

Quoi de neuf en chirurgie HPB en 2021

Dr boris Tréchet



CHC

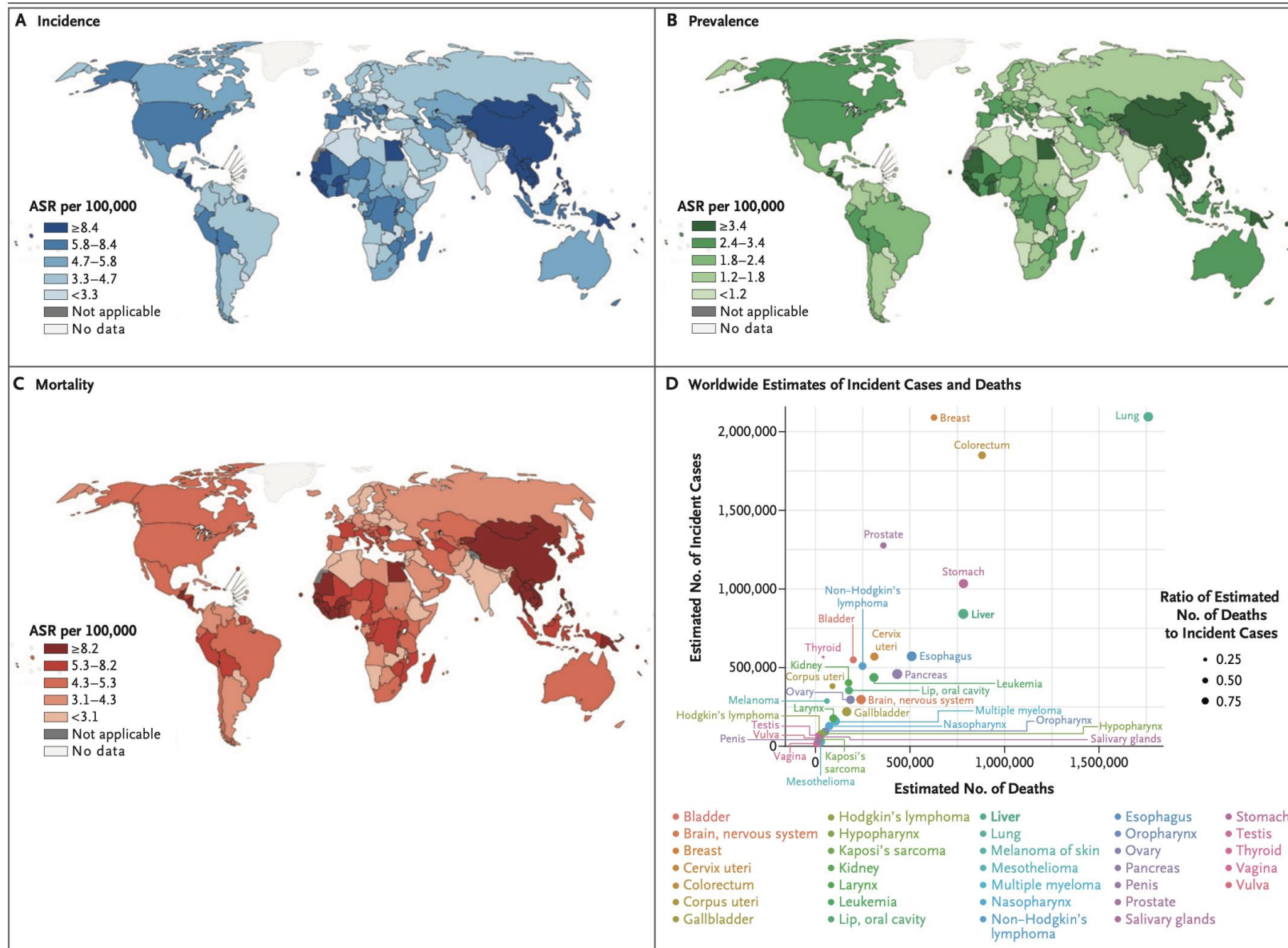
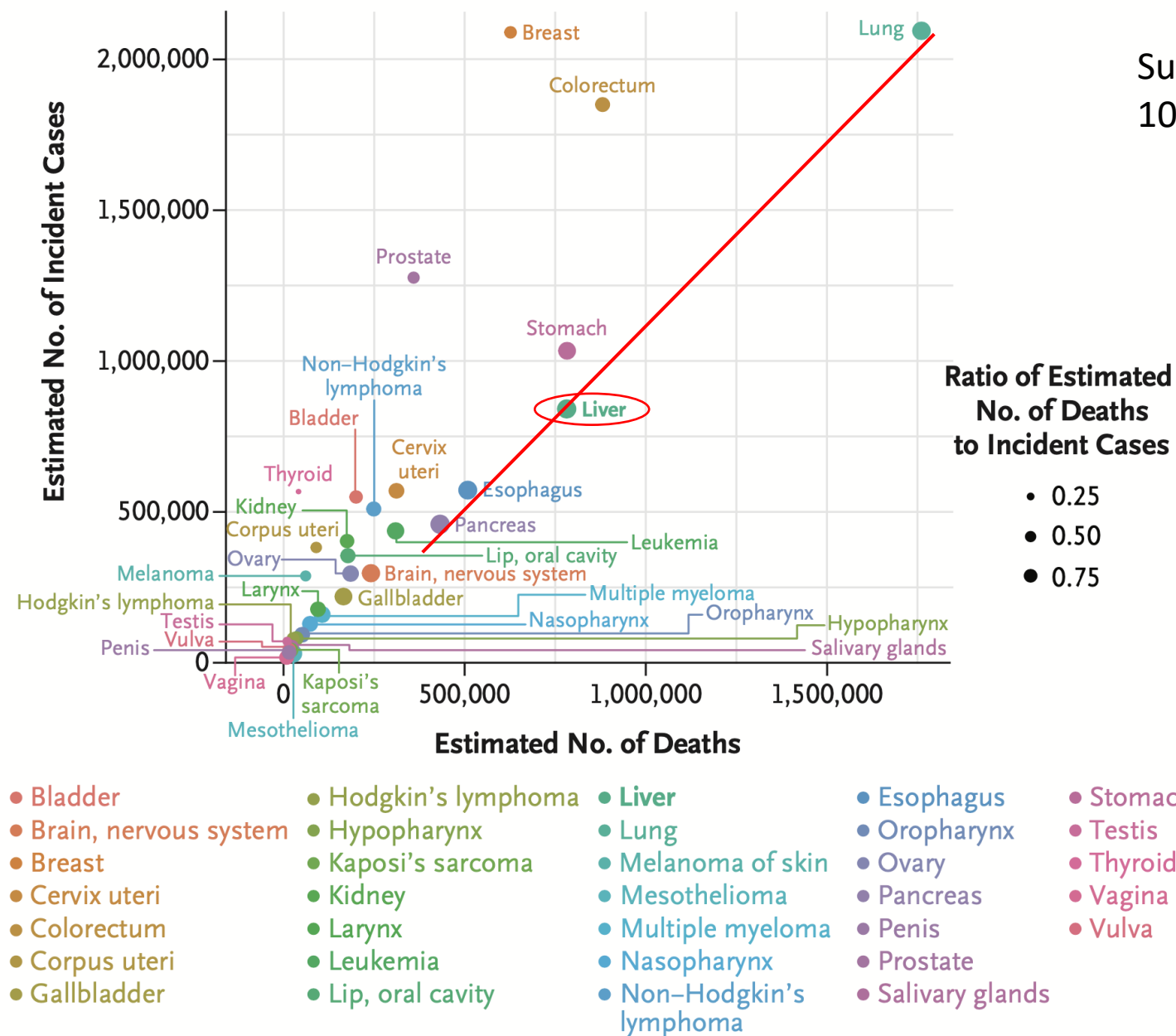


Figure 1. Worldwide Epidemiology of Liver Cancer in 2018.

Data are from the International Agency for Research on Cancer¹ (accessed on October 10, 2018). The incidence and prevalence of liver cancer are shown in Panels A and B, respectively, and associated deaths are shown in Panel C; data are expressed as the age-standardized rate (ASR) per 100,000 population. Panel D shows the worldwide estimates of incident cancer cases and deaths in 2018 for all tumor types.

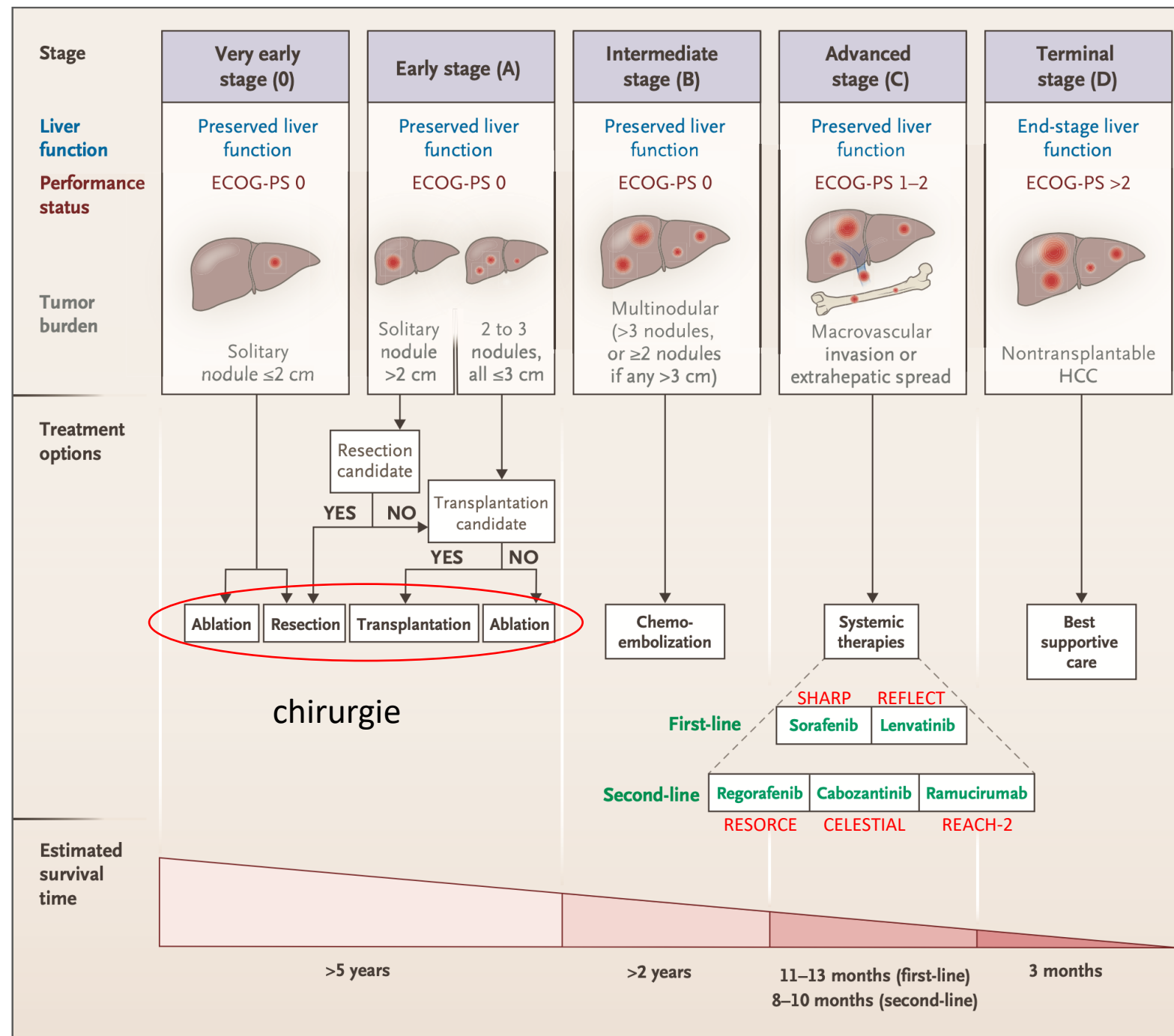
CHC

D Worldwide Estimates of Incident Cases and Deaths



Survie à 5 ans 18%
10⁶ décès/an en 2030

CHC

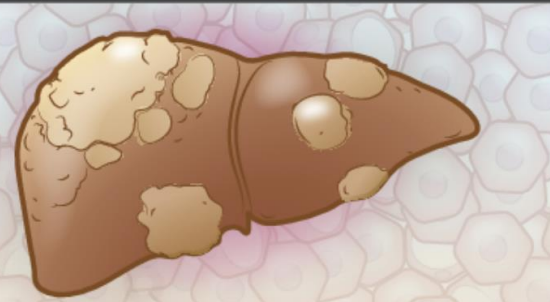


BCLC algorithme

CHC non résécables

Atezolizumab + Bevacizumab for Hepatocellular Carcinoma

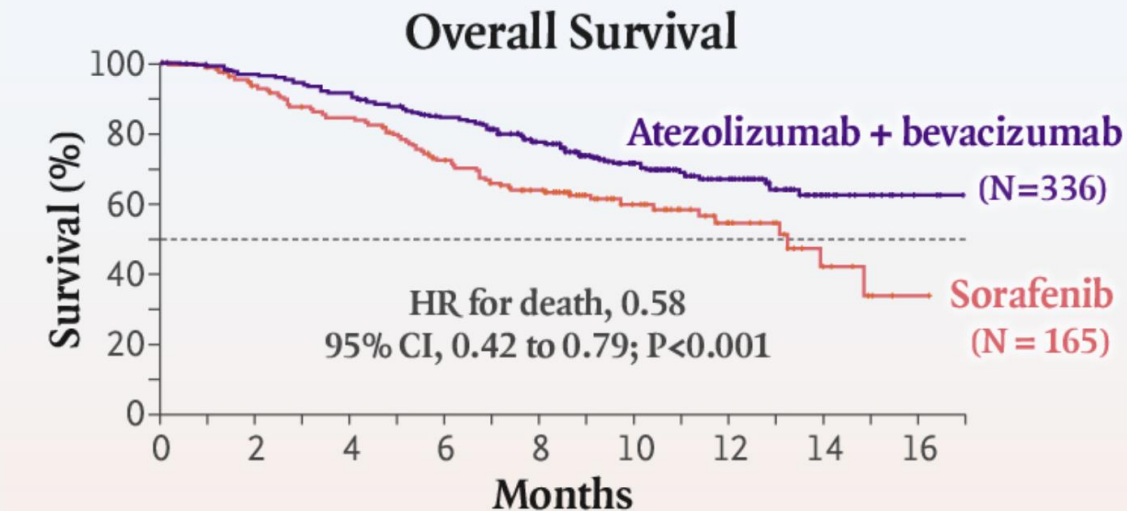
PHASE 3, OPEN-LABEL, MULTICENTER, RANDOMIZED TRIAL



501

Patients with locally advanced
hepatocellular carcinoma
(metastatic, unresectable, or both)

Median
progression-free
survival



Atezolizumab + bevacizumab

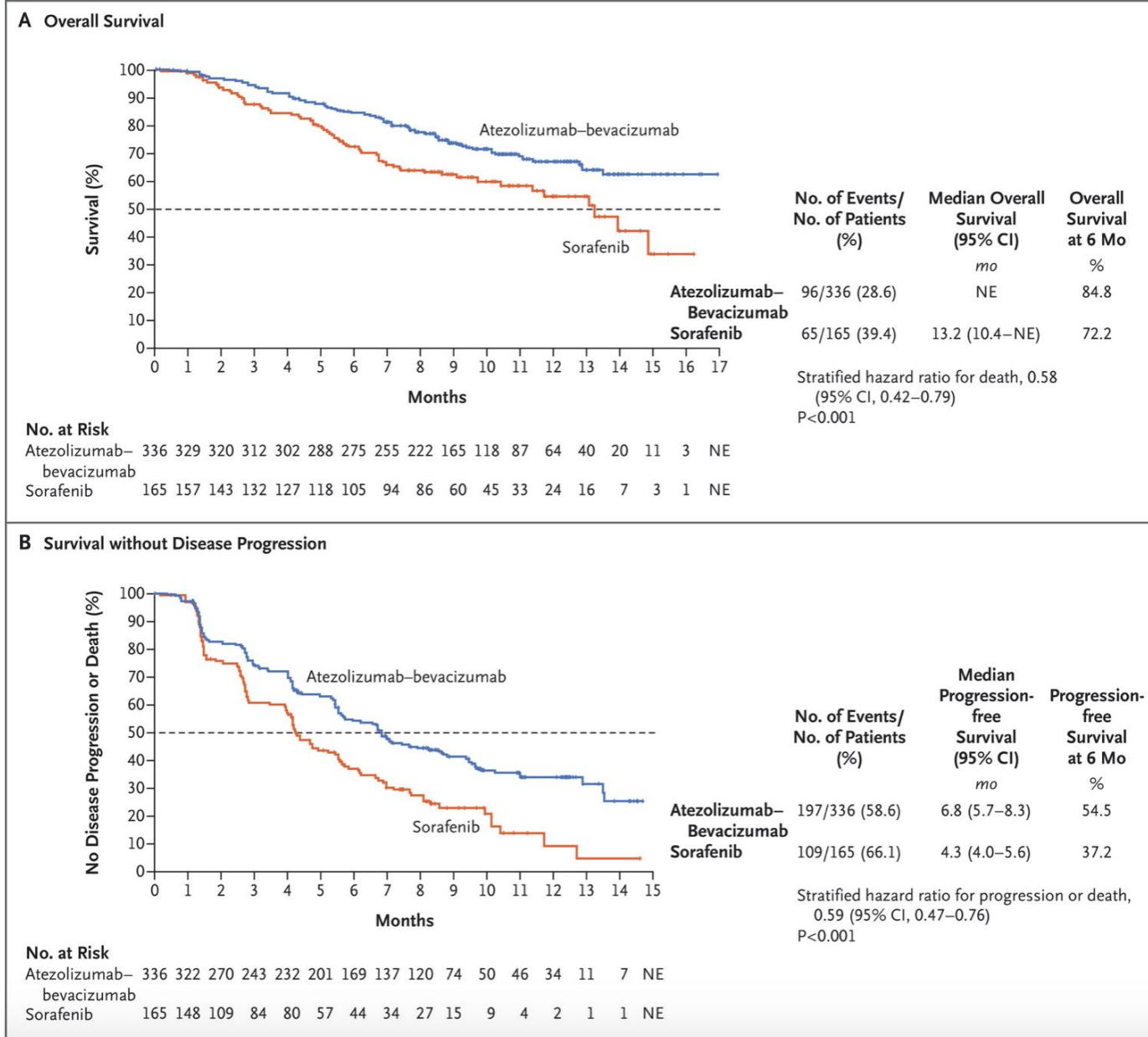
6.8 Mo

Sorafenib

4.3 Mo

HR for disease progression or death, 0.59; 95% CI, 0.47 to 0.76; $P < 0.001$

CHC non résécables



CHC non résécables – Place de la Radioembolisation?

