Bukspottkörtelcancer – biologi och selektion, att välja rätt patient för rätt behandling

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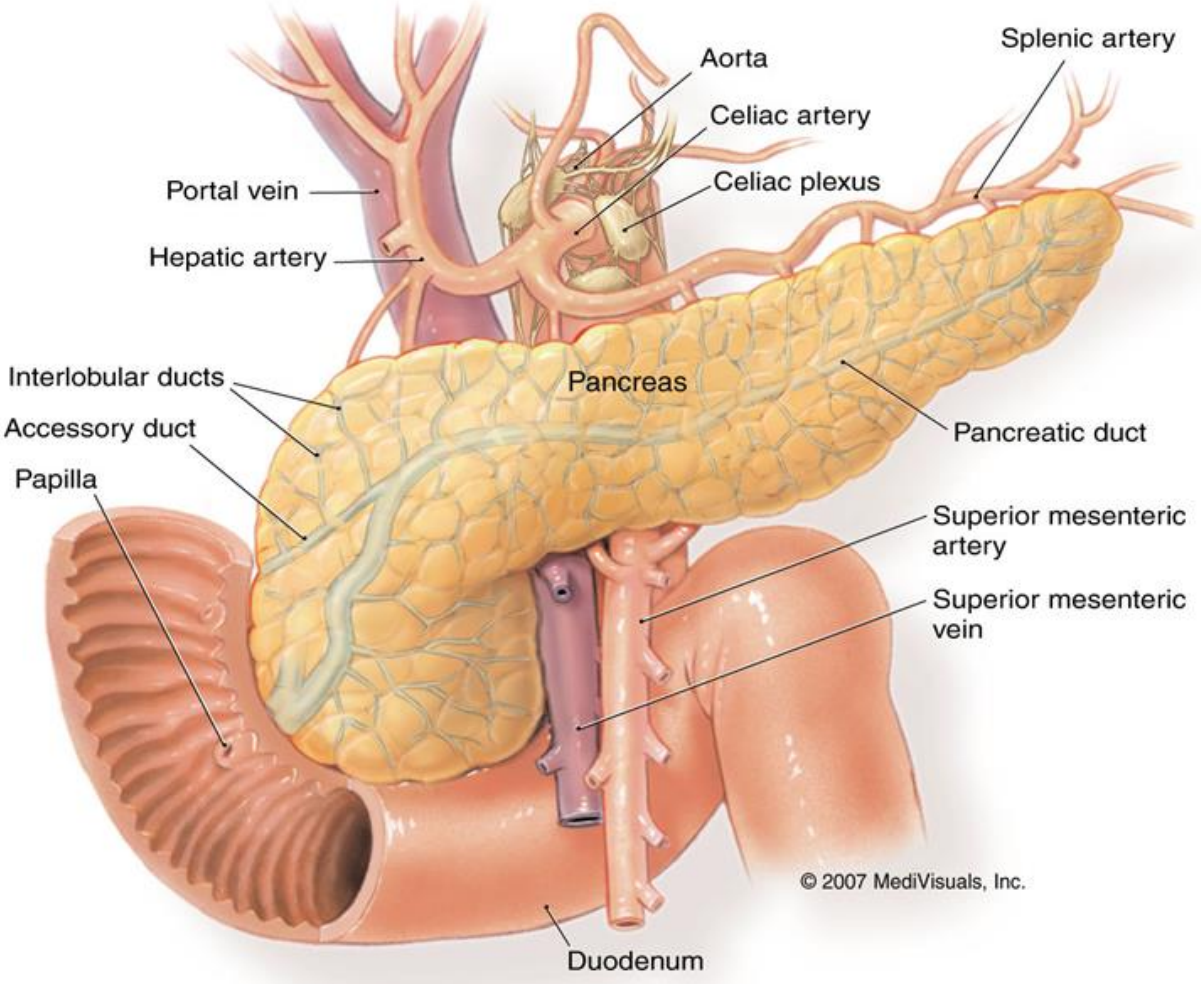
UMEÅ UNIVERSITY
Stockholm, 2024-05-23

- ingen intressekonflikt



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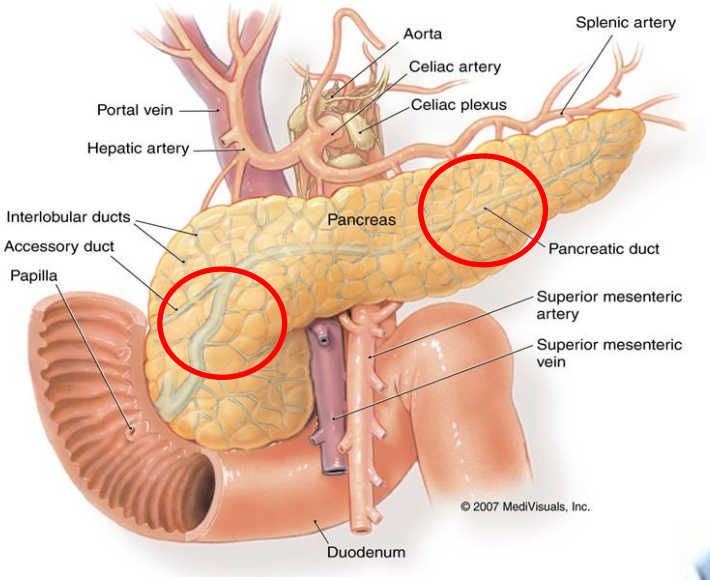
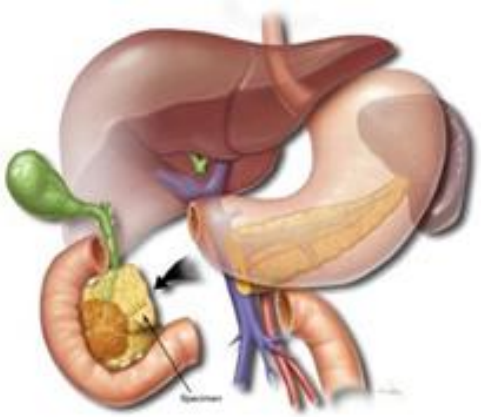
PANKREASKIRURGI



Whipple



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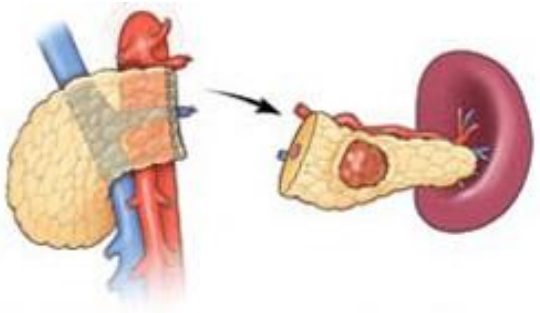

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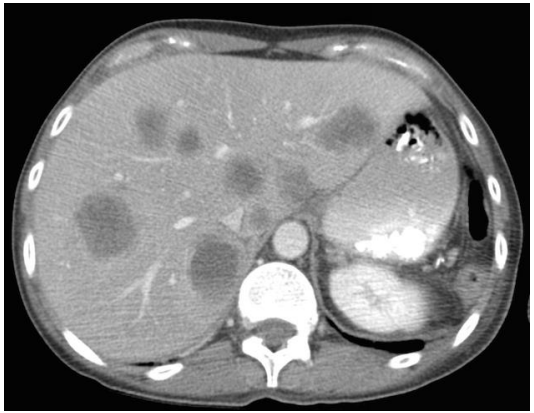
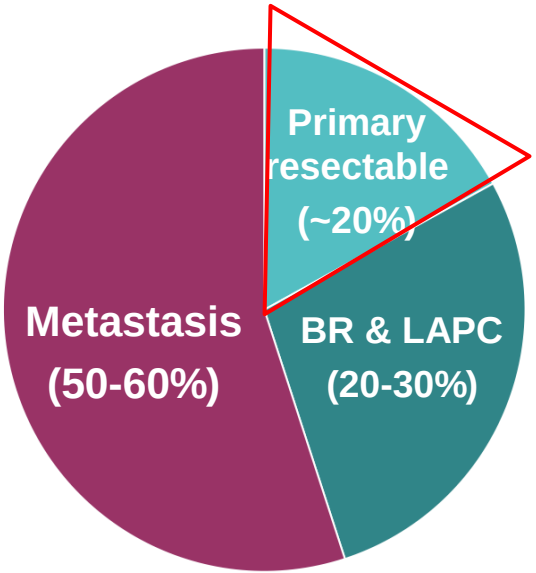
BUKSPOTTKÖRTELCANCER





