



# PACT-UK PAncreatic Cancer reporting Template-UK

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### Overview

- Background
  - Why radiology is central to management planning
  - Why template reporting is necessary
  - Advantages
  - Evidence

- Review of PACT-UK synoptic report
  - How it can improve treatment pathway
  - Potential impact for patients and healthcare teams

### Radiology Central to Staging & Treatment Planning...

- Local disease extent
  - Relationship between tumour and major vessels / adjacent organs
  - Providing a vascular roadmap for surgery
    - Including variants
- Detection of metastatic disease

Re-assessment following chemorad



### The Problem...



Enclose Encroach Compress Surround Invasion Nip Abutment Impingement Pinch Contact Involvement Distortion Touch Encasement



### The Problem...

Human error

"Hindsight is a wonderful thing but foresight is better, especially when it comes to saving life, or some pain!" - William Blake

"We must accept human error as inevitable - and design around that fact." - Donald Berwick

## Reporting Templates

- Evidence
  - Significantly improve completeness of cancer staging reports & quality
  - Improve reproducibility & clarity
  - Significantly reduce number of missing morphological & vascular features
  - Improves inter-reader agreement
  - Increase surgeons' confidence with decision making

Patel A, Brown G et al. BMJ Open. 2018 Oct;8(10):e018499
Dimarco et al. Abdom Radiol. 2020 Feb;45(2):437-448
Brook O R et al. Radiology. 2015 Feb;274(2):464-72

# Reporting Templates

- Advantages
  - Aid memoir
  - All info for surgical planning & post neoadjuvant treatment
  - Faster management decisions
  - More efficient MDT review
  - Safer for patients eg variants
  - Consistent data for audit and research

# Society of Abdominal Radiology & American Pancreatic Association

Al-Hawary MM et al. Gastroenterology. 2014 Jan;146(1):291-304

### <u>PA</u>ncreatic <u>C</u>ancer reporting <u>T</u>emplate—UK PACT-UK

### Appendix E1 Pancreatic Cancer Staging Template

Morphologic Evaluation

Appearance (in the pancreatic parenchymal phase): hypo-, iso-, or hyperattenuating

Size (maximal axial dimension in centimeters): measurable or nonmeasurable (isoattenuating tumors)

Location (head right of SMV, body left of SMV): head/ uncinate or body/tail

Pancreatic duct narrowing/abrupt cutoff with or without upstream dilatation: present or absent

Biliary tree abrupt cutoff with or without upstream dilatation: present or absent

#### Arterial evaluation

SMA: Present or absent

Degree of solid soft-tissue contact:  $\leq\!180^\circ$  or  $>\!180^\circ$ 

Degree of increased hazy attenuation/stranding contact:  ${\leq}180^{\circ}$  or  ${>}180^{\circ}$ 

Focal vessel narrowing or contour irregularity: present or absent

Extension to first SMA branch: present or absent

Celiac Axis: Present or absent

Degree of solid soft-tissue contact:  $\leq\!180^{\circ}$  or  $>\!180^{\circ}$ 

Degree of increased hazy attenuation/stranding SMV, or splenic vein) (tumor, bland) contact:  $<180^{\circ}$  or  $>180^{\circ}$ 

Focal vessel narrowing or contour irregularity: present or absent

CHA: Present or absent

Degree of solid soft-tissue contact:  $\leq\!180^\circ$  or  $>\!180^\circ$ 

Degree of increased hazy attenuation/stranding contact:  ${<}180^{\circ}$  or  ${>}180^{\circ}$ 

Focal vessel narrowing or contour irregularity: present or absent

Extension to celiac axis: present or absent

Extension to bifurcation of right/left hepatic artery: present or absent

Arterial Variant: Present or absent

Variant anatomy: Accessory right hepatic artery, replaced right hepatic artery, replaced common hepatic artery, others (origin of replaced or accessory artery) Variant vessel contact: present or absent