Clinical Trial > [Lancet Oncol.](#) 2017 Dec;18
doi: 10.1016/S1470-2045(17)30683-6. Epub 2017

Efficacy and safety of selective internal radiotherapy with yttrium-90 compared with sorafenib in inoperable hepatocellular carcinoma: an open-label randomised controlled trial

Valérie Vilgrain¹, Helena Pereira², Eric Assenat³, Georges-Philippe [Pauget](#)³, [Jean-Luc Raoul](#)¹¹, Anthony Sarran¹¹, Charlott Alain Luciani¹³, René Adam¹⁴, Maïté Lewin¹⁴, Aurelia Dinut², Laurent Castera¹⁵, Gilles Chat

Collaborators, Affiliations + expand

PMID: 29107679 DOI: [10.1016/S1470-2045\(17\)](#)

Clinical Trial > [J Clin Oncol.](#) 2018 Jun 1;36(12):1255-1263. doi: 10.1200/JCO.2017.76.0892. Epub 2017

SIRveNIB: Selective Internal Radiotherapy Versus Sorafenib in Asian Patients with Hepatocellular Carcinoma

Pierce K H Chow¹, Mihir Gandhi¹, Say-E Ariunaa Khasbazar¹, Janus Ong¹, Su Pi Chanisa Chotipanich¹, Kieron Lim¹, Lau

Albert Su-Chong Low¹, Anthony S W Goh¹, Brian K P Goh¹, David C E Ng¹, Ganesh Kenneth S W Mak¹, Khee Chee Soo¹, Asia-Pacific Hepatocellular Carcinoma Trials Group

Affiliations + expand

PMID: 29498924 DOI: [10.1200/JCO.2017.76.0892](#)

Clinical Trial > [J Hepatol.](#) 2019 Dec;71(6):1164-1174. doi: 10.1016/j.jhep.2019.08.006. Epub 2019 Aug 14.

Impact of combined selective internal radiation therapy and sorafenib on survival in advanced hepatocellular carcinoma

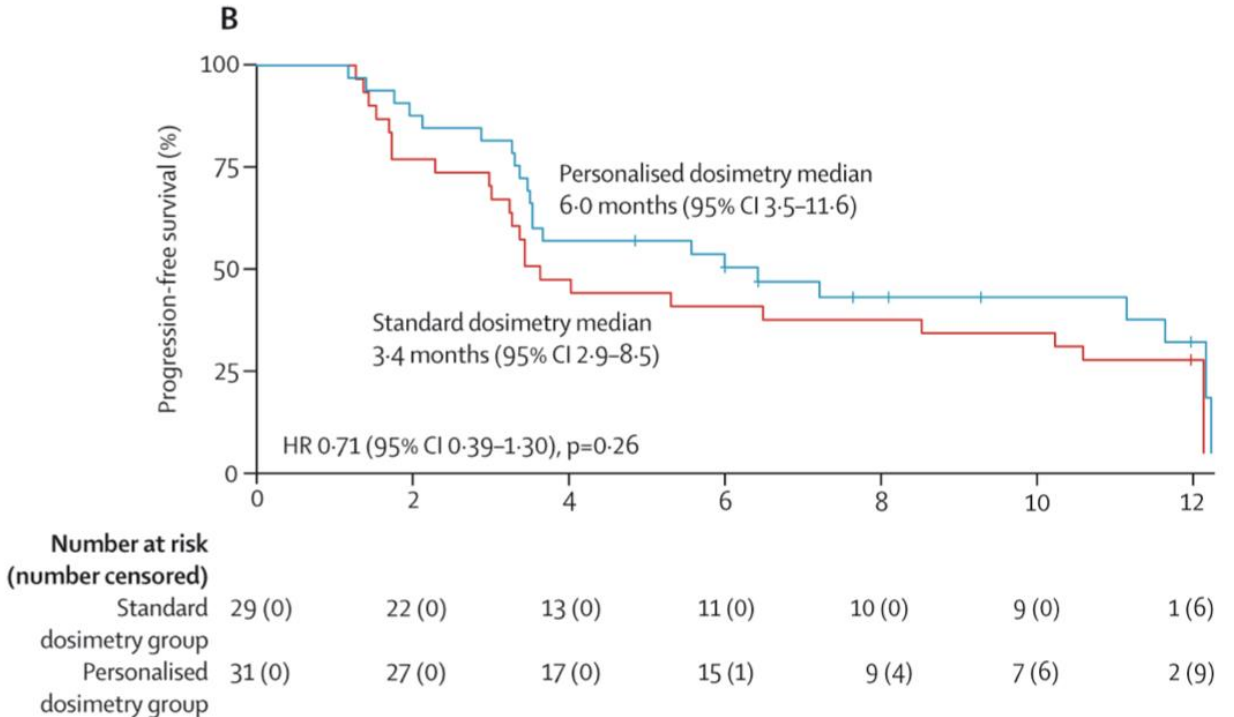
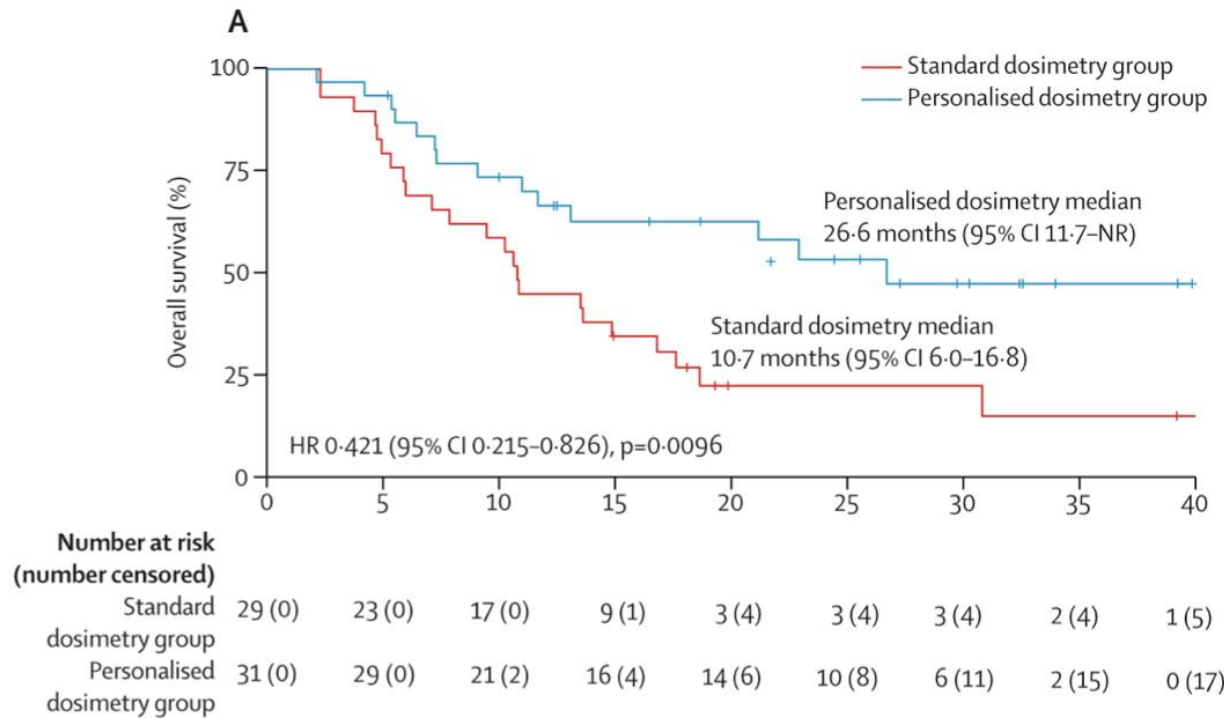
Jens Ricke¹, Heinz Josef Klumpen², Holger Amthauer³, Irene Bargellini⁴, Peter Bartenstein⁵, Enrico N de Toni⁶, Antonio Gasbarrini⁷, Maciej Pech⁸, Markus Peck-Boeckers⁹, Peter Pongráč¹⁰, Olivier Rössner¹¹, Eckart Scharl¹²,

PMID: 31421157 DOI: [10.1016/j.jhep.2019.08.006](#)

Asia-Pacific Hepatocellular Carcinoma Trials Group

PAS DE BENEFICE DE SURVIE DE LA RADIO-EMBOISATION PAR RAPPORT AU SORAFENIB SEUL OU EN ASSOCIATION AU SORAFENIB

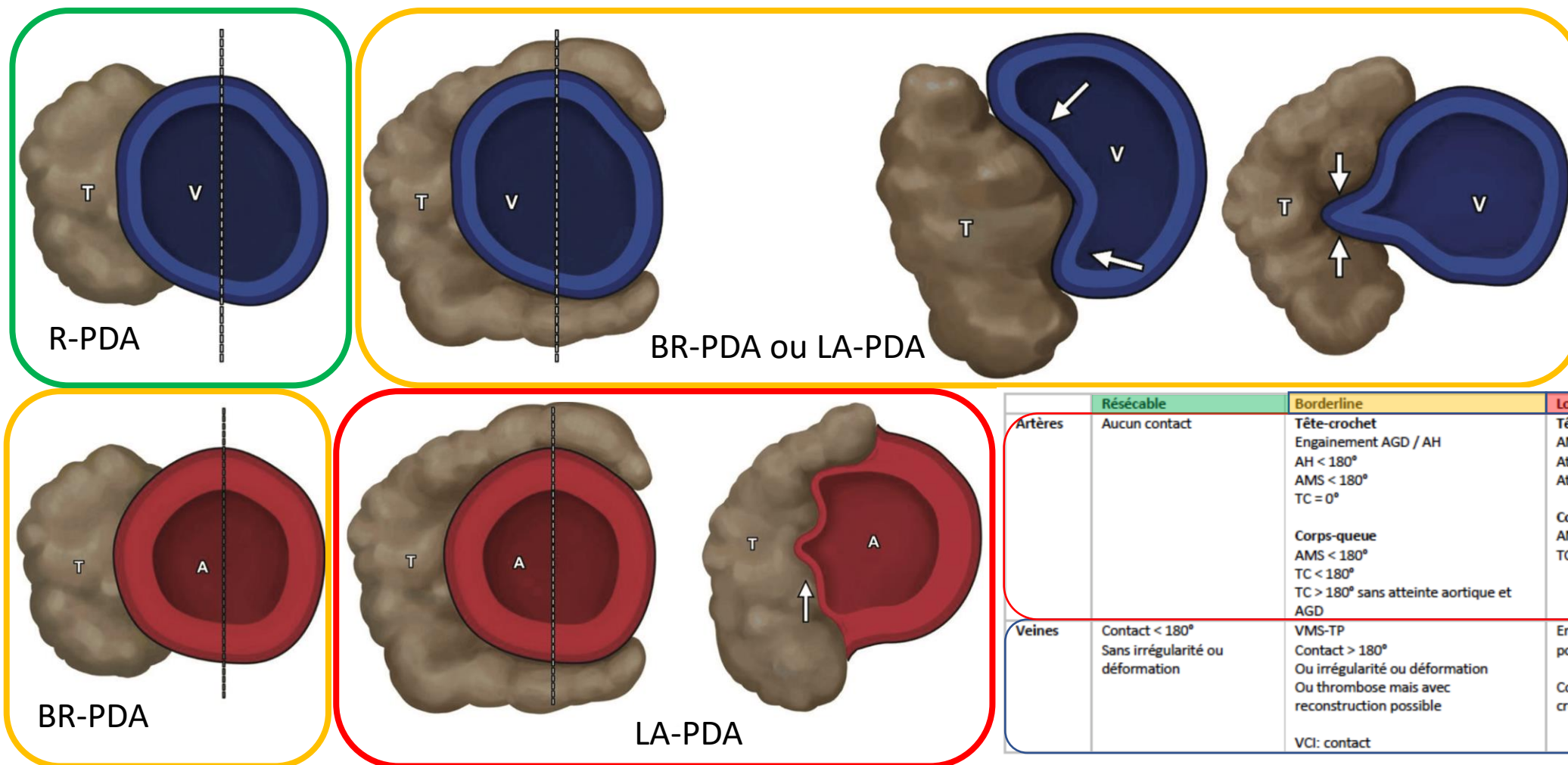
CHC non résécables – Place de la Radioembolisation?



DOSISPHERE-01

Pancréas résécables

Pancréas évaluation de la résécabilité



	Résécable	Borderline	Localement avancé
Artères	Aucun contact	Tête-crochet Engainement AGD / AH AH < 180° AMS < 180° TC = 0° Corps-queue AMS < 180° TC < 180° TC > 180° sans atteinte aortique et AGD	Tête-crochet AMS > 180° Atteinte TC Atteinte 1^{ère} branche jéjunale Corps-queue AMS > 180° TC > 180° ou avec atteinte aortique
Veines	Contact < 180° Sans irrégularité ou déformation	VMS-TP Contact > 180° Ou irrégularité ou déformation Ou thrombose mais avec reconstruction possible VCI: contact	Envahissement ou occlusion porte ou VMS sans possibilité de reconstruction Contact avec branches jéjunales proximales (tête-crochet)

Recommandations selon le stade

- Résécable: chirurgie vs TNA

Pourquoi TNA ?

- 4-6 mois observations, observer l'agressivité (30% DO)
- Augmenter le taux de R0
- Traiter la maladie micrométastatique
- Évaluer chimiosensibilité et tolérance du patient

PANACHE-01/PRODIGE 48 : FOLFOX vs FOLFIRINOX

PANACHE-02 : CT puis RCT néoadjuvant



Recommandations selon le stade

- BorderLine résécable: chirurgie vs TNA

Pourquoi TNA ?

- Risque de chirurgie R1 élevé
- Mais pas de preuve



ESPAC-5F: chirurgie vs GEM-CAP vs FOLFIRINOX vs RCT (abstract ASCO 2020) bénéfice en survie dans les 3 bras TNA

PREOPANC: CT puis RCT néoadjuvante pas de bénéfice en survie globale (JCO 2020)

PANDAS/PRODIGE 44: FOLFIRINOX +/- RCT

Recommandations selon le stade

- Localement avancés : CT d'induction

Pourquoi d'induction?

- La chirurgie n'est pas la règle, mais proposée en cas de bonne réponse (cli/bio/radio)
- Place de la RCT « de clotûre » après 3-6 mois de FOLFIRINOX ou GEMZAR/ABRAXANE ?



Pancréas résécables (BR)

Multicenter Study > Ann Surg. 2021 Nov 1;274(5):721-728.

doi: 10.1097/SLA.0000000000005132.

The Impact of Neoadjuvant Treatment on Survival in Patients Undergoing Pancreatoduodenectomy With Concomitant Portomesenteric Venous Resection: An International Multicenter Analysis

Nikolaos Machairas¹, Dimitri A Raptis^{1 2}, Patricia Sánchez Velázquez³, Alain Sauvanet⁴, Alexandra Rueda de Leon⁵, Atsushi Oba⁶, Bas Groot Koerkamp⁷, Brendan Lovasik⁸, Carlos Chan⁵, Charles J Yeo⁹, Claudio Bassi¹⁰, Cristina R Ferrone¹¹, David Kooby⁸, David Moskal⁹, Domenico Tamburrino¹², Dong-Sup Yoon¹³, Eduardo Barroso¹⁴, Eduardo de Santibañes¹⁵, Emanuele F Kauffmann¹⁶, Emanuel Vigia¹⁴, Fabien Robin¹⁷, Fabio Casciani¹⁰, Fernando Burdío³, Giulio Belfiori¹², Giuseppe Malleo¹⁰, Harish Lavu⁹, Hermien Hartog⁷, Ho-Kyoung Hwang¹³, Ho-Seong Han¹⁸, Hugo P Marques¹⁴, Ignasi Poves³, Ismael Domínguez-Rosado⁵, Joon-Seong Park¹³, Keith D Lillemoe¹¹, Keith Roberts¹⁹, Laurent Sulpice¹⁷, Marc G Besselink²⁰, Mahmoud Abuawwad²¹, Marco Del Chiaro⁶, Martin de Santibañes¹⁵, Massimo Falconi¹², Mizelle D'Silva¹⁸, Michael Silva²², Mohammed Abu Hilal^{21 23}, Motaz Qadan¹¹, Naomi M Sell¹¹, Nassiba Beghdadi⁴, Niccolò Napoli¹⁶, Olivier R C Busch²⁰, Oscar Mazza¹⁵, Paolo Muesan¹⁹, Philip C Müller²⁴, Reena Ravikumar²², Richard Schulick⁶, Sarah Powell-Brett¹⁹, Syed Hussain Abbas²², Tara M Mackay²⁰, Thomas F Stoop²⁰, Tom K Gallagher²⁵, Ugo Boggi¹⁶, Casper van Eijck⁷, Pierre-Alain Clavien²⁴, Kevin C P Conlon²⁵, Giuseppe Kito Fusai^{1 2}

Affiliations + expand

PMID: 34353988 DOI: 10.1097/SLA.0000000000005132

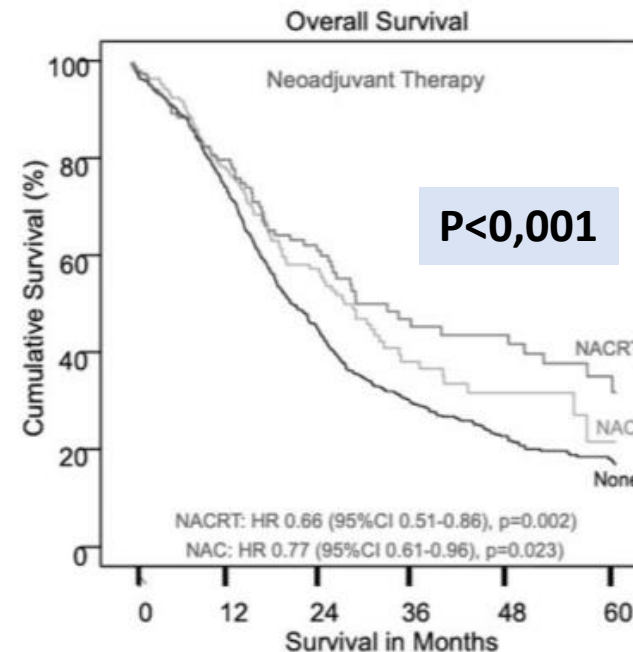
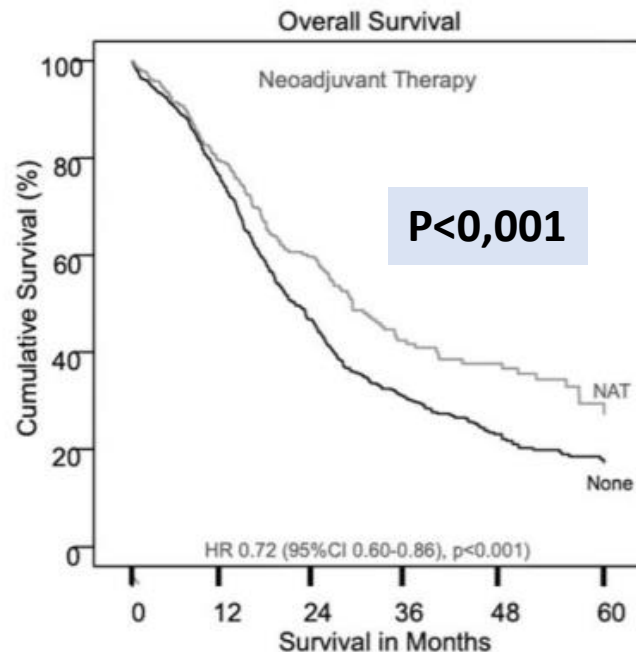
Pancréas résécables (BR)

