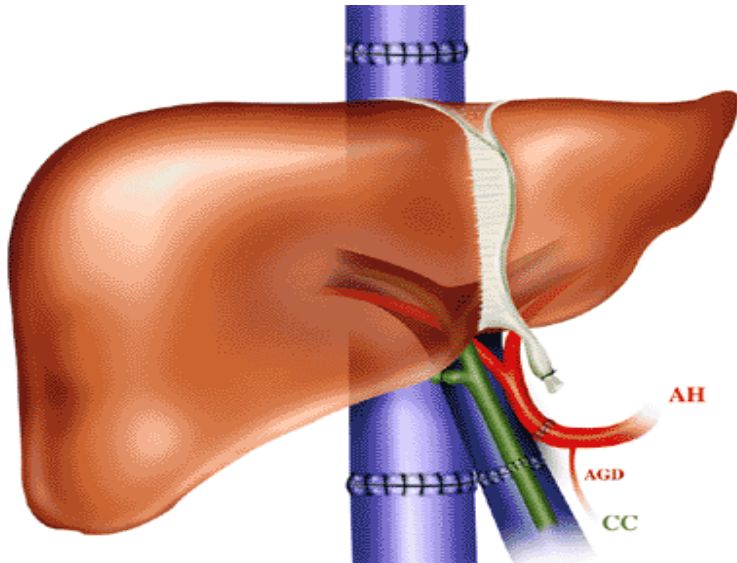
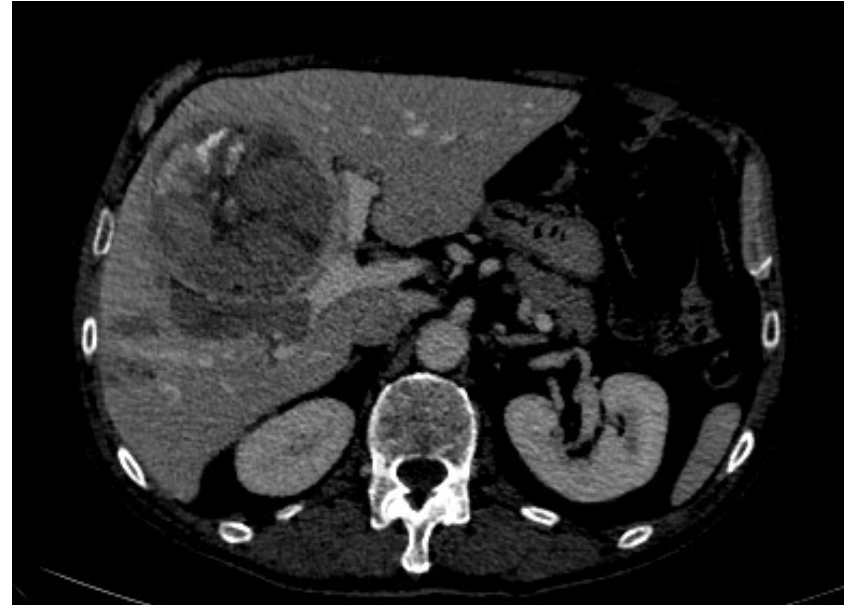
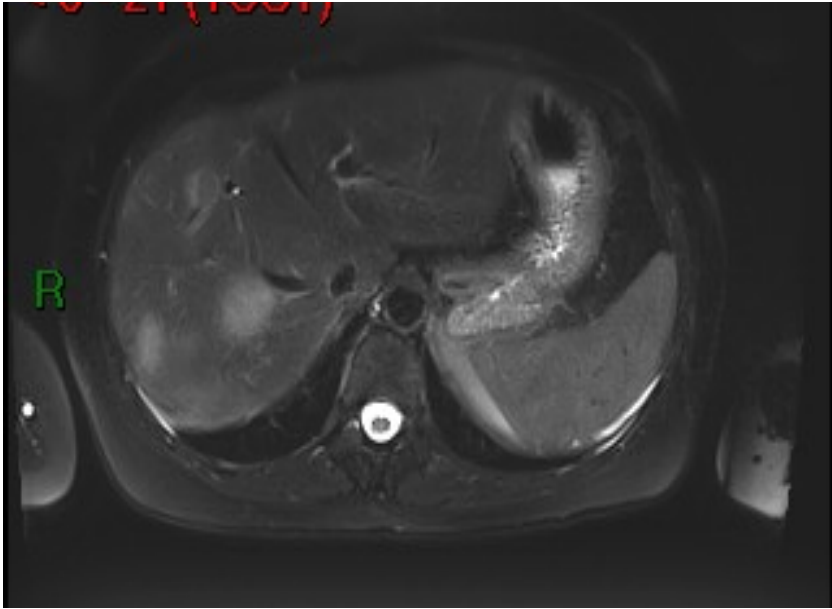


When To Resect, When to Transplant

Pr Eric Vibert, MD, PhD, IKO
Centre Hépato-Biliaire,
Hop. Paul Brousse, Villejuif



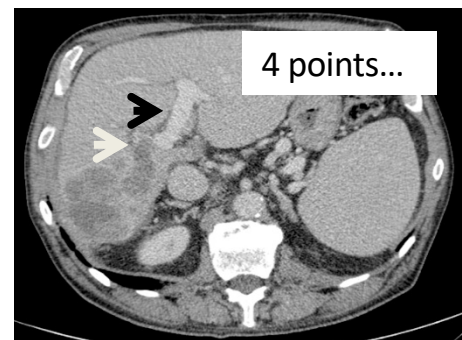
An Eastern Hepatobiliary Surgery Hospital/Portal Vein Tumor Thrombus Scoring System as an Aid to Decision Making on Hepatectomy for Hepatocellular Carcinoma Patients With Portal Vein Tumor Thrombus: A Multicenter Study

Xiu-Ping Zhang,^{1,2} Yu-Zhen Gao,² Zhen-Hua Chen,¹ Min-Shan Chen,^{1,2} Le-Qun Li,^{1,2} Tian-Fu Wen,^{1,2} Li Xu,^{1,2} Kang Wang,¹ Zong-Tao Chai,¹ Wei-Xing Guo,¹ Jie Shi,¹ Dong Xie,¹ Meng-Chao Wu,^{1,2} Wan Yee Lau,^{1,2} and Shu-Qun Cheng^{1,2}

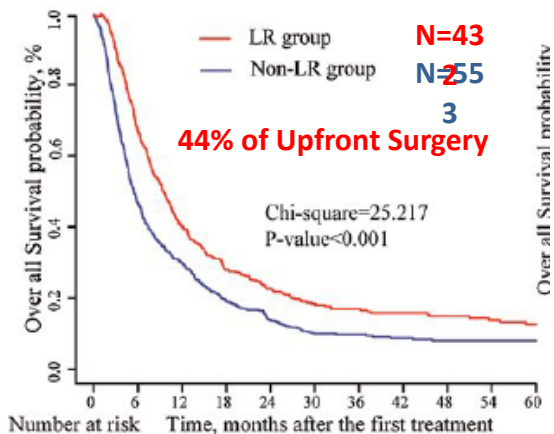
HEPATOLOGY, VOL. 69, NO. 5, 2019

67 pts / 985 pts

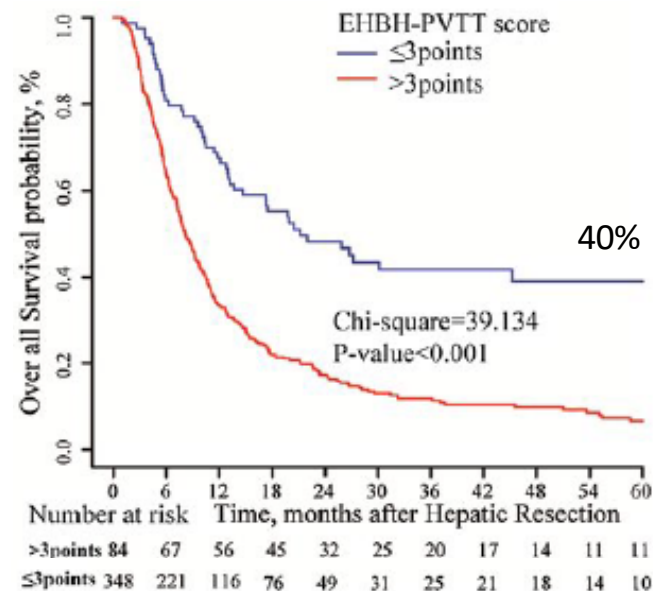
Only 6.8% of Patients with EHBH-PVTT < 3 pts

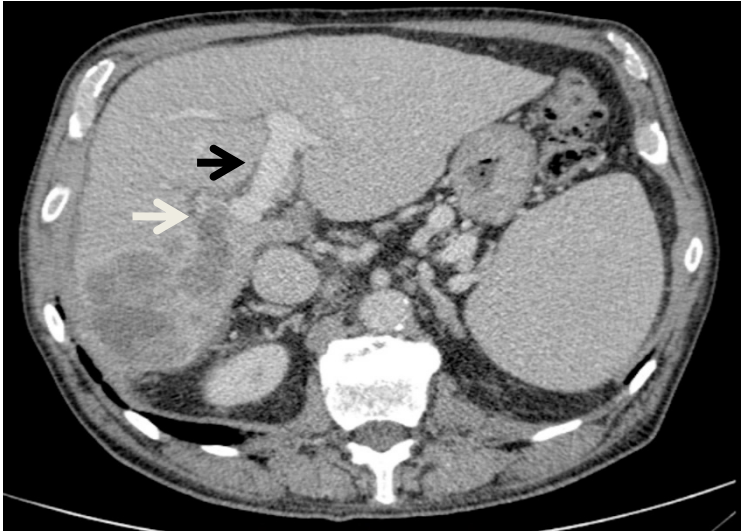


2004-2010 : 985 pts with HCC with Sectorial and/or Pedicular TVP



Variable	Cut-off	Points
Bilirubin	> 17 μmol/L	1
AFP	< 20 ng/ml	0
	20 – 400	1
	> 400 ng/ml	2
Diameter	< 3 cm	0
	3 – 5	1
	> 5 cm	2
Satellite Nodules	No	0
	Yes	1