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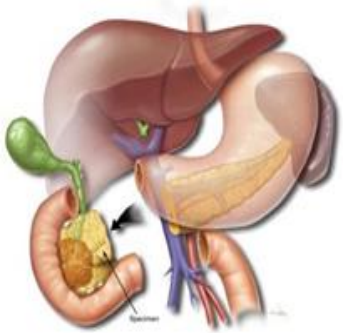

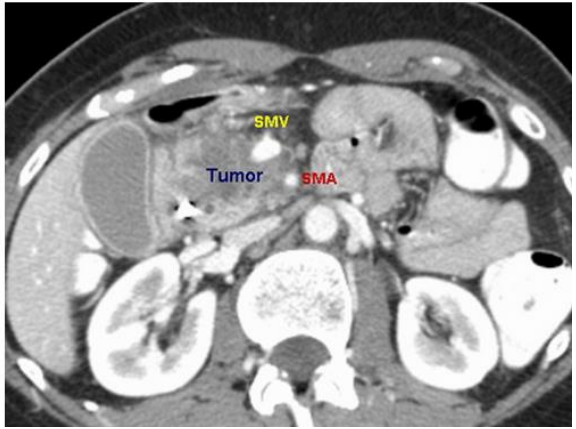

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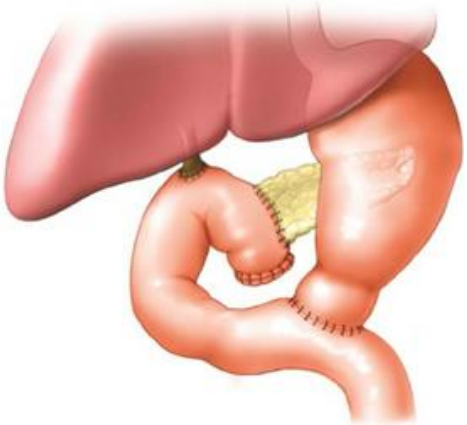
Neoptolemos et al, New Engl J Med 2004
Ghaneh et al, Gut 2007
Bockhorn et al, Surgery 2014

SURGERY IS CRUCIAL

Surgery + chemotherapy treatment gives the best survival chance



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Neoptolemos et al, New Engl J Med 2004
ESPAC studies

ESPAC TRIALS

Trial	Treatment	Pts, n (N = 2092)	5-Yr OS, % (95% CI)	Stratified Log-Rank X^2	*P* Value
ESPAC-1	5-FU/ leucovorin	149	21 (14.6-28.5)	7.03	.030*
	No chemotherapy	143	8.0 (3.8-14.1)		
	CRT (5-FU/RT)	145	10.8 (6.1-17.0)		
ESPAC-3	GEM	539	17.5 (14.0-21.2)	0.74	.390*
	5-FU/ leucovorin	551	15.9 (12.7-19.4)		
ESPAC-4	GEM	366	16.3 (10.2-23.7)	4.61	.032†
	GEMCAP	364	28.8 (22.9-35.2)		

Neoptolemos et al, ESPAC trials, 2004-2017

FOLFIRINOX ERA

Fluorouracil
Leucovorin
Irinotecan
Oxaliplatin

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

FOLFIRINOX versus Gemcitabine for Metastatic Pancreatic Cancer

Thierry Conroy, M.D., Françoise Desseigne, M.D., Marc Ychou, M.D., Ph.D., Olivier Bouché, M.D., Ph.D., Rosine Guimbaud, M.D., Ph.D., Yves Bécouarn, M.D., Antoine Adenis, M.D., Ph.D., Jean-Luc Raoul, M.D., Ph.D., Sophie Gourgou-Bourgade, M.Sc., Christelle de la Fouchardière, M.D., Jaafar Bennouna, M.D., Ph.D., Jean-Baptiste Bachet, M.D., Faiza Khemissa-Akouz, M.D., Denis Péré-Vergé, M.D., Catherine Delbaldo, M.D., Eric Assenat, M.D., Ph.D., Bruno Chauffert, M.D., Ph.D., Pierre Michel, M.D., Ph.D., Christine Montoto-Grillot, M.Chem., and Michel Ducreux, M.D., Ph.D., for the Groupe Tumeurs Digestives of Unicancer and the PRODIGE Intergroup*

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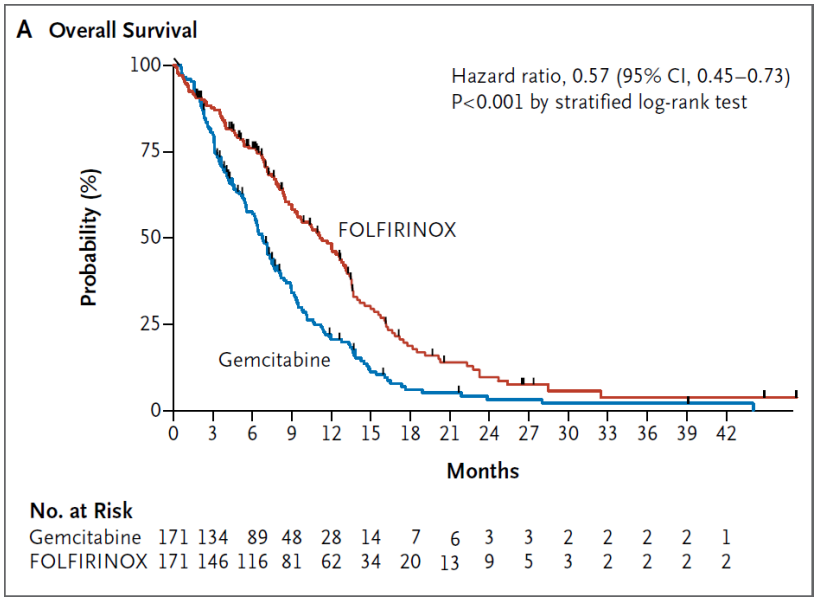
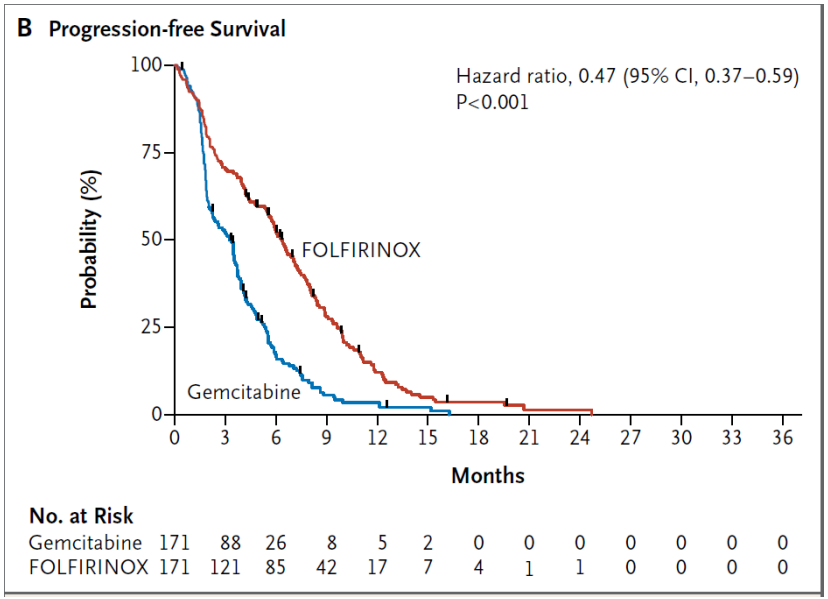
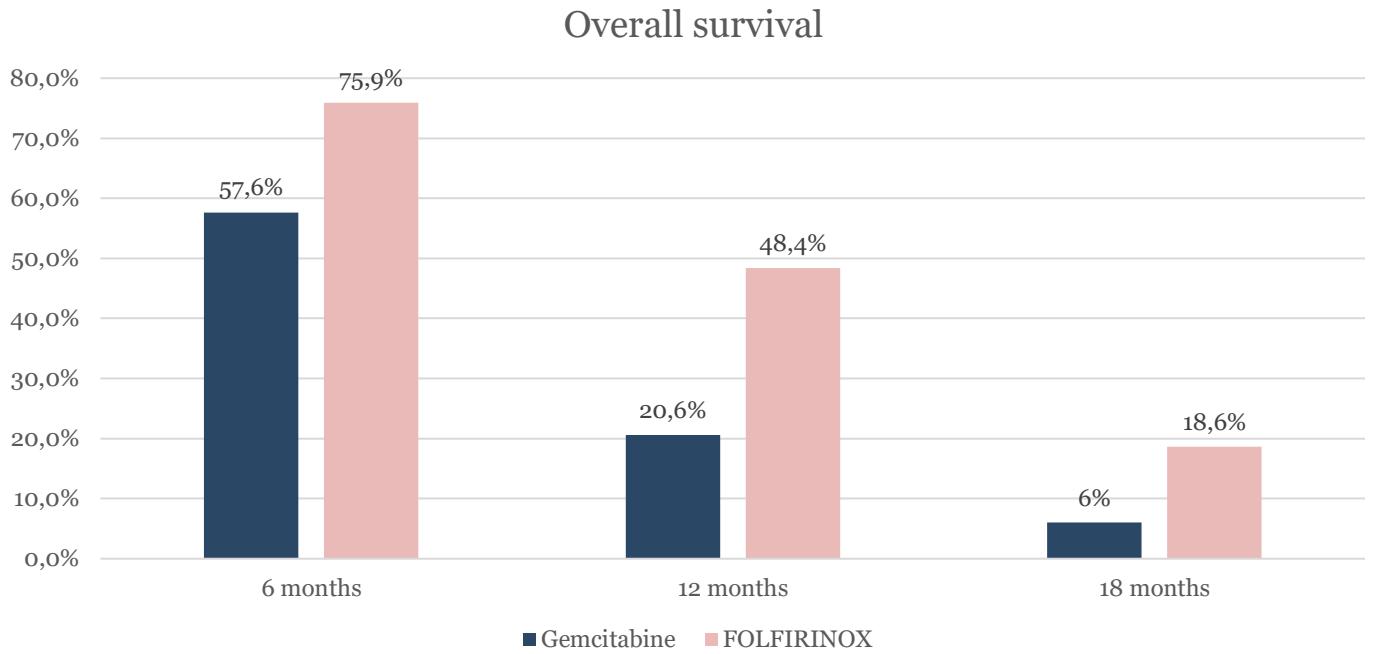
Conroy et al, New Engl J Med 2011