26%

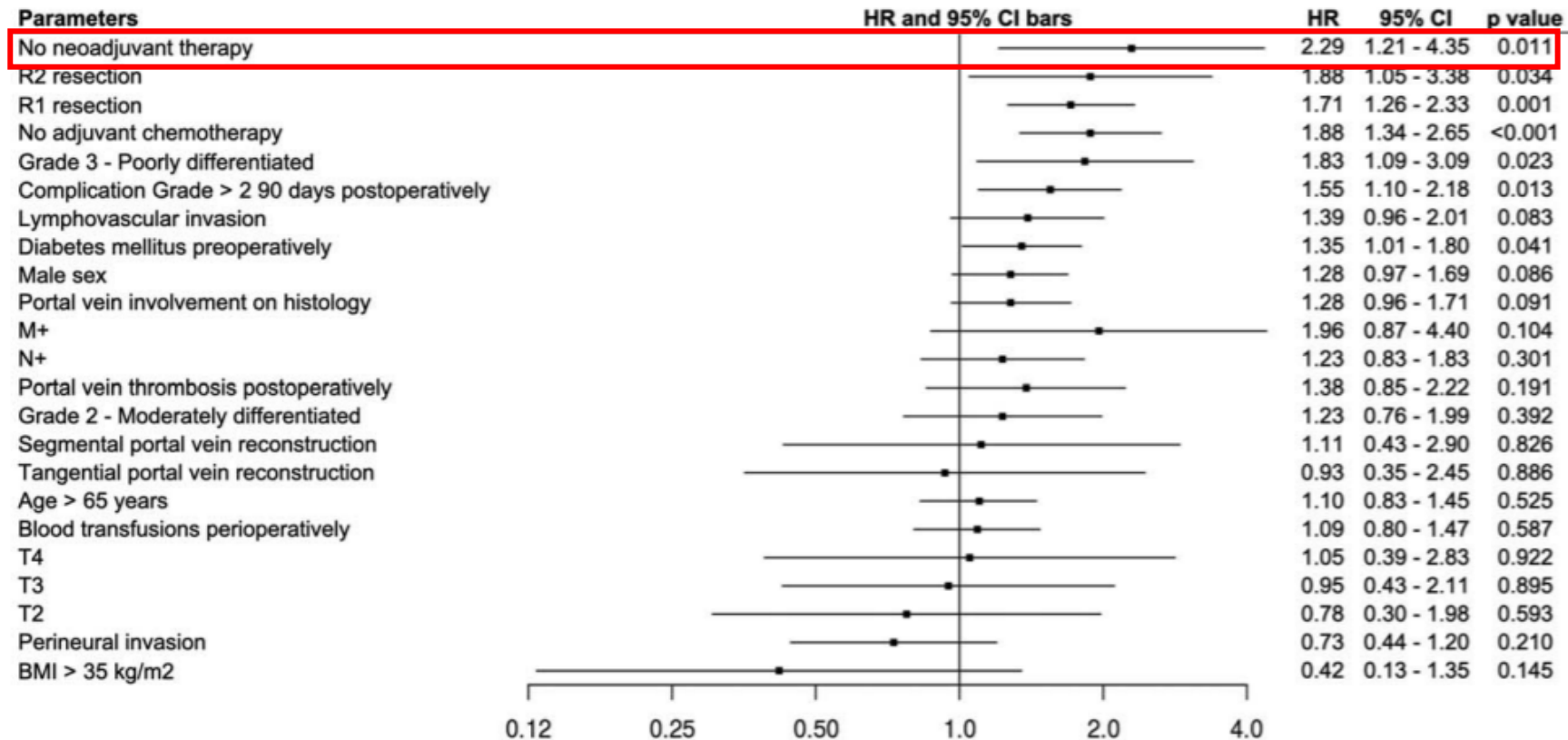
74%

Parameters	(n = 1192) All patients	(n = 317) NAT	(n = 875) No NAT	OR (95% CI)	P value
<i>Portal vein involvement /invasion on histology, n (%)</i>					
No involvement	661 (55)	217 (68.5)	444 (50.7)	-	<0.001
Involvement	531 (45)	100 (31.5)	431 (49.3)	-	-
<i>Resection margin status, (n=1160 reported), n (%)</i>					
R0	574 (49.5)	177 (57.5)	397 (46.6)	-	0.004*
R1	546 (47.1)	121 (39.3)	425 (49.9)	-	-
R2	40 (3.4)	10 (3.2)	30 (3.5)	-	-

Pas de différence de morbi-mortalité MAIS survie ...



Pancréas résécables (BR)



Suspicion de résection veineuse = Traitement néoadjuvant

Pancréas résécables (BR)

Multicenter Study > Ann Surg. 2020 Nov;272(5):731-737.

doi: 10.1097/SLA.0000000000004267.

Defining Benchmark Outcomes for Pancreatoduodenectomy With Portomesenteric Venous Resection

Dimitri A Raptis¹, Patricia Sánchez-Velázquez², Nikolaos Machairas¹, Alain Sauvanet³, Alexandra Rueda de Leon⁴, Atsushi Oba⁵, Bas Groot Koerkamp⁶, Brendan Lovasik⁷, Carlos Chan⁴, Charles J Yeo⁸, Claudio Bassi⁹, Cristina R Ferrone¹⁰, David Kooby⁷, David Moskal⁸, Domenico Tamburrino¹¹, Dong-Sup Yoon¹², Eduardo Barroso¹³, Eduardo de Santibañes¹⁴, Emanuele F Kauffmann¹⁵, Emanuel Vigia¹³, Fabien Robin¹⁶, Fabio Casciani⁹, Fernando Burdío², Giulio Belfiori¹¹, Giuseppe Malleo⁹, Harish Lavu⁸, Hermien Hartog⁶, Ho Kyuon Hwang¹², Ho-Seong Han¹⁷, Ignasi Poves², Ismael Domínguez Rosado⁴, Joon-Seong Park¹², Keith D Lillemoe¹⁰, Keith J Roberts¹⁸, Laurent Sulpice¹⁶, Marc G Besselink¹⁹, Mahmoud Abuawwad²⁰, Marco Del Chiaro⁵, Martin de Santibañes¹⁴, Massimo Falconi¹¹, Mizelle D'Silva¹⁷, Michael Silva²¹, Mohammed Abu Hilal^{20 22}, Motaz Qadan¹⁰, Naomi M Sell¹⁰, Nassiba Beghdadi³, Niccolò Napoli¹⁵, Olivier R C Busch¹⁹, Oscar Mazza¹⁴, Paolo Muiresan¹⁸, Philip C Müller²³, Reena Ravikumar²¹, Richard Schulick⁵, Sarah Powell-Brett¹⁸, Syed Hussain Abbas²¹, Tara M Mackay¹⁹, Thomas F Stoop¹⁹, Tom K Gallagher²⁴, Ugo Boggi¹⁵, Casper van Eijck⁶, Pierre-Alain Clavien²³, Kevin C P Conlon²⁴, Giuseppe Kito Fusai¹

Affiliations + expand

PMID: 32889866 DOI: 10.1097/SLA.0000000000004267

Pancréas résécables (BR)

Operation duration	≤8 h			
Intraoperative blood transfusion rate	≤27%			
Intensive therapy unit stay	≤1 d			
Hospital stay	≤14 d			
Postoperative morbidity	At discharge	At 90 d	At 6 mo	
Any complication	<79%	<83%	<83%	
Clavien-Dindo Grade ≥3a	≤28%	≤34%	≤36%	
Comprehensive complications index (CCI)	≤21	≤23	≤26	
Pancreatic leak rate (all grades) (ISGPF)	≤19%			
Clinically relevant POPF (Grades B or C)	≤14%			
Severe postoperative bleeding grade ≥3a	≤7%			
In-hospital mortality	<4%			
1-yr hospital readmission rate	≤32%			
Portal vein thrombosis rate	≤14%			
Occlusive only rate	≤4%			
Oncological outcomes (PDAC only, n = 679)	R0 rate	R1 rate	R2 rate	
Resection margin status	≥35%	≤63%	≤2%	
Portal vein positive resection margin rate	≤3%			
Total number of lymph nodes resected	≥16			
Survival (PDAC only, n = 589)	1-yr	2-yr	3-yr	5-yr
Overall survival rate	≥68%	≥37%	≥21%	≥9%
Disease-free survival rate	≥22%	≥9%	≥2%	≥0%

Pancréas résécables (R-BR-LA)

> [JAMA Oncol.](#) 2020 Nov 1;6(11):1733-1740. doi: 10.1001/jamaoncol.2020.3537.

Evaluation of Adjuvant Chemotherapy in Patients With Resected Pancreatic Cancer After Neoadjuvant FOLFIRINOX Treatment

Stijn van Roessel ¹, Eran van Veldhuisen ¹, Sjors Klompemaker ^{1 2}, Quisette P Janssen ³, Mohammed Abu Hilal ^{4 5}, Adnan Alseidi ^{6 7}, Alberto Balduzzi ⁸, Gianpaolo Balzano ⁹, Claudio Bassi ⁸, Frederik Berrevoet ¹⁰, Morgan Bonds ⁶, Olivier R Busch ¹, Giovanni Butturini ¹¹, Marco Del Chiaro ¹², Kevin C Conlon ¹³, Massimo Falconi ⁹, Isabella Frigerio ¹¹, Giuseppe K Fusai ¹⁴, Johan Gagnière ^{15 16}, Oonagh Griffin ¹⁵, Thilo Hackert ¹⁷, Asif Halimi ¹⁸, Ulla Klaißer ¹⁷, Knut J Labori ¹⁹, Giuseppe Malleo ⁸, Marco V Marino ^{20 21}, Michael B Mortensen ²², Andrej Nikov ²³, Mickaël Lesurtel ²⁴, Tobias Keck ²⁵, Jörg Kleeff ²⁶, Rupaly Pandé ²⁷, Per Pfeiffer ²⁸, D Pietrasz ²⁹, Keith J Roberts ²⁷, Antonio Sa Cunha ²⁹, Roberto Salvia ⁸, Oliver Strobel ¹⁷, Timo Tarvainen ³⁰, Patrick M Bossuyt ³¹, Hanneke W M van Laarhoven ³², Johanna W Wilmink ³², Bas Groot Koerkamp ³, Marc G Besselink ¹,
European-African Hepato-Pancreato-Biliary Association

Affiliations [+](#) expand

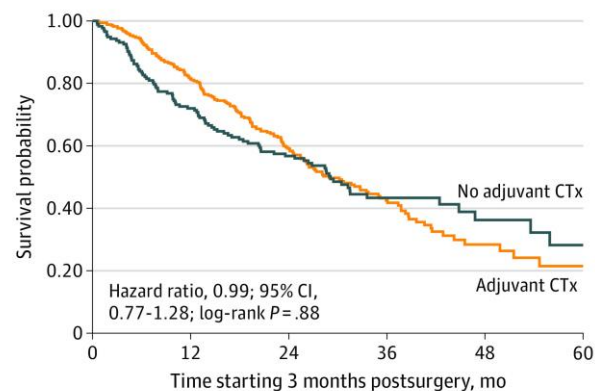
PMID: 32910170 PMCID: [PMC7489392](#) DOI: [10.1001/jamaoncol.2020.3537](#)

Pancréas résécables

Characteristic	No. (%) ^a		
	Entire cohort (N = 520)	Adjuvant therapy (n = 343)	No adjuvant therapy (n = 177)
Resectability status ^d			
Resectable	243 (48.4)	172 (52.0)	71 (41.5)
Borderline resectable	208 (41.4)	131 (39.6)	77 (45.0)
Locally advanced	51 (10.2)	28 (8.5)	23 (13.5)

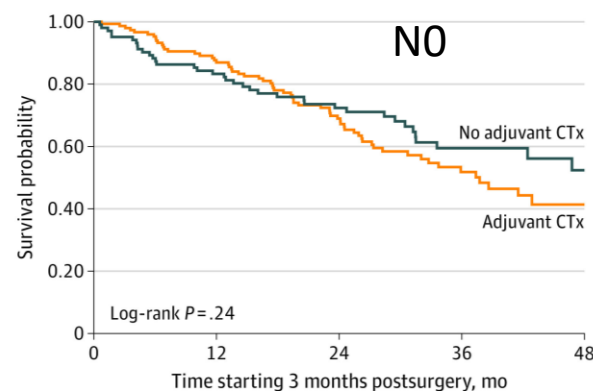
Folfirinox avant = Folfirinox après ?

A After neoadjuvant X



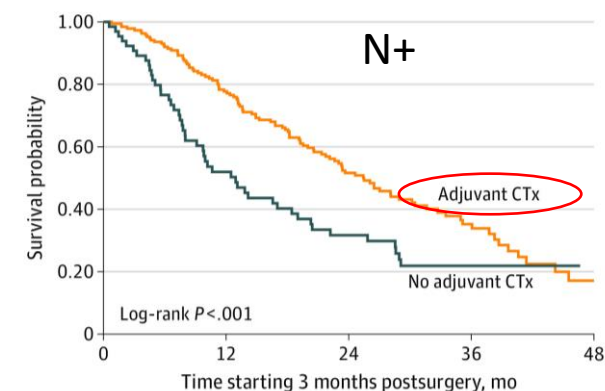
No. at risk					
Adjuvant CTx	343	251	147	58	18
Nonadjuvant CTx	177	120	81	34	14

B With node-negative disease



No. at risk				
Adjuvant CTx	151	121	79	32
Nonadjuvant CTx	105	83	60	29

C With node-positive disease



No. at risk				
Adjuvant CTx	189	130	68	68
Nonadjuvant CTx	65	31	17	17

Métastases hépatiques colo-rectales

- Coelio
- MH résécables
- MH non résécables

Chirurgie coelio des métastases hépatiques

Review > [Ann Surg.](#) 2020 Aug;272(2):253-265. doi: 10.1097/SLA.0000000000003672.

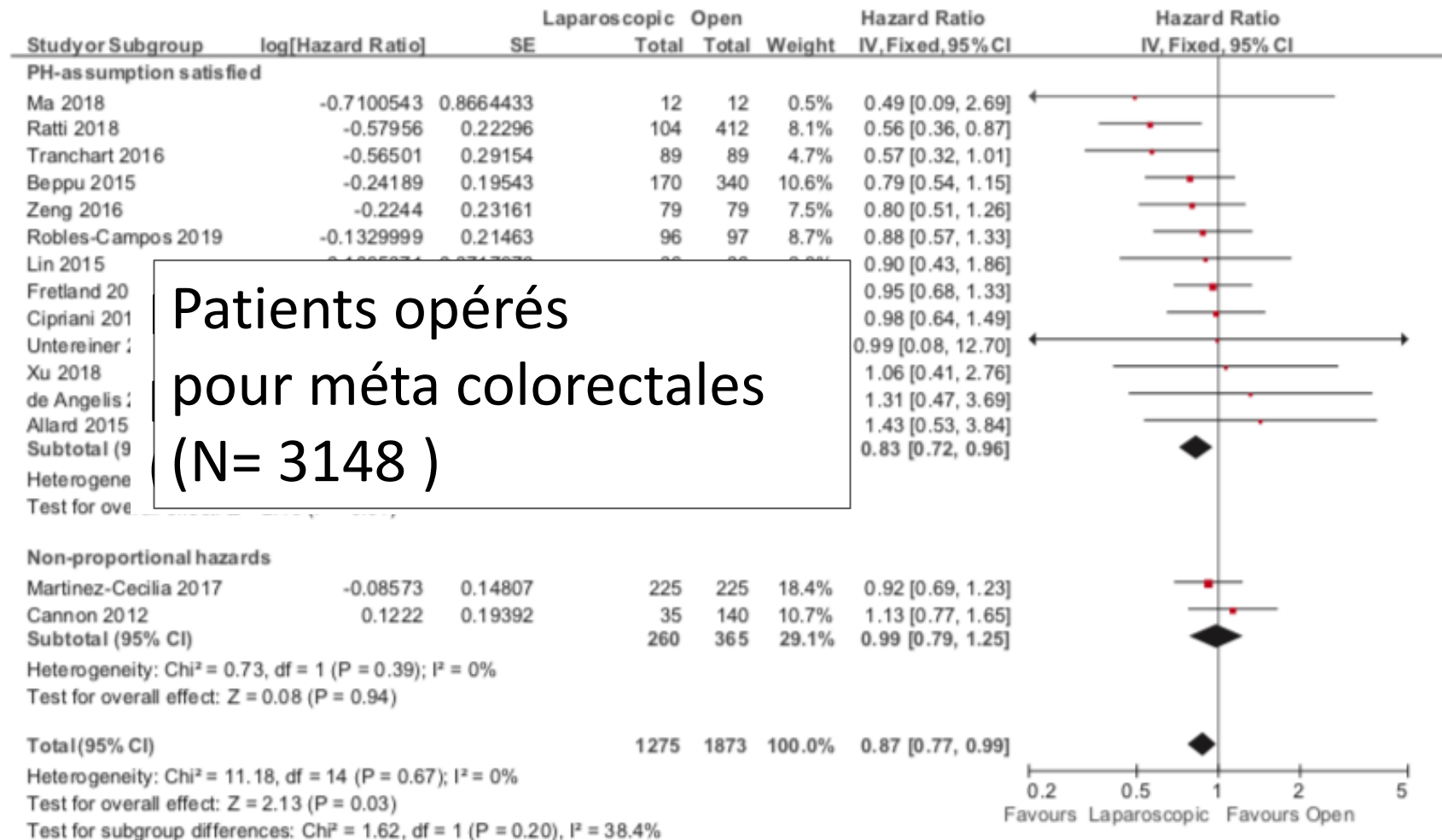
Survival Advantage of Laparoscopic Versus Open Resection For Colorectal Liver Metastases: A Meta-analysis of Individual Patient Data From Randomized Trials and Propensity-score Matched Studies

Nicholas L Syn ^{1 2 3}, Tousif Kabir ¹, Ye Xin Koh ¹, Hwee Leong Tan ¹, Louis Z Wang ³,
Brian Zhaojie Chin ⁴, Ian Wee ^{1 3}, Jin Yao Teo ^{1 5}, Bee Choo Tai ^{2 3 6 7},
Brian K P Goh ^{1 5}

