratio.

Supplementary Table 3 . Factors Associated with Mortality within 6 Months

Factor	Overall EBD	
	Crude HR (95% CI)	Adjusted HR (95% CI)
Sex		
Female	0.74 (0.37–1.47)	0.92 (0.40–2.13)
Male	Reference	Reference
Age	1.05 (1.01–1.08)	1.05 (1.01–1.09)
BMI	0.98 (0.89–1.07)	1.05 (0.94–1.18)
Smoking	0.92 (0.47–1.81)	0.84 (0.37–1.89)
Underlying disease		
Hypertension	1.02 (0.54–1.95)	1.69 (0.73–3.91)
Diabetes	1.45 (0.64–3.31)	0.98 (0.37–2.56)
Clinical stage		
IIIc	Reference	Reference
IVa	2.08 (0.56–7.70)	1.53 (0.39–5.91)
IVb	16.07 (4.80–53.81)	12.31 (3.52–43.08)
Bismuth type		
I/II	Reference	Reference
IIIa/IIIb	2.38 (0.54–10.46)	1.01 (0.21–4.78)
IV	2.1 (0.49–8.95)	1.19 (0.26–5.45)
Total bilirubin	1.06 (1.02–1.10)	1.04 (0.99–1.10)
PT INR	2.17 (0.74–6.36)	0.71 (0.14–3.46)
Albumin	0.42 (0.29–0.61)	0.41 (0.26–0.66)
Emergent procedure	1.02 (0.25–4.26)	1.78 (0.26–12.35)
Treatment		
No treatment	Reference	Reference
Treatment	0.47 (0.14–1.56)	0.43 (0.12–1.54)
Stent type and number		
Bilateral metal stents	Reference	Reference
Multiple plastic stents	1.89 (0.93–3.82)	2.91 (1.26–6.71)

Adjusted for BMI, clinical stage, bismuth type (I/II, IIIa/IIIb and IV), time varying total bilirubin, PT INR, albumin and stent type.

EBD, endoscopic biliary drainage; HR, hazard ratio; CI, confidence interval; BMI, body mass index; PT, prothrombin time; INR, international normalized ratio.