FOLFIRINOX ERA





FOLFIRINOX ERA



Conroy et al, New Engl J Med 2011

FOLFIRINOX ERA

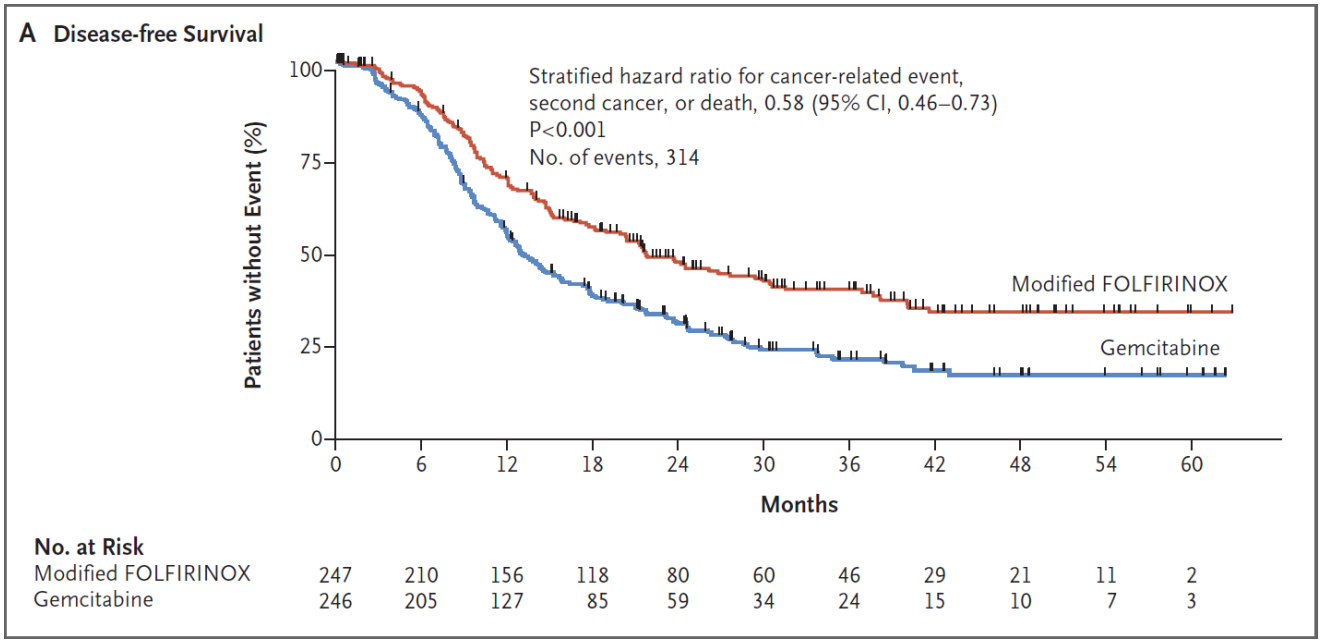
The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 DECEMBER 20, 2018 VOL. 379 NO. 25

FOLFIRINOX or Gemcitabine as Adjuvant Therapy for Pancreatic Cancer

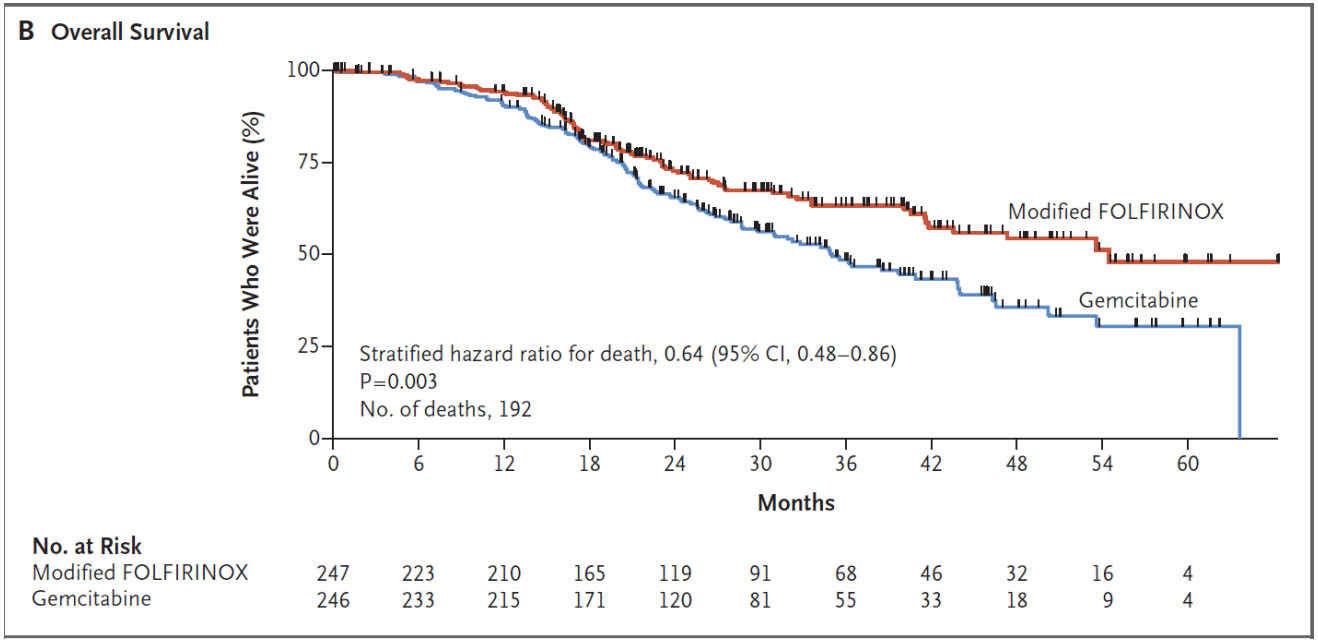
T. Conroy, P. Hammel, M. Hebbar, M. Ben Abdelghani, A.C. Wei, J.-L. Raoul, L. Choné, E. Francois, P. Artru, J.J. Biagi, T. Lecomte, E. Assenat, R. Faroux, M. Ychou, J. Volet, A. Sauvanet, G. Breysacher, F. Di Fiore, C. Cripps, P. Kavan, P. Texereau, K. Bouhier-Leporrier, F. Khemissa-Akouz, J.-L. Legoux, B. Juzyna, S. Gourgou, C.J. O'Callaghan, C. Jouffroy-Zeller, P. Rat, D. Malka, F. Castan, and J.-B. Bachet, for the Canadian Cancer Trials Group and the Unicancer-GI–PRODIGE Group*