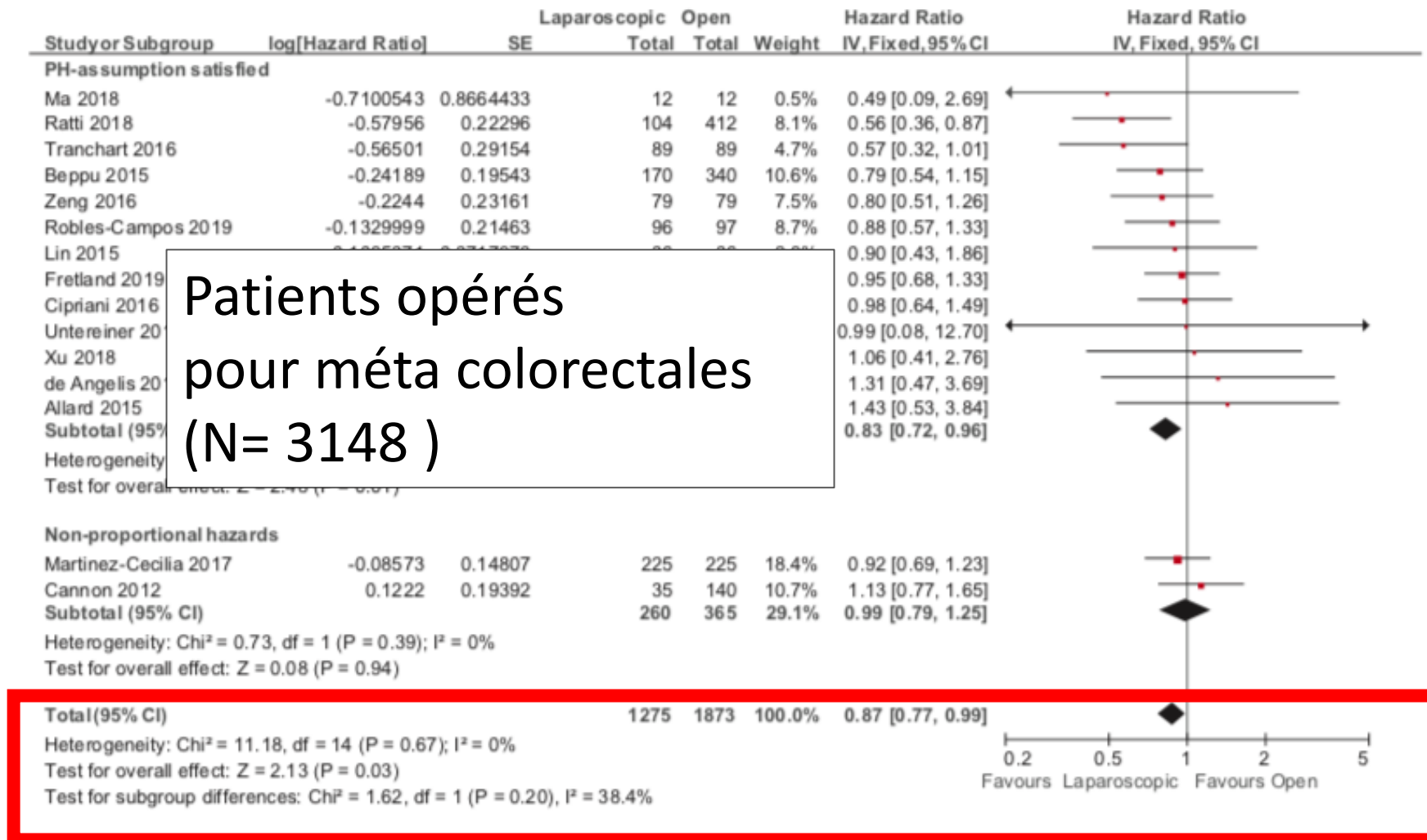
Affiliations + expand

PMID: 32675538 DOI: [10.1097/SLA.0000000000003672](#)

Chirurgie coelio des métastases hépatiques



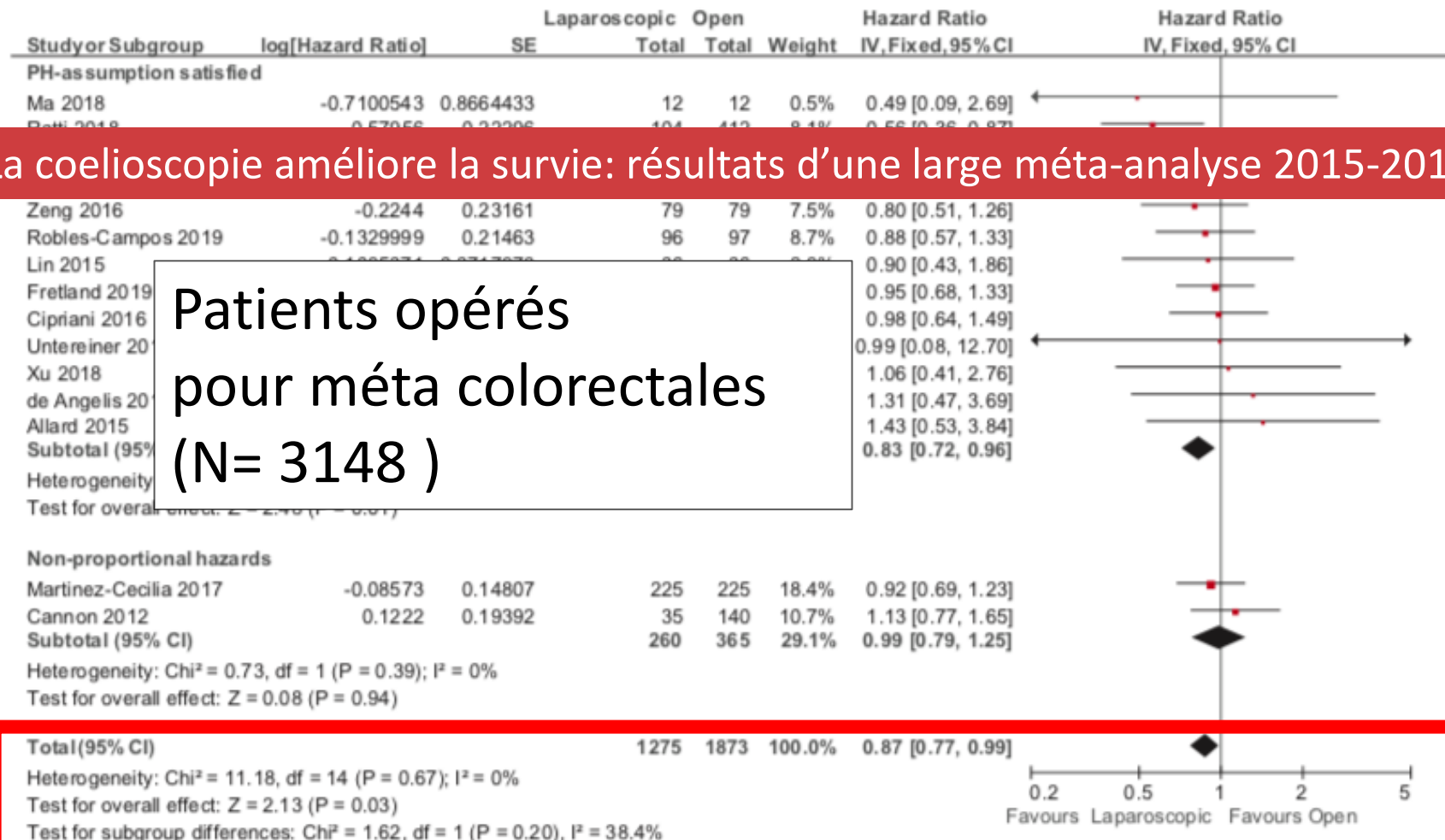
Chirurgie coelio des métastases hépatiques



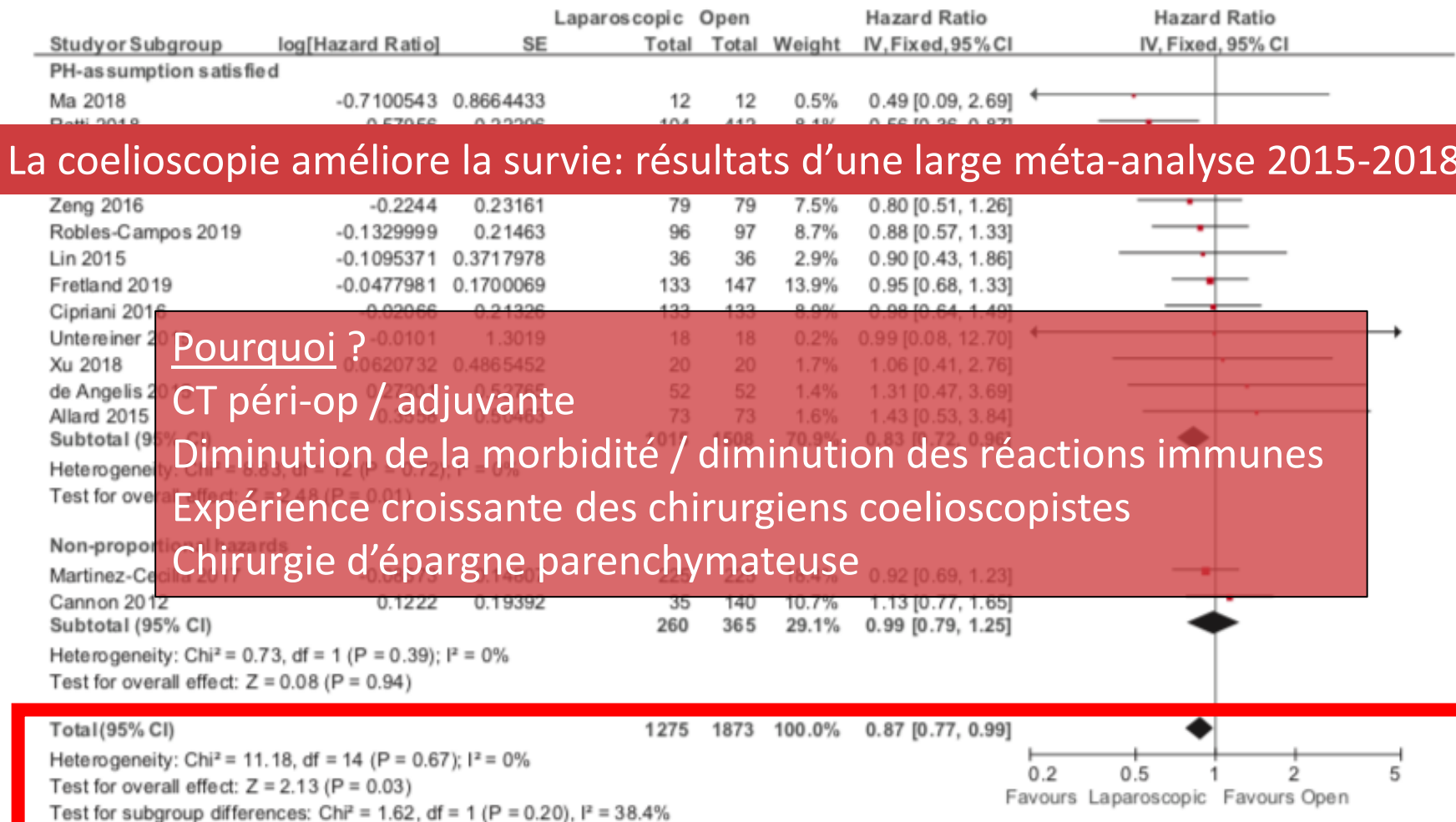
Chirurgie coelio des métastases hépatiques

La coelioscopie améliore la survie: résultats d'une large méta-analyse 2015-2018

Patients opérés
pour méta colorectales
(N= 3148)



Chirurgie coelio des métastases hépatiques



Chirurgie coelio des métastases hépatiques

➤ [Surg Endosc.](#) 2021 Feb;35(2):809-818. doi: 10.1007/s00464-020-07452-4.

Epub 2020 Feb 27.

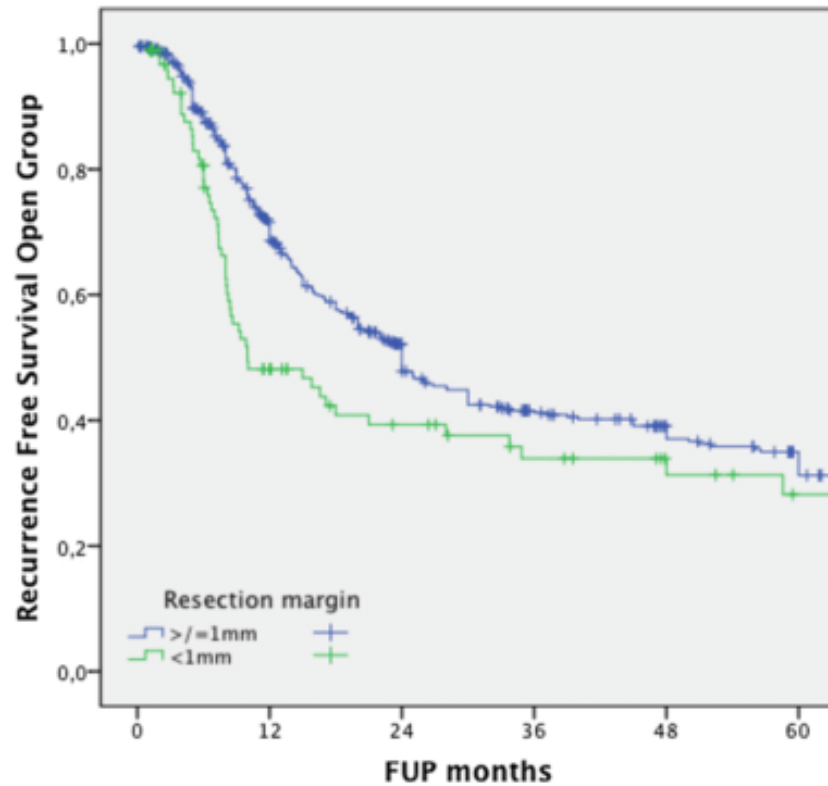
Impact of resection margins for colorectal liver metastases in laparoscopic and open liver resection: a propensity score analysis

David Martínez-Cecilia ^{1 2}, Dennis A Wicherts ³, Federica Cipriani ⁴, Giammauro Berardi ⁵, Leonid Barkhatov ^{6 7}, Panagiotis Lainas ⁸, Mathieu D'Hondt ⁹, Fernando Rotellar ¹⁰, Ibrahim Dagher ⁸, Luca Aldrighetti ⁴, Roberto I Troisi ⁵, Bjorn Edwin ^{6 7}, Mohammad Abu Hilal ^{3 11}

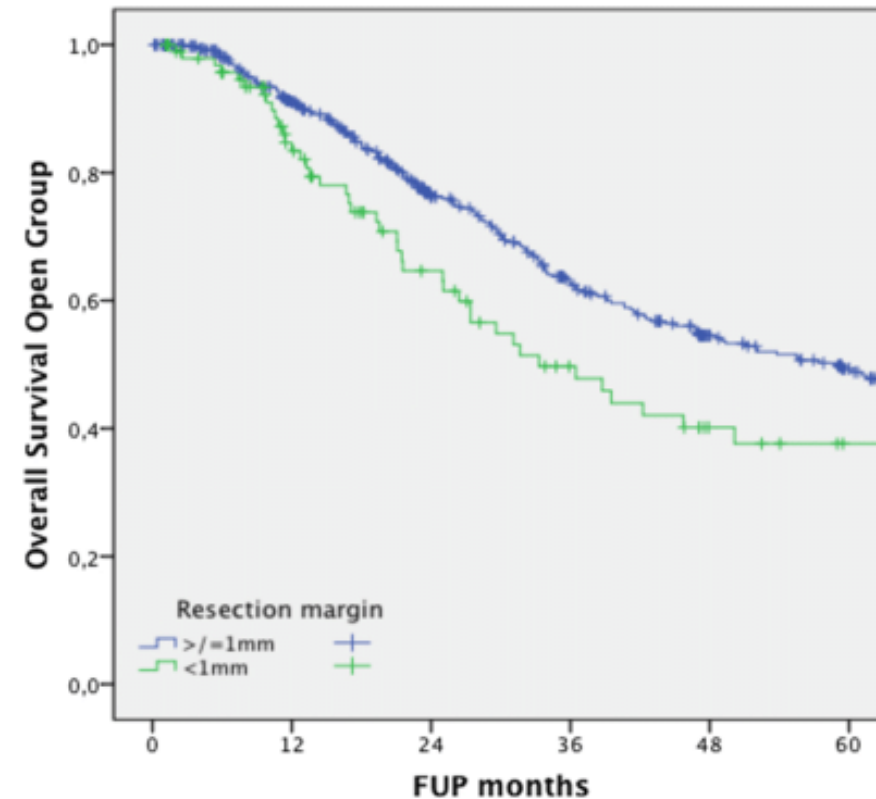
Affiliations  expand

PMID: 32107633 DOI: [10.1007/s00464-020-07452-4](#)

Chirurgie coelio des métastases hépatiques

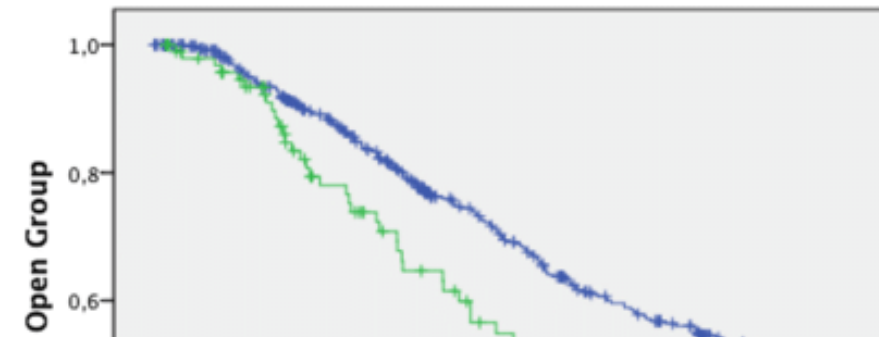
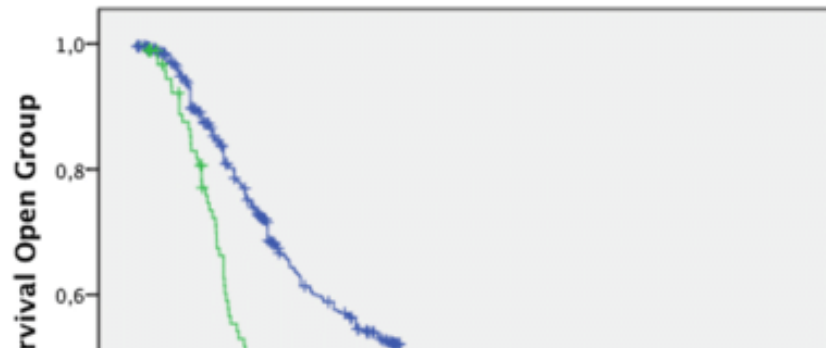


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
≥1mm	484	293	179	123	96	75
<1mm	95	37	25	18	13	8