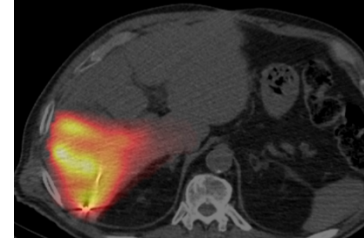




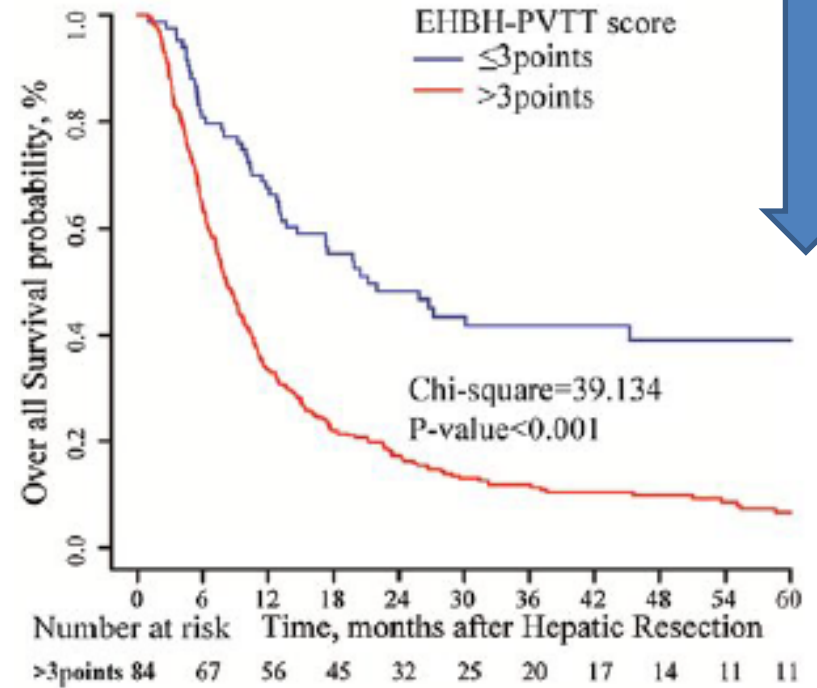
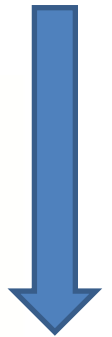
CHC 6 cm – VP2

AFP 2300 ng/ml

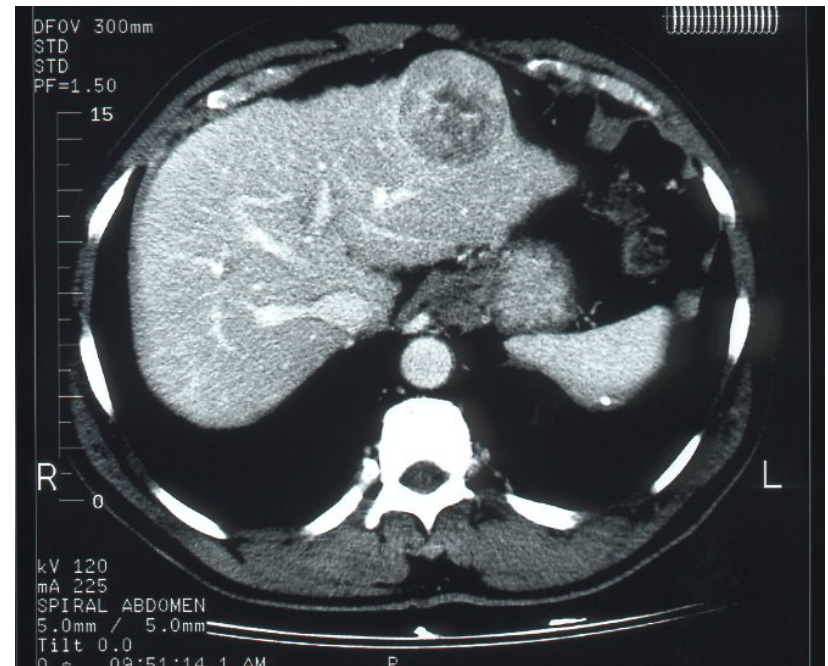
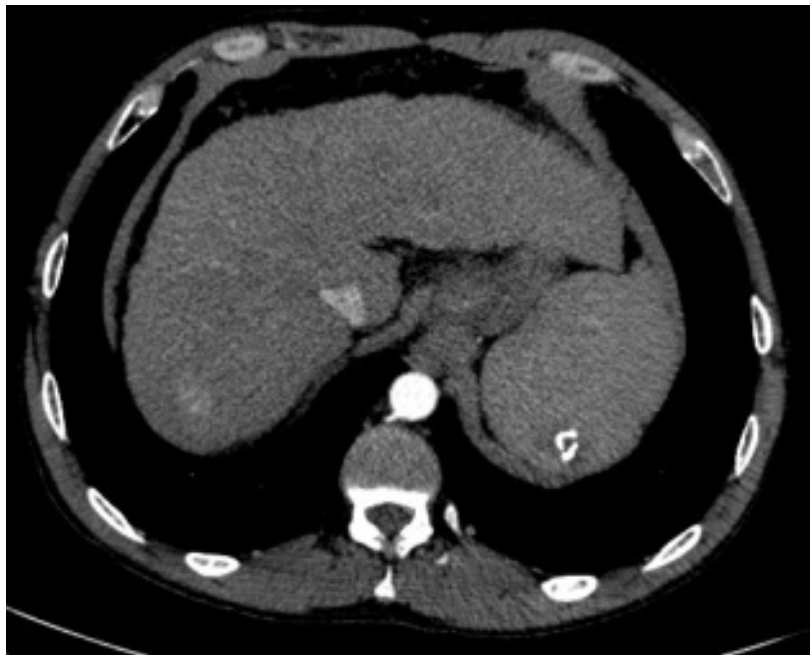
EHBH – PVTT Score = 4