Degree of solid soft-tissue contact: ≤180° or

Degree of increased hazy attenuation/stranding contact: <180° or >180°

Focal vessel narrowing or contour irregularity: present or absent

Venous evaluation. MPV: Present, absent, or complete occlusion

Degree of solid soft-tissue contact:  $\leq 180^{\circ}$  or  $> 180^{\circ}$ 

Degree of increased hazy attenuation/stranding contact:  ${<}180^{\circ}$  or  ${>}180^{\circ}$ 

Focal vessel narrowing or contour irregularity (tethering or tear drop): present or absent

SMV: Present, absent, or complete occlusion

Degree of solid soft- tissue contact:  $\leq\!180^\circ$  or  $>\!180^\circ$ 

Degree of increased hazy attenuation/stranding contact:  ${<}180^{\circ}$  or  ${>}180^{\circ}$ 

Focal vessel narrowing or contour irregularity (tethering or tear drop): present or absent

Extension to first draining vein: present or absent

Thrombus within vein: present or absent (MPV, SMV, or splenic vein) (tumor, bland)

Venous collaterals: present or absent (around pancreatic head, porta hepatis, root of the mesentery, or left upper quadrant)

### Extrapancreatic evaluation

Liver lesions: present or absent; suspicious/indeterminate or likely benign

Peritoneal or omental nodules: present or absent

Ascites: present or absent

Suspicious lymph nodes: present or absent (porta hepatis, celiac, splenic hilum, paraaortic, aortocaval)

Other extrapancreatic disease (invasion of adjacent structures): present or absent

Impression: Tumor: size and location

Vascular contact: absent or present (vessel involved and extent)

Metastasis: absent or present (location)



**Arterial Evaluation** 

### NCCN Guidelines Version 1.2020 Pancreatic Adenocarcinoma

PRINCIPLES OF DIAGNOSIS, IMAGING, AND STAGING

PANCREATIC CANCER RADIOLOGY REPORTING TEMPLATE<sup>C</sup>



Morphologic Evaluation

Appearance (in the pancreatic parenchymal phase)