FOLFIRINOX ERA



Median disease-free survival:
21,6 months with mod-FOLFIRINOX vs 12,8 months with Gemcitabine

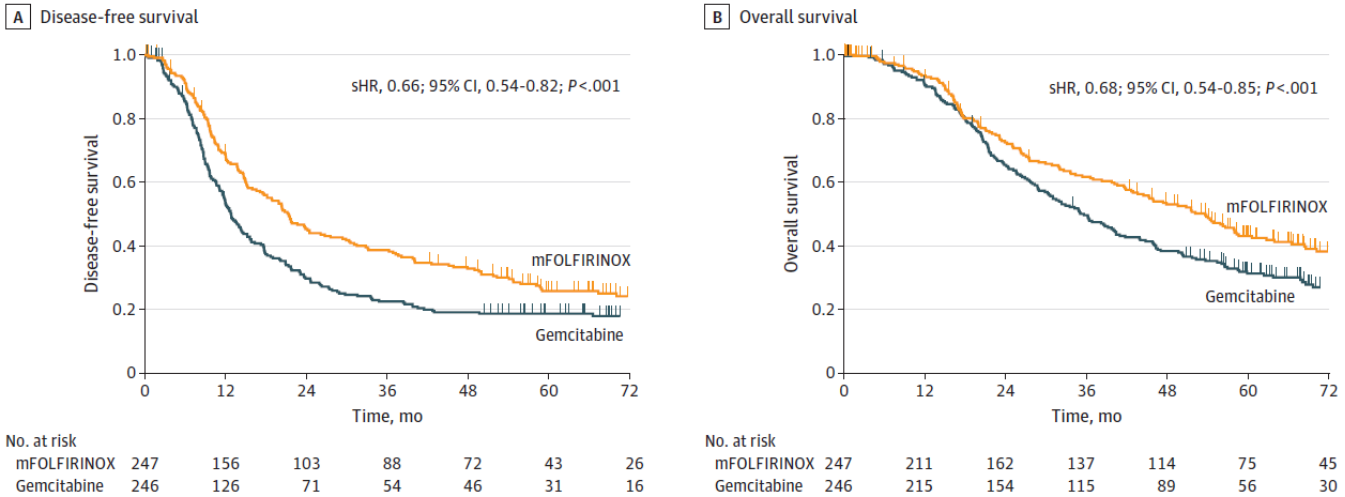
FOLFIRINOX ERA



Median overall survival:
54,4 months with mod-FOLFIRINOX vs 35 months with Gemcitabine

FOLFIRINOX ERA – 5-YEAR FOLLOW-UP

Figure 1. Kaplan-Meier Analysis of Survival in the Intention-to-Treat Population



Median overall survival:
53,5 months with mod-FOLFIRINOX vs 35,5 months with Gemcitabine

5-year Overall survival:
43,2 % with mod-FOLFIRINOX vs 31,4 % with Gemcitabine

Table 3. Five-Year Outcomes From Randomized Clinical Trials of Adjuvant Chemotherapy in Patients With Resected PDAC

Source	Patients, No.	Adjuvant therapy	Median follow-up, mo (IQR)	DFS		OS	
				Median, mo (95% CI)	5-y, %	Median, mo (95% CI)	5-y, %
ESPAC-1[9]	147	FU + leucovorin	47.0 (33-62)	15.3 (10.5-19.2)	NA	20.1 (16.5-22.7)	21.1[a]
	142	Observation	47.0 (33-62)	9.4 (8.4-15.2)	NA	15.5 (13.0-17.7)	8.0[a]
CONKO-001[10]	179	Gemcitabine	136 (104-144)	13.4 (11.6-15.3)	16.6	22.8 (NA)	20.7
	175	Observation	136 (104-144)	6.7 (6.0-7.5)	7.0	20.2 (NA)	10.4
JSAP-02[13]	58	Gemcitabine	60.4 (40.6-77.1)	11.4 (8.0-14.5)	NA	22.3 (16.1-30.7)	23.9
	60	Observation	60.4 (40.6-77.1)	5.0 (3.7-8.9)	NA	18.4 (15.1-25.3)	10.6
ESPAC-3[12]	537	Gemcitabine	34.2 (27.1-43.4)	14.3 (13.5-15.6)[b]	NA	23.6 (21.4-26.4)	17.5[a]
	551	FU + leucovorin	34.2 (27.1-43.4)	14.1 (12.5-15.3)[b]	NA	23.0 (21.1-25.0)	15.9[a]
JASPAC-01[20]	187	S-1	79.3 (72.0-89.0)	22.9 (NA)[c]	33.3	46.5 (37.8-63.7)	44.1[a]
	190	Gemcitabine	83.2 (71.8-88.5)	11.3 (9.7-13.6)[c]	16.8	25.5 (22.5-29.6)	24.4[a]
ESPAC-4[11]	364	Gemcitabine + capecitabine	43.2 (39.7-45.5)	13.9 (12.1-16.6)	18.6	28.0 (23.5-31.5)	28.8[a]
	366	Gemcitabine	43.2 (39.7-45.5)	13.1 (11.6-15.3)[c]	11.9	25.5 (22.7-27.9)	16.3[a]
APACT[21]	432	Gemcitabine + nab-paclitaxel	63.2 (NA)[c]	16.6 (NA)	NA	41.8 (NA)[d]	38[d]
	434	Gemcitabine	63.2 (NA)[c]	13.7 (NA)	NA	37.7 (NA)[d]	31[d]
PRODIGE 24	247	mFOLFIRINOX	69.7 (59.4-84.1)	21.4 (17.5-26.7)	26.1	53.5 (22.4-NE)	43.2
	246	Gemcitabine	69.7 (59.4-84.1)	12.8 (11.6-15.2)	19.0	35.5 (20.3-80.8)	31.4

Abbreviations: DFS, disease-free survival; FU, fluorouracil; mFOLFIRINOX, modified fluorouracil, leucovorin, irinotecan, and oxaliplatin; NA, not available; NE, nonestimable; OS, overall survival; PDAC, pancreatic ductal adenocarcinoma.

[a] Estimated 5-year survival.

[b] Progression-free survival.

[c] Recurrence-free survival.

[d] Post hoc analysis; data cutoff date of April 9, 2021 (88% mature).