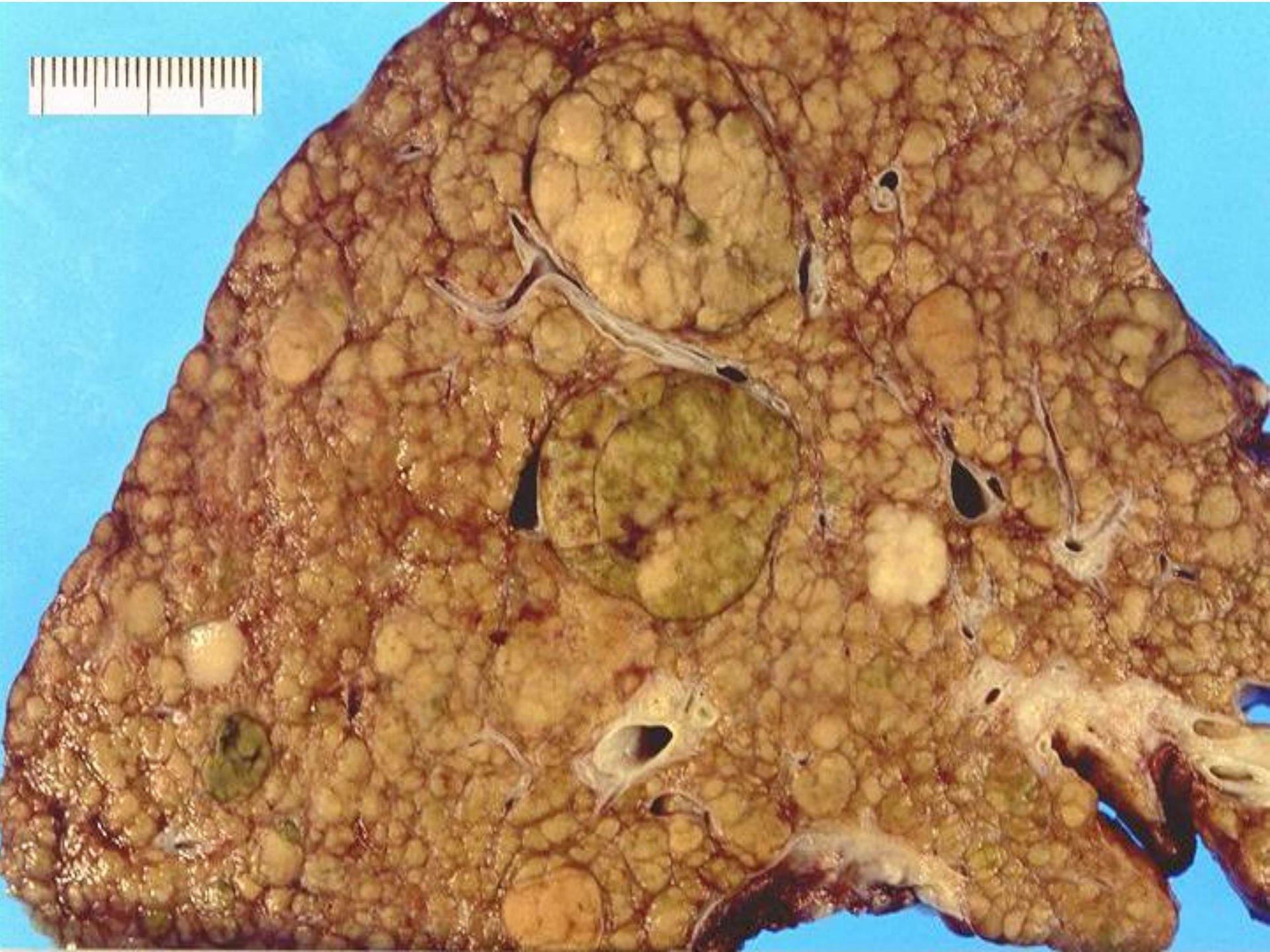


**EHBH- PVT
Score < 3**



Unique HCC on pathological liver



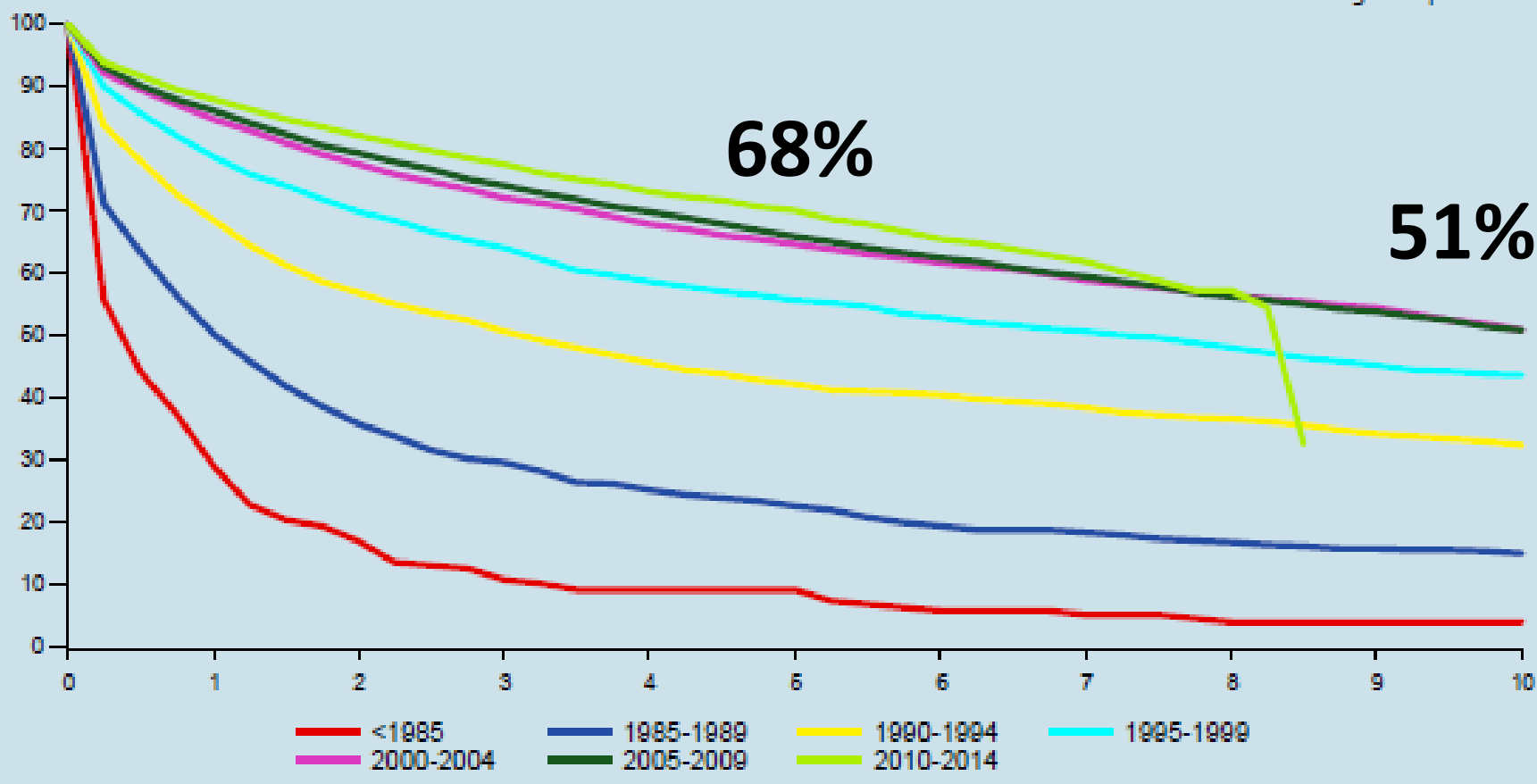


2018 Annual Report of the European Liver Transplant Registry (ELTR) – 50-year evolution of liver transplantation

TH pour CHC au XXI^è Siècle

Patient Survival vs Period of Liver Transplantation : Cancer
N = 19,805 (1968-June 2018)

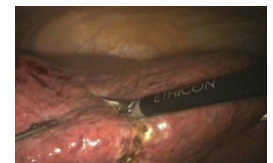
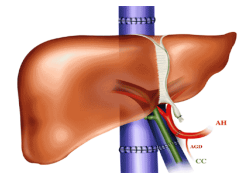
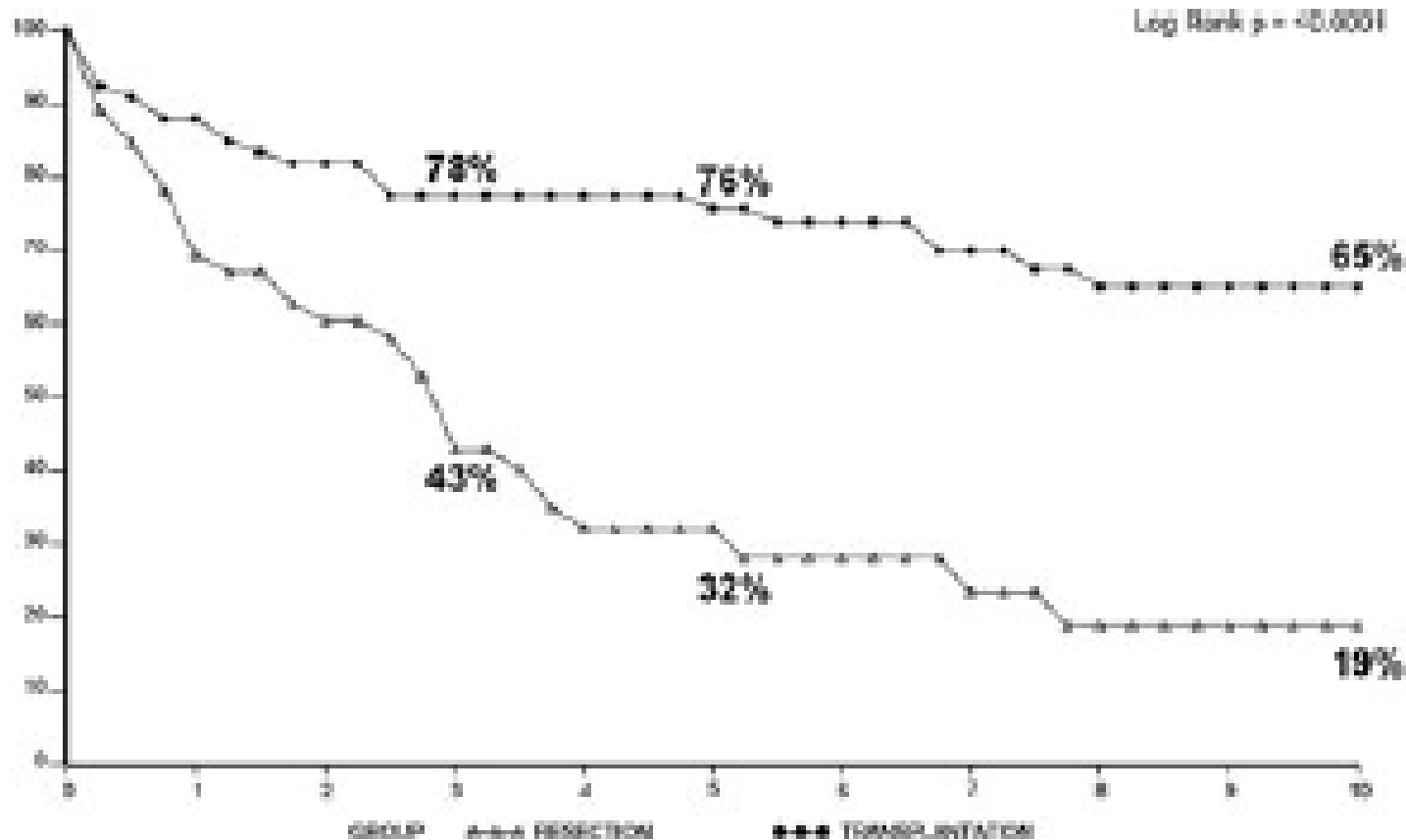
Global Log Rank p = <0.0001



Resection or Transplantation for Early Hepatocellular Carcinoma in a Cirrhotic Liver

Does Size Define the Best Oncological Strategy?

Rene Adam, MD, PhD,*†‡ Prashant Bhangui, MS,* Eric Vibert, MD,*†‡ Daniel Azoulay, MD, PhD,*†§
 Gilles Pelletier, MD, PhD,* Jean-Charles Duclos-Vallée, MD, PhD,*†‡ Didier Samuel, MD, PhD,*†‡
 Catherine Guettier, MD,* and Denis Castaing, MD*†‡



Liver Resection *Versus* Transplantation for Hepatocellular Carcinoma in Cirrhotic Patients

Henri Bismuth, M.D., F.A.C.S. (Hon), Laurence Chiche, M.D., René Adam, M.D.,
Denis Castaing, M.D., Tom Diamond, M.D., F.R.C.S., and Ashley Dennison, M.D., F.R.C.S.

Ann Surg, 1992

LIVER TRANSPLANTATION FOR THE TREATMENT OF SMALL HEPATOCELLULAR CARCINOMAS IN PATIENTS WITH CIRRHOSIS

VINCENZO MAZZAFERRO, M.D., ENRICO REGALIA, M.D., ROBERTO DOCI, M.D., SALVATORE ANDREOLA, M.D.,
ANDREA PULVIRENTI, M.D., FEDERICO BOZZETTI, M.D., FABRIZIO MONTALTO, M.D., MARIO AMMATUNA, M.D.,
ALBERTO MORABITO, PH.D., AND LEANDRO GENNARI, M.D., PH.D.