### NCCN Guidelines Version 1.2020 Pancreatic Adenocarcinoma

NCCN Guidelines Index
Table of Contents
Discussion

☐ Hyperattenuating

□ Isoattenuating

PRINCIPLES OF DIAGNOSIS, IMAGING, AND STAGING PANCREATIC CANCER RADIOLOGY REPORTING TEMPLATE<sup>C</sup>

☐ Hypoattenuating

SMA Contact	☐ Present	□ Absent	Size (maximal axial differsion in certaineters)	□ Ivieasurable	-	(isoattenuating tumors)	
Degree of solid soft-tissue contact	□ ≤180	□ >180	Location	☐ Head/uncinate (	right of SMV)	Body/tail (left of SMV)	
Degree of increased hazy attenuation/stranding contact	□ ≤180	□ >180	Pancreatic duct narrowing/abrupt cutoff with or without upstre	eam dilatation		1 Absent	
ocal vessel narrowing or contour irregularity	☐ Present	☐ Absent	Biliary tree abrupt cutoff with or without upstream dilatation	□ Present		1 Absent	
Extension to first SMA branch	☐ Present	☐ Absent					
			National NCCN Guidelines Vers	sion 1 2020		NCC	N Guidelines I
Celiac Axis Contact	☐ Present	☐ Absent	Comprehensive				Table of Con
Degree of solid soft-tissue contact	□ ≤180	□ >180	NCCN Cancer Pancreatic Adenocard	inoma			<u>Discu</u>
Degree of increased hazy attenuation/stranding contact	□ ≤180	□ >180					
ocal vessel narrowing or contour irregularity	□ Present	☐ Absent		IOSIS, IMAGING, AND STA			
			PANCREATIC CANCER RA	DIOLOGY REPORTING TEI	WPLAIE		
CHA Contact	☐ Present	☐ Absent	Venous Evaluation				
Degree of solid soft-tissue contact	□ ≤180	□ >180	MPV Contact	□ Present	☐ Absent	☐ Comple	ete occlusion
Degree of increased hazy attenuation/stranding contact	□ ≤180	□ >180	Degree of solid soft-tissue contact	□ ≤180	□ >180		
ocal vessel narrowing or contour irregularity	☐ Present	☐ Absent	Degree of increased hazy attenuation/stranding contact	□ ≤180	□ >180		
Extension to celiac axis	☐ Present	☐ Absent	Focal vessel narrowing or contour irregularity (tethering or tear drop)	□ Present	☐ Absent		
Extension to bifurcation of right/left hepatic artery	□ Present	☐ Absent	SMV Contact	□ Present	☐ Absent	□ Comple	ete occlusion
			Degree of solid soft-tissue contact	□ ≤180	□ >180	Li Compie	ete occiusion
Arterial Variant	□ Present	☐ Absent	Degree of increased hazy attenuation/stranding contact	□ ≤180	□ >180		
/ariant anatomy	☐ Accessory right	☐ Replaced right	Focal vessel narrowing or contour irregularity (tethering or tear drop)	□ Present	□ Absent		
	hepatic artery	hepatic artery	Extension	□ Present	□ Absent		
/ariant vessel contact	□ Present	□ Absent			<u>'</u>	·	
Degree of solid soft-tissue contact	□ ≤180	□ >180	Other				
Degree of increased hazy attenuation/stranding contact	□ ≤180	□ >180	Thrombus within vein (tumor, bland)	□ Present	☐ Absent		
ocal vessel narrowing or contour irregularity	☐ Present	☐ Absent		□ MPV □ SMV			
Adapted from: Al-Hawary MM, Francis IR, Chari ST, et al. F	ancreatic ductal ade	nocarcinoma radiolo		☐ Splenic vein			
Abdominal Radiology and the American Pancreatic Associa	tion. Radiology 2014	Jan;270(1):248-260	Venous collaterals	□ Present	☐ Absent		
Note: All recommendations are category 2A unless otherwise indicate Clinical Trials: NCCN believes that the best management of any patie		nical trial. Participation		☐ Around pancreatic head ☐ Porta hepatis ☐ Root of the mesentery ☐ Left upper quadrant			

### German Society of Radiology

Persigehl T et al. Rofo. 2020 Jul;192(7):641-656

### <u>PA</u>ncreatic <u>C</u>ancer reporting <u>T</u>emplate–UK PACT-UK

#### Solid pancreatic lesion on CT/MRI:

#### Descript

- + No relevant prior images
- + Prior images from: \_

#### General information:

Image quality: good/average/poor

Histology/lgG4: still pending/confirmed

Solid pancreatic lesion:

Pancreatic parenchyma: normal/edamatous/lipotropic/signs of chronic pancreatitis

Number of lesions: singular/approx.\_\_/multifocal

+ Location: Head of the pancreas/uncinate process/body of the pancreas/tail of the pancreas

Size: \_\_mm (series/image number)

Characterization: solid/mixed solid and cystic/necrotic

Contrast enhancement compared to pancreatic tissue:

Arterial: hypo-/iso-/hyper-

Venous: hypo-/iso-/hyper-

Pancreatic duct: unremarkable/prestenotic dilatation with max. diameter:

Common bile duct: unremarkable/prestenotic dilatation with max. diameter: \_\_/stent normal

Index lesion maximum size: \_\_ mm

(Exocrine information: T1:  $\leq 2cm$  (T1a:  $\leq 0.5$  cm/T1b < 1 cm/T1c:  $\leq 2$  cm)/T2:  $\leq 4$  cm/T3: > 4 cm/T4: Vascular infiltration)

(Neuroendocrine information: T1: < 2cm/T2: 2-4 cm/T3: > 4 cm/T4: Organ or vascular infiltration)

Index lesion with infiltration of adjacent organs: stomach/spleen/duodenum/jejunum/colon/kidney/left/right adrenal gland