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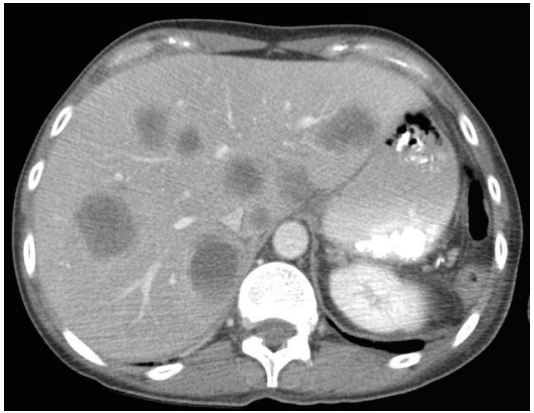

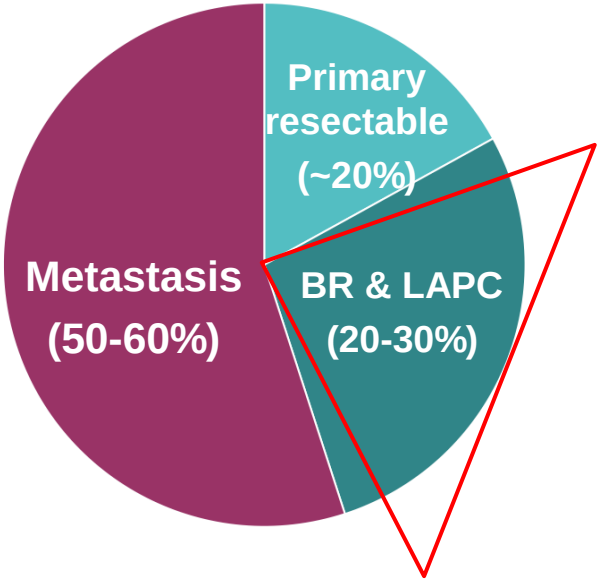

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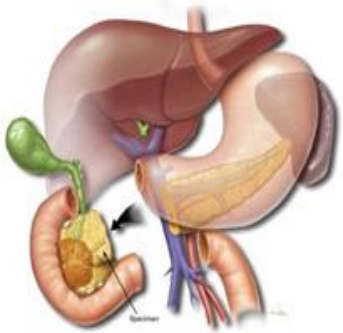

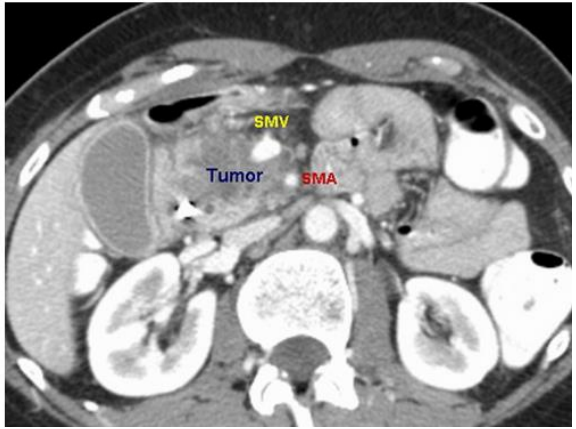

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Neoptolemos et al, New Engl J Med 2004
Ghaneh et al, Gut 2007
Bockhorn et al, Surgery 2014

NCCN GUIDELINES 2017

CRITERIA DEFINING RESECTABILITY STATUS[1]

Resectability Status	Arterial	Venous
Resectable	No arterial tumor contact (celiac axis [CA], superior mesenteric artery [SMA], or common hepatic artery [CHA]).	No tumor contact with the superior mesenteric vein (SMV) or portal vein (PV) or ≤180° contact without vein contour irregularity.
Borderline Resectable[2]	Pancreatic head/uncinate process: • Solid tumor contact with CHA without extension to celiac axis or hepatic artery bifurcation allowing for safe and complete resection and reconstruction. • Solid tumor contact with the SMA of ≤180° • Solid tumor contact with variant arterial anatomy (ex: accessory right hepatic artery, replaced right hepatic artery, replaced CHA, and the origin of replaced or accessory artery) and the presence and degree of tumor contact should be should be noted if present as it may affect surgical planning. Pancreatic body/tail: • Solid tumor contact with the CA of ≤180° • Solid tumor contact with the CA of >180° without involvement of the aorta and with intact and uninvolved gastroduodenal artery thereby permitting a modified Appleby procedure [some members prefer this criteria to be in the unresectable category].	• Solid tumor contact with the SMV or PV of >180°, contact of ≤180° with contour irregularity of the vein or thrombosis of the vein but with suitable vessel proximal and distal to the site of involvement allowing for safe and complete resection and vein reconstruction. • Solid tumor contact with the inferior vena cava (IVC).
Unresectable[2]	• Distant metastasis (including non-regional lymph node metastasis) Head/uncinate process: • Solid tumor contact with SMA >180° • Solid tumor contact with the CA >180° • Solid tumor contact with the first jejunal SMA branch Body and tail • Solid tumor contact of >180° with the SMA or CA • Solid tumor contact with the CA and aortic involvement	Head/uncinate process • Unreconstructible SMV/PV due to tumor involvement or occlusion (can be due to tumor or bland thrombus) • Contact with most proximal draining jejunal branch into SMV Body and tail • Unreconstructible SMV/PV due to tumor involvement or occlusion (can be due to tumor or bland thrombus)

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NCCN GUIDELINES 2023

National Comprehensive Cancer Network®

NCCN Guidelines Version 2.2023
Pancreatic Adenocarcinoma

NCCN Guidelines Index
Table of Contents
Discussion

CRITERIA DEFINING RESECTABILITY STATUS AT DIAGNOSIS[a]

• Decisions about resectability status should be made in consensus at multidisciplinary meetings/discussions.

Resectability Status	Arterial	Venous
Resectable	• No arterial tumor contact (celiac axis [CA], superior mesenteric artery [SMA], or common hepatic artery [CHA]).	• No tumor contact with the superior mesenteric vein (SMV) or portal vein (PV) or ≤180° contact without vein contour irregularity.
Borderline Resectable[b]	Pancreatic head/uncinate process: • Solid tumor contact with CHA without extension to CA or hepatic artery bifurcation allowing for safe and complete resection and reconstruction. • Solid tumor contact with the SMA of ≤180°. • Solid tumor contact with variant arterial anatomy (ex: accessory right hepatic artery, replaced right hepatic artery, replaced CHA, and the origin of replaced or accessory artery) and the presence and degree of tumor contact should be noted if present, as it may affect surgical planning. Pancreatic body/tail: • Solid tumor contact with the CA of ≤180°.	• Solid tumor contact with the SMV or PV of >180°, contact of ≤180° with contour irregularity of the vein or thrombosis of the vein but with suitable vessel proximal and distal to the site of involvement allowing for safe and complete resection and vein reconstruction. • Solid tumor contact with the inferior vena cava (IVC).
Locally Advanced[b,c]	Head/uncinate process: • Solid tumor contact >180° with the SMA or CA. Pancreatic body/tail: • Solid tumor contact of >180° with the SMA or CA. • Solid tumor contact with the CA and aortic involvement.	• Unreconstructible SMV/PV due to tumor involvement or occlusion (can be due to tumor or bland thrombus).

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Prognosis Based Definition of Resectability in Pancreatic Cancer

A Road Map to New Guidelines

Atsushi Oba, MD, PhD,† Chiara Croce, MD, PhD,* Patrick Hosokawa, MS,‡ Cheryl Meguid, DNP,* Robert J. Torphy, MD,* Mohammed H. Al-Musawi, MD, MBChB, MSc, FIBMS, FRCS,§ Steven Ahrendt, MD,*¶ Ana Gleisner, MD, PhD,*¶ Richard D. Schulick, MD, MBA, FACS,*¶✉ and Marco Del Chiaro, MD, PhD, FACS*¶*

7 849 opererated patients between 2010 – 2016, **1500** hospitals in USA

TABLE 2. Univariate and Multivariate Cox Models

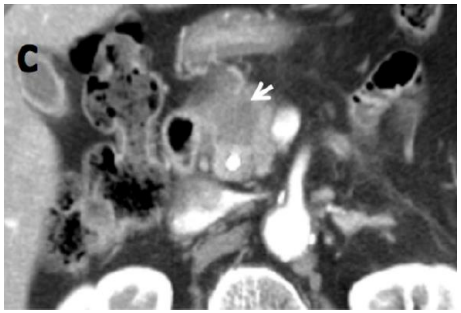
Variable	Multivariate		Univariate	
	HR (CI)	*P*-value	HR (CI)	*P*-value
CA19–9 (U/mL)		<0.0001		<0.0001
0–2.0	1.04 (0.94–1.16)		1.06 (0.95–1.17)	
2.1–36.9	Ref		Ref	
37.0–97.9	1.08 (0.99–1.18)		1.10 (1.01–1.20)	
98.0+	1.34 (1.26–1.43)		1.38 (1.29–1.47)	
Neoadjuvant treatment	1.32 (1.23–1.41)	<0.0001	1.31 (1.22–1.39)	<0.0001
Tumor size (mm)		<0.0001		<0.0001
0–29	Ref		Ref	
30+	1.31 (1.23–1.38)		1.33 (1.26–1.40)	
Age		<0.0001		
18–50	Ref		Ref	
51–65	1.02 (0.91–1.14)		1.05 (0.93–1.18)	
66–75	1.19 (1.06–1.34)		1.25 (1.11–1.40)	
76+	1.37 (1.21–1.55)		1.44 (1.27–1.62)	
Facility type		<0.0001		<0.0001
Academic/research	Ref		Ref	
Others	1.19 (1.08–1.30)		1.23 (1.17–1.30)	
Charlson/Deyo score		<0.0001		<0.0001
0	Ref		Ref	
1	1.07 (1.01–1.13)		1.10 (1.03–1.17)	
2+	1.36 (1.24–1.48)		1.39 (1.27–1.52)	
Primary site		0.0002		0.02
Tail	Ref		Ref	
Body	1.05 (0.92–1.19)		0.95 (0.84–1.09)	
Head	1.19 (1.08–1.30)		1.08 (0.99–1.19)	
Sex		0.02		0.02
Female	Ref		Ref	
Male	1.07 (1.01–1.13)		1.06 (1.01–1.12)	
T-Stage				0.21
1–3			Ref	
4			1.09 (0.96–1.24)	

