

CASE REPORT FORM

Patient Characteristics

Case ID* _____

No patient or center identifiers allowed.

Age* _____ years **Gender*** Male Female

Height* _____ cm **Weight*** _____ kg

Preoperative Characteristics

ASA Status*

(ASA: American Society of Anesthesiologists – Physical Status Classification system)

- ASA 1 – A normal healthy patient
- ASA 2 – A patient with mild systemic disease
- ASA 3 – A patient with severe systemic disease
- ASA 4 – A patient with severe systemic disease that is a constant threat to life

Comorbidities* None Cardiac disease *(Arterial hypertension is NOT considered as cardiac disease)*

- Diabetes mellitus Chronic renal failure
- Metastatic cancer Cirrhosis Stroke
- Asthma COPD *(Chronic obstructive Pulmonary Disorder)*
- Other *(Please indicate below)*

If other comorbidity, please indicate _____

If concomitant or previous cancer, please indicate below. *(Occurring or existing at the same time as pancreatic cancer or diagnosed previously E.g. Lung, colorectal, endometrial cancer.)*

If diabetic preoperatively, please, indicate management

- Diet Controlled Oral antidiabetics
- Insulin

Pancreatic enzyme supplementation preoperatively

(Enzyme supplements containing Pancreatin, a mixture of pancreatic enzymes, lipase, amylase and protease e.g. Creon)

- Yes No Unknown

Preoperative Characteristics continued

COVID-19 Status*

- No previous diagnosis of COVID-19
- Previous diagnosis of COVID-19 *Diagnosed >4 weeks*
- Current diagnosis of COVID-19 *Diagnosed within 4 weeks*
- Unknown COVID-19 status

Preoperative blood values

Hemoglobin* _____ g/L
(Normal range typically 115-180 g/L)

Creatinine* _____ µmol/l
(Normal range typically 50-120 µmol/L)

Albumin _____ g/L
(Normal range typically 35-50 g/L)

Bilirubin* _____ µmol/L
(Normal values typically <17 µmol/L)

CA 19-9 _____ U/ml
(Normal values typically <27 U/ml)

Preoperative therapy*

(Related to the current disease)

- No preoperative therapy
- Preoperative chemotherapy
- Preoperative radiotherapy
- Preoperative chemoradiotherapy
(Chemotherapy and radiotherapy at the same time)
- Preoperative sequential chemoradiotherapy
(chemotherapy followed by radiotherapy)

If preoperative chemotherapy, please indicate regime used _____

Preoperative stent*

(ERCP: Endoscopic Retrograde Cholangiopancreatography. PTBD: Percutaneous Transhepatic Biliary Drainage)

- None
- ERCP Stent
- PTBD stent
- Failed ERCP but successful PTBD stent
- Unknown

Operation Characteristics

Approach*

- Open Laparoscopic Robotic
- Laparoscopic converted to open
- Robotic converted to laparoscopic
- Robotic converted to open

If open, incision performed* Midline Transverse

- Rooftop "L" Inverted "L" Other

Procedure performed*

- Pancreatoduodenectomy – Whipple’s
- Pancreatoduodenectomy – Pylorus preserving (PPPD)
- Distal Pancreatectomy and splenectomy
- Distal Pancreatectomy – Spleen Preserving
- Pancreatic Duct drainage procedure (e.g. Frey, Puestow, Beger)
- Total Pancreatectomy and splenectomy
- Total Pancreatectomy – Spleen preserving
- Enucleation
- Other pancreatic operation (indicate below)

If other operation performed, please indicate

Portomesenteric venous resection and reconstruction performed*

(Any type of portomesenteric resection, including the portal vein and/or the superior mesenteric vein.)