Index lesion with vascular infiltration: no/yes (from celiac trunk, superior mesenteric artery and/or common hepatic artery, see below for details)

Vascular involvement of the primary tumor (specified in degrees of the circumference)

Aorta (ventral): no/≤ 180°/> 180°/deformation

Celiac trunk: no/≤ 180°/> 180°/deformation

Common hepatic artery: no/≤ 180°/> 180°/deformation

Proper hepatic artery: no/≤ 180°/> 180°/deformation

Gastroduodenal artery (close to the origin): no/S 180°/> 180°/deformation

Superior mesenteric artery: no/S 180°/> 180°/deformation

Splenic artery: no/≤ 180°/> 180°/deformation

Anatomical vascular variants: no/accessory right hepatic artery/common hepatic artery from the superior mesenteric artery/other: \_\_Infiltration: no/< 180°/>180°/deformation

Splenic vein: no/≤ 180°/> 180°/deformation/thrombosis

Superior mesenteric vein: no/≤ 180°/>180°/deformation/first injurial branch infiltrated/thrombosis

Portal vein: no/≤ 180°/> 180°/deformation/thrombosis/free text, e.g. cavernous transformation

Atherosclerosis of the celiac trunk: no/stenosis approx.\_%

Atherosclerosis of the superior mesenteric artery: no/stenosis approx.\_%

Locoregional lymph node: no suspicious lymph nodes/suspicious lymph nodes number:\_\_, max. \_mm. Location: (series/image number)

Distant lymph nodes: no suspicious lymph nodes/suspicious lymph nodes number:\_\_, max. \_mm. Location:\_\_

Ascites: no/yes: minimal/pronounced/peritoneal implants Location:

- + Liver: unremarkable/detectable:
- + Liver metastases: Total number: \_ in segment: \_
- + Measurement of max. 2 lesions according to RECIST 1.1: L01:\_\_(series/image number)
- LO2:\_\_(series/image number)
- + Cyst in the segment:\_\_
- + Hemangioma in the segment:
- + Other liver lesions: Free text

Bile ducts/gallbladder: unremarkable/cholestasis/choledocholithiasis/cholecystolithiasis

Spleen: unremarkable/craniocaudal splenomegaly max. \_\_cm.

- + Kidney/ureter: unremarkable/detectable:
- + Renal cyst Bosniak: \_\_\_/free text

Adrenal gland: unremarkable/free text

Colon: unremarkable/free text

Pelvic organs: unremarkable/free text Bone: unremarkable/free text

Recorded basal lung segments: unremarkable/free text

#### Assessmen

- + Pancreatic cancer in the \_\_\_
- + Suspected pancreatic cancer in the \_\_\_
- + cTxNxMx (lymphogenic/hepatic/osseous/pulmonary)

### Beth Israel Boston USA

Brook O R et al. Radiology. 2015 Feb;274(2):464-72

### <u>PA</u>ncreatic <u>C</u>ancer reporting <u>T</u>emplate–UK PACT-UK

### Figure 1

### Pancreatic tumor table

- 1) Pancreatic tumor present: yes/no
  - a) Location: head/neck/body/tail
  - b) Size: \_\_ x \_\_ cm
  - c) Enhancement relative to pancreas: hypo/iso/hyper
  - d) Confined to pancreas with clear fat plane: yes/no
  - e) Biliary involvement: yes/no
  - f) Remaining pancreas: yes/no ductal dilation
- Adenopathy present: yes/no
- Metastatic disease: yes/no
- Ascites/peripancreatic fluid: yes/no

### Pancreatic vascular table

- Vascular tumor involvement and degree (90°, 180°, 360°): no/\_\_\_\_°
  - a) Celiac involvement: \_\_\_% /no
  - b) SMA involvement: \_\_\_\_% /no
  - c) SMV involvement: \_\_\_\_% /no
  - d) Other vascular involvement: yes/no Specify:
- Thrombosis, any vessel: yes/no

Specify:\_\_\_\_

- Aberrant anatomy: yes/no
  - a) Replaced right hepatic artery: yes/no
  - Major accessory or other replaced arteries/veins, collaterals, dilated vessels: yes/no

Specify:

- 4) Atherosclerotic origins of celiac axis/SMA: yes/no
- Distance to SMV: mn

Figure 1: Template for structured reporting of pancreatic multiphasic CT results that was implemented at Beth Israel Deaconess Medical Center, Boston, Mass.