NEJM, 1996

Liver Transplantation for Hepatocellular Carcinoma: Validation of the UCSF-Expanded Criteria Based on Preoperative Imaging

F. Y. Yao^{a,b,*}, L. Xiao^a, N. M. Bass^a, R. Kerlan^c,
N. L. Ascher^b and J. P. Roberts^b

Am J Transp, 2007

AFP Score from 2014

Liver Transplantation for Hepatocellular Carcinoma: A Model Including α -Fetoprotein Improves the Performance of Milan Criteria

CHRISTOPHE DUVOUX,^{1,2} FRANÇOISE ROUDOT-THORAVAL,^{2,3} THOMAS DECAENS,^{1,2,4} FABIENNE PESSIONE,⁵ HANAA BADRAN,¹ TULLIO PIARDI,⁶ CLAIRE FRANCOZ,⁷ PHILIPPE COMPAGNON,⁸ CLAIRE VANLEMMENS,⁹ JÉROME DUMORTIER,¹⁰ SÉBASTIEN DHARANCY,¹¹ JEAN GUGENHEIM,¹² PIERRE-HENRI BERNARD,¹³ RENÉ ADAM,¹⁴ SYLVIE RADENNE,¹⁵ FABRICE MUSCARI,¹⁶ FILOMENA CONTI,¹⁷ JEAN HARDWIGSEN,¹⁸ GEORGES-PHILIPPE PAGEAUX,¹⁹ OLIVIER CHAZOUILLÈRES,¹⁷ EPHREM SALAME,²⁰ MARIE-NOELLE HILLERET,²¹ PASCAL LEBRAY,²² ARMAND ABERGEL,²³ MARILYNE DEBETTE-GRATIEN,²⁴ MICHAEL D. KLUGER,²⁵ ARIANE MALLAT,^{1,2,4} DANIEL AZOULAY,^{2,25} and DANIEL CHERQUI,^{2,25} on behalf of the Liver Transplantation French Study Group

¹AP-HP, Groupe Henri-Mondor, Department of Hepatology, Créteil; ²Université Paris-Est, Faculté de Médecine, UMR-S 955 Créteil; ³AP-HP, Groupe Henri-Mondor, Department of Public Health, Créteil; ⁴INSERM, Unité U955, Créteil; ⁵Agence de la Biomédecine, Saint Denis; ⁶Hôpital Hautefeuille, Department of Transplantation, Strasbourg; ⁷AP-HP, Hôpital Beaujon, Department of Hepatology, Clichy; ⁸Hôpital Ponchaillou, Department of Surgery, Rennes; ⁹Hôpital Jean Mirjot, Department of Hepatology, Besançon; ¹⁰Hospices Civiles de Lyon, Hôpital Edouard Herriot, Department of Hepato-Gastroenterology, Lyon; ¹¹Hôpital Claude Hurriez, Department of Hepatology, Lille; ¹²Hôpital l'Archet 2, Department of Surgery, Nice; ¹³Hôpital Saint André, Department of Hepatology, Bordeaux; ¹⁴AP-HP, Hôpital Paul Brousse, Hepato-Biliary Centre, Villejuif; ¹⁵Hospices Civiles de Lyon, Hôpital La Croix Rousse, Department of Hepatology, Lyon; ¹⁶Hôpital Rangueil, Department of Surgery, Toulouse; ¹⁷AP-HP, Hôpital Saint Antoine, Department of Hepatology, Paris; ¹⁸Hospices Civiles de Marseille, Hôpital La Conception, Department of Surgery, Marseille; ¹⁹Hôpital Saint Eloi, Department of Hepatology, Montpellier; ²⁰CHU Cote de Nacre, Department of Surgery, Caen; ²¹CHRU de Grenoble, Department of Hepatology, Grenoble; ²²Groupe Pitié-Salpêtrière, Department of Hepatology, Paris; ²³CHU Clermont-Ferrand, Department of Hepatology, Clermont-Ferrand; ²⁴CHU de Limoges, Department of Hepato-Gastroenterology, Limoges; and ²⁵AP-HP, Groupe Henri-Mondor, Department of Surgery, Créteil, France

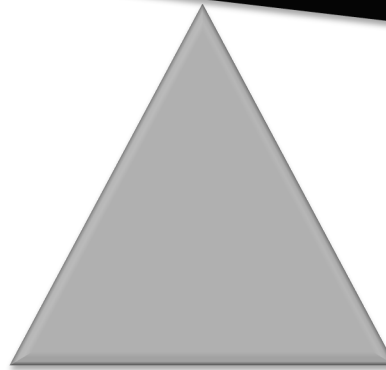
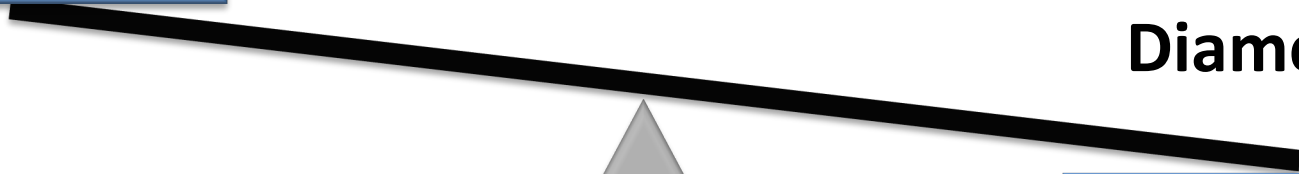
We propose the adoption of new selection criteria for HCC transplant candidates, taking into account AFP.

GASTROENTEROLOGY 2012;143:986-994

**Number
Diameter**



**AFP
Number
Diameter**

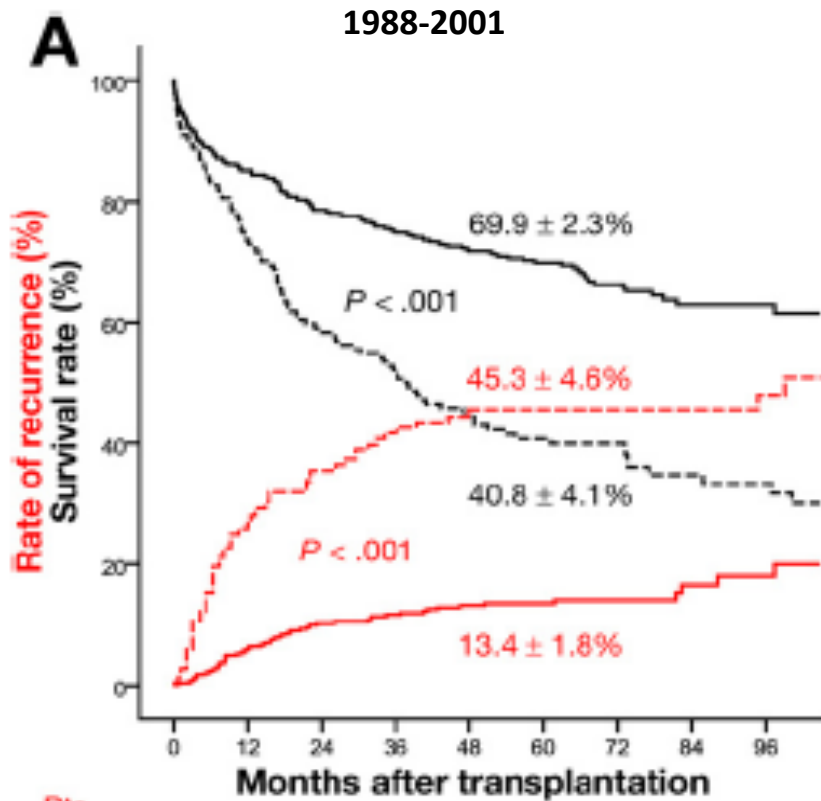


3 criteria is always better than 2...

Score de Duvoux

Paramètre	Points
Diamètre du plus gros nodule	
≤ 3 cm	0
3.1 à 6 cm	1
> 6 cm	4
Nombre de nodule(s)	
1 à 3	0
4 ou plus	2
Taux d'AFP en ng/ml	
≤ 100	0
101 à 1000	2
> 1000	3

Training (n=492)

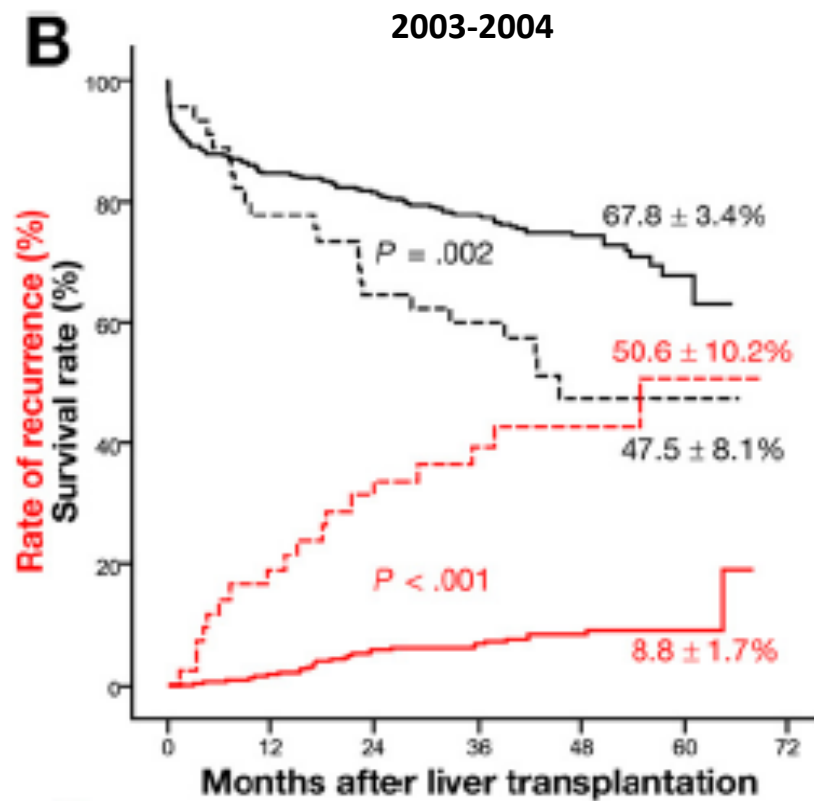


Pts at risk	366	327	304	293	262	177	114	64	44
at risk	127	88	75	63	54	43	32	22	19