- Yes No

If Portomesenteric venous resection performed, please indicate reconstruction technique

- Tangential End-to-end
- Autologous or cadaveric graft
- Prosthetic graft (biologic or synthetic)

Arterial resection and reconstruction performed*

(The term "arterial resection" refers to the superior mesenteric or hepatic artery)

- Yes No

Operation Characteristics continued

Extended procedure including resection of additional organs* (If yes, please indicate below)

- Yes No

If resection was extended to additional organs, please indicate below: (e.g. Colon, adrenal, liver resection)

Operation duration _____ minutes

Texture of Pancreas*

(As assessed by the surgeon intraoperatively)

- Soft/normal Hard/fibrotic Unknown

Size of pancreatic duct*

- <3mm 3-10mm >10mm unknown

Pancreatic anastomosis*

- None Pancreaticojejunostomy
- Pancreaticogastrostomy

If pancreatic anastomosis performed, indicate technique

- Duct to Mucosa Dunking/invagination

If distal pancreatectomy performed, indicate closure of the pancreatic remnant stump (multiple options)

- Hand-sewn closure Stapler closure
- Reinforced staple line Seromuscular patch
- Separate ligation of pancreatic duct
- Pancreaticoenteric anastomosis
- Falciform ligament patch Fibrin Glue Sealing
- Surface Active Meshes (e.g. Tachosil) Other

Estimated blood loss intraoperatively _____ mL

Intraoperative blood transfusions* _____ Units

(Please indicate "0" if no blood transfusions)

Use of pancreatic stent*

(i.e. percutaneous surgical drain)

- Yes No Unknown

Surgical drain*

- Yes No Unknown

Octreotide administration intra-/postoperatively*

- Yes No

Final Pathological Diagnosis

Final histological diagnosis*

- Pancreatic ductal adenocarcinoma
- Ampullary carcinoma Duodenal adenocarcinoma
- Cholangiocarcinoma Neuroendocrine neoplasia
- Chronic pancreatitis Benign cystic lesions
- Intraductal papillary mucinous neoplasm (IPMN)
- Other

If other histological diagnosis, please indicate

Tumour size (if applicable) _____ mm

Lymphovascular invasion (if applicable)

- Yes No Unknown

Perineural invasion (if applicable)

- Yes No Unknown

Portal vein (PV) involvement on histology (if PV resection)

- Yes No Unknown

TNM classification AJCC 8th edition (cancer)

- pT** Tx T0 Tis T1 T1a T1b T1c
 T2 T3 T3a T3b T4

- pN** Nx N0 N1 N2 N3

- M** Mx M1 M2

Total number of lymph nodes resected:

Total number of positive lymph nodes resected:

TNM classification AJCC 8th edition (cancer) continued

Staging (for all cancers)

- 0 IA IB IIA IIB III IV

Histologic Grade (for all cancers)

- Gx G1 G2 G3 G4

Resection margins (for all cancers)

- R0 R1 R2

If R1/R2, margins for pancreatoduodenectomies for all cancers

- Anterior surface Posterior margin
- SMV margin SMA margin
- Pancreatic neck/transection margin
- Proximal duodenal/gastric margin
- Common bile duct margin
- Distal duodenal margin
- Portal vein resection margin Other

Postoperative course from operation until discharge

Intensive care unit stay* _____ days
(If no admission to the intensive care unit, then indicate "0". If there was an unplanned readmission, then please indicate the total number of ITU unit stay in days.)

Intermediate care (IMC) or high dependency unit (HDU) stay* _____ days
(If no admission to the IMC/HDU, then indicate "0". If there was an unplanned readmission, then please indicate the total number of IMC/HDU unit stay in days.)

Postoperative hospital stay* _____ days
(i.e the total postoperative hospital stay until hospital discharge including ITU/IMC/HDU days)

Blood transfusions postoperatively _____ units
(If no blood transfusions administered post-operatively then indicate "0")

Insulin for glycaemic control postoperatively*
 Yes No

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Complication types and grades according to the Clavien-Dindo classification until discharge*

*This field is mandatory. If the patient did not encounter any complications from operation until discharge, please allow "No" for all types and grades of complications listed above. In case of other types of complications, please indicate below the types. Note: Pulmonary complications includes embolism. Gastrointestinal: e.g. ileus, diarrhea. Infection: includes wound infections. The type of pancreatic fistula according to the ISGPF is described below. In case of complex cases, such as bleeding, leading to multiorgan failure and death, the study coordinator may contact you for further clarifications regarding the grading of complications.