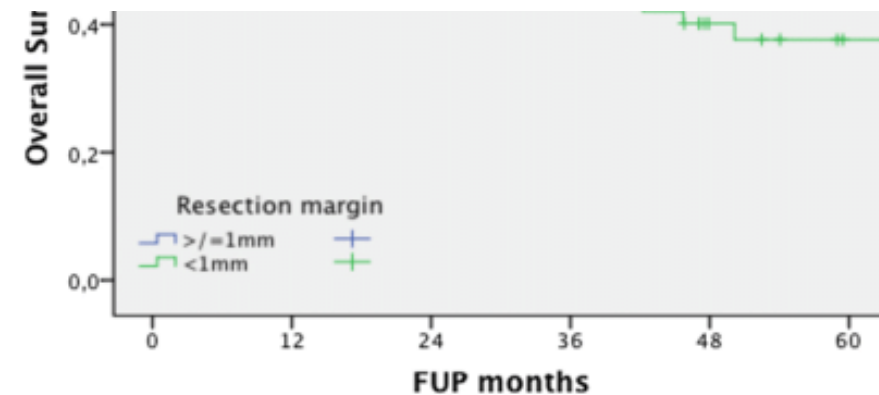
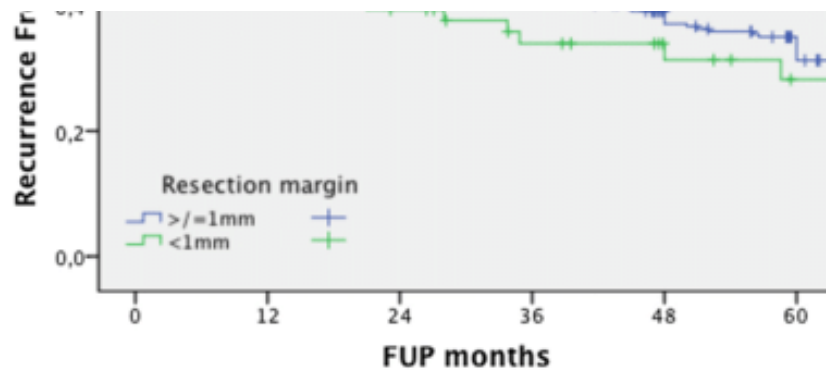


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
≥1mm	482	379	255	185	132	100
<1mm	100	64	41	26	16	11

Chirurgie coelio des métastases hépatiques



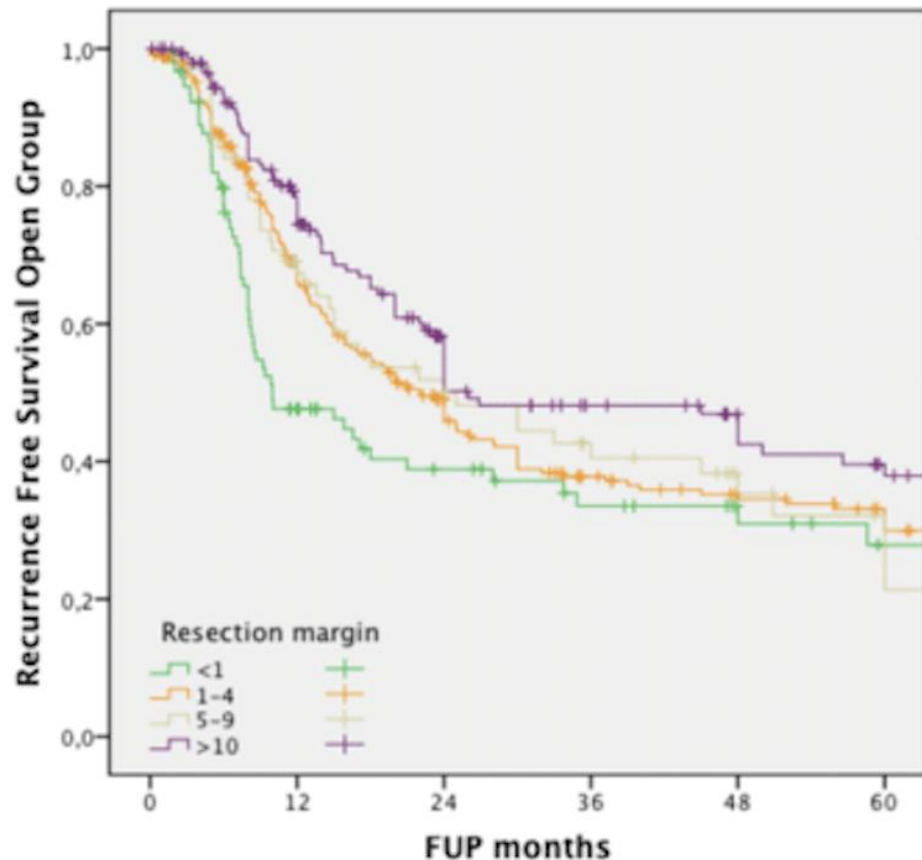
DIFFERENCE EN SURVIE SANS RECIDIVE ET GLOBALE QUAND MARGE <1mm OU MARGE >1mm



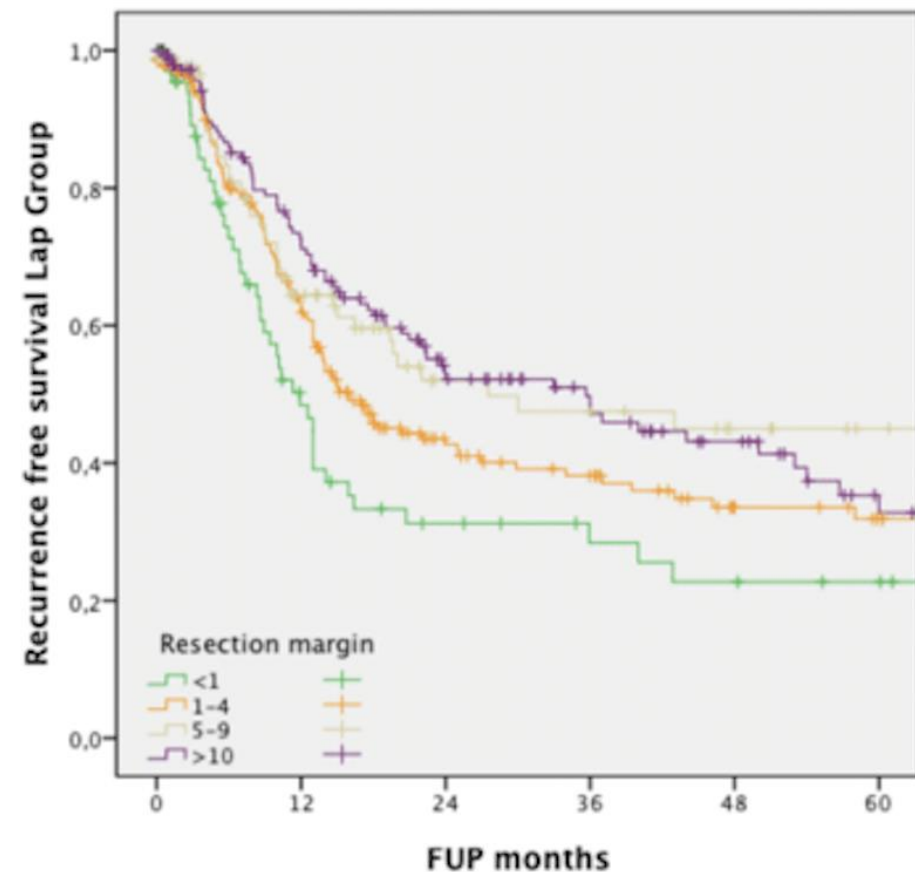
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Chirurgie coelio des métastases hépatiques

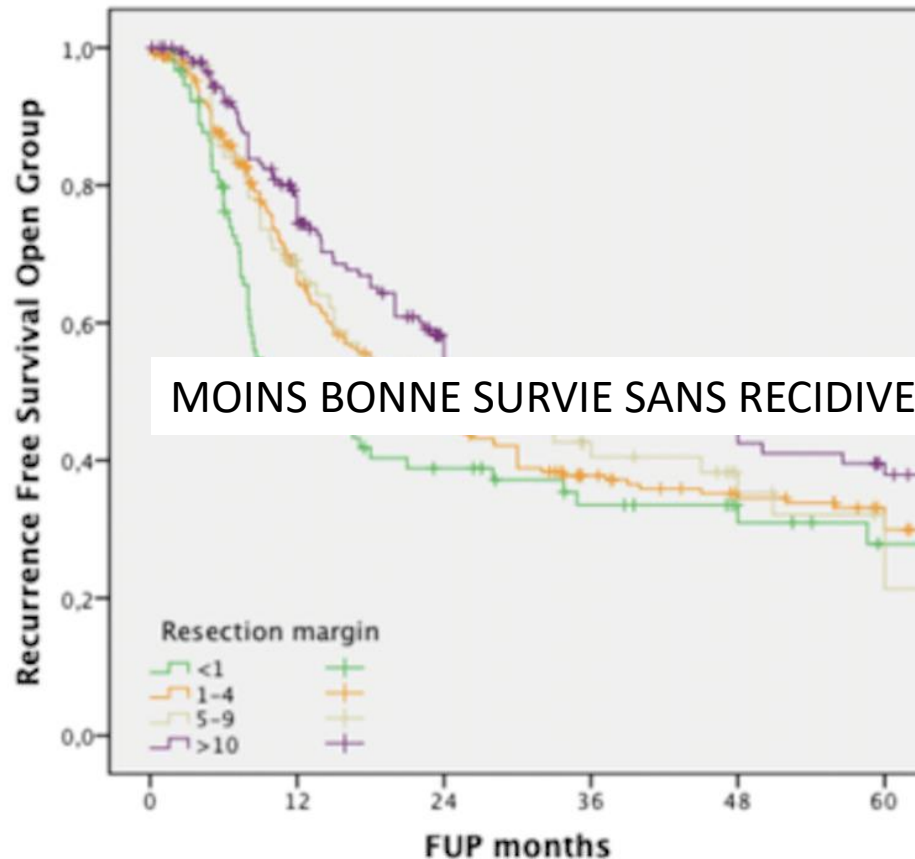


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	154	107	74	51	42	37
5-9	75	41	29	20	13	9
>10	149	98	58	41	32	24

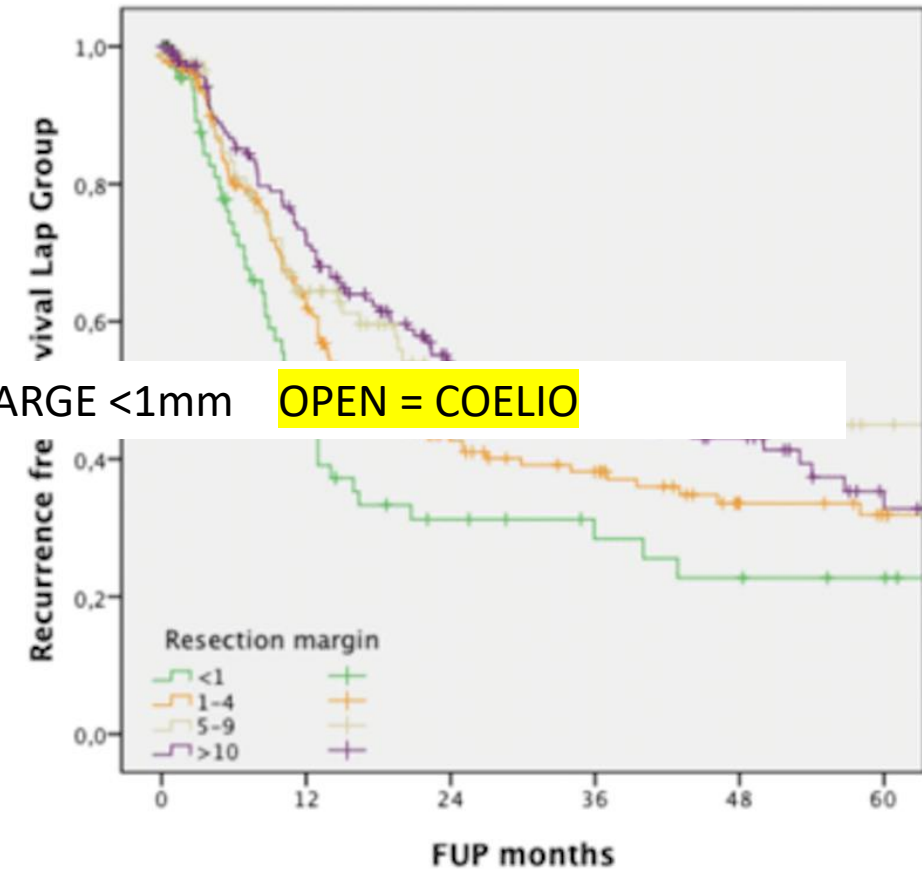


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	174	96	41	29	18	15
5-9	94	47	24	20	15	11
>10	148	93	54	38	27	14

Chirurgie coelio des métastases hépatiques



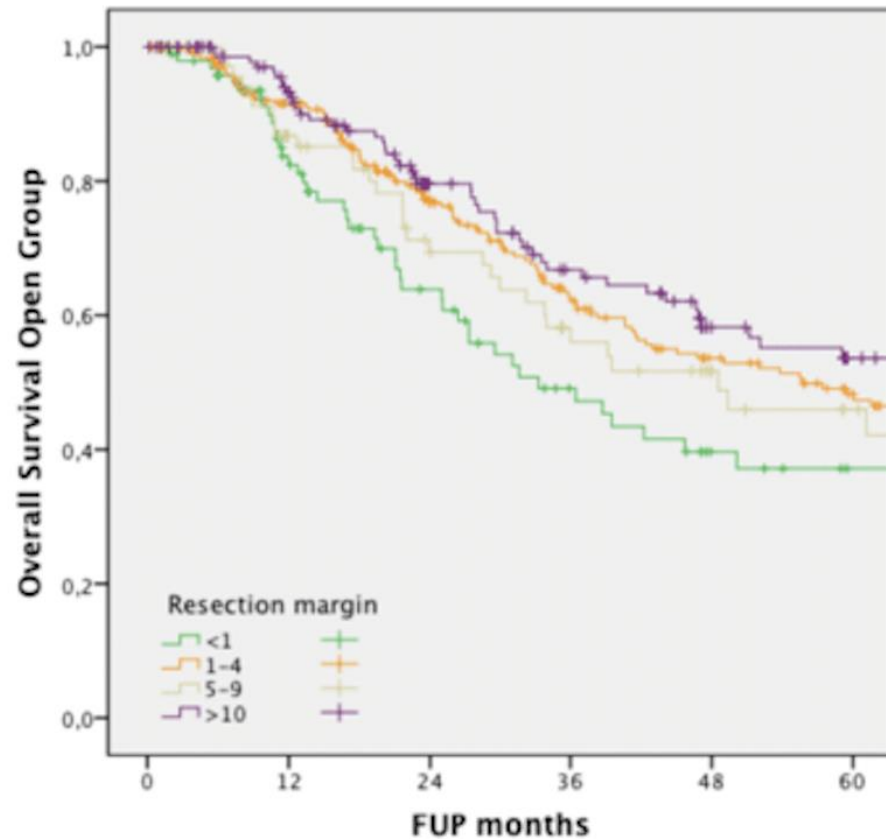
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1-4	154	107	74	51	42	37
5-9	75	41	29	20	13	9
>10	149	98	58	41	32	24



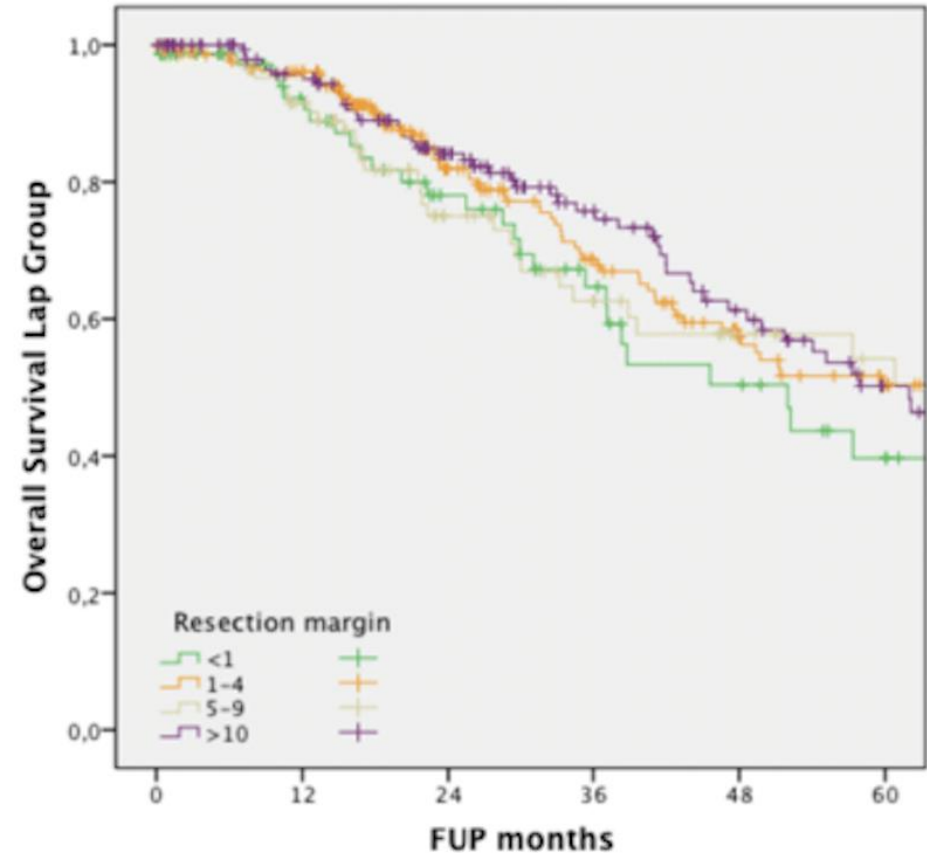
Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	174	96	41	29	18	15
5-9	94	47	24	20	15	11
>10	148	93	54	38	27	14

