Table S1. Summary of rare benign solid pancreatic lesions.

	IST	PT	SSCA
Demographics	?	4th- 5th decade. Immunosuppression.	Women 7th decade.
Laboratory	-	-	-
Prognosis	Benign	Good	Benign
Location	Tail	Body, head	?
Appearance	Well-defined.	Well-defined. Focal mass. Multiple small nodules. Diffuse involvement.	Well-defined
Enhancement	Hypervascular. Same as spleen. Zebra pattern.	Peripheral enhancement.	Rapid arterial enhancement. Isodensity/intensity portal phase.
Calcification	-	++	-
Haemorrhagic content	-	-	++
Cysts	-	++	-
Necrosis	-	-	-
MPD dilatation	-	Rare	Rare
Vascular invasion	-	-/+	-
TIP	Prior splenic surgery or trauma. High DWI SI.	Peripancreatic necrotic adenopathies.	MRCP: cysts
Differential diagnosis	pNEN SPT Hypervascular metastasis.	***Solid appearance:*** • PDAC • Lymphoma • Metastasis ***Cystic appearance:*** • Cystadenoma • Pseudocyst • Abscess ***Diffuse involvement:*** • Acute pancreatitis.	pNEN SPT Hypervascular metastasis.

IST Intrapancreatic splenic tissue, *PDAC* Pancreatic ductal adenocarcinoma, *pNEN* Pancreatic neuroendocrine tumour, *PT* Pancreatic tuberculosis, *SPT* Solid pseudopapillary tumour, *SSCA* Solid serous cystadenoma

Table S2. Summary of rare potentially malignant solid pancreatic lesions.

	SPT	PS	INEN	PSFT
Demographics	Women < 40 y.o. Men: older, aggressive behaviour.	5th decade. 10% association NF2. Rarely NF1 and risk of malignancy.	?	6th decade
Laboratory	-	-	Non-functioning pNEN.	Recurrent hypoglucemia.
Prognosis	Good if R0 resection, even if metastatic. Malignant behaviour 10-15%.	Good. Malignant transformation possible.	?	Good if R0 resection. 12-22% malignant.
Location	Tail	Head	?	Head
Appearance	Well-defined. Large. Heterogeneous. Homogeneous if small	Well-defined. Solid-cystic.	Purely intraductal. Distal pancreas atrophic.	Well-defined. Large. Heterogeneous. Homogeneous if small
Enhancement	++	Determined by proportion solid/cystic components	+++	++
Calcification	+	-/+ if large	?	++if large
Hemorraghic content	++	-/+ if large	?	+if large
Cysts	++	-/+	?	++if large
Necrosis	++	-/+ if large	?	+++ if large
MPD dilatation	-/+ if malignant	-	++	-/+ if malignant
Vascular invasion	+if malignant	+if malignant	-	-
TIP	Fibrous pseudocapsule. Fluid-fluid levels.	Hypermetabolic on PET-CT even if benign.	May be obscured if causing acute pancreatitis.	Hypervascular. Adenopathies rare. PET-CT not useful for malignancy.
Differential diagnosis	pNEN. Hypervascular metastasis.	SPT pNEN SSCA	Chronic pancreatitis.	pNEN PPLM GIST PEComa SPT

GIST gastrointestinal stromal tumour, *INEN* Intraductal Neuroendocrine Neoplasm, *PEComa* perivascular epithelioid cell tumour, *pNEN* Pancreatic neuroendocrine tumour, PPLM Primary pancreatic leiomyosarcoma, *PS* Pancreatic schwannoma, *PSFT* Pancreatic solitary fibrous tumour, *SPT* Solid pseudopapillary tumour, *SSCA* Solid serous cystadenoma.

Table S3. Summary of rare malignant solid pancreatic lesions.

	ACC	UCOGC	PASC	CC	PPLM	PPL	SPL	PM
Demographics	Men>women. Bimodal: 8-15 y.o 7th decade	Women>>men Middle aged and elderly.	Men>women. 6th decade.	7th decade.	5th decade. East Asian ethnicity.	Men > women. 5th decade. Immunosuppression.	Known lymphoma. More frequent than PPL.	Known primary tumour: RCC, gastric, breast, lung.
Laboratory	↑ Lipase. ↑Alpha-fetoprotein. Peripheral eosinophilia.	N/↑CEA N/↑CA19-9	↑CEA ↑CA19-9 Hypercalcemia	↑CEA ↑CA19-9	-	↑LDH	↑LDH	-
Prognosis	5-year survival rate 50%	5-year survival rate > 50%. Variable.	Median overall survival after surgery 1 year.	5-year survival rate 57%.	48 months	Long-term regression/remission.	Long-term regression/remission.	Depends on primary tumour.
Location	-	Body-tail	Head	Head	-	Head	-	-
Appearance	Large. Well-defined. Exophytic.	Large. Locally aggressive.	Round. Lobulated.	Large. Lobulated. Ill-defined. Intraluminal if IPMN-related.	Large. Heterogeneous.	*Focal pattern:* Homogeneous Large *Other:* Diffuse Peripheral Multinodular	Peripancreatic adenopathy with pancreas invasion. Same patterns as primary pancreatic lymphoma.	Single. Multiple. Diffuse.
Enhancement	-Arterial phase + Portal phase	-/+	+	Progressive and delayed. Sponge-like.	+ If large: +peripheric - central	Limited. Progressive. Delayed.	+	Like primary tumour
Calcification	-/+ if large	-/+	-	++	-	-	-	Like primary tumour
Hemorraghic content	-/+ if large	-/+	-	-	-/+ (if large)	-	-	Like primary tumour
Cysts	-/+(if large)	+	-	-	-/+(if large)	-	-	-
Necrosis	-/+ if large	-/+	++	-	-/++ if large	-	-	Like primary tumour
MPD dilatation	-	+	+	-/+	-	-	-	-
Vascular invasion	-/+	+	-/+	-/+	-/+	-	-	-
TIP	May be exophytic. Enhancing capsule. Adenopathies and hepatic	Invasive. Adenopathies and metastases rare.	Central high SI T2WI. Enhancing capsule. Locally advanced / metastatic.	↑ High T2 SI. Salt&pepper pattern.	Adenopathies rare. Metastases frequent at presentation.	High DWI signal. If infrarenal retroperitoneal adenopathy,	Known or suspected lymphoma.	Advanced disease. Long latency.

	metastases frequent at presentation.					PDAC ruled out.		
Differential diagnosis	PDAC. pNEN. SPT. Pancreatoblastoma.	PDAC. Mucinous carcinoma. SPT. pNEN. Pseudocyst.	PDAC	IPMN Mucinous carcinoma.	PDAC pNEN	PDAC ***Diffuse pattern:*** Acute pancreatitis. ***Peripheral pattern:*** AIP. ***Multinodular pattern:*** PM. Multifocal AIP.	PDAC PPL Same as PPL	***Hypervascular*** pNEN IPST Vascular ***Hypovascular*** PDAC PPL AIP

ACC Acinar cell carcinoma, *AIP* Autoimmune pancreatitis, *CC* Colloid carcinoma, *IPMN* Intraductal papillary mucinous neoplasm, *PASC* Pancreatic adenosquamous carcinoma, *PDAC* Pancreatic ductal adenocarcinoma, *pNEN* Pancreatic neuroendocrine tumour, *PM* Pancreatic metastases,
PPL Primary pancreatic lymphoma, *PPLM* Primary pancreatic leiomyosarcoma, *SPL* Secondary pancreatic lymphoma, *SPT* Solid pseudopapillary tumour, UCOGC Undifferentiated carcinoma with osteoclastic-like giant cells.