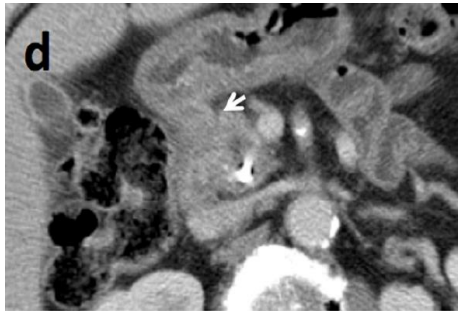
T4 stage was not independently associated with OS – tumor biology is important!

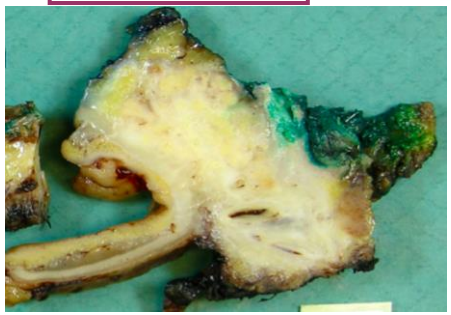
RADIOLOGY UNRELIABLE AFTER CHEMOTHERAPY

	Pre-FOLFIRINOX Treatment (n = 40)	Post-FOLFIRINOX Treatment (n = 40)	*P*
CA 19.9, median (range)[1]	169 (1–4754)	0.17 (0.01–9.81)	<0.001
CA 19.9 > 40 U[1]	26 (70.3%)	11 (28.9%)	<0.001
Tumor diameter at CT, median (range), cm	3.6 (0–6.0)	2.1 (0–5.4)	<0.001
Gastrointestinal consensus group	LAPC = 25 (62.5%) Borderline = 15 (37.5%)	Complete = 6 (15%) Partial = 30 (75%) Stable = 4 (10%) Progression = 0	
Blinded review by senior pancreatic surgeon (A.L.W.)	Resectable—0 Borderline—14 (35%) LA—26 (65%)	Resectable—12 (30%) Borderline—9 (22%) LA—19 (48%)	

Imaging unresectable:
92% R0 resection







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Ferrone et al, Ann Surg 2015
Dholakia et al, J Radiat Oncol 2013

MORBIDITY AFTER PANCREATIC SURGERY

All complications → 57%

Clavien Dindo >3 → 27%

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van Rijssen et al, HPB 2017. Nationwide Dutch audit
Tingstedt et al, HPB 2019. Swedish Pancreatic cancer registry

MORTALITY AFTER PANCREATIC SURGERY

In hospital mortality:

- Germany 10,1 %
- 6,5 % in high volume, 11,5 % in low volume

90 day motality:

- France 8,1 %, (Whipple 9,2%)

Accepted mortality in high-volume centers: 2-3 %

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Nimptsch et al, Annals 2016
Krautz et al, Annals 2018
Farges et al, Annals 2017

MORTALITY AFTER PANCREATIC SURGERY

Sweden:

30 day mortality:

- Whipple and total pancreatectomy: 1,5%
- Distal pancreatectomy: 0,3%

90 day mortality:

- Whipple and total pancreatectomy: 3,5%
- Distal pancreatectomy: 1,8%

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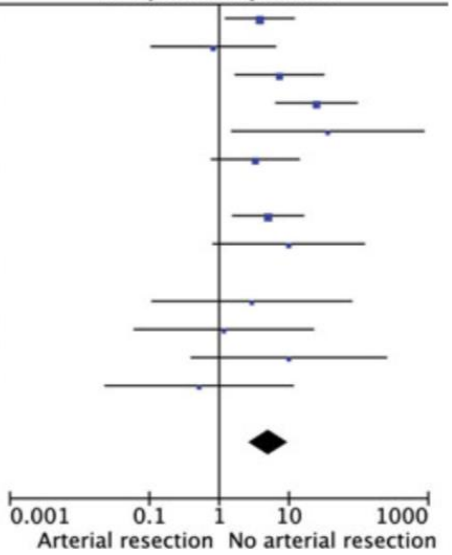
Tingstedt et al, HPB 2019.
Swedish Pancreatic cancer registry

ARTERIAL VS STANDARD WHIPPLE

Study or Subgroup	Arterial resection Events	Total	No arterial resection Events	Total	Weight	Odds Ratio M-H, Random, 95% CI
Bockhorn (2010)	4	29	18	449	16.3%	3.83 [1.21, 12.17]
Boggi (2009)	1	26	13	281	7.3%	0.82 [0.10, 6.57]
Hartwig (2009)	3	14	7	195	12.0%	7.32 [1.66, 32.27]
Kato (2009)	5	14	6	275	13.4%	24.91 [6.39, 97.05]
Kinoshita (2001)	2	6	0	32	3.5%	36.11 [1.48, 879.18]
Klempnauer (1996)	3	16	7	107	12.1%	3.30 [0.76, 14.35]
Martin (2009)	0	5	0	31		Not estimable
Ogata (1997)	5	21	10	171	15.8%	5.03 [1.53, 16.54]
Ouaissi (2010)	1	8	2	141	5.3%	9.93 [0.80, 123.11]
Shimada (2006)	0	12	0	76		Not estimable
Sperti (2010)	0	5	1	49	3.3%	2.94 [0.11, 81.29]
Tamura (1989)	1	7	1	8	4.0%	1.17 [0.06, 22.94]
Wang (2008)	1	19	0	61	3.4%	9.97 [0.39, 255.29]
Wu (2010)	0	9	2	26	3.6%	0.52 [0.02, 11.77]
Total (95% CI)		**191**		**1902**	**100.0%**	**5.04 [2.69, 9.45]**
Total events	26		67			

Heterogeneity: $\tau^2 = 0.28$; $\chi^2 = 14.56$, df = 11 ($P = 0.20$); $I^2 = 24\%$

Test for overall effect: Z = 5.05 ($P < 0.00001$)



Morbidity 53.6 % , Mortality 11.8 %

Median blood loss range 300-4500 ml

PANCREAS WITH VENOUS AND ARTERIAL RESECTION

- Vein + artery – 90 day 9%
  - *Kinny-Köster et al, Annals of Surg 2023*

- Vein resection – 90 day 7%
- Liver artery, Celiac trunk – 90 day 9%
- SMA resection – 90 day 14%
  - *Boggi et al, BJS 2022*

OUR EXPERIENCE

HPB (Oxford). 2018 Aug 6. pii: S1365-182X(18)32704-7. doi: 10.1016/j.hpb.2018.07.017. [Epub ahead of print]

Pancreatectomy with arterial resection is superior to palliation in patients with borderline resectable or locally advanced pancreatic cancer.

Del Chiaro M[1], Rangelova E[2], Halimi A[2], Ateeb Z[2], Scandavini C[2], Valente R[2], Segersvärd R[2], Arnelo U[2], Verbeke CS[3].

