Same-session endoscopic diagnosis and symptoms' palliation in pancreato-biliary malignancies: clinical impact of Rapid-on-Site Evaluation

#### **Supplementary Statement 1**: List of collected variables

#### Characteristics of included patients

- Age, years [IQR]
- Male sex, n (%)
- Primary disease, n (%)
  - o Pancreatic cancer
  - o Cholangiocarcinoma
  - o Ampullary/Duodenal cancer
  - o Metastatic lesion
  - o Other malignancies
- Oncological Staging, n (%)
  - o Resectable/Borderline resectable
  - Locally advanced
  - o Metastatic
- Presenting Symptom, n (%)
  - o Jaundice
  - o GOO

#### Characteristics of sampling procedures

- Upfront procedure, n (%)
  - o EUS
  - o ERCP
  - o ERCP after inadequate EUS
- First-session Adequacy, n (%)
  - o EUS Adequacy
  - ERCP Adequacy
- Inadequate samples, n (%)
  - o Final diagnosis obtained by, n
    - Subsequent EUS
    - Subsequent ERCP
    - Surgical specimen
    - Clinico-radiological follow up
- Adverse events during sampling, n (%)

### Characteristics of therapeutic procedures

- Endoscopic Technical Success, n (%)
  - o ERCP
  - o EUS-CDS
  - o EUS-HGS
  - o EUS-GBD
  - o EUS-GE
  - o Enteral Stenting
- Rescue of endoscopic failure, n (%)



- o PTBD
- o Surgery
- Adverse events, n (%)
- Procedural time, minutes [IQR]
- Hospital stay, days [IQR]
- Time to chemotherapy, days [IQR]

BMI: Body Mass Index; ERCP: Endoscopic Retrograde Cholangiopancreatography; EUS: Endoscopic Ultrasound; CDS: Choledocho-duodenostomy; GOO: Gastric Outlet Obstruction; GBD: Gallbladder Drainage; GE: Gastro-enterostomy; HGS: Hepatico-gastrostomy; IQR: Interquartile Range; LAMS: Lumen Apposing Metal Stents; PTBD: Percutaneous Transhepatic Biliary Drainage.



## **Supplementary Table 1**: Sampling Adequacy according to Level of the Stenosis

Variable	Gastric Outlet Stenosis (n= 21)	Distal Biliary Stenosis (n= 272)	Proximal Biliary Stenosis (n= 30)	p-value	p-value (distal versus proximal)
First attempted sampling modality, n (%)				<0.001	0.007*
EUS, n (%)	21 (100)	270 (99.3)	27 (90)		
ERCP, n (%)	0 (0)	2 (0.7)	3 (10)		
Total Adequacy, n (%)	21 (100)	264 (97.1)	27 (90%)	0.09	0.05*
EUS Adequacy, n (%)	21 (100)	260/270 (96.3)	23/27 (85)	0.01*	0.01*
ERCP Adequacy, n (%)		4/10 (40)	4/6 (66.7)		0.6



## Supplementary Table 2: Sampling Adequacy and Stenting according to Pancreatic versus Biliary Cancer

Variable	Pancreatic Cancer (n= 248)	Biliary Cancer (n= 52)	p-value
First attempted sampling modality, n (%)			<0.001*
EUS	248 (100)	47 (90.4)	
ERCP	0	5 (9.6)	
Total Adequacy, n (%)	244 (98.4)	47 (90.4)	0.002*
EUS Adequacy	243/248 (97.9)	41/47 (87.2)	<0.001*
ERCP Adequacy	1/4 (25)	6/10 (60)	0.6
Stenting <sup>\$</sup> n (%)			<0.001*
Plastic	6 (3.1)	16 (34.8)	
PC-SEMS	170 (88.5)	23 (50)	
FC-SEMS	3 (1.6)	1 (2.2)	
UC-SEMS	12 (6.2)	6 (13)	

ERCP: Endoscopic Retrograde Cholangiopancreatography; EUS: Endoscopic Ultrasound; FC: Fully Covered; PC: Partially Covered; SEMS: Self-Expandable Metal Stent; UC: Uncovered.

\$ Amongst patients with jaundice and retrograde cannulation success
\*statistically significant



## Supplementary Table 3: Biliary Stenting according to Level of the stenosis and Adequacy

Variable	Distal Biliary Stenosis		Proximal Biliary Stenosis		p-value
	All Patients (n= 272)	Patients with inadequate sampling (n= 8)	All Patients (n= 30)	Patients with inadequate sampling (n= 3)	
Biliary Stenting, n (%)					
ERCP					<0.001*
Plastic stenting	10 (4.4)	7	14 (51.9)	3	
Partially Covered SEMS	197 (87.6)	0	7 (25.9%)	0	
Fully Covered SEMS	5 (2.2)	1	0 (0)	0	
Uncovered SEMS	12 (5.3)	0	6 (22.2)	0	
Therapeutic EUS					
EUS-Choledocho-duodenostomy	37	0	0	0	
EUS-Hepatico-gastrostomy	4	0	1	0	
EUS-Gallbladder Drainage	1	0	0	0	

ERCP: Endoscopic Retrograde Cholangiopancreatography; EUS: Endoscopic Ultrasound; SEMS : Self-Expandable Metal Stent . \*statistically significant