MOINS BONNE SURVIE SANS RECIDIVE QUAND MARGE <1mm OPEN = COELIO

Chirurgie coelio des métastases hépatiques

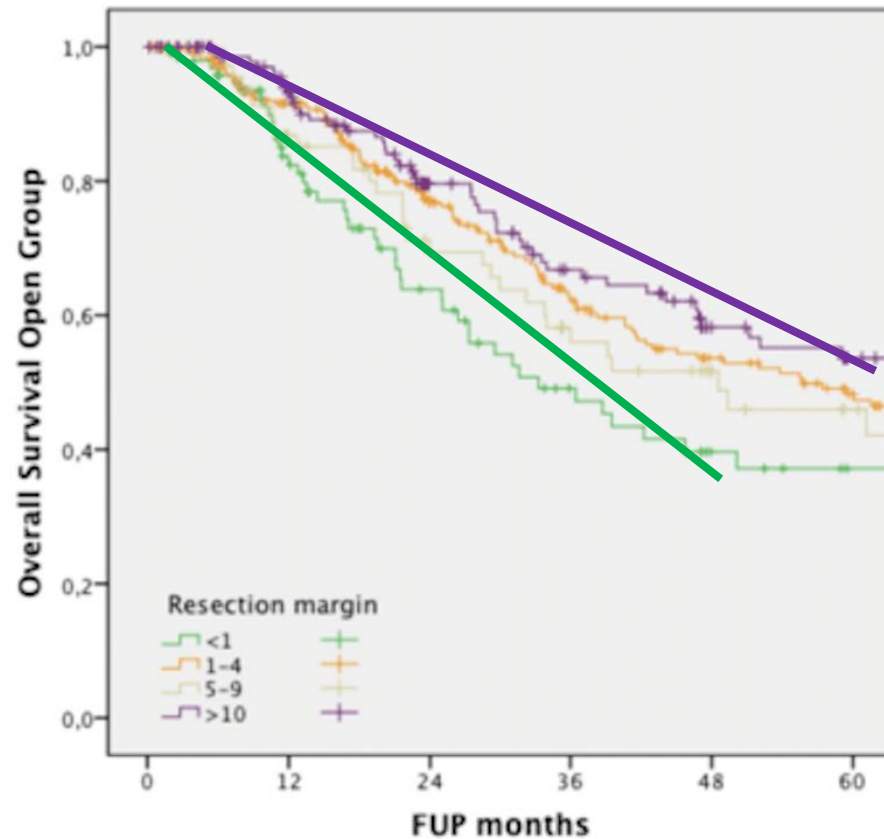


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	153	128	89	70	53	42
5-9	75	53	38	27	19	13
>10	149	119	77	58	39	31

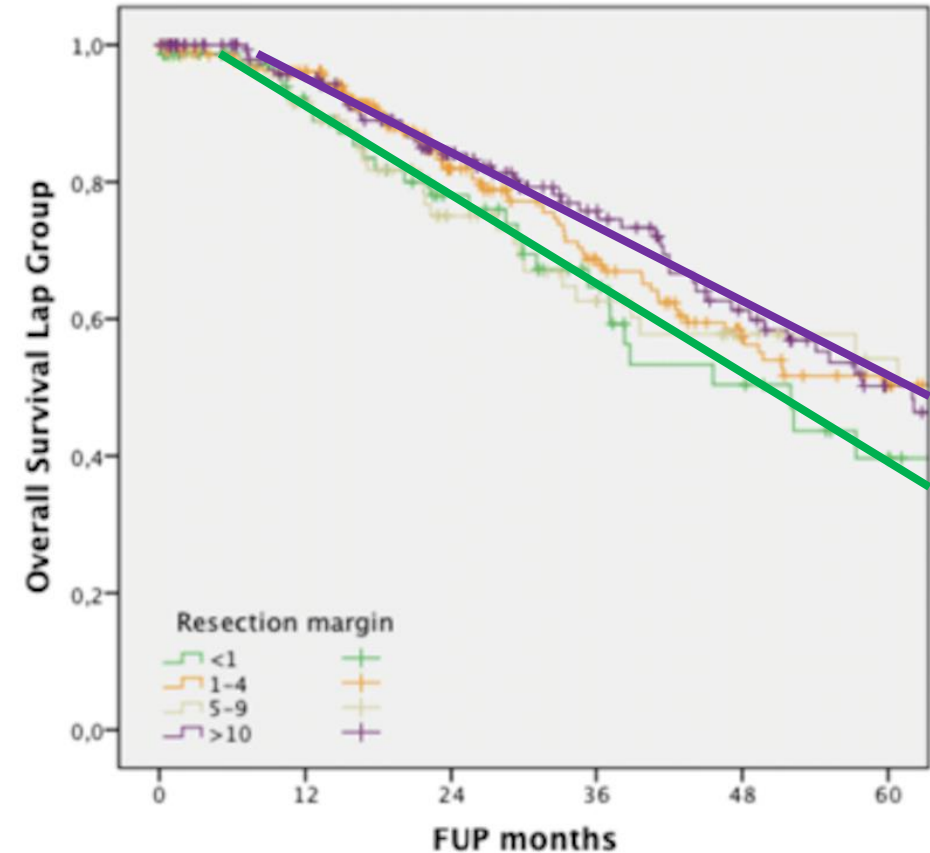


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	182	158	90	64	43	32
5-9	96	72	41	28	19	14
>10	165	132	95	63	43	26

Chirurgie coelio des métastases hépatiques

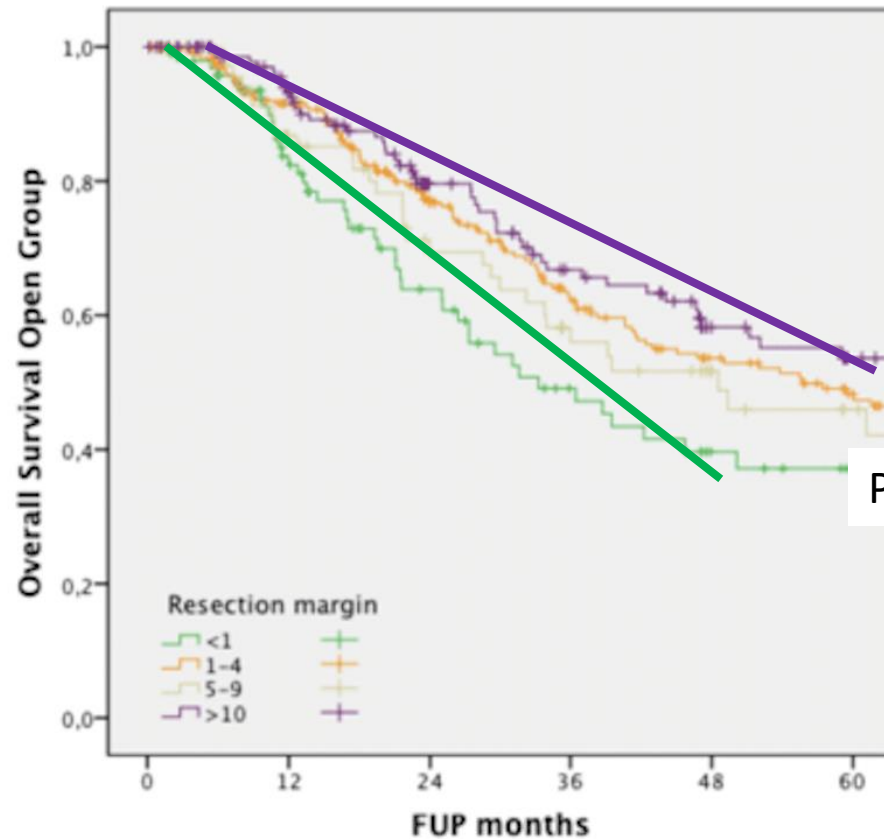


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	153	128	89	70	53	42
5-9	75	53	38	27	19	13
>10	149	119	77	58	39	31

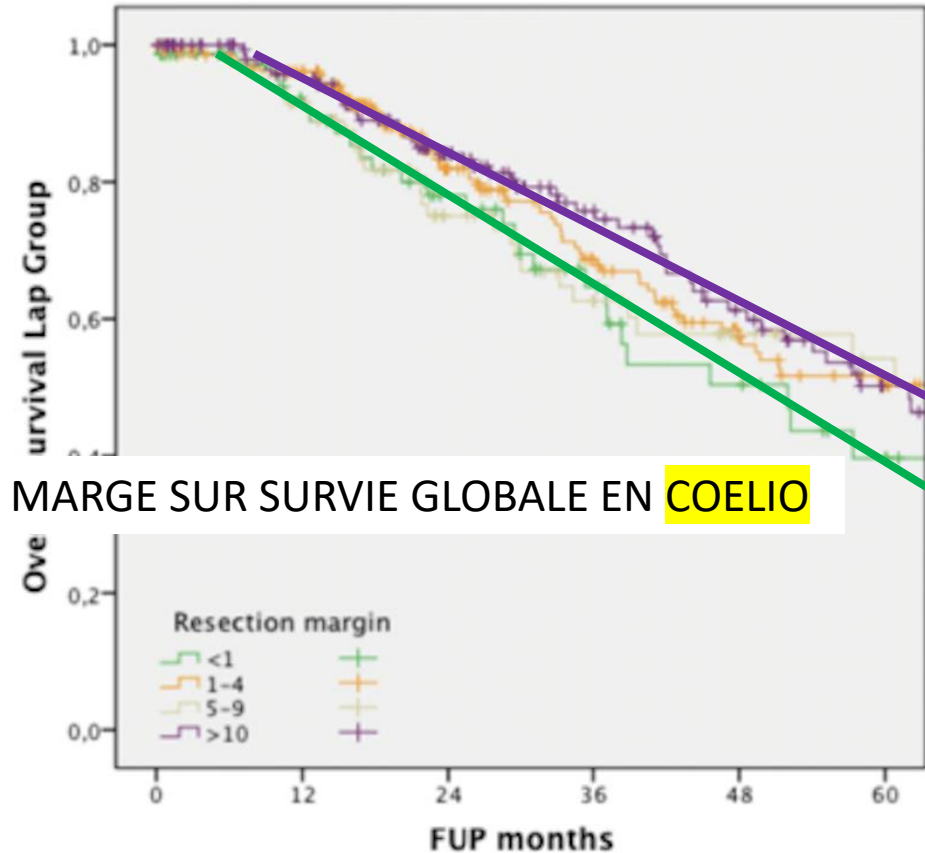


Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	182	158	90	64	43	32
5-9	96	72	41	28	19	14
>10	165	132	95	63	43	26

Chirurgie coelio des métastases hépatiques



PLUS D'EFFET MARGE SUR SURVIE GLOBALE EN COELIO



Pats at risk	Total	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs
1-4	153	128	89	70	53	42
5-9	75	53	38	27	19	13
>10	149	119	77	58	39	31

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1-4	182	158	90	64	43	32
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>10	165	132	95	63	43	26

Métastases hépatiques synchrones résécables

➤ [Ann Surg Oncol](#). 2021 Dec;28(13):8198-8208. doi: 10.1245/s10434-021-10220-w.
Epub 2021 Jul 1.

Liver-First Approach for Synchronous Colorectal Metastases: Analysis of 7360 Patients from the LiverMetSurvey Registry

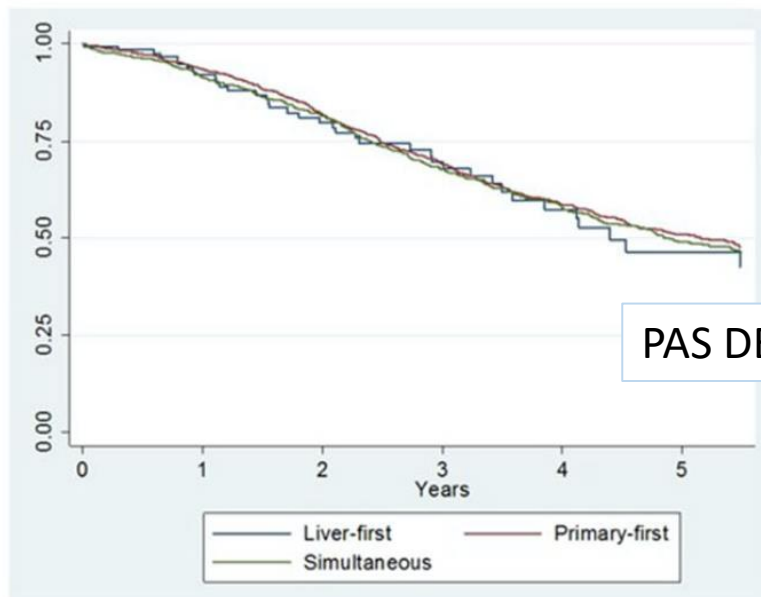
Felice Giuliani¹, Luca Viganò², Agostino M De Rose³, Darius F Mirza⁴, Réal Lapointe⁵,
Gernot Kaiser⁶, Eduardo Barroso⁷, Alessandro Ferrero⁸, Helena Isoniemi⁹,
Santiago Lopez-Ben¹⁰, Irinel Popescu¹¹, Jean-Francois Ouellet¹², Catherine Hubert¹³,
Jean-Marc Regimbeau¹⁴, Jen-Kou Lin¹⁵, Oleg G Skipenko¹⁶, Francesco Ardito³,
René Adam¹⁷

Affiliations + expand

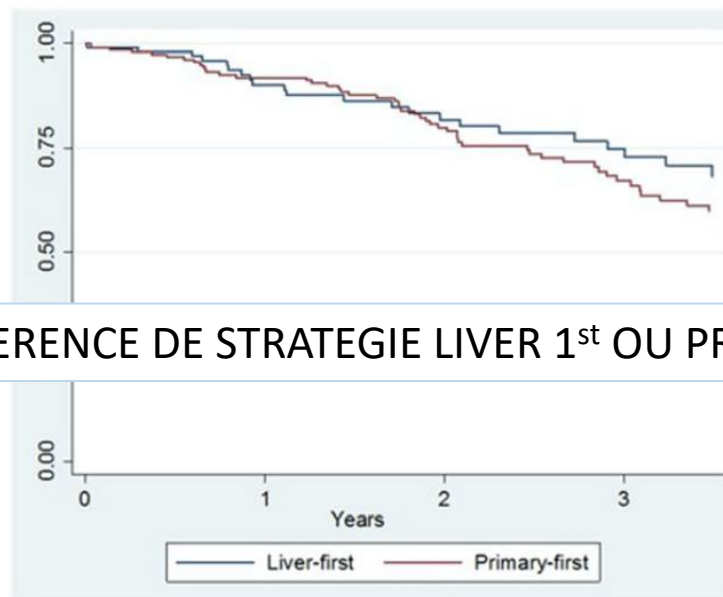
PMID: 34212254 PMCID: [PMC8590998](#) DOI: [10.1245/s10434-021-10220-w](#)

Métastases hépatiques synchrones résécables

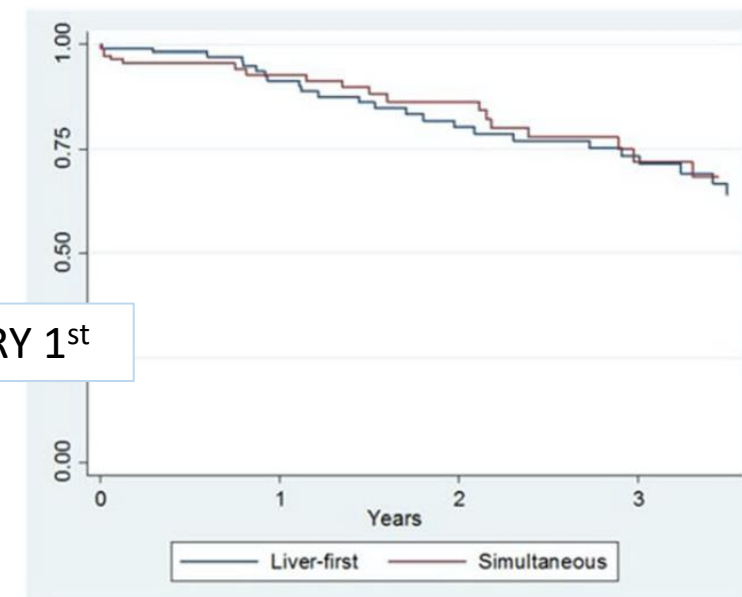
Whole population



Liver-first vs. Primary-first after PSM



Liver-first vs. Simultaneous after PSM



PAS DE DIFFERENCE DE STRATEGIE LIVER 1st OU PRIMARY 1st

	0	1 year	2 years	3 years	4 years	5 years
Primary-first	1501	1061	788	554	408	289
Liver-first	144	95	62	42	25	14
Simultaneous	1118	745	541	363	237	158

	0	1 year	2 years	3 years
Primary-first	230	143	96	59
Liver-first	115	75	54	40

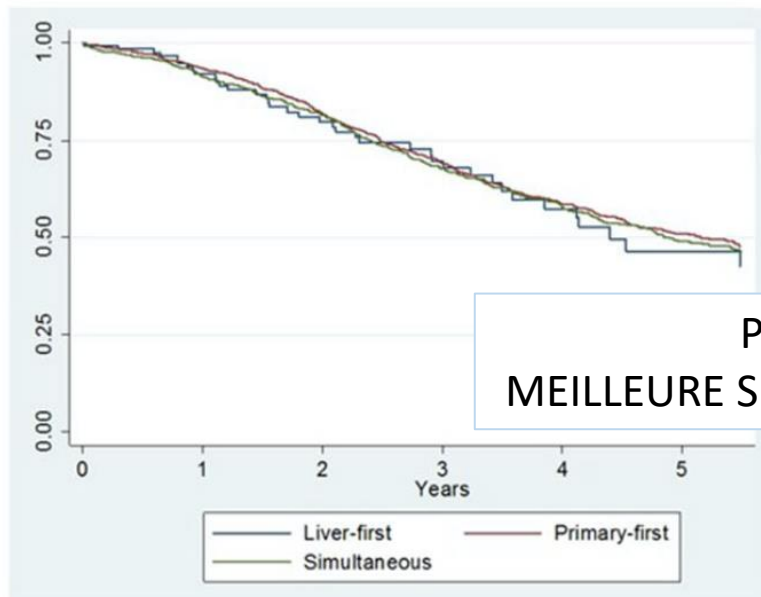
	0	1 year	2 years	3 years
Liver-first	118	77	52	39
Simultaneous	118	66	45	24