Intra- and postoperative results	Resection group (n=34) %	Palliative Group (n=39) %	p
Mean operation time (minutes)	426 ± 14	171 ± 11	<0.0001
Mean intraoperative blood loss (ml)	613 ± 72	188 ± 21	<0.0001
Postoperative mortality (in hospital)	2.9 %	2.6 %	0.9
Postoperative overall morbidity	61.7%	43.5%	0.1
Postoperative overall surgical complications	38.2 %	25.6 %	0.2
Severe postoperative complications (Clavien-Dindo ≥ 3b)	11.7 %	5.1 %	0.3
Reoperation	8.8 %	-	0.058
Need for ICU stay	8.8 %	-	0.058
Mean length of hospital stay (days)	18 ± 2.4	9.3 ± 1	0.0005

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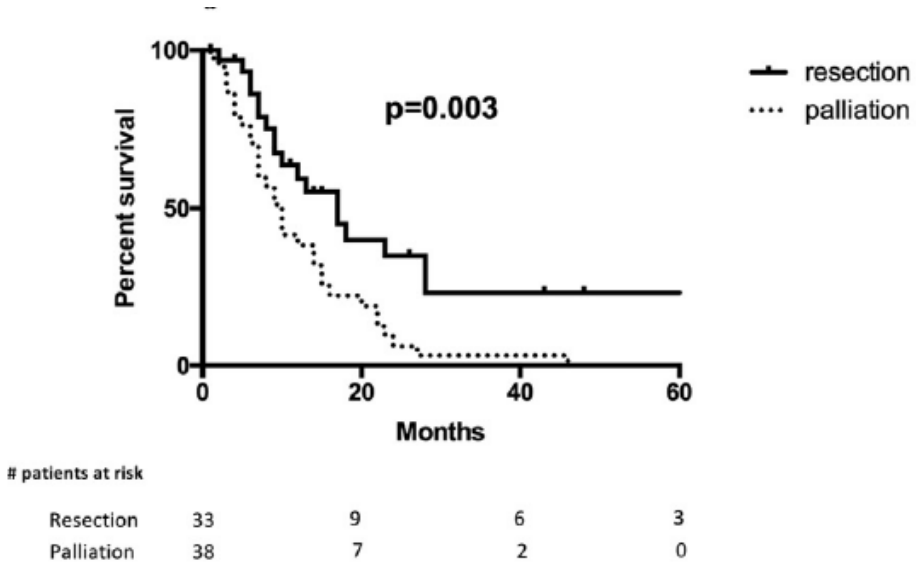
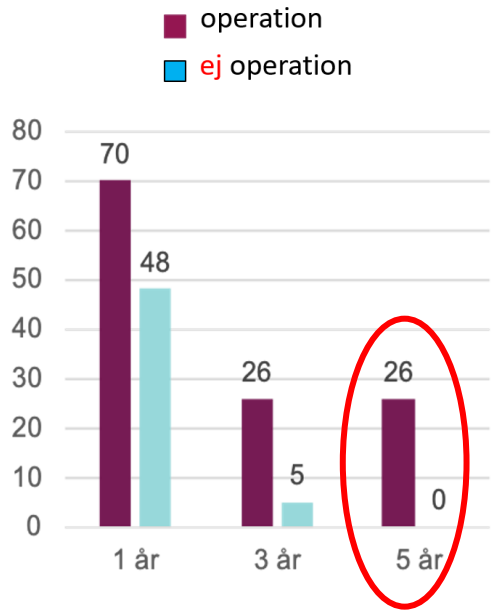




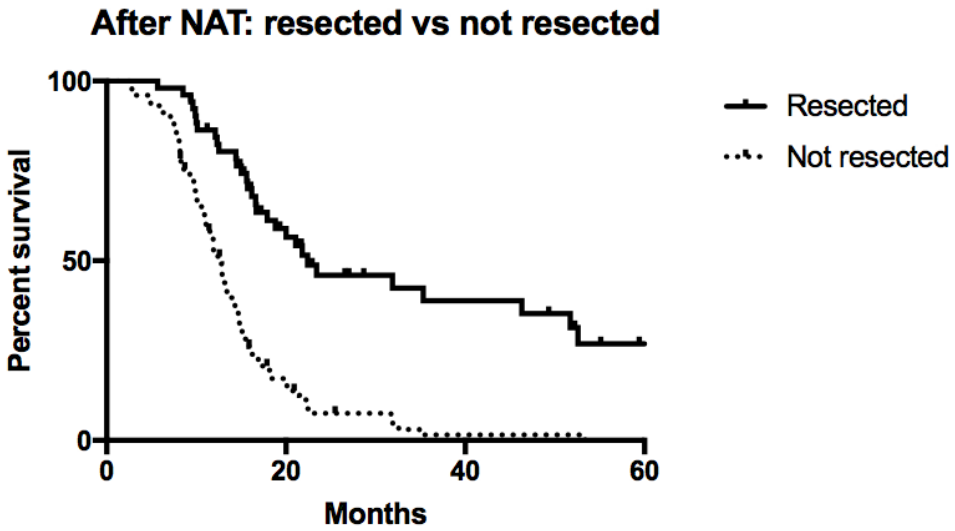
OUR EXPERIENCE

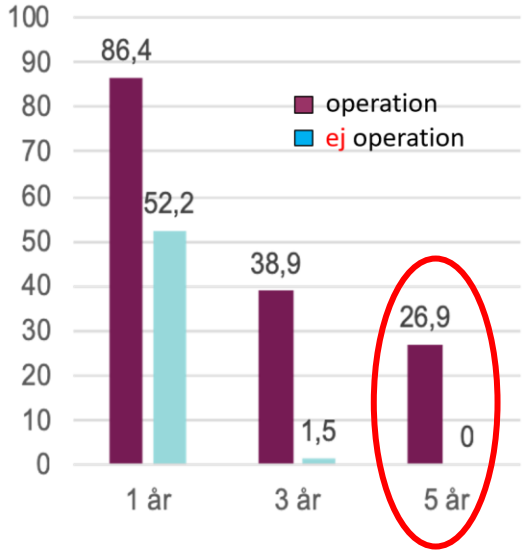
156 pts with pancreatic cancer receiving neoadjuvant treatment

Patient data	
Man : Female (n)	82 : 74
Age (yrs)	64 (32-81)
Caput: corpus: cauda	119 : 32 : 5
Resectability : BR : LAPC *(ISGPS)* (n)	2 : 22 : 132
Resectability rate: **2011-15** *vs* **-16-17** (%)	**34.7 : 59.5%** (p=0.009)

OUR EXPERIENCE

Survival after neoadjuvant: resected vs unresected patients

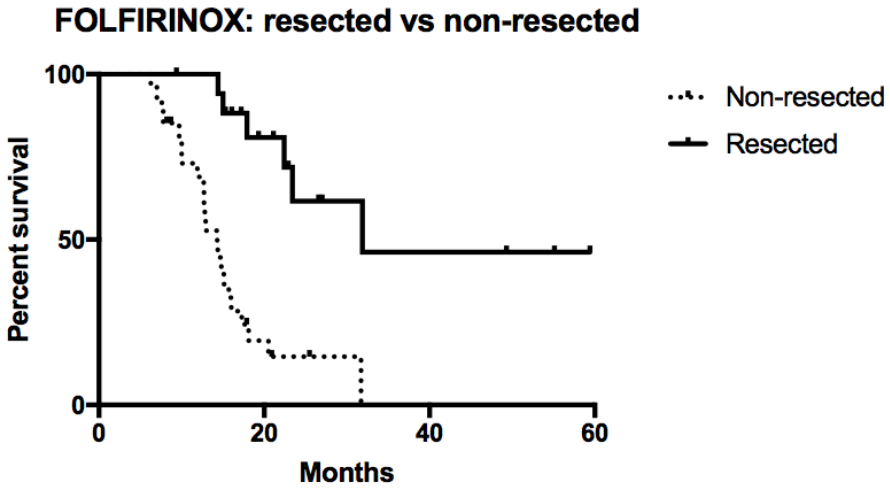


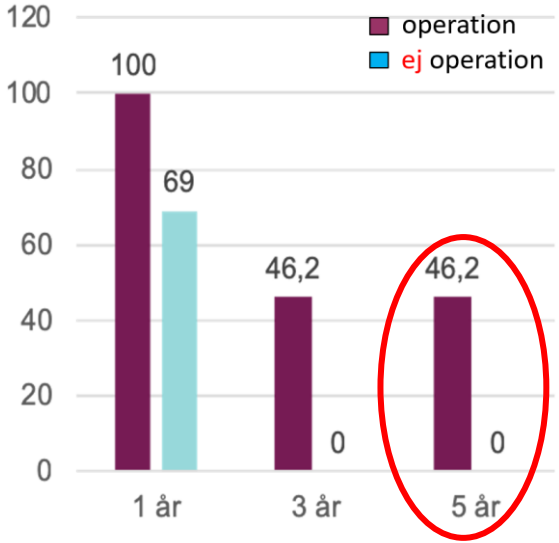


Rangelova et al, Ann Surg 2019

OUR EXPERIENCE

Survival after neoadjuvant: resected vs unresected patients





VENOUS RESECTION 2016 VS 2022

Systematic review

Meta-analysis of benefits of portal–superior mesenteric vein resection in pancreatic resection for ductal adenocarcinoma