## PROTRACT Newcastle UK

#### Appendices (for guide only)

#### Appendix 1 - TMN pancreatic staging classification (8th edition)

- Tumour 2 cm or less T1a Tumour 0.5 cm or less T1b Tumour greater than 0.5 cm and less than 1 cm T1c Tumor greater than 1 cm but no more than 2 cm Tumour more than 2 cm but no more than 4 cm Tumour more than 4 cm in greatest dimension Tumour involves coeliac axis, superior mesenteric artery and/or common hepatic artery
- NO Stage IA T1 N0 Stage IB T2 Stage IIA T3 Stage IIB T1, T2, T3 N1 Stage IV Any T Any N M1

MO

M category unchanged

Stage

Appendix 2 - Compass reference for position of vessel involvement

Metastases in 1 to 3 nodes Metastases in 4 or more nodes



Appendix 3					
Radiological-pla	ne to examine circumferential				
degree/j	oosition of involvement				
Vessel	Plane				
PV	Sagittal				
SMV	Axial				
SV	Sagittal				
SMA	Axial				
Coeliac axis	Coronal				
Splenic artery	Sagittal				
GDA	Axial				
CHA	Sagittal				

Part 1 Tumour details										
Location (tick all that apply)	Head □	Neck 🗆 🛚 B	ody 🗆 🏻 T	āil □						
Size (mm)	AP -		Transv	erse -		Craniocau	ıdal -			
Composition	Solid 🗆	Cystic 🗆	Mixed 🗆							
Lymphadenopathy	Yes □ No If yes, site			T N	l	e (8 <sup>TH</sup> editio	n – see app	oendix 1):		
Part 2 Vessel Involvemer  * See appendix 2  ** Use far right box to do										
	PV	SMV	SV	SMA	Coeliac	Splenic A	GDA	СНА	**	
Longitudinal length vessel involvement (cm)										
Circumferential degree of tumour involvement (°)										
"Compass" position of involvement: X° from A° to B°:app 2*										
Stricturing (y/n – complete below if applicable)										
Max reduction     in X-sectional     area (%)										
<ul> <li>Length of vessel stricture (cm)</li> </ul>										
Occlusion (y/n) Luminal invasion by tumour (y/n)										
Document replaced or accessory vessels : Other comment:										

<u>PA</u>ncreatic <u>C</u>ancer repo PACT-UK

# Glasgow UK For PRECISION-PANC trial

Location		
Head/uncinate		Yes □ / No □
Body/Tail		Yes □ / No □
Size		
Maximal tumour d	limension CT (mm	
If isodense/inferre	d	
- Estimated size or - Size on EUS (mm)		
Comment:		
Imaging scans	Date	
used:		
	//	
	//	

	Specify		contact (mm)	Contact Circumference 1) 0-900 2) 90-1800
VESSEL INVOLVEMENT		w) O (Occluded) T (thrombosis)		3)>180-270 4)>270
PV/ SMV	Yes □/ No □			
Extension to Tributaries		Yes □/ No □		
IVC	Yes □/ No □			
Superior Mesenteric Artery	Yes □/ No □			
Extension to 1st branch		Yes □/ No □		
Coeliac Axis	Yes □/ No □			
Common Hepatic Artery	Yes □/ No □			
Ext. to Coeliac		Yes □/ No □		
Ext. to R/L hepatic artery		Yes □/ No □		
	Yes □/ No □			
Other	Yes □/ No □			
VENOUS COLLATERALS	No □			
Porta Hepatis Root of mesentery	Yes □/ No □ Yes □/ No □			
Left upper quadrant	Yes □/ No □			
VARIANT ARTERIAL ANATOMY	No □			
Accessory RHA	Yes □/ No □			
Replaced RHA	Yes □/ No □			
Replaced CHA	Yes □/ No □			
Other	Yes □/ No □			