MH UNIQUE

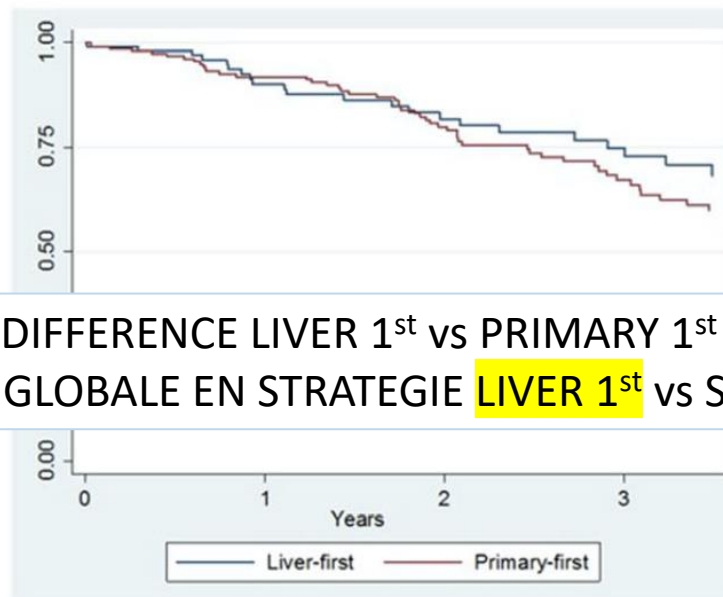
Adam ASO 2021

Métastases hépatiques synchrones résécables

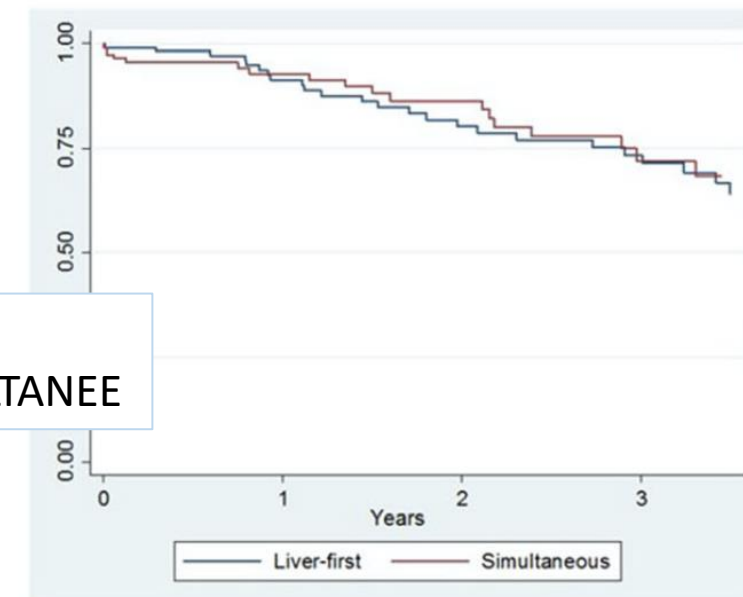
Whole population



Liver-first vs. Primary-first after PSM



Liver-first vs. Simultaneous after PSM



PAS DE DIFFERENCE LIVER 1st vs PRIMARY 1st
MEILLEURE SURVIE GLOBALE EN STRATEGIE **LIVER 1st** vs SIMULTANEE

	0	1 year	2 years	3 years	4 years	5 years
Primary-first	1501	1061	788	554	408	289
Liver-first	144	95	62	42	25	14
Simultaneous	1118	745	541	363	237	158

	0	1 year	2 years	3 years
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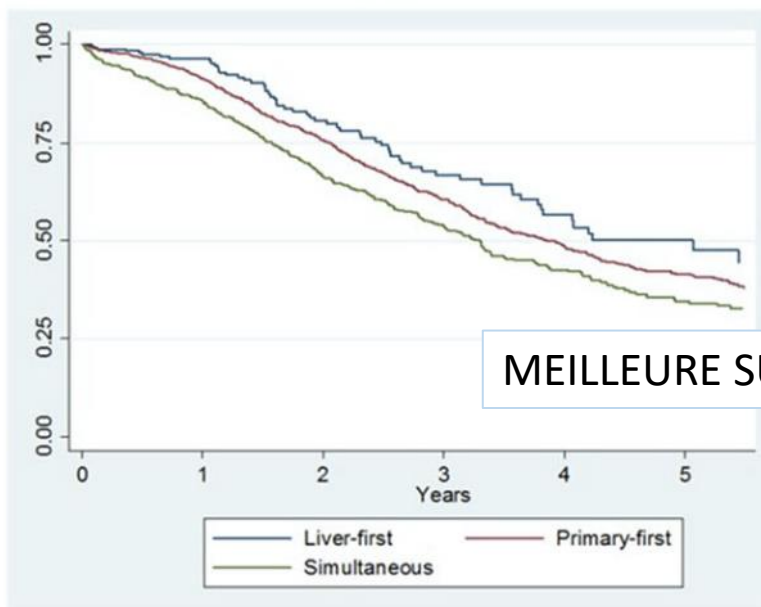
	0	1 year	2 years	3 years
Liver-first	118	77	52	39
Simultaneous	118	66	45	24

MH UNILOBAIRES

Adam ASO 2021

Métastases hépatiques synchrones résécables

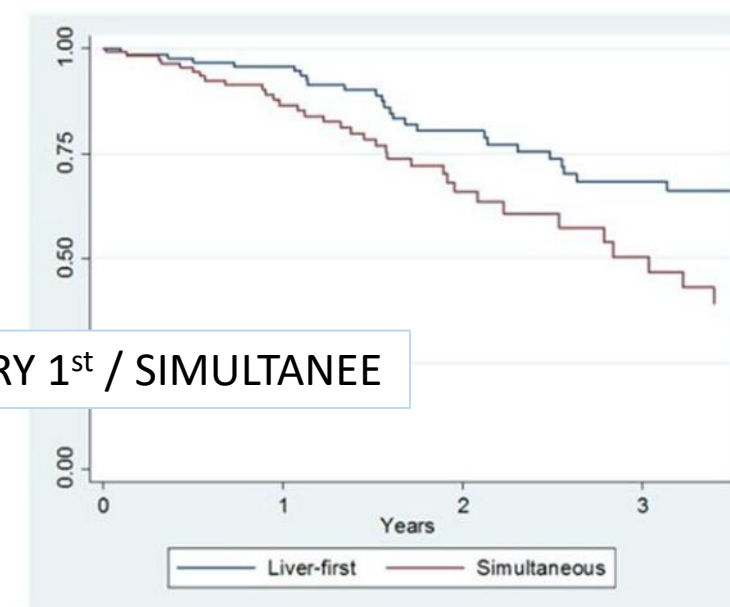
Whole population



Liver-first vs. Primary-first after PSM



Liver-first vs. Simultaneous after PSM



MEILLEURE SURVIE GLOBALE EN STRATEGIE **LIVER 1st** vs PRIMARY 1st / SIMULTANEE

	0	1 years	2 years	3 years	4 years	5 years
Primary-first	1644	1110	757	491	316	214
Liver-first	252	172	99	62	36	22
Simultaneous	693	425	258	173	113	67

	0	1 year	2 years	3 years
Primary-first	326	194	123	71
Liver-first	163	111	66	40

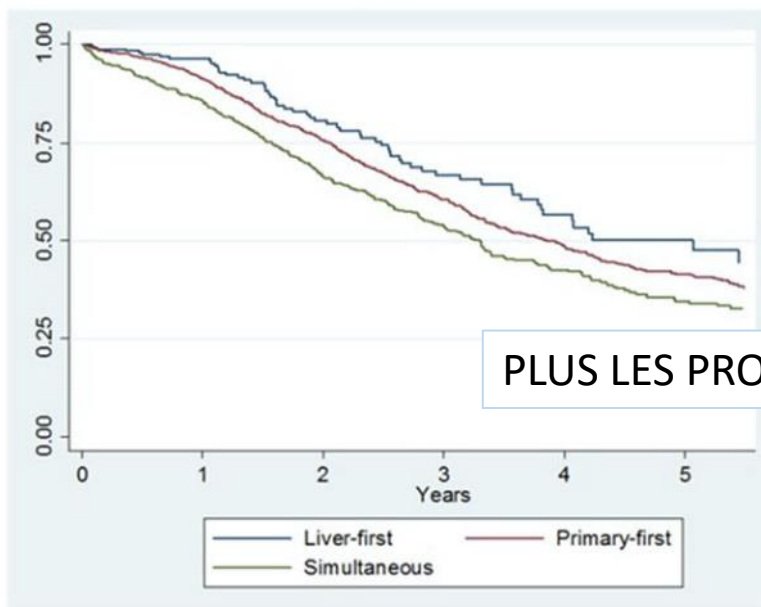
	0	1 year	2 years	3 years
Liver-first	135	93	52	34
Simultaneous	135	71	31	15

MH BILOBAIRES

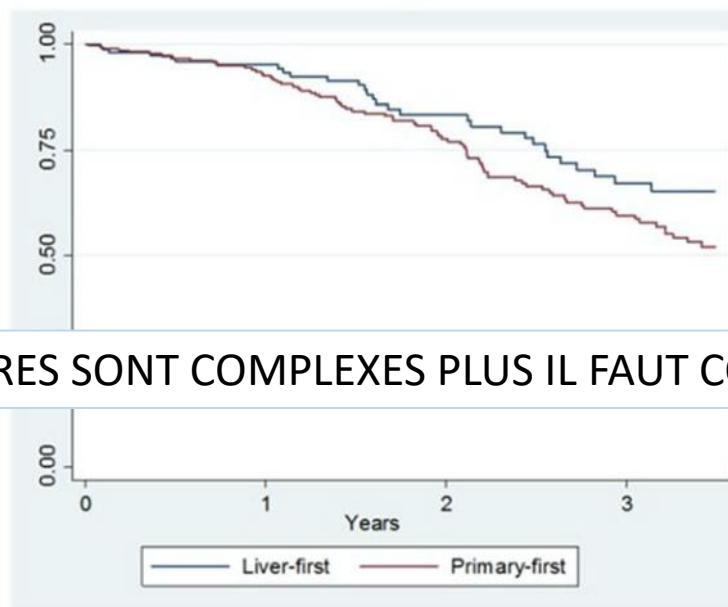
Adam ASO 2021

Métastases hépatiques synchrones résécables

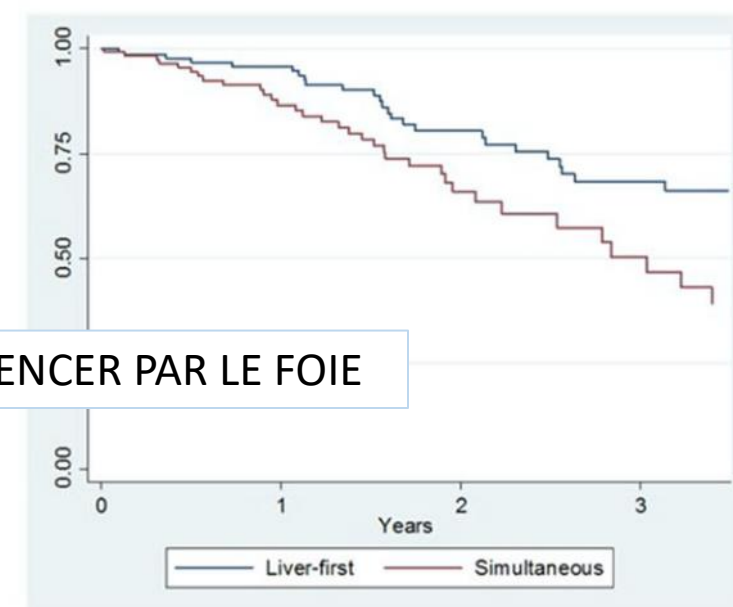
Whole population



Liver-first vs. Primary-first after PSM



Liver-first vs. Simultaneous after PSM



	0	1 years	2 years	3 years	4 years	5 years
Primary-first	1644	1110	757	491	316	214
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Liver-first	135	93	52	34
Simultaneous	135	71	31	15

MH BILOBAIRES

Adam ASO 2021

Métastases hépatiques synchrones résécables

Randomized Controlled Trial > [Ann Surg.](#) 2021 Jan 1;273(1):49-56.

doi: 10.1097/SLA.0000000000003848.

Simultaneous Versus Delayed Resection for Initially Resectable Synchronous Colorectal Cancer Liver Metastases: A Prospective, Open-label, Randomized, Controlled Trial

Karim Boudjema ¹, Clara Locher ², Charles Sabbagh ³, Pablo Ortega-Deballon ⁴, Bruno Heyd ⁵, Philippe Bachellier ⁶, Sylvie Métairie ⁷, François Paye ⁸, Pascal Bourlier ⁹, René Adam ¹⁰, Aude Merdrignac ¹, Christelle Tual ², Estelle Le Pabic ², Laurent Sulpice ¹, Bernard Meunier ¹, Jean-Marc Regimbeau ³, Eric Bellissant ², METASYNC Study group

Affiliations + expand

PMID: 32209911 DOI: [10.1097/SLA.0000000000003848](#)

Métastases hépatiques synchrones résécables

Etude METASYNC

Objectif principal : complications majeures à 60j,

Objectifs secondaires : Survie Globale, Survie sans récurrence

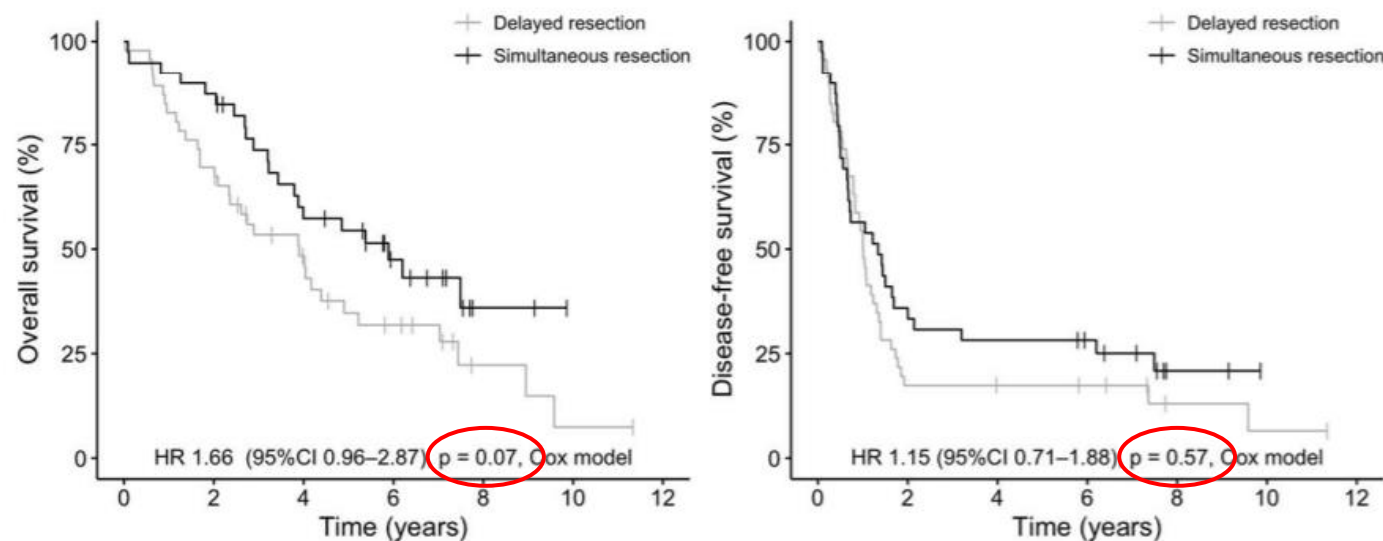
	Total N = 85	Simultaneous Resection N = 39	Delayed Resection N = 46	P Value
Demographics				
Age, years (mean $\pm$ SD)	67 $\pm$ 10	68 $\pm$ 9	66 $\pm$ 11	0.21
Female sex	35 (41.2%)	14 (35.9%)	21 (45.7%)	0.36
BMI, kg/m ² (mean $\pm$ SD)	25.5 $\pm$ 4.1	25.5 $\pm$ 3.7	25.5 $\pm$ 4.5	0.95
Site of colorectal primary cancer				0.16
Colon	52 (61.2%)	27 (69.2%)	25 (54.4%)	
Right	17 (20.0%)	10 (25.6%)	7 (15.2%)	
Left	35 (41.2%)	17 (43.6%)	18 (39.2%)	
Rectum	33 (38.8%)	12 (30.8%)	21 (45.6%)	
Liver metastases at the time of screening				
Number of SLM (median [min–max])	2 [1–13]	2 [1–13]	2 [1–9]	0.34
SLM				0.24
Solitary SLM	35 (41.2%)	17 (43.6%)	18 (39.1%)	
2 SLM	23 (27.0%)	13 (33.3%)	10 (21.8%)	
> 3 SLM	27 (31.8%)	9 (23.1%)	18 (39.1%)	
Number of segments involved (median [min–max])	2 [1–6]	2 [1–5]	2 [1–6]	0.97
Location of SLM				0.98
Unilobar	50 (58.8%)	23 (59.0%)	27 (58.7%)	
Bilobar	35 (41.2%)	16 (41.0%)	19 (41.3%)	
Largest diameter, mm (mean $\pm$ SD)	38.9 $\pm$ 31.3	40.8 $\pm$ 28.8	37.2 $\pm$ 33.5	0.30
CEA, ng/mL (median [min–max])	7.4 [0.5–2707.0]	8.3 [1.0–2707.0]	7.1 [0.5–900.0]	0.71
Chemotherapy				0.95
Preoperative chemotherapy	52 (61.2%)	24 (61.5%)	28 (60.9%)	
Interval chemotherapy	NA	NA	31 (67.4%)	
Postoperative chemotherapy	39 (45.9%)	30 (76.9%)	9 (19.6%)	

Métastases hépatiques synchrones résécables

Objectif principal : 49% vs 46%, $p=0,7$

	Simultaneous Resection N = 39	Delayed Resection N = 46	P Value
Clavien-Dindo classification [‡]	N = 27	N = 31	0.57
Grade I	6 (22.2%)	9 (29.0%)	
Grade II	4 (14.8%)	8 (25.8%)	
Grade III	7 (25.9%)	8 (25.8%)	
IIIa	3 (11.1%)	1 (3.2%)	
IIIb	4 (14.8%)	7 (22.6%)	
Grade IV	8 (29.6%)	5 (16.1%)	
IVa	7 (25.9%)	5 (16.1%)	
IVb	1 (3.7%)	0 (0.0%)	
Grade V	2 (7.4%)	1 (3.2%)	

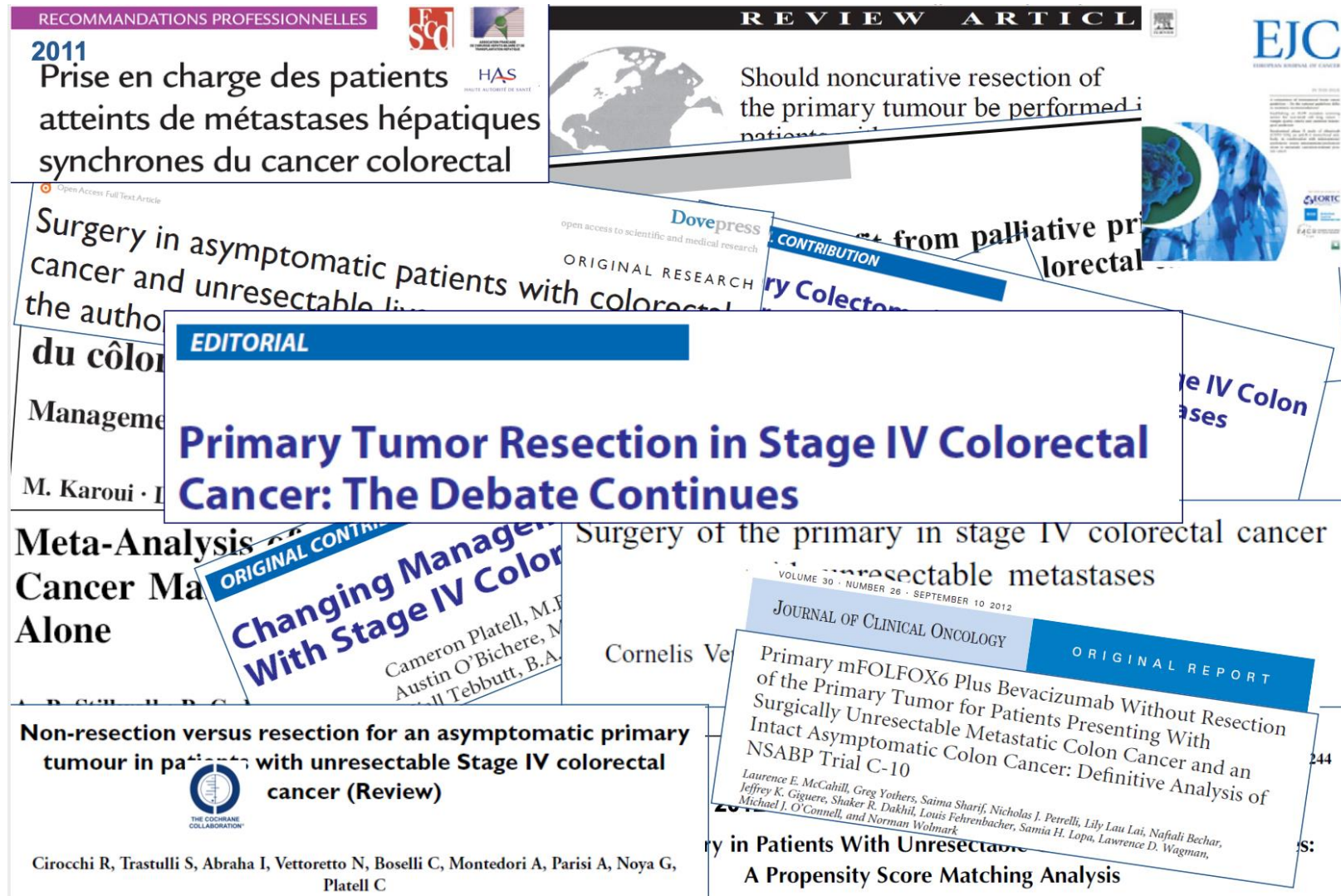
Objectifs secondaires : tendance mais pas de différence significative



- Durée opératoire
- Régime de CT
- Organisation
- RAAC
- Voie d'abord
- Deux équipes
- ...