Pts at risk	401	341	315	300	271	187	122	67	47
at risk	144	106	84	74	64	52	41	23	21

TH faisable : Score ≤ 2

Validation (n=435)



Pts at risk	390	324	305	268	130	17
at risk	45	33	25	20	11	3

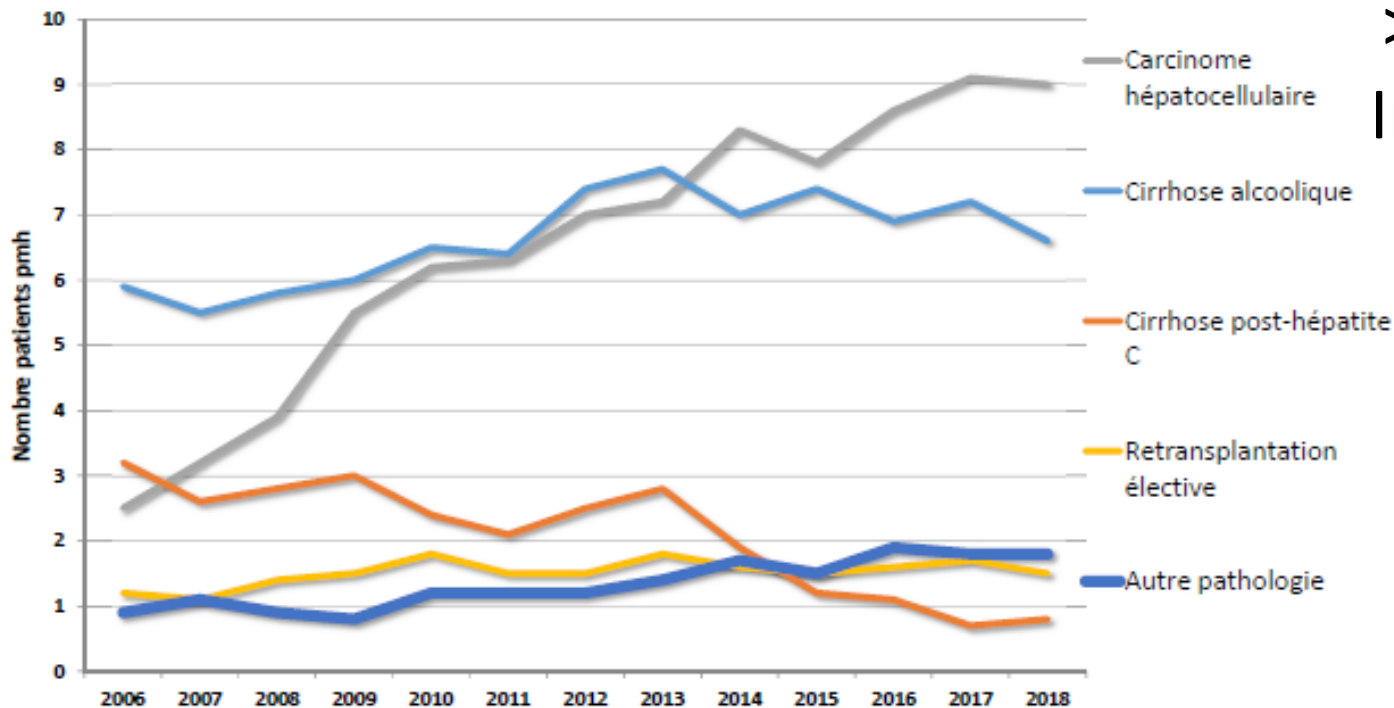
Pts at risk	390	329	315	274	133	18
at risk	45	35	29	25	9	3

TH non Faisable : Score > 2

MALADIE HÉPATIQUE PRINCIPALE

Le CHC est devenue la principale indication de greffe depuis 2014

Taux de nouveaux inscrits par millions d'habitants selon la maladie hépatique initiale



> 30% des Indications

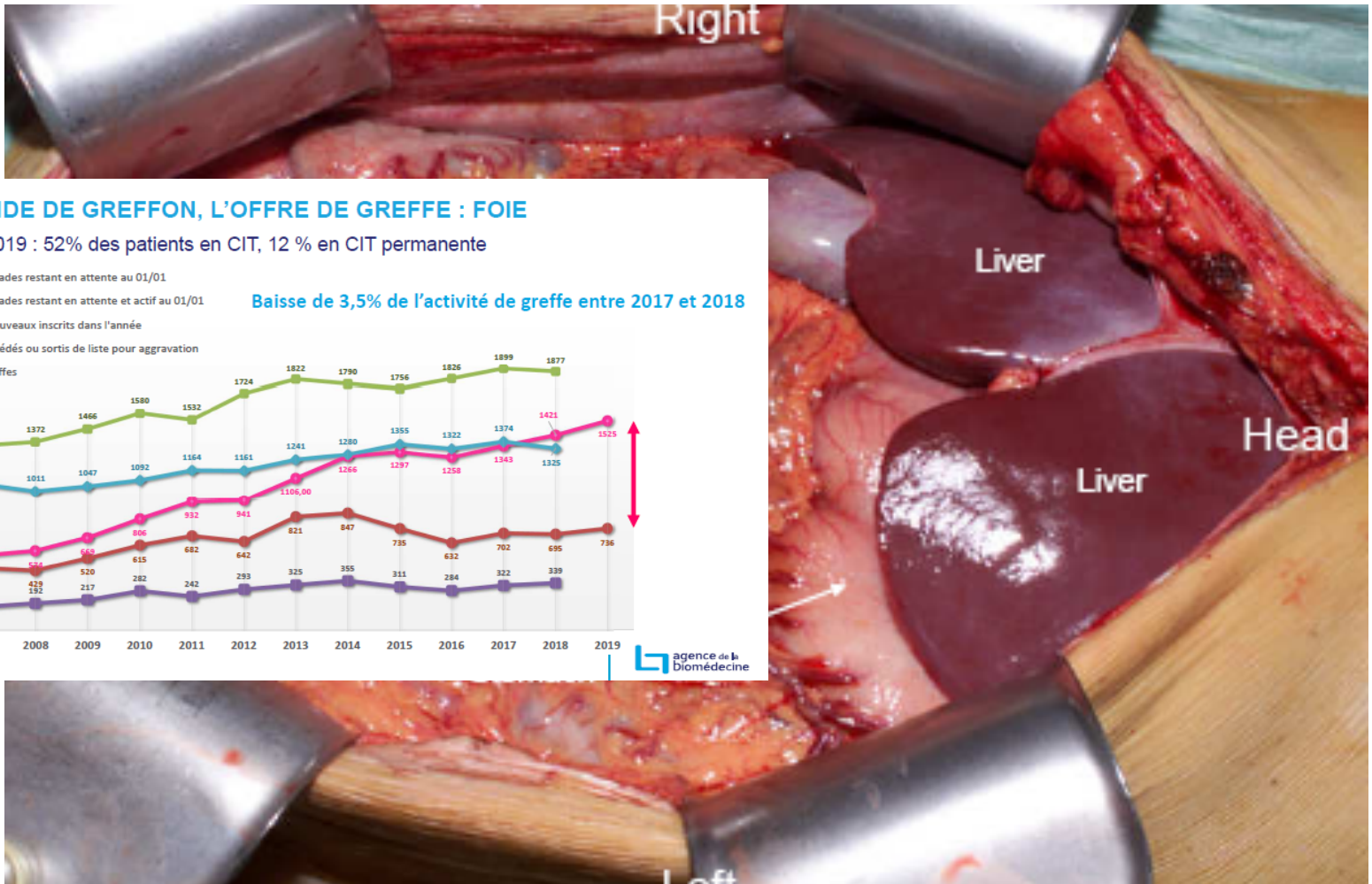
HCC in France

8000 to 10 000 New Cases by Year
16 case for 100 000 persons

Liver Resection 11%

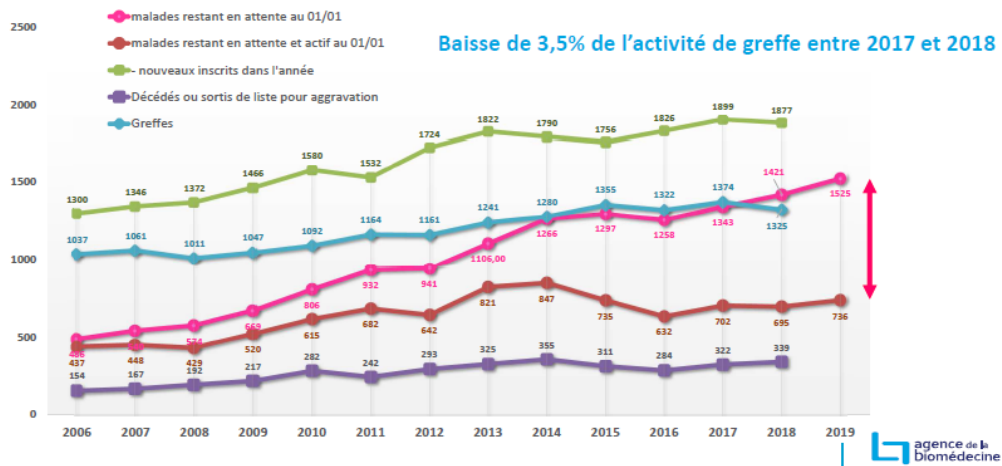
Local Destruction 8%

Liver Transplant 4%



LA DEMANDE DE GREFFON, L'OFFRE DE GREFFE : FOIE

Au 01/01/2019 : 52% des patients en CIT, 12 % en CIT permanente



1325 Greffons en 2018 qu'il faut réserver aux malades sans alternatives thérapeutiques... avec ou sans CHC...



VS



When I plan a treatment to Mister Durand, I think to Mister Dupond...
Who will be more beneficiated of liver transplantation relatively to resection ?