# Plymouth UK

Radiology Reporting Template for Suspected Pancreatic/Lower CBD/Ampullary Tumour

Radiology Reporting Template for Suspected Pancreatic/Lower CBD/Ampullary Tumour	
Patient Details	
Name of the patient	
DOB	
NHS number	
Date of CT-TAP	
Gender	Female
CT TAP Findings	
Morphology	
	Hypoattenuating
Size (maximal axial dimension in centimeters	
Location	Body/tail (left side of SI
Pancreatic duct narrowing with abrupt cutoff/with or without upstream dilatation	Present
Biliary abrupt cut off with or without upstream dilatation	Absent
Evidence of acute pancreatitis	
Evidence of chronic pancreatitis	
Arterial Evaluation	
SMA contact	
Degree of solid soft tissue contact	Present
Degree of increased hazy attentuation/stranding contact	>180
Focal vessel narrowing or contour irregularity	<180
Extension to 1st branch SMA	Absent
Coeliac Axis contact	
Degree of solid soft tissue contact	Absent
Degree of increased hazy attentuation/stranding contact	Absent
Focal vessel narrowing or contour irregularity	<180
Common Hepatic Artery contact	
Degree of solid soft tissue contact	Absent
Degree of increased hazy attentuation/stranding contact	<180
Focal vessel narrowing or contour irregularity	<180
Extension to coeliac axis	Absent
Extension to bifurcation of right and left hepatic artery	Absent
Variant Anatomy	
Replaced RHA	Absent
Accessory RHA	Absent
Replaced CHA	Absent
Origin of Replaced artery	Absent
Variant vessel contact	
Degree of solid soft tissue contact	Absent
Degree of increased hazy attentuation/stranding contact	<180

#### **Venous Evaluation**

#### MPV contact

Degree of solid soft tissue contact

Degree of increased hazy attentuation/stranding contact

Focal vessel narrowing or contour irregularity (tethering or tear drop)

#### SMV contact

Degree of solid soft tissue contact

Degree of increased hazy attentuation/stranding contact

Focal vessel narrowing or contour irregularity (tethering or tear drop)

vessel involved

Length of contact

#### others

Venous collaterals

Thrombus within vein

Length of contact with MPV

### **Extra Pancreatic findings**

Liver lesions
Peritoneal or omental nodules

Ascites

Lung lesions

Suspicious lymph nodes

Invasion of adjacent structures

Suspicious

Absent

Absent

Suspicious

Porta hepatis

Absent

### Impression

**Tumour location** 

Tumour size:

Uncinate process

Resectability criteria

#### Metastasis

if Present (location):

#### **Vessel Contact**

if present, extent of contact:

PACT-UK

# PACT-UK PAncreatic Cancer reporting Template-UK

- Developed by multi-speciality group across UK 2020-2022
  - Collaboration between RCR / RCS / PCUK / BSGAR
  - Review of existing templates
  - Surveys of radiologists and surgeons at pancreatic centres
- Available on BSGAR website
- In press *BMJ Oncology*



## Methodology

Consensus round-table zoom discussion

- Incorporating radiology and surgical surveys outcomes / feedback
  - Concise
  - User friendly layout
  - IT compatibility
  - Easy to embed into routine radiology practice