	No	1	2	3a	3b	4a	4b	5
Delayed gastric emptying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pancreatic fistula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Postoperative bleeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biliary fistula	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gastrojejunostomy leak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chyle leak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portal vein Thrombosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulmonary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gastrointestinal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cardiac	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Urologic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neurologic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COVID-19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If other types of complications (1 to 3 above), then please describe them below:

If death (grade 5) then please indicate cause of death:

If the patient developed a pancreatic fistula, please indicate the ISGPS grade

- No fistula A B C

If the patient developed delayed gastric emptying, please indicate the ISGPS grade

- No DGE A B C

If the patient developed bile leakage, please indicate the grade (Grade A: Bile leakage requiring no or little change in patients' clinical management. Grade B: Bile leakage requiring a change in patients clinical management (eg, additional diagnostic or interventional procedures) but manageable without relaparotomy, or a Grade A bile leakage lasting for >1 week. Grade C: Bile leakage requiring relaparotomy)

- No bile leakage A B C

If the patient developed postoperative bleeding, please indicate the ISGPS grade Grade A: Early / mild: no clinical impairment. Observation. No therapeutic consequence. Grade B: Early and severe or late and mild: Rarely life-threatening. CT scan, angiography, embolisation or surgery. Grade C: Late / severe: Life-threatening. CT scan, angiography, endoscopy, embolisation, surgery.

- No postoperative bleeding A B C

Additional complications from hospital discharge until 90 days postoperatively

Please report all complications up to 90 days postoperatively excluding those already stated above (i.e. those during hospitalization)

Complication 1 after hospital discharge

Complication 1 type _____

Complication 1 grade:

1 2 3A 3B 4A 4B 5(Death)

Days from operation to complication 1 _____ days

Complication 2 after hospital discharge

Complication 2 type _____

Complication 2 grade:

1 2 3A 3B 4A 4B 5(Death)

Days from operation to complication 2 _____ days

Complication 3 after hospital discharge

Complication 3 type _____

Complication 3 grade:

1 2 3A 3B 4A 4B 5(Death)

Days from operation to complication 3 _____ days

Hospital readmission within 90 days postoperatively (for all cancers) *(Hospital readmission is defined as any type of hospitalization within the same hospital the patient was operated or any other hospital. This applies to all reasons of readmission, including indirectly related to the main pancreatic operation.)*

Yes No Unknown

Pancreatic Insufficiency

Insulin administration at 90 days post-operatively

Yes No Unknown

Pancreatic enzyme supplementation at 90 days postoperatively

Yes No Unknown

Enzyme supplements containing Pancreatin, a mixture of pancreatic enzymes, lipase, amylase and protease e.g. Creon

Adjuvant Chemotherapy

Patient offered chemotherapy within 90 days postoperatively (for all cancers)

Yes No Unknown

If chemotherapy offered, please indicate regime used:

Patient offered radiotherapy within 90 days postoperatively (for all cancers)

Yes No Unknown

If radiotherapy offered, please indicate type

- External Beam Radiation therapy
- Intensity-modulated Radiation therapy (IMRT)
- Stereotactic Body Radiation therapy (SBRT)
- Image-guided radiation therapy (IGRT)
- Volumetric modulated arc therapy (VMAT)
- Other type
- Unknown

Data completion

All data until discharge from hospital is complete
(Please check the box if all data is complete until discharge. If not complete by the end of the study period, the case will be excluded from the analysis.)

All data until 90 days postoperatively follow up are complete
(Please check the box if all data is complete until 90 days postoperatively. If not complete by the end of the study period, the case will be excluded from the analysis)

Comments (Optional)