Risk and Interest of oncologic hepatectomy ?

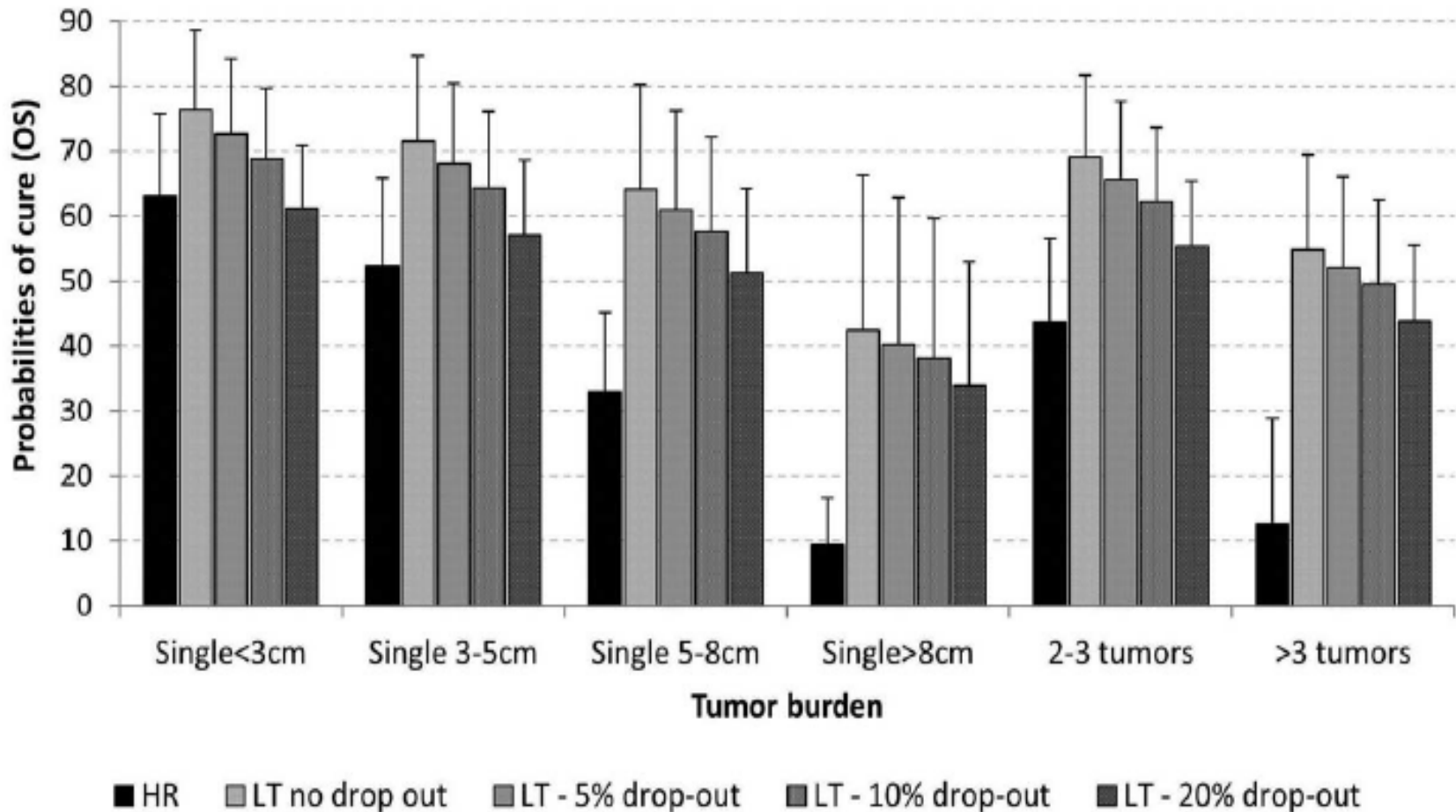
Liver Transplantation and Hepatic Resection can Achieve Cure for Hepatocellular Carcinoma

Antonio Daniele Pinna, MD,* Tian Yang, MD,† Vincenzo Mazzaferro, MD, PhD,‡
 Luciano De Carlis, MD, FEBS,§ Jian Zhou, MD, PhD,¶ Sasan Roayaie, MD,|| Feng Shen, MD, PhD,†
 Carlo Sposito, MD, PhD,‡ Matteo Cescon, MD, PhD,* Stefano Di Sandro, MD, PhD,§ He Yi-feng, MD,¶
 Philip Johnson, MD, FRCP,** and Alessandro Cucchetti, MD*

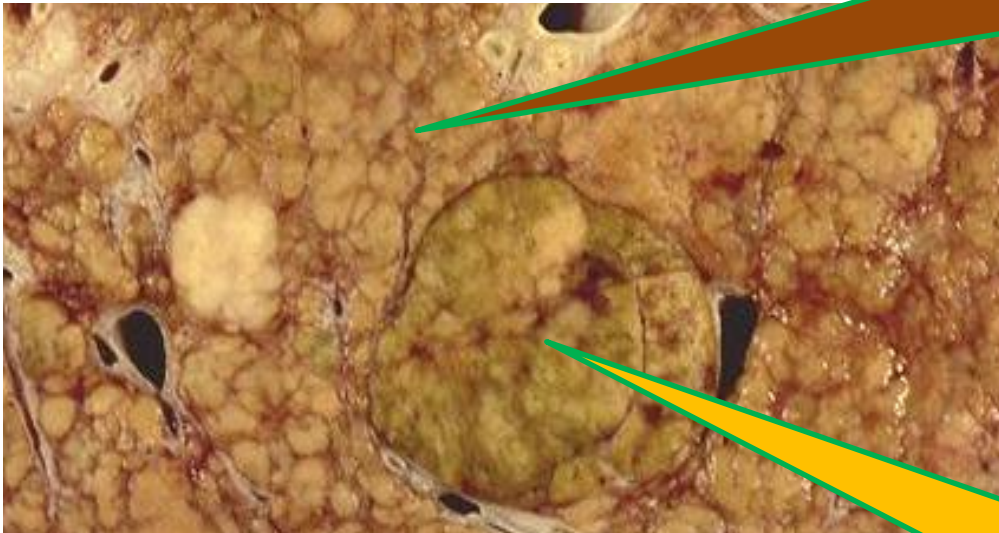
Annal of Surgery, 2018

Background: *Statistical cure* occurs when the mortality of a specific population returns to values of that of general population. Resection and transplantation are considered potentially curative therapies for HCC, but their effect on the residual entire life-expectancy has never been investigated.

Methods: Data from 3286 HCC patients treated with LT (n = 1218) or HR (n = 2068) were used to estimate *statistical cure*. Disease-free survival (DFS) was the primary survival measure to estimate cure fractions through a non-mixture model. Overall survival (OS) was a secondary measure. In both, patients were matched with general population by age, sex, year, and race/ethnicity. Cure variations after LT were also adjusted for different waiting-list drop-outs.



Feasibility of liver resection ?
Response in the liver...



Postop. Courses

De Novo recurrence

Utility of liver resection ?
Response in the cancer...

Local recurrence

Extra-hepatic Disease

Mortality of Liver Resection for HCC

Authors	Period	N	90 days Mortality	Parenchyma
Greco et al.	2001-2005	129	4.1%	Abnormal Liver
Rosaye et al	2005-2011	2342	3.5%	Abnormal Liver
Zhong et al	2000-2007	908	3.1%	Abnormal Liver
Vigano et al	2000-2012	192	2.1%	Abnormal Liver
Donadon et al	2004-2013	336	2%	Abnormal Liver
French HPB Registry	2012-2016	343	4.7%	Abnormal liver
Kim et al	2005-2010	454	0.7%	Healthy Liver
Zhou et al	2006-2009	124	0.5%	Healthy Liver

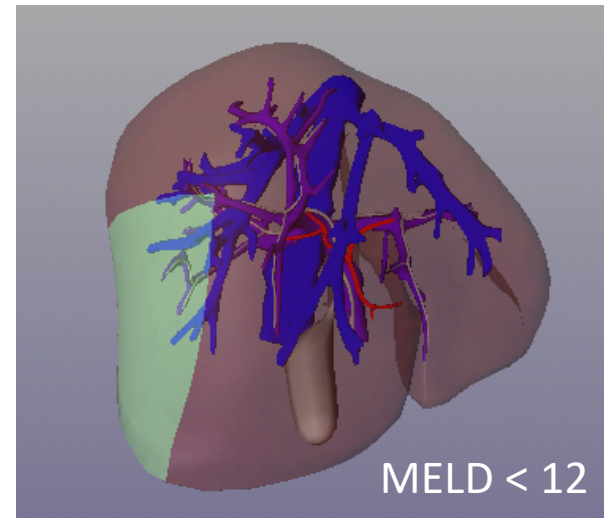
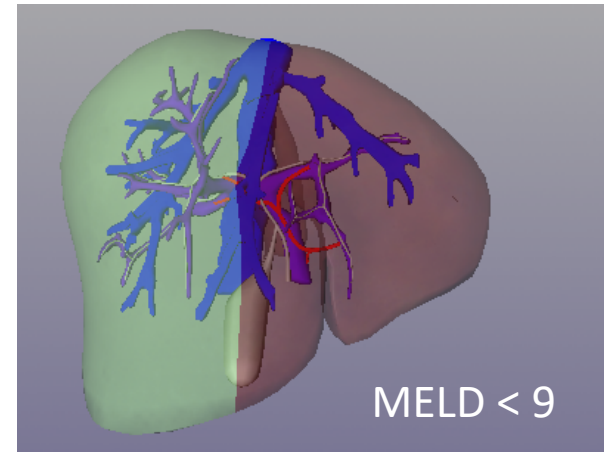
Post-operative mortality in cirrhotic patient is inferior to 5%

3-months Mortality of Liver Transplantation : 9% (Adam et al. J Hep 2012)

Feasibility of Surgery ?