Centres (27)	Surgeons (27)	Radiologists (41)	Oncologists (7)
Manchester	Nicola Deliguoricarino	Stephen Lee, Jana Suntharanathan, Rishi Sethi	Ganesh Radhakrishna , Juan Valle
Newcastle	John Moir	John Scott, Samantha Saikia, Paul Turner	
Leeds	Andy Smith	Raneem Albazaz , Claire Smith	Rebecca Goody Alison Cairns (Pathologist)
Glasgow	Nigel Jamieson	Abdullah Al-adhami , Jonathan Platt	Derek Grose
Birmingham	Keith Roberts	Rania Ghaffar , Arvind Pallan , Sharan Wadhwani	
Bristol	James Skipworth	Hedi Karteszi	
Cambridge	Siong-Seng Liau	Edmund Godfrey	
Southampton	Dimitrios Karavias	Liam Ingram	
Aberdeen	James Milburn	Lokesh Saraswat	
Plymouth	Somaiah Aroori	Mark Puckett	
Guildford	Adam Frampton	Shelley Chapman	
Liverpool	Declan Dunne, Paula Ghaneh	Jonathan Evans, Catriona Farrell	Dan Palmer
Sheffield	Nehal Shah		
Coventry	Gabriele Marangoni	Lye-Quen Hon, James Harding , Praveen Varra , Manpreet Dhillon, Nikhil Rao, Vincent Leung, Syed Abbas Hasan	Martin Scott-Brown
Blackburn	Asma Sultana		Catherine Mitchell
Stoke	Damien Durkin		
Leicester	Giuseppe Garcea		
Barts	Hemant Kocher	Mahrukh Qureshi	
Swansea	Bilal Al-Sarireh	Kieran Foley, Peter Chowdhury, Toby Wells, Derrian Markham	
Royal Free	Brian Davidson, Kito Fusai		
Kings	Krishna Menon		
Royal Marsden	Ricky Bhogal	Gina Brown, Joshua Shur, Angela Riddell, Svetlana Balyasnikova	
Nottingham	Glen Irving	Christopher Clarke	
Oxford	Michael Silva	Helen Bungay	
Belfast		Mark Love	
NW London		Rebecca Greenhalgh	
Edinburgh	Sarah Thomasset		

# PACT-UK

PAncreatic Cancer reporting Template-UK

Imaging reviewed:

Radiologist:

Clinical details:

If clear metastatic disease complete only part A. If post neo-adjuvant treatment, complete only part D. Delete the irrelevant parts accordingly, including instructions in italics.

### Summary (optional - key positive findings):

### PART A - Initial Staging

1) Tumour

Location: Uncinate/head/neck/body/tail

Maximum diameter: [.....] mm / isodense precluding ability to estimate size

Biliary involvement: Yes stented/ Yes un-stented/ No

Pancreatic duct size: [.....] mm

- Adjacent organ involvement (including duodenum): No / Yes [.....]
- 3) Regional lymphadenopathy: No / Yes [.....]
- 4) Metastatic disease: No / Indeterminate / Yes

Specify location and volume: [.....]

- 5) Predicted tumour type: PDAC / Ampullary / Cholangiocarcinoma / Other [.....]
- Predicted radiological staging T[.....] N[.....] M[.....]

### PART B - Vessel Involvement\*

- 1) Variant vascular anatomy (including accessory/replaced RHA/CHA)? No / Yes [.....]
- Venous contact:

```
PV: No / Yes [.....°] [.....]

SMV: No / Yes [.....°] [.....]

PV/SMV total contact length: [.....] mm

Other vein contact: No / Yes [specify vessel.....] [.....°] [......]

Jejunal / colic tributary: No / Yes [.....]

Presence of venous collaterals if PV/SMV occlusion? No / Yes
```

3) Arterial contact:

```
SMA: No / Yes [.....°] [.....]

SMA total contact length: [.....] mm

CHA: No / Yes [.....°] [.....]

Coeliac axis: No / Yes [.....°] [.....]

Jejunal / colic branch: No / Yes [.....]

GDA: No / Yes

Other arterial contact (including accessory/replaced): No / Yes [specify vessel.....] [.....°] [.....]
```

4) Stenosed coeliac axis/SMA origin: No / Yes [.....]