F. Giovinazzo[1], G. Turri[1], M. H. Katz[3], N. Heaton[2] and I. Ahmed[1]

[1]Hepatobiliary and Pancreatic Surgical Unit, NHS Grampian, Aberdeen, and [2]Institute of Liver Studies, King's College Hospital, London, UK, and [3]MD Anderson Cancer Center, Houston, Texas, USA

Correspondence to: Dr F. Giovinazzo, Department of Surgery, Aberdeen Royal Infirmary, Foresterhill Road, Aberdeen AB25 2ZN, UK (e-mail: francesco.giovinazzo@nhs.net)

- 27 studies
- ↑ mortality
- ↑ R1/R2 resections

Venous resection for pancreatic cancer, a safe and feasible option? A systematic review and meta-analysis

E.S. Zwart [a, 1], B.S. Yilmaz [b, 1], A. Halimi [c, d], R. Ahola [e], B. Kurlinkus [f], J. Laukkarinen [e], G.O. Ceyhan [g, *]

[a] *Amsterdam UMC, Amsterdam, Cancer Center Amsterdam, Netherlands Department of Surgery, the Netherlands*
[b] *Klinikum Rechts der Isar, Technical University of Munich, Munich, Germany*
[c] *Division of Surgery, CLINTEC, Karolinska Institute, Sweden*
[d] *Department of Surgical and Perioperative Sciences, Umeå University Hospital, Sweden*
[e] *Tampere University Hospital and Tampere University, Tampere, Finland*
[f] *Clinic of Gastroenterology, Nephrourology and Surgery, Faculty of Medicine, Vilnius University, Vilnius, Lithuania*
[g] *Department of General Surgery, HPB Unit, School of Medicine, Acibadem Mehmet Ali Aydinlar University, Istanbul, Turkey*

- 32 studies
- ↑ R1 (36,7% vs 28,6%)
- Similar 90-d mortality & OS

HOW WE DO IT IN THE NORTH

BR & LAPC → chemotherapy

- 6-8 cycles FOLFIRINOX or 4-6 cycles Gem-Nab paclitaxel
- 2 months radiology
- MDT → Radiology unchanged, ↓ Ca19-9, no metastasis
- **nMDT**
- Conclude the planned chemotherapy
- New radiology
- MDT → Radiology unchanged, ↓ Ca19-9, no metastasis, patients status
- Exploration

- Radiology progression, ↑ Ca19-9 → 2nd line chemotherapy (if possible, or palliation)

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HOW WE DO IT IN THE NORTH

- Downsizing / downstaging rarely required
  - If there is a need for tumor shrinking and/or ↓ vascular engagement prior to resection
  - These cases usually require more chemo cycles

UMEÅ DATA

- 2020 – 2023

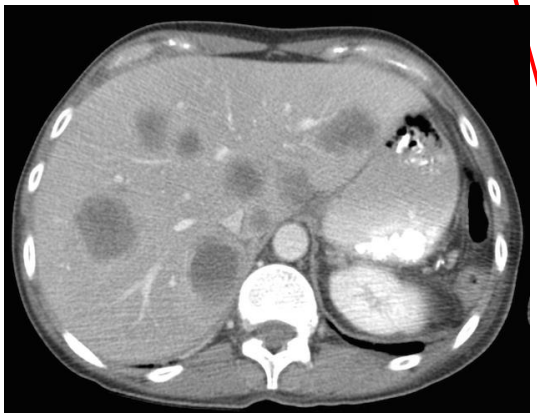
- 33 cases with BR and LAPC
  - 7 open & close due to metastasis
  - 26 resected

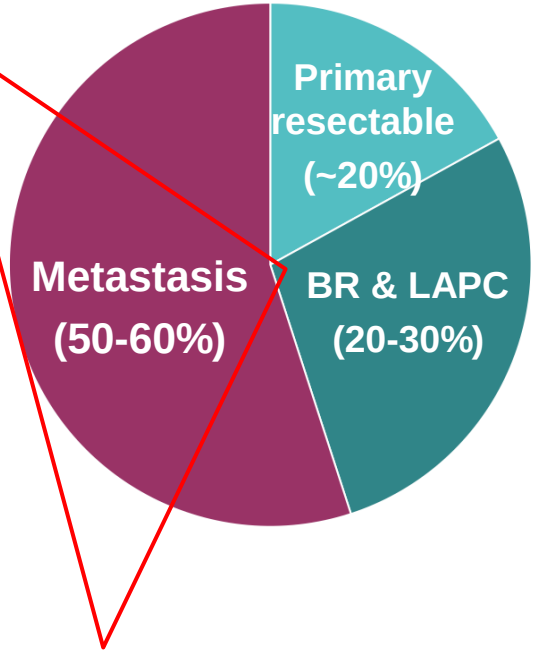
- 100 % resection rate if no intraoperative metastasis

- Average bleeding 217 ml (range 0 – 1500 ml)

- Mortalitet:
  - 30 day 3%
  - 90 day 6%

BUKSPOTTKÖRTELCANCER





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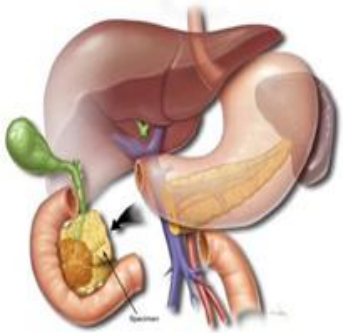

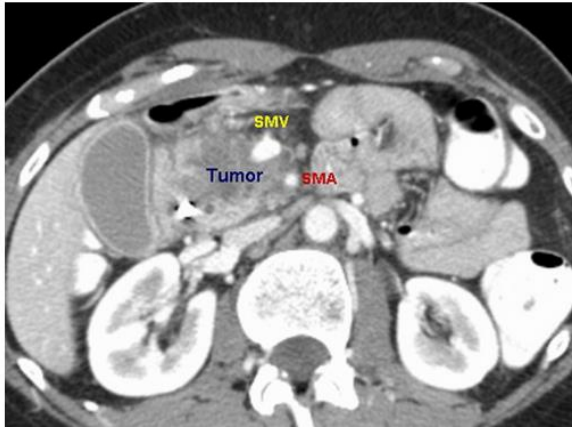

Neoptolemos et al, New Engl J Med 2004
Ghaneh et al, Gut 2007
Bockhorn et al, Surgery 2014

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METASASERAD BUKSPOTTKÖRTELCANCER

- Att operera primär tumören vid metastaserad sjukdom hjälper inte
- Viktigt att patienten får komma till bromsande palliativ cytostatika så snart som möjligt
- ScanPan-1 studien
  - Oligometastas studie
- SPEARMINT studien
  - ERCP + stent, med eller utan ablation

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ATT VÄLJA RÄTT PATIENT

- Tumör faktorer, patient faktorer
- Tumör lokalisation, storlek, kärlengagemang?
- +75 årig häcklöpare eller 82 årig off-pist skidåkare, vs rullstolsbunden 50 åring
- Resektabel tumör? operabel patient?

IN SUMMARY

- Combination of Surgery + chemo gives the best survival chance.
- ”New” chemotherapy regimens give us the possibility to treat patients otherwise deemed palliative.
- Tumor biology is more important than tumor staging.
- We have come far with surgery, we can do advanced procedures with acceptable complication rates, which is superior to palliation.
- “with great power comes great responsibility”, just because we can, we shouldn’t.
- Selection the right patient is crucial.

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TACK!

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