Independant predictive
factor of mortality



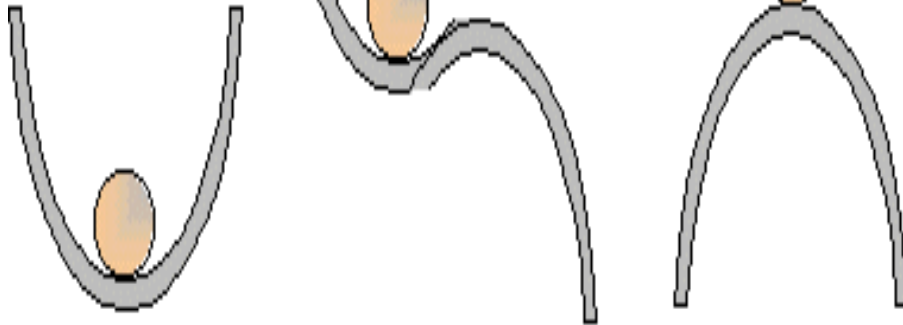
Specific Complication Pathological Liver

3 types of Equilibrium

Stable

Metastable

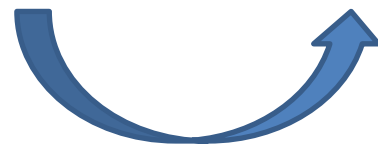
Unstable



Normal Liver

CHILD A/B

CHILD C

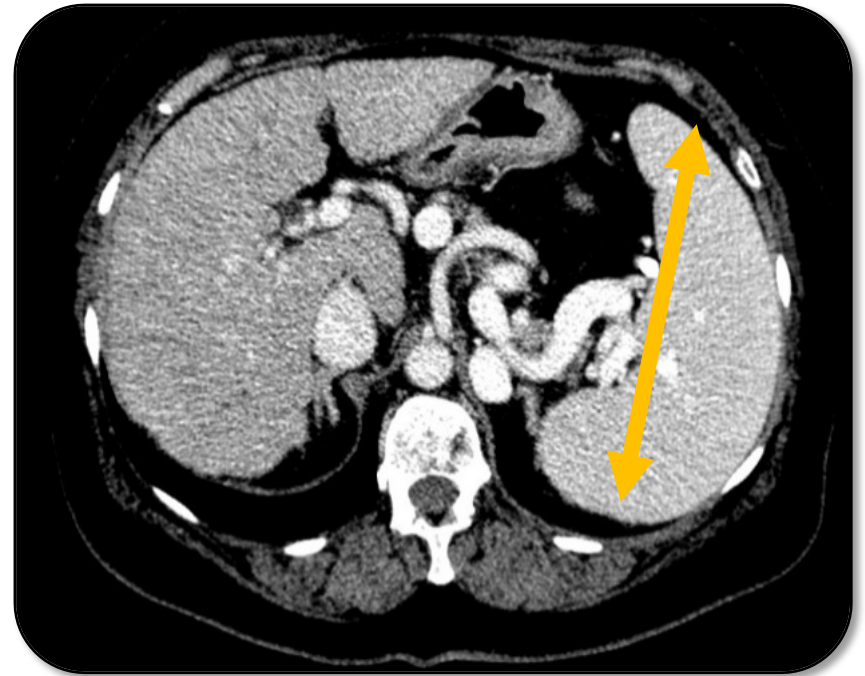


Liver Surgery



Clinical Ascitis **and/or** Jaundice **and/or** Encephalopathy at 3 months po.

Portal Hypertension is no more a formal contra-indication to surgery



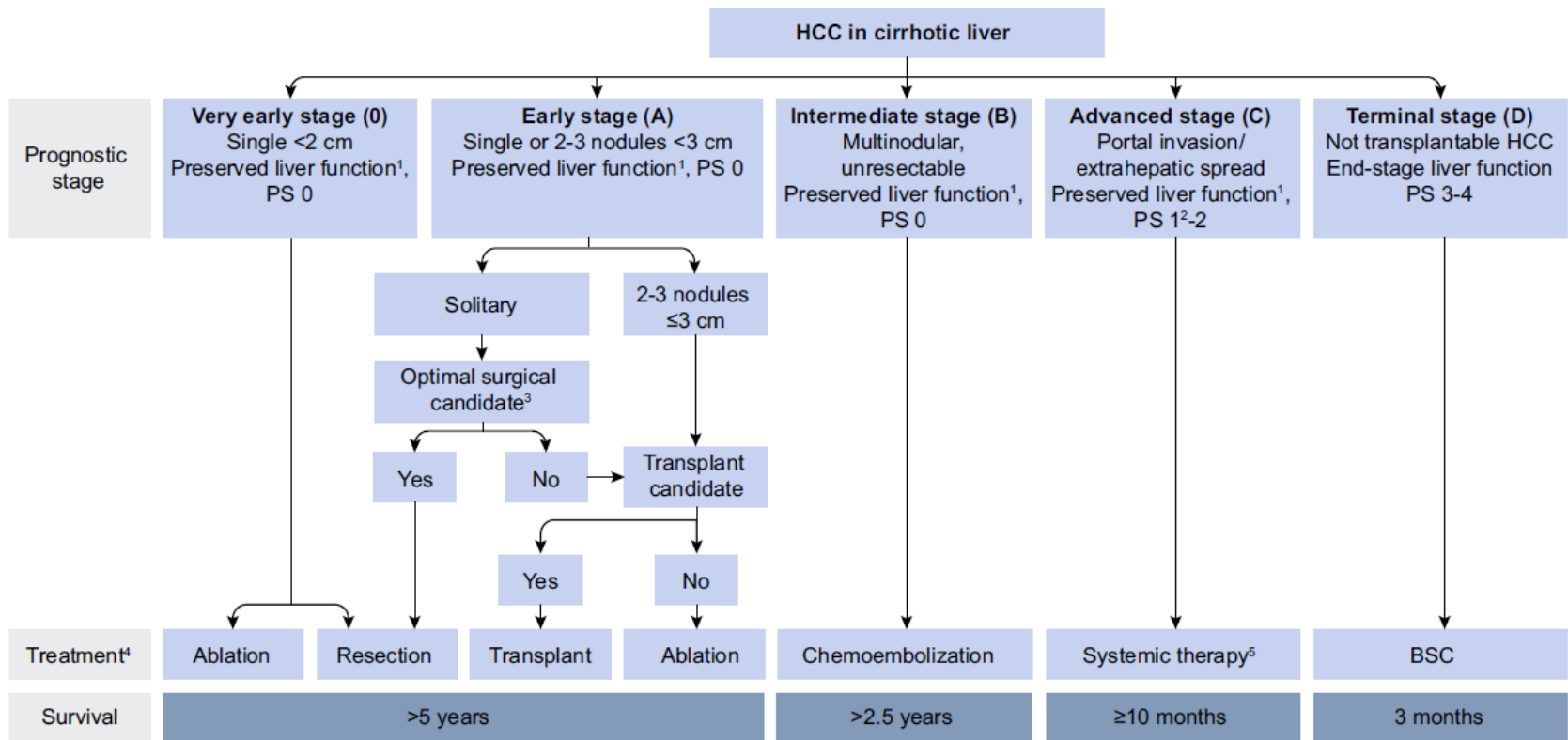
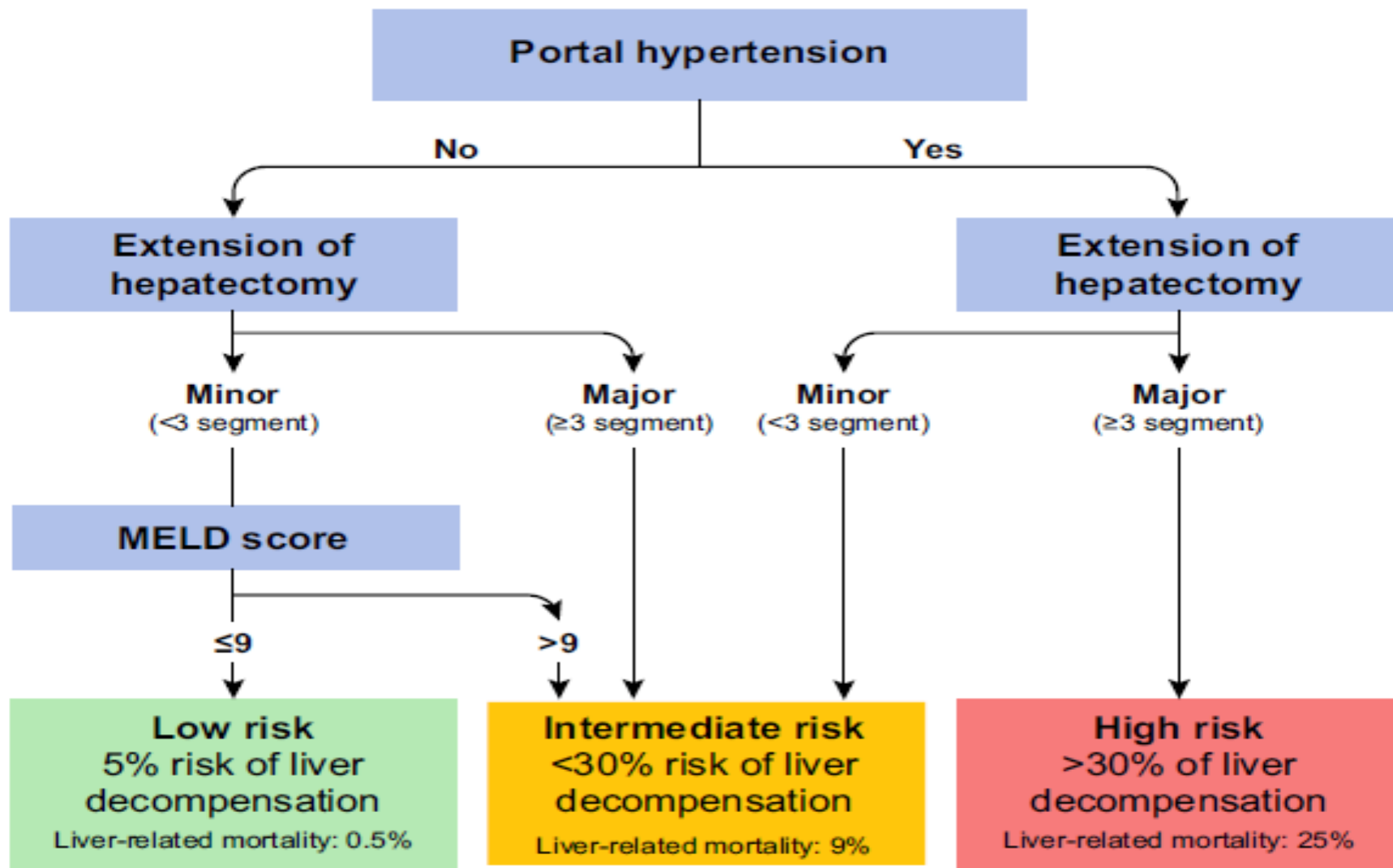