Boudjema Ann Surg 2021

Métastases hépatiques synchrones non-résécables



Métastases hépatiques synchrones non-résécables

RECOMMANDATIONS PROFESSIONNELLES

2011

Prise en charge des patients atteints de métastases hépatiques synchrones du cancer colorectal

HAS

REVIEW ARTICLE

Should noncurative resection of the primary tumor...
doi: 10.1200/JCO.21.00057.

Editorial

Epub 2021 Feb 16.

> J Clin Oncol. 2021 Apr 1;39(10):1095-1097. doi: 10.1200/JCO.21.00057.

Primary Tumor Resection in Colorectal Cancer With Synchronous Unresectable Metastasis: Time to End the Debate?

George J Chang¹

Affiliations + expand

PMID: 33591837 DOI: 10.1200/JCO.21.00057

Colorectal

Cirotchi R, Trastulli S, Abrahama I, Vettoretto N, Boselli C, Montedori A, Parisi A, Noya G, Platell C

Bevacizumab Without Resection...
Unresectable Metastatic Colon Cancer and an...
NSABP Trial C-10

Laurence E. McCahill, Greg Yothers, Saima Sharif, Nicholas J. Petrelli, Lily Lau Lai, Nafuili Bechar, Jeffrey K. Giguere, Shaker R. Dakhil, Louis Fehrenbacher, Samia H. Lopa, Lawrence D. Wagman, Michael J. O'Connell, and Norman Wolmark

ry in Patients With Unresectable...
A Propensity Score Matching Analysis

Métastases hépatiques synchrones non-résécables

Clinical Trial > J Clin Oncol. 2021 Apr 1;39(10):1098-1107. doi: 10.1200/JCO.20.02447.

Epub 2021 Feb 9.

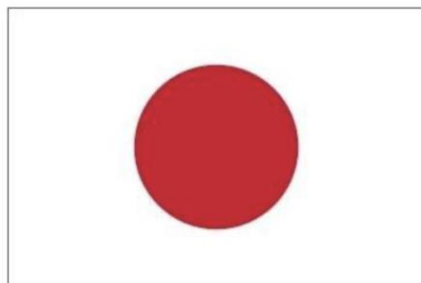
Primary Tumor Resection Plus Chemotherapy Versus Chemotherapy Alone for Colorectal Cancer Patients With Asymptomatic, Synchronous Unresectable Metastases (JCOG1007; iPACS): A Randomized Clinical Trial

Yukihide Kanemitsu¹, Kohei Shitara², Junki Mizusawa¹, Tetsuya Hamaguchi³, Dai Shida¹, Koji Komori⁴, Satoshi Ikeda⁵, Hitoshi Ojima⁶, Hideyuki Ike⁷, Akio Shiomi⁸, Jun Watanabe⁹, Yasumasa Takii¹⁰, Takashi Yamaguchi¹¹, Kenji Katsumata¹², Masaaki Ito², Junji Okuda¹³, Ryoji Hyakudomi¹⁴, Yasuhiro Shimada¹⁵, Hiroshi Katayama¹, Haruhiko Fukuda¹, JCOG Colorectal Cancer Study Group

Affiliations + expand

PMID: 33560877 PMCID: PMC8078424 (available on 2022-04-01)

DOI: 10.1200/JCO.20.02447



Clinical Trial > JAMA Surg. 2021 Dec 1;156(12):1093-1101.

doi: 10.1001/jamasurg.2021.4992.

Sixty-Day Mortality of Patients With Metastatic Colorectal Cancer Randomized to Systemic Treatment vs Primary Tumor Resection Followed by Systemic Treatment: The CAIRO4 Phase 3 Randomized Clinical Trial

Dave E W van der Kruijssen¹, Sjoerd G Elias², Geraldine R Vink^{1 3}, Karlijn L van Rooijen¹, Jorine 't Lam-Boer⁴, Linda Mol⁵, Cornelis J A Punt², Johannes H W de Wilt⁴, Miriam Koopman¹, CAIRO4 Working Group

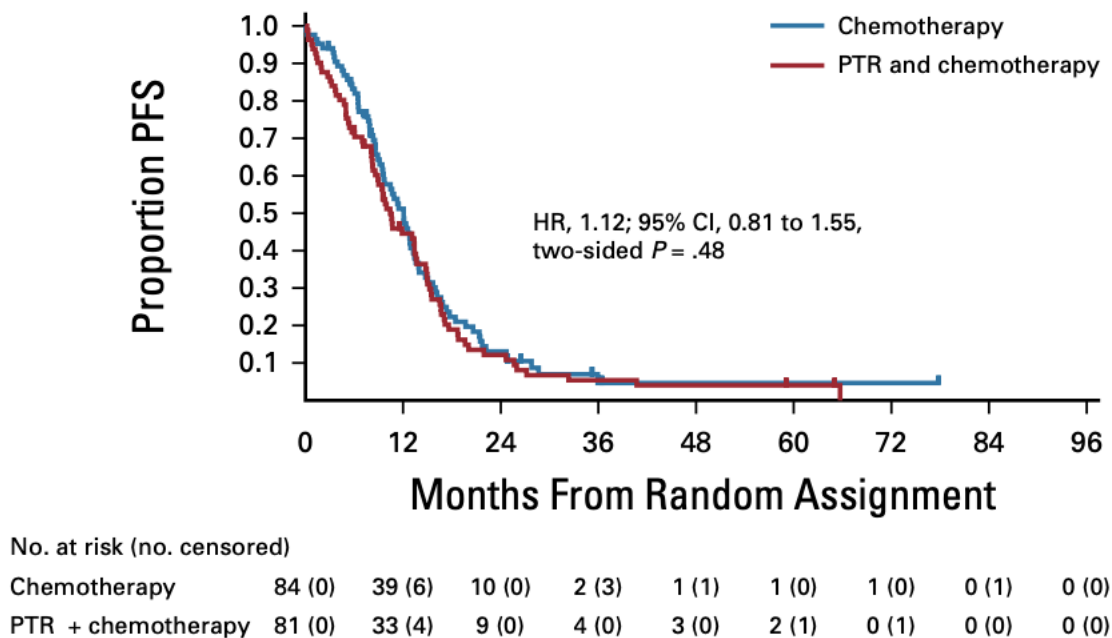
Collaborators, Affiliations + expand

PMID: 34613339 PMCID: PMC8495602 (available on 2022-10-06)

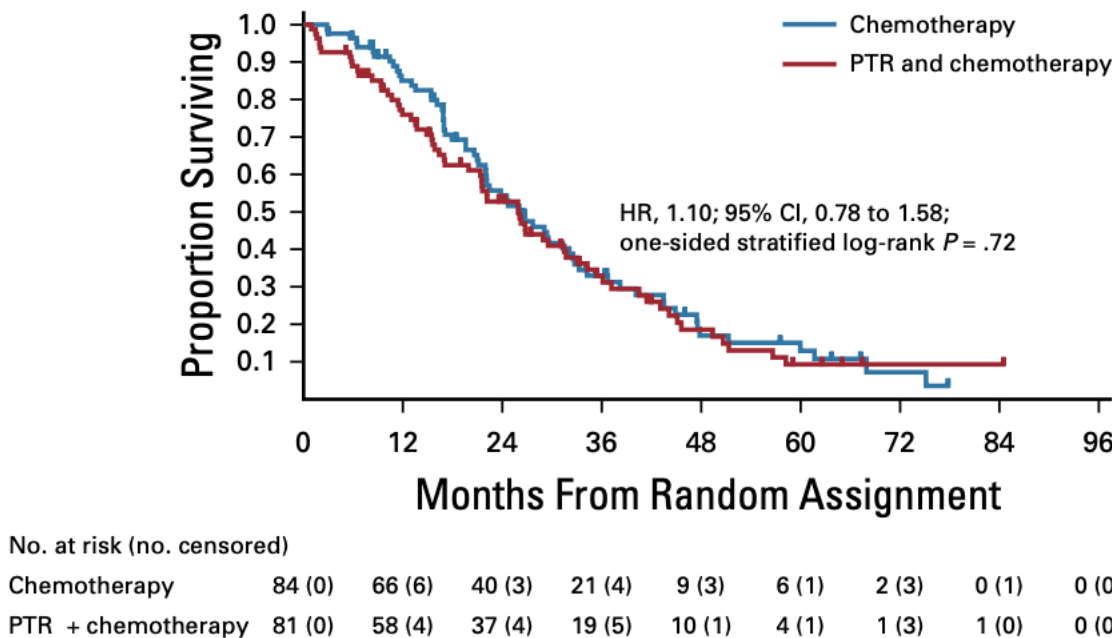
DOI: 10.1001/jamasurg.2021.4992



Métastases hépatiques synchrones non-résécables



Survie sans progression



Survie globale

Métastases hépatiques synchrones non-résécables

La colectomie « première » en situation métastatique avec MH non-résécables

- N'améliore pas la SG ni la SSP
- Est associée à une morbidité élevée
- N'améliore pas la tolérance à la chimiothérapie
- N'améliore pas la réponse à la chimiothérapie
- N'améliore pas la QdV, ni la survie sans détérioration à 2 ans
- Pourrait diminuer la réponse à la chimiothérapie

La chimiothérapie première en situation métastatique avec MH non-résécables

- Est associée à un risque faible de complications de la tumeur primitive
- A un effet sur la tumeur primitive

Métastases hépatiques synchrones non-résécables

Case Reports > [Ann Surg.](#) 2019 Aug;270(2):327-332.

doi: 10.1097/SLA.0000000000002861.

Paradigm Shift in the Management of Irresectable Colorectal Liver Metastases: Living Donor Auxiliary Partial Orthotopic Liver Transplantation in Combination With Two-stage Hepatectomy (LD-RAPID)

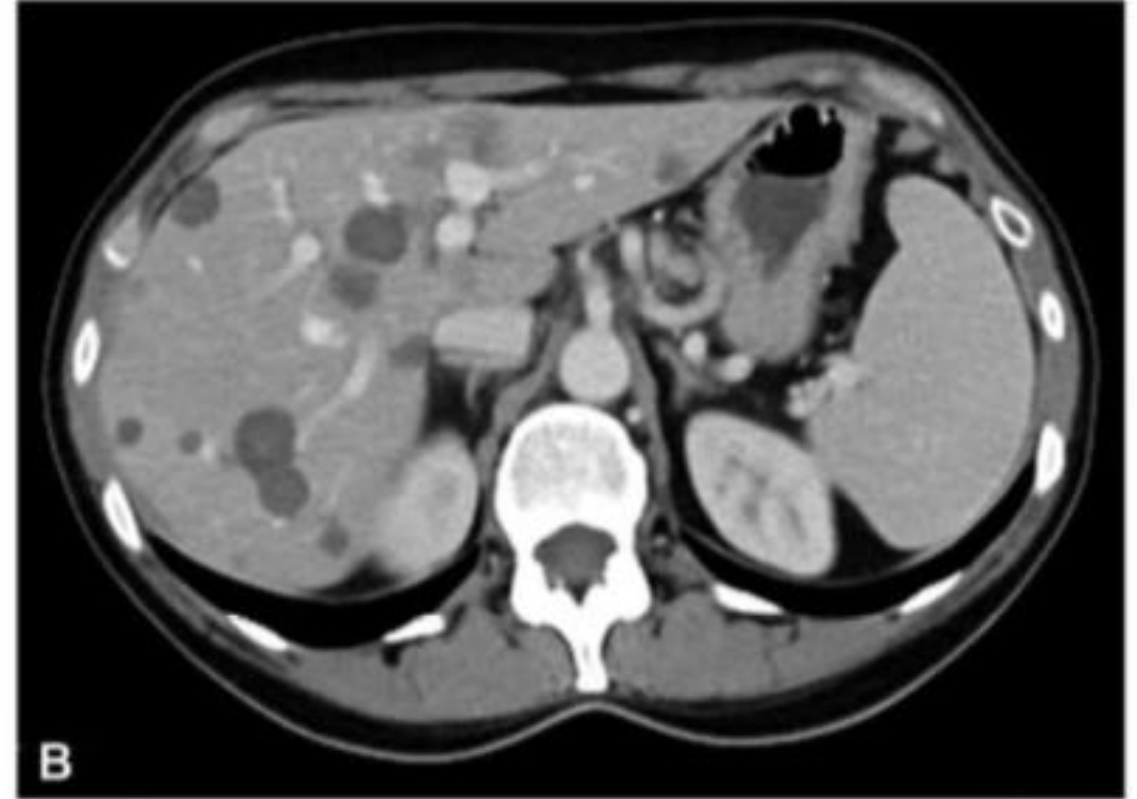
[Alfred Königsrainer](#)¹, [Silke Templin](#)¹, [Ivan Capobianco](#)¹, [Ingmar Königsrainer](#)¹,
[Michael Bitzer](#)², [Lars Zender](#)³, [Bence Sipos](#)⁴, [Lothar Kanz](#)⁵, [Silvia Wagner](#)¹,
[Silvio Nadalin](#)¹

Affiliations + expand

PMID: 29916882 DOI: [10.1097/SLA.0000000000002861](#)

Métastases hépatiques synchrones non-résécables

*Living Donor Auxiliary Partial Orthotopic Liver Transplantation
in Combination With Two-stage Hepatectomy (LD-RAPID)*

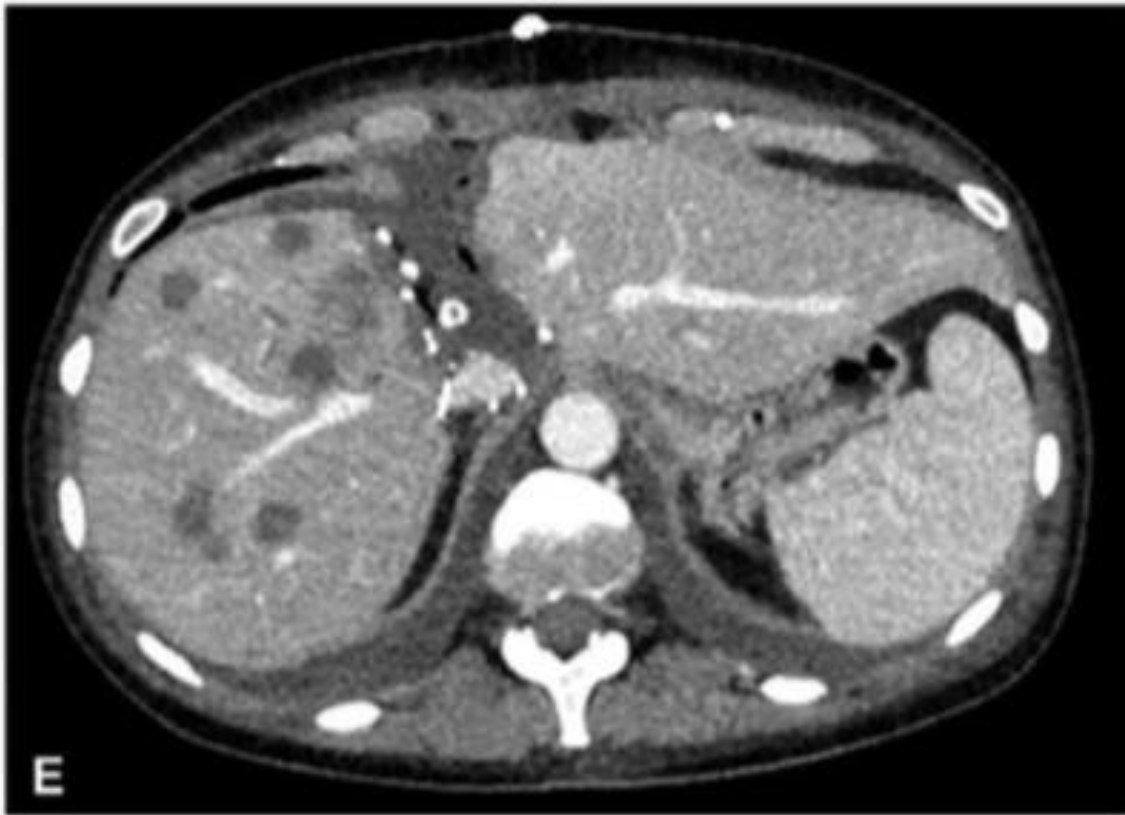


CT

Konigsrainer Ann Surg 2019

Métastases hépatiques synchrones non-résécables

*Living Donor Auxiliary Partial Orthotopic Liver Transplantation
in Combination With Two-stage Hepatectomy (LD-RAPID)*



Hépatectomie gauche + ligature VP droite implantation d'un lobe gauche prélevé chez un donneur vivant (250 cc) soit GVBWR: 16%



Hépatectomie droite à J10 GVBWR: 57,6% (879 cc)

Conclusions

- **CHC**: ATEZO-BEVACIZUMAB / NEXAVAR / RADIO-EMBOLISATION
- **PANCREAS**: SELECTIONNER LES PATIENTS A OPERER PAR TNA
- **MHCCR**: COELIO / LIVER FIRST / REPOUSSER LES LIMITES
- NE PAS OPERER LE PRIMITIF ASYMPTOMATIQUE EN CAS DE NON RESECABILITE HEPATIQUE