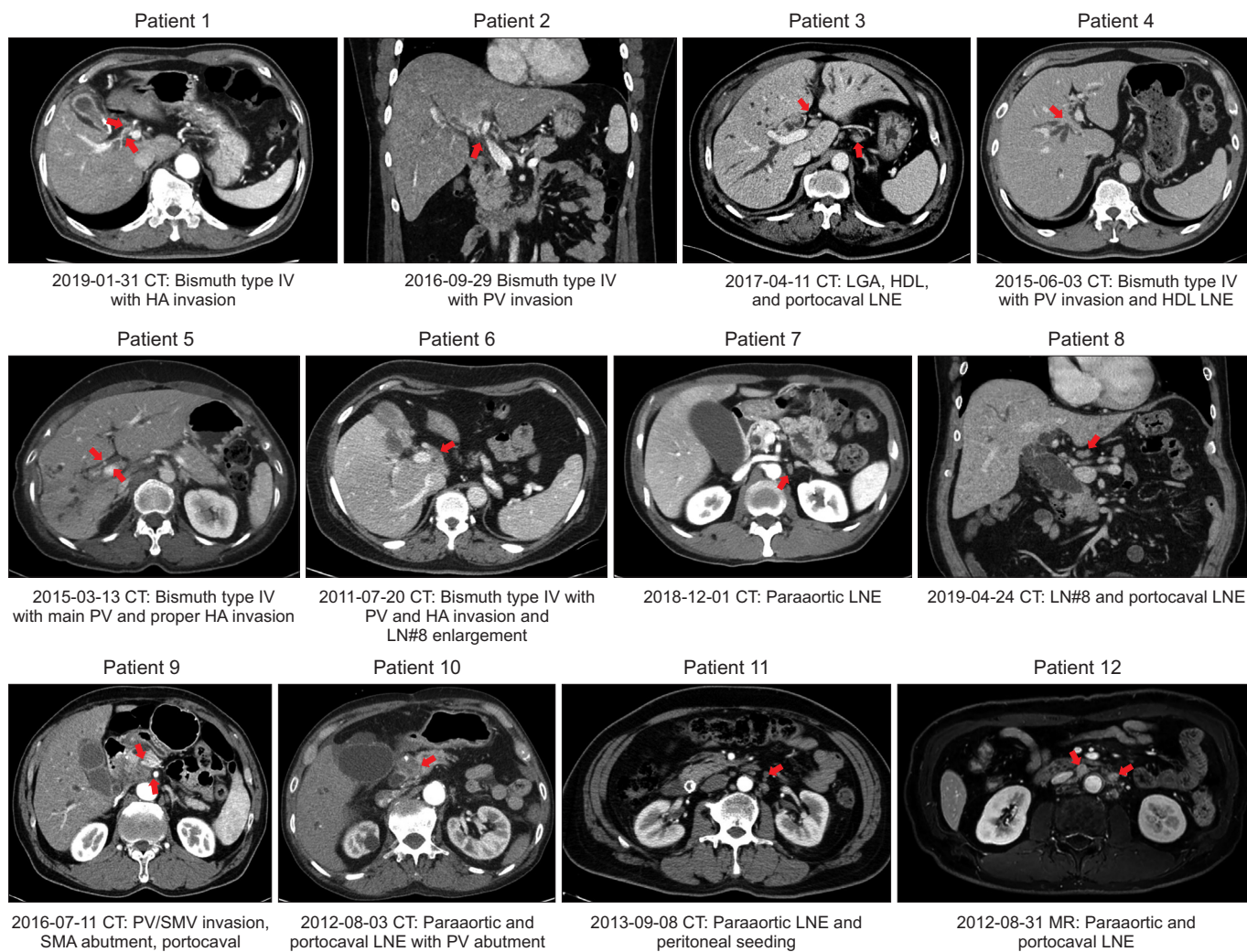


Supplementary Table 1. Reasons for conversion surgery and tumor pathological characteristics

Patient	Tumor location	Reason for unresectability	Reason for conversion surgery	Tumor stage	Dominant component	Tumor differentiation
1	Perihilar	Bismuth type IV with HA invasion	Decreased right hepatic bile duct involvement and HA involvement	yT2aN0M0	Adenocarcinoma	Well
2	Perihilar	Bismuth type IV with PV invasion	Decreased size of LNs, decreased extent of left hepatic bile duct involvement and PV invasion on follow-up imaging	yT2aN0M0	Adenocarcinoma	Moderate
3	Perihilar	LGA, HDL, and portocaval LNE	Decreased size of LNs on follow-up imaging	yT1N0M0	Adenocarcinoma	Well
4	Perihilar	Bismuth type IV with PV invasion and HDL LNE	Decreased right hepatic bile duct involvement and decreased size of LNs on follow-up imaging	yT2bN0M0	Adenocarcinoma	Moderate
5	Perihilar	Bismuth type IV with main PV and proper HA invasion	Decreased tumor extent and vessel invasion	yT2bN0M0	Adenocarcinoma	Moderate
6	Perihilar	Bismuth type IV with PV and HA invasion and LN#8 enlargement	Decreased size of LNs and vessel invasion	No residual tumor	Adenocarcinoma	N/A
7	Distal bile duct	Paraaortic LNE	Decreased size of LNs on follow-up imaging	yT1N0M0	Adenocarcinoma	Moderate
8	Distal bile duct	LN#8 and portocaval LNE	Decreased size of LNs on follow-up imaging	yT1N0M0	Adenocarcinoma	Moderate
9	Distal bile duct	PV/SMV invasion, SMA abutment, portocaval and HDL LNE	Decreased extent of SMV/SMA invasion and decreased size of LNs on follow-up imaging	yT3N0M0	Adenocarcinoma	Moderate
10	Distal bile duct	Paraaortic and portocaval LNE with PV abutment	Decreased size of LNs and tumor extent	yT1N0M0	Adenocarcinoma	Moderate
11	Gallbladder	Paraaortic LNE and peritoneal seeding	Decreased size of retroperitoneal LNs, no peritoneal seeding on follow-up imaging	yT2N0M0	Adenocarcinoma	Well
12	Gallbladder	Paraaortic and portocaval LNE	Decreased size of LNs on follow-up imaging	yT3N1M0	Adenocarcinoma	Moderate

HA, hepatic artery; LNs, lymph nodes; PV, portal vein; LGA, left gastric artery; HDL, hepatoduodenal ligament; LNE, lymph node enlargement; SMV, superior mesenteric vein; SMA, superior mesenteric artery; N/A, not available.



Supplementary Fig. 1. Key image findings associated with reasons for initial unresectability. CT, computed tomography; HA, hepatic artery; PV, portal vein; LGA, left gastric artery; HDL; hepatoduodenal ligament; LNE, lymph node enlargement; LNs, lymph nodes; SMV, superior mesenteric vein; SMA, superior mesenteric artery; MR, magnetic resonance.