Fig. 3. Modified BCLC staging system and treatment strategy. ¹“Preserved liver function” refers to Child-Pugh A without any ascites, considered conditions to obtain optimal outcomes. This prerequisite applies to all treatment options apart from transplantation, that is instead addressed primarily to patients with decompensated or end-stage liver function. ²PS 1 refers to tumour induced (as per physician opinion) modification of performance capacity. ³Optimal surgical candidacy is based on a multiparametric evaluation including compensated Child-Pugh class A liver function with MELD score <10, to be matched with grade of portal hypertension, acceptable amount of remaining parenchyma and possibility to adopt a laparoscopic/minimally invasive approach. The combination of the previous factors should lead to an expected perioperative mortality <3% and morbidity <20% including a postsurgical severe liver failure incidence <5%. ⁴The stage migration strategy is a therapeutic choice by which a treatment theoretically recommended for a different stage is selected as best 1st line treatment option. Usually it is applied with a left to right direction in the scheme (i.e. offering the effective treatment option recommended for the subsequent more advanced tumour stage rather than that forecasted for that specific stage). This occurs when patients are not suitable for their first line therapy. However, in highly selected patients, with parameters close to the thresholds defining the previous stage, a right to left migration strategy (i.e. a therapy recommended for earlier stages) could be anyhow the best opportunity, pending multidisciplinary decision. ⁵As of 2017 sorafenib has been shown to be effective in first line, while regorafenib is effective in second line in case of radiological progression under sorafenib. Lenvatinib has been shown to be non-inferior to sorafenib in first line, but no effective second line option after lenvatinib has been explored. Cabozantinib has been demonstrated to be superior to placebo in 2nd or 3rd line with an improvement of OS from eight months (placebo) to 10.2 months (ASCO GI 2018). Nivolumab has been approved in second line by FDA but not EMA based on uncontrolled phase II data. ASCO, American Society of Clinical Oncology; BCLC, Barcelona Clinic Liver Cancer; EMA, European Medicines Agency; FDA, Food and Drug Administration; MELD, model for end-stage liver disease; PS, performance status; OS, overall survival.

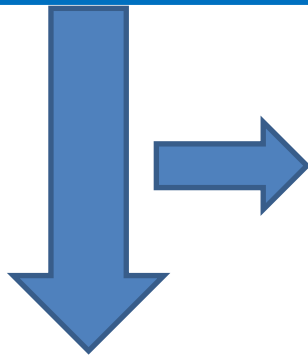


Prospective Study of 107 patients operated for HCC between 2012-2016 in Paul Brousse Hospital

Nov 2014 – Aug 2016

Transient Elastography before Hepatectomy

N = 418



Other Indications
Excluded
N = 312

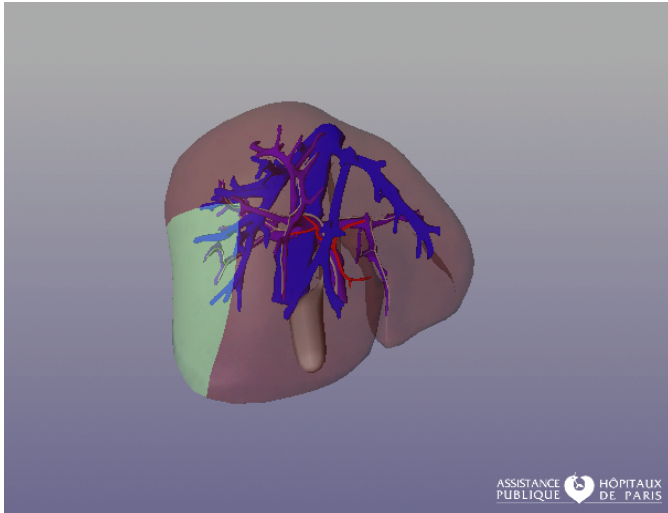
Study Population
HCC
N = 107

The screenshot displays the 'e-HpbChir V3' interface for a patient named Rico VIB. The patient's date of birth is 20/02/1971 and sex is Male. The main section is titled 'Séquence thérapeutique N°1 (Débutée le 04 Jul 2012)'. It shows a timeline with four stages: 'Evaluation initiale' (04 Jul 2012), 'Préparation' (04 Jul 2012), 'Intervention' (04 Jul 2012), and 'Evénements indésirables post-op' (04 Jul 2012). There are icons for each stage, including a scale, a person, a surgical team, and a person with a bandage. A 'Ajouter une nouvelle séquence thérapeutique' button is visible below the timeline. On the right, there is a 'Suivi' table with columns for 'Suivi', 'M', 'V', and 'S'. The table contains rows for 'Suivi journalier (2012-11-01)', 'Biologie (2012-10-07)', and 'Dernières nouvelles (2012-07-04)'. At the bottom, there are buttons for 'Suivi biologique', 'Suivi volumétrique', and 'Suivi questionnaire'.

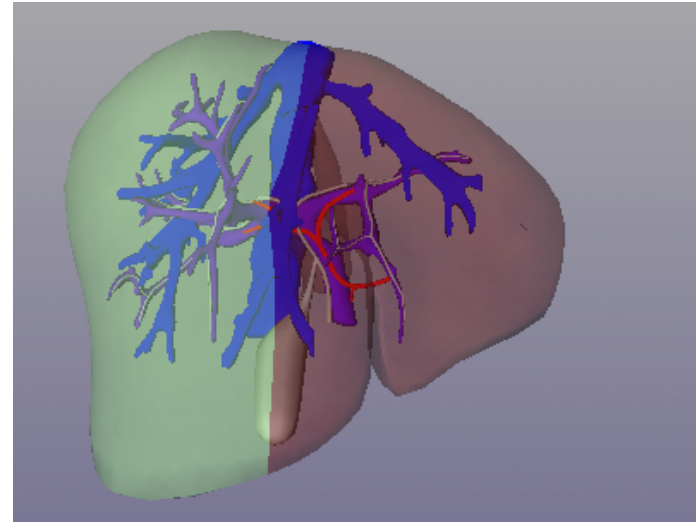
MELD \leq 12, platelet count \geq 80,000

No preoperative HVPG assessment

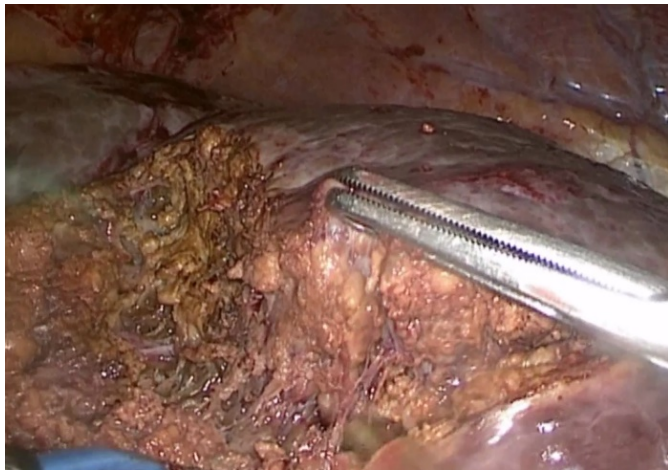
TACE than PVE before Right Hep. in abnormal liver



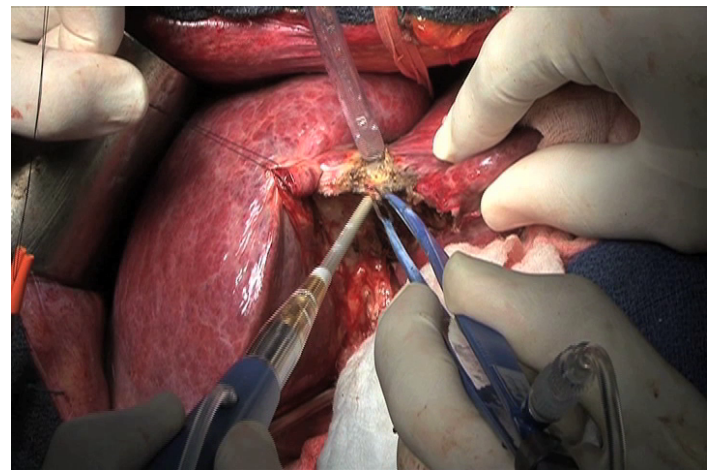
Minor Hepatectomy, N=80 75(%)



Major Hepatectomy, N=27 (25%)