<sup>\*</sup>For each involved vessel, state degrees of contact in first box (state range 0-90,90-180,180-270,270-360) and presence of narrowing, occlusion or thrombosis in second box.

### PART C - Additional Findings

### PART D - Post Neo-adjuvant Treatment

Baseline CT date for comparison – xx/xx/xxxx

If Answer to 1 is Yes, do not complete the remaining questions

- New metastases: No / Indeterminate/ Yes
   Specify:
- Tumour size: Decreased / Stable / Increased Specify:
- Venous involvement: Decreased / Stable / Increased / Nil Specify:
- Arterial involvement: Decreased / Stable / Increased / Nil Specify:
- 5) Increased local invasion: No / Yes / Not applicable Specify:
- 6) Other findings: No / Yes Specify:
- 7) Subjective overall response: Partial / Stable / Progression

### Feedback

- Excellent informal feedback
  - Used as part of safety checklist & in trial design
- Feedback survey about to be sent to all Pancreatic Centres



PACT-UK radiology reporting template

User feedback survey

### What is PACT-UK?

As you are probably aware, a team of pancreatic cancer specialists across the UK, facilitated by Pancreatic Cancer UK, has worked together to develop a radiology template proforma for pancreatic cancer (PACT-UK). You may have already seen that the PACT-UK tool has now been published on the the British Medical Journal (BMJ) Oncology. You can read the article here [INSERT LINK WHEN ARTICLE IS AVAILABLE].

This is an important tool that, if implemented consistently across the UK, will help HPB MDTs to make better and faster decisions on the best treatment for people with pancreatic cancer. Moreover, this tool can be used in studies and clinical trials which aim to improve and understand best standards of treatment.

### We want to hear from you

We would be grateful if you could complete this short survey regarding your experience of using the PACT-UK radiology reporting template, to help us understand if and how the tool is currently used.

Please could one representative from each pancreas MDT complete this survey on behalf of and in consultation with the other members of your pancreas MDT. The aim of the survey is to gather feedback on the template, any obstacles to its use and any suggestions for improvement. Please complete this survey even if you do not currently use PACT-UK. Many thanks in advance for your assistance.

If you have any queries, please contact Alice Clarkson, Policy and Health Improvement Manager, Pancreatic Cancer UK (alice.clarkson@pancreaticcancer.org.uk).

Next

# Potential Impact of PACT-UK for Patients & Healthcare Teams

- More rapid and efficient decision-making
- MDT more confident with management pathway
- Safer surgery with more consistent documentation of anatomical variants and vascular issues which may complicate surgery
- Potential to speed up initiation of treatment if consistently implemented
  - Plan to incorporate into national guidelines
  - More uniform national treatment pathways
  - Less need for repeated MDT discussions

### How Specialist Centres Can Engage with PACT-UK

- Attend PACT-UK meetings organised by PCUK
  - Next meeting 14<sup>th</sup> Nov 2023
  - Feedback / discussion / issues in implementation

- Practical workshops supported by PCUK and the British Society of Gastrointestinal & Abdominal Radiology
  - Next workshop March 2024
  - Aimed at radiologists





### Summary

 Consider introducing PACT-UK into local MDT practice to increase efficiency / consistency / confidence in decision making

Potentially faster start of treatment without need for repeated MDT discussions

• Template available on BSGAR website and in press BMJ Oncology

Please contact PCUK for more information

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- Mr Andy Smith (Leeds UK)
- Professor Keith Roberts (Birmingham UK)
- Wider PACT-UK team
- PCUK
- BSGAR

# **Endorsing a PACT-UK Consensus statement**

PACT-UK should be implemented as the standard radiology reporting tool across all specialist pancreatic cancer multidisciplinary meetings in the UK to promote more consistent and reliable radiology reporting of pancreatic cancer.

- To endorse this statement:
- Visit <a href="https://www.menti.com/">https://www.menti.com/</a>
- Enter the code 8753 6158
- You'll be asked to submit your name, job title and organisation.









