

## Appendix I. PubMed-MEDLINE search strategy

up to 31 October 2018.

#1 "Endosonography"[MeSH] OR "endoscopic ultrasonography"[tiab] OR  
"endoscopic ultrasound"[tiab] OR "EUS"[tiab] OR "choledochoduodenostomy"[tw]  
OR "hepaticogastrostomy"[tw]

#2 "Cholangiopancreatography, Endoscopic Retrograde"[MeSH] OR  
"ERCP"[tiab]

#3 "Cholestasis, Extrahepatic"[MeSH] OR "Jaundice, Obstructive"[MeSH] OR  
"biliary obstruction"[tiab] OR "biliary stricture"[tiab]

#4 "Carcinoma"[MeSH] OR "malign\*" [tiab] OR "cancer"[tiab]

#5 #3 AND #4

#6 "randomized controlled trial"[pt] OR "controlled clinical trial"[pt] OR  
"randomized"[tiab] OR "randomised"[tiab] OR "randomly"[tiab]

#7 #1 AND #2 AND #5 AND #6

## Appendix II. Data extraction form

Article title		
First author		
Year of publication		
Location		
Setting		
Study design		
Study quality		
Patient demographics characteristics	EUS-BD	ERCP-BD
Sample size, n		
Age (y), mean $\pm$ SD		
Sex, male, %		
Patient clinical characteristics		
Etiology (n)		
Duodenal invasion, n/N (%)		
Indwelling duodenal stent, n/N (%)		
Indications for reintervention (n)		
Chemotherapy, n/N (%)		
EUS-BD technique		
Type of stents		
<b>Technical success, n/N (%)</b>		
<b>Clinical success, n/N (%)</b>		
<b>Procedure Duration (mins), mean <math>\pm</math> SD</b>		
<b>Stent dysfunctions, n/N (%)</b>		
<b>Stent occlusion</b>		
<b>Stent migration</b>		
<b>Tumor in/overgrowth</b>		
<b>Reinterventions, n/N (%)</b>		
<b>Adverse events, n/N (%)</b>		
<b>Total</b>		
<b>Pancreatitis</b>		
<b>Cholangitis</b>		
<b>Cholecystitis</b>		
<b>Bleeding</b>		
<b>Bile peritonitis</b>		
<b>Stent Patency (HR)</b>		
<b>Overall survival (HR)</b>		
Follow-up (days), median (IQR)		
Patients lost to follow-up, n/N (%)		
<p>EUS-BD, EUS-guided biliary drainage; ERCP-BD, ERCP-guided biliary drainage;  HR, hazard ratio; IQR, interquartile range, SD, standard deviation.  Bold items are outcomes of our analysis.</p>		