Chemotherapy: treatment options

October 5th 2022

Dr Mairéad McNamara Senior lecturer, University of Manchester Honorary Consultant in Medical Oncology The Christie NHS Foundation Trust



Conflict of interest statement |

- Speakers bureau:
 - Advanced Accelerator Applications (UK & Ireland) Limited
- Advisory board:
 - Incyte, Astra Zeneca
- Investigator-initiated study funding:
 - Servier (previously Baxalta and SHIRE), Ipsen, NuCana BioMed Limited

Overview |

Anatomical location of pancreas and functions

Cancer deaths

• Stages of pancreas cancer

• Parameters for treatment

Overview |

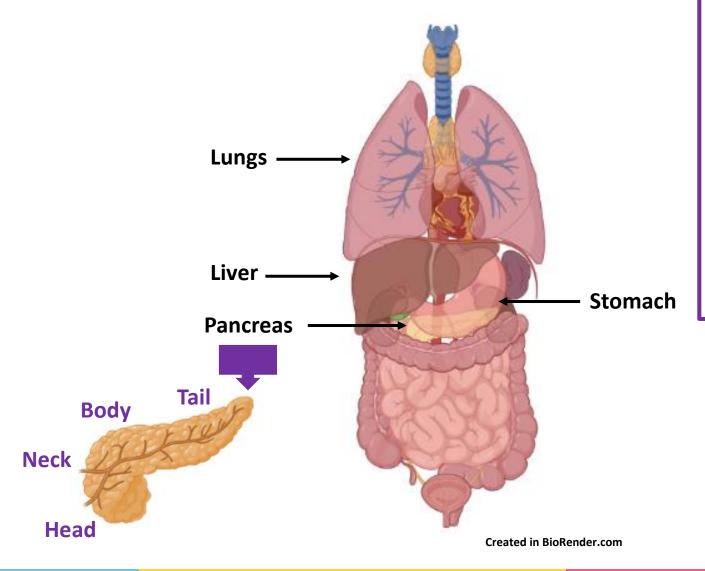
Terminology

• Best supportive care

• Non-metastatic disease

Advanced disease

Anatomical location of pancreas



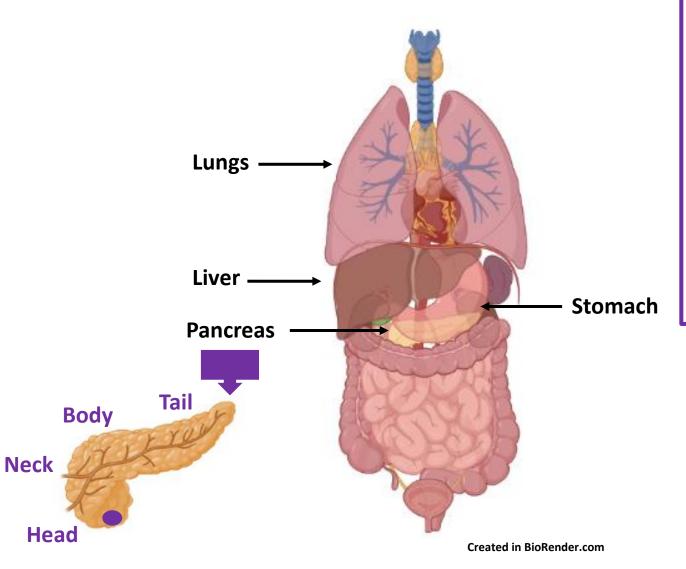
Pancreas functions:

- Produces enzymes: break down proteins, fats, and starches
- Produces insulin and glucagon: Lower blood sugar/increase blood sugar respectively

Potential complications of head of pancreas tumour:

- Jaundice
- Duodenal obstruction
- Pancreatic insufficiency

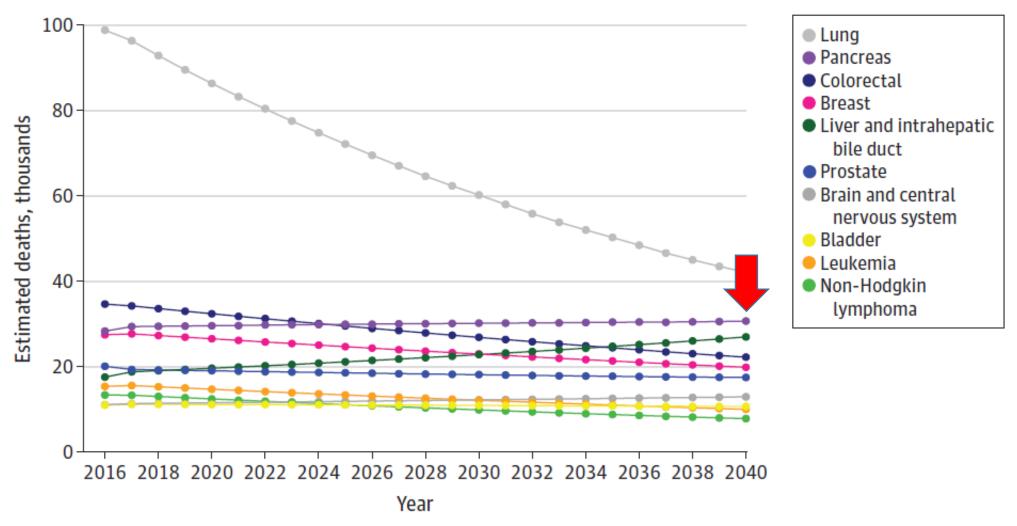
Anatomical location of pancreas



Pancreas functions:

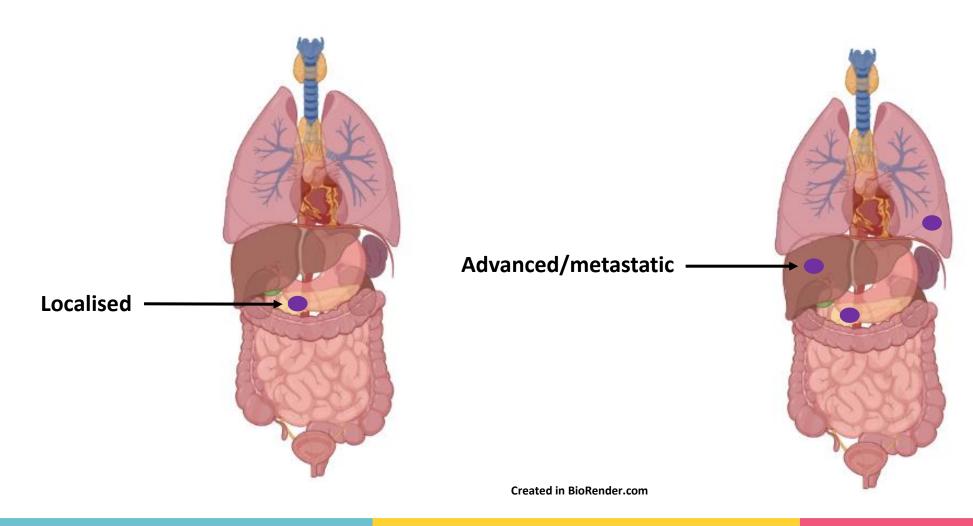
- Produces enzymes: break down proteins, fats, and starches
- Produces insulin and glucagon: Lower blood sugar/increase blood sugar respectively

Estimated projections of cancer deaths (USA) based on demographic and average annual % change (Male & Female)¹ |



Lung cancer
estimated
leading cause
of cancerrelated death
in 2040, with
pancreatic
cancer 2nd
most
common.

Stages of pancreas cancer |

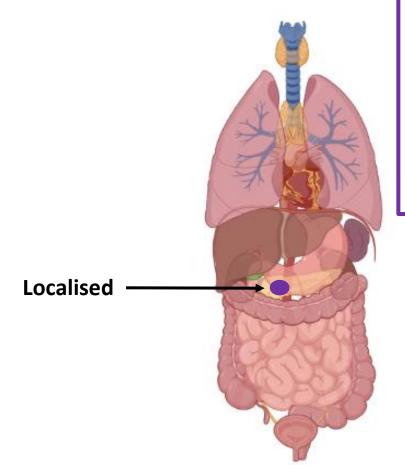


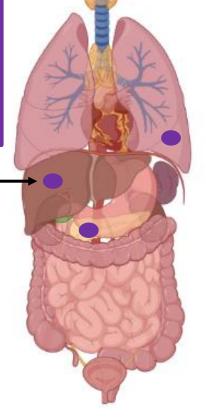
Stages of pancreas cancer

Locally advanced pancreas cancer:

- Not metastatic
- Extensive blood vessel (vascular) involvement, and high chance of non-curative resection

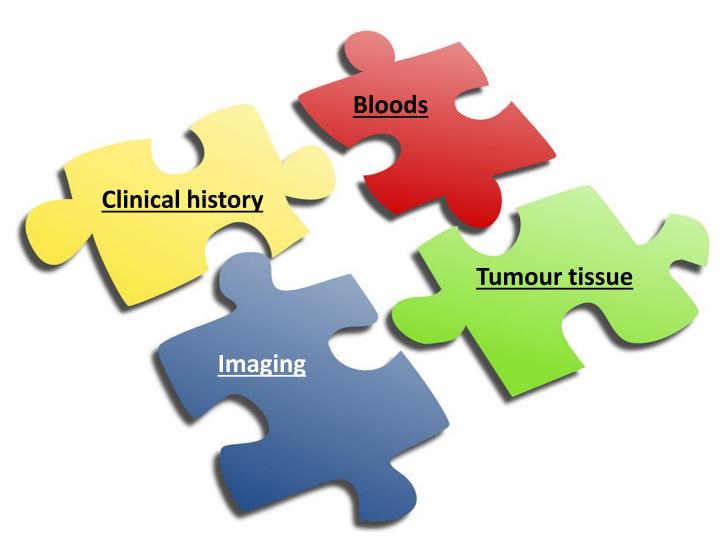
Advanced/metastatic





Created in BioRender.com

Parameters for treatment |



Need sufficient tissue for analysis – biopsy or fine needle biopsy (>20% tumour cellularity required for molecular analysis)

Genomics* |





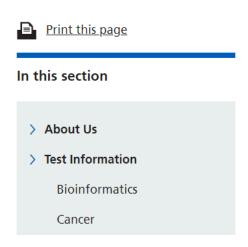
Our Hospitals The Trust ▼ Case Studies ▼ Careers Education Research ▼ Community News Contact

Referral Forms

Home North West Genomic Laboratory Hub Test Information Cancer Solid Tumour Sample Requirements Referral Forms

Please refer to our <u>Sample Requirements</u> section before sending any samples to us for testing. The relevant forms can also be found below:

- <u>Tumour Request Form -Gastrointestinal</u>
- Tumour Request Form Genitourinary/Renal/Pancreatic
- Tumour Request Form -Gynaecological/Breast
- Tumour Request Form -Head & Neck/Endocrine
- Tumour Request Form -Lung
- Tumour Request Form Melanoma
- Tumour Request Form -Paediatric/Sarcoma/Other

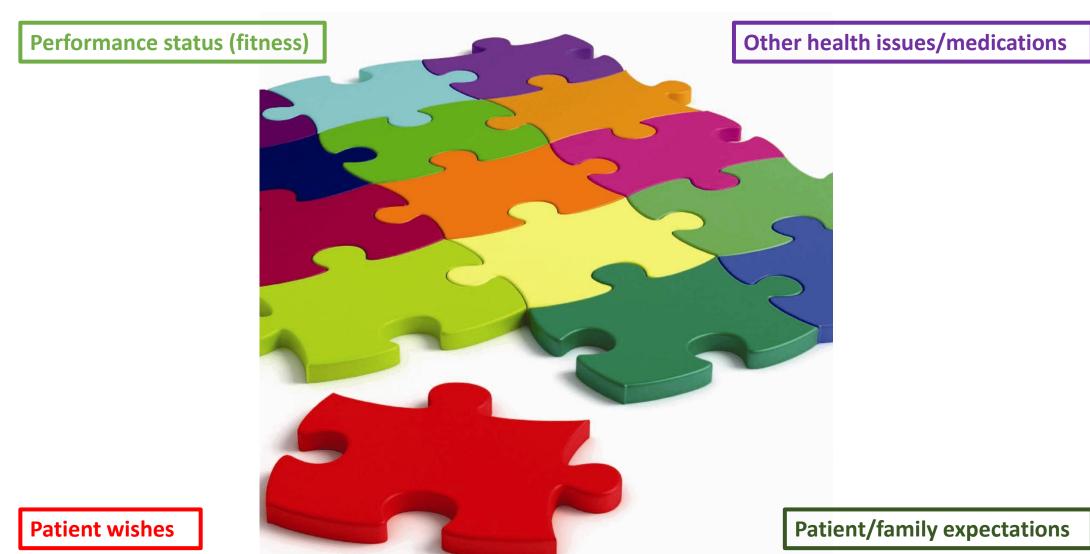


^{*}For full details of genes covered see national genomic cancer test directory (https://www.england.nhs.uk/publication/national-genomic-test-directories/).

Genomics |

						986							
Patient Details Payment Status: NHS Private Surname: Forename:				Referring Clinician Consultant (in full): Hospital (in full):									
							DoB: NHS No:			`	Department: Tel:		
							Sex: Hospital No:				Email:		
Address/Postcode.				Copy report to (if applicable):									
CLINICAL DETAILS				PLEASE INCLUDE A COPY OF THE PATHOLOGY REPORT									
Pathology La	boratory Hos	spital/Trust:		Pathology block/sample no.:									
				DRATORY HOLDING THE SAMPLE, OR IF N WARD TO mft.Pharmaco.GeneticsReque		IE GENOMI							
			VIEW TEENSE TON	WAID TO III II III III III III II II II II II	ata@iiia.iict.								
CI Code*	ode* Clinical Indication Name		Test Name		Test Code	Please tick							
			FH, SDHA, S	SDHB, SDHC, SDHD, VHL, ELOC	Couc	LICK							
M18	Renal Cel	l Carcinoma - Adult	(TCEB-1), T	SC1/2, MET, BRAF	M18.2								
			TFE3, NTRK	fusions	M18.6								
			II ES, IVIIII	Tusions	1010.0								
M217	Bladder Cancer		FGFR2, FGFR3		M217.1								
			ECEDS FOR	R3, NTRK fusions	M217.3								
			FOFRZ, FGF	NJ, ITTAK IUSIOIIS	IVIZI7.3								
M218	Prostate Cancer		BRCA1, BRO	BRCA1, BRCA2, ATM, CDK12									
			NTDV f!		M219.2								
			NTRK fusion	ns	M218.2								
M219	Pancreati	c Cancer	BRCA1, BRO	CA2	M219.1								
			NTRK fusion	ns	M219.2								
			MSI Testino	T	M219 5								

Parameters for treatment

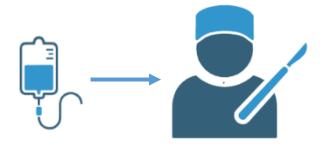


https://images.google.com

Terminology |

• Neo-adjuvant:

• Treatment given as a first step to try to shrink a tumour before surgery.



Adjuvant:

• Treatment given after surgery, to lessen the chance of the cancer coming back.



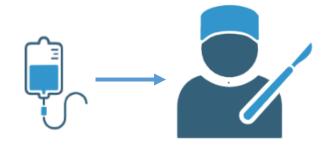
• Palliative:

• Aim is to control disease and not cure and to try to relieve symptoms and improve quality of life.

Terminology |

Neo-adjuvant:

• Treatment given as a first step to try to shrink a tumour before surgery.



Adjuvant:

 Treatment given after surgery, to lessen the chance of the cancer coming back.



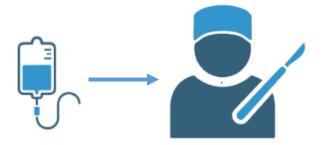
• Palliative:

• Aim is to control disease and not cure and to try to relieve symptoms and improve quality of life.

Terminology |

Neo-adjuvant:

• Treatment given as a first step to try to shrink a tumour before surgery.



Adjuvant:

• Treatment given after surgery, to lessen the chance of the cancer coming back.



• Palliative:

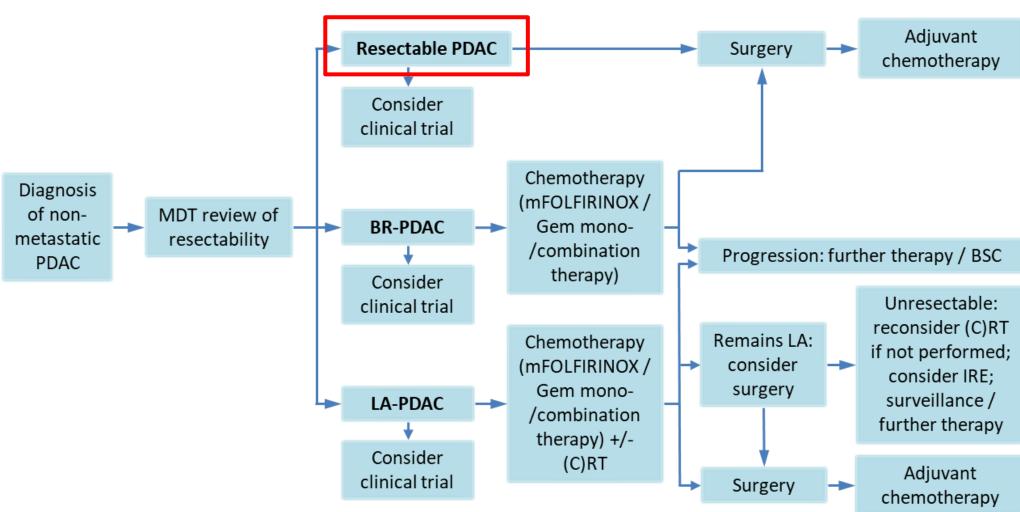
• Aim is to control disease and not cure and to try to relieve symptoms and improve quality of life.

- A randomised, prospective study² compared standard oncology care alone with standard oncology care plus early supportive care in patients with metastatic non-small cell lung cancer.
- Median OS in the early supportive care arm was 11.6 months versus 8.9 months in the standard of care arm (P=0.02)².

Best supportive care¹ |



Management of non-metastatic pancreas cancer¹ |



Management of non-metastatic pancreas cancer¹ |

VOLUME 32 · NUMBER 6 · FEBRUARY 20 2014

JOURNAL OF CLINICAL ONCOLOGY

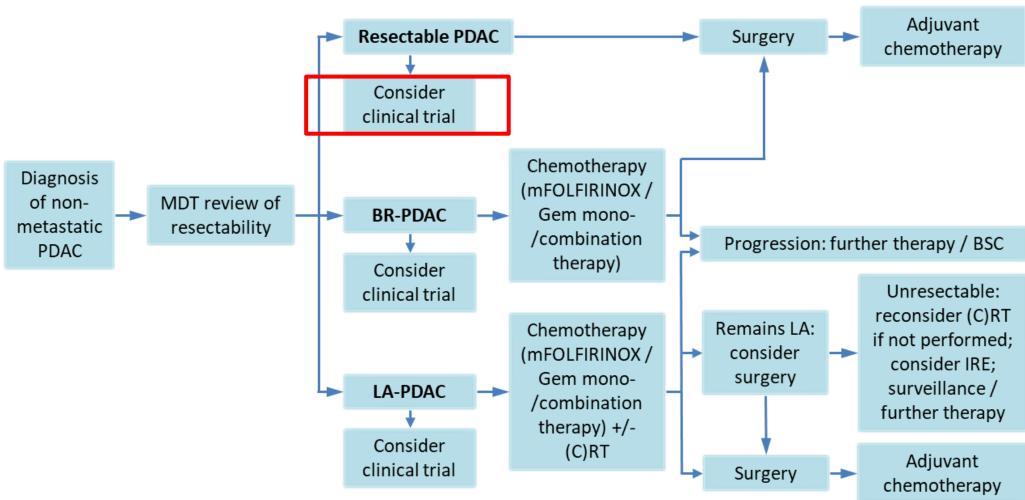
ORIGINAL REPORT

Optimal Duration and Timing of Adjuvant Chemotherapy After Definitive Surgery for Ductal Adenocarcinoma of the Pancreas: Ongoing Lessons From the ESPAC-3 Study

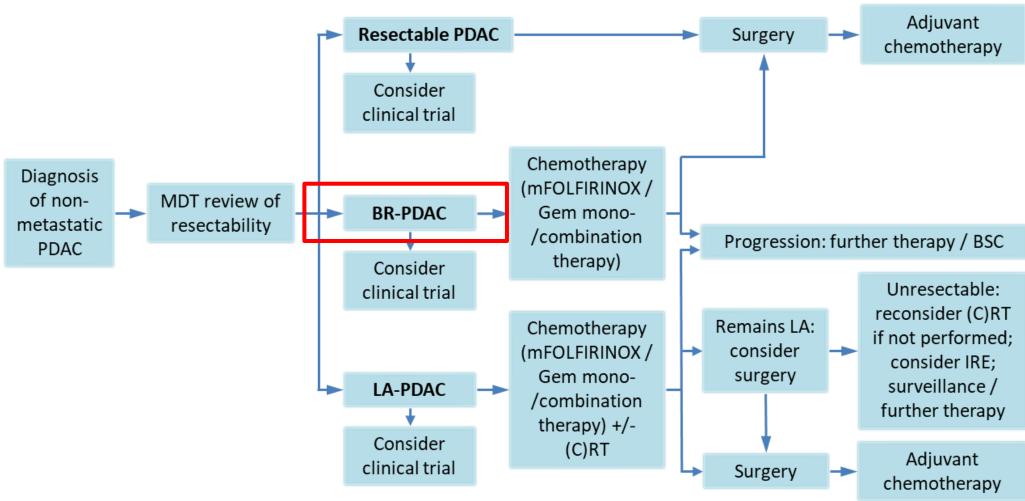
Juan W. Valle, Daniel Palmer, Richard Jackson, Trevor Cox, John P. Neoptolemos, Paula Ghaneh, Charlotte L. Rawcliffe, Claudio Bassi, Deborah D. Stocken, David Cunningham, Derek O'Reilly, David Goldstein, Bridget A. Robinson, Christos Karapetis, Andrew Scarfe, Francois Lacaine, Juhani Sand, Jakob R. Izbicki, Julia Mayerle, Christos Dervenis, Attila Oláh, Giovanni Butturini, Pehr A. Lind, Mark R. Middleton, Alan Anthoney, Kate Sumpter, Ross Carter, and Markus W. Büchler

- Completion of all six cycles of planned adjuvant chemotherapy rather than early initiation was an independent prognostic factor after resection for pancreatic adenocarcinoma.
- No difference in outcome if chemotherapy is delayed up to 12 weeks, thus allowing adequate time for postoperative recovery.

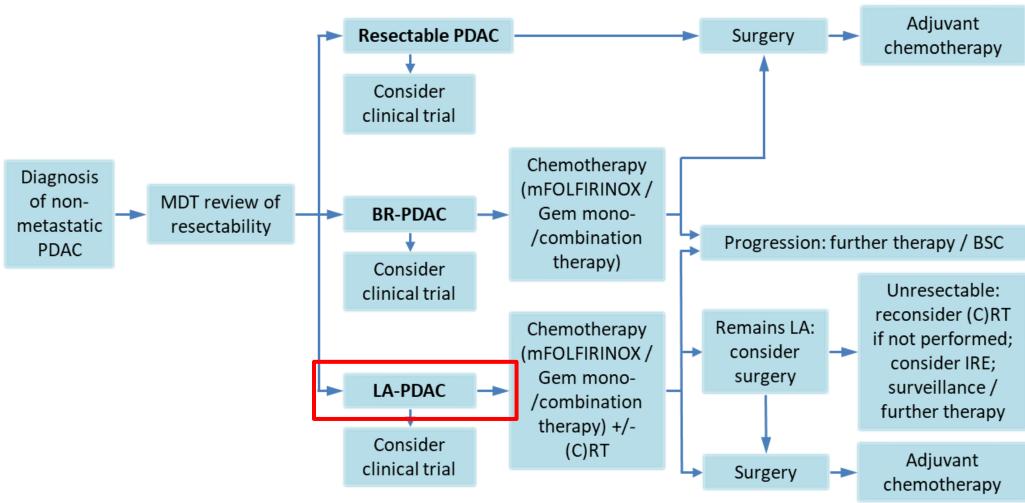
Management of non-metastatic pancreas cancer¹ |



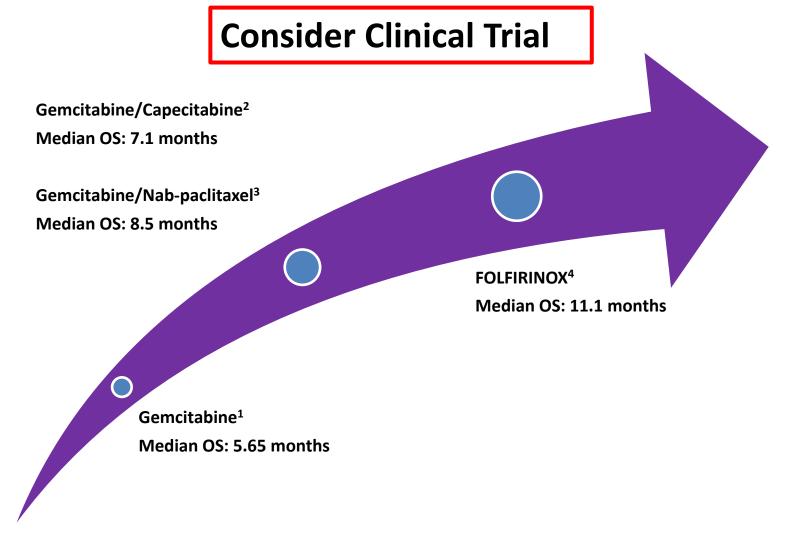
Management of non-metastatic pancreas cancer¹ |



Management of non-metastatic pancreas cancer¹ |

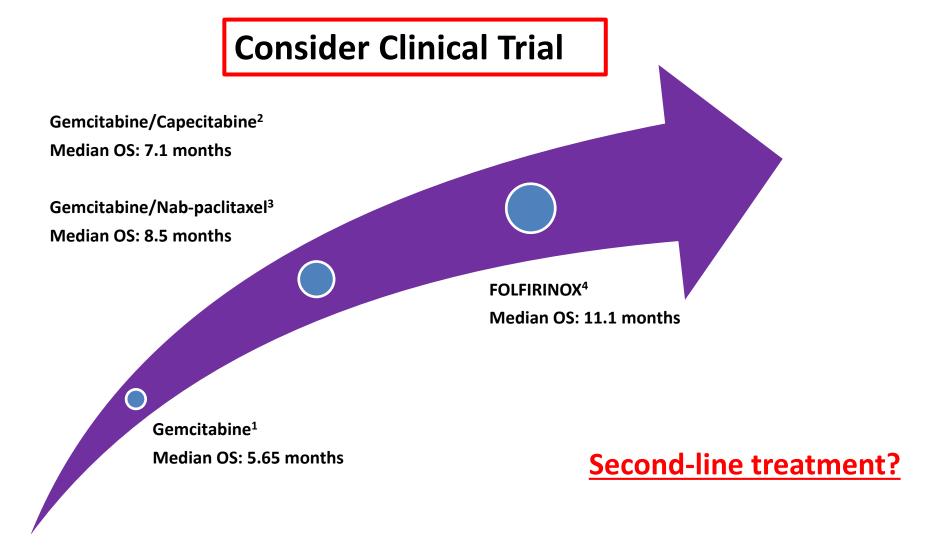


Treatment for advanced disease



¹Burris et al 1997, J Clin Oncol 15: 2403-2413; ²Cunningham et al 2009, J Clin Oncol 27: 5513-5518; ³Von Hoff et al 2013, N Engl J Med 369: 1691-1703; ⁴Conroy et al 2011, N Engl J Med 364: 1817-1825, **OS**: Overall Survival, **FOLFIRINOX**: 5-fluorouracil/irinotecan/oxaliplatin.

Treatment for advanced disease



¹Burris et al 1997, J Clin Oncol 15: 2403-2413; ²Cunningham et al 2009, J Clin Oncol 27: 5513-5518; ³Von Hoff et al 2013, N Engl J Med 369: 1691-1703; ⁴Conroy et al 2011, N Engl J Med 364: 1817-1825, **OS**: Overall Survival, **FOLFIRINOX**: 5-fluorouracil/irinotecan/oxaliplatin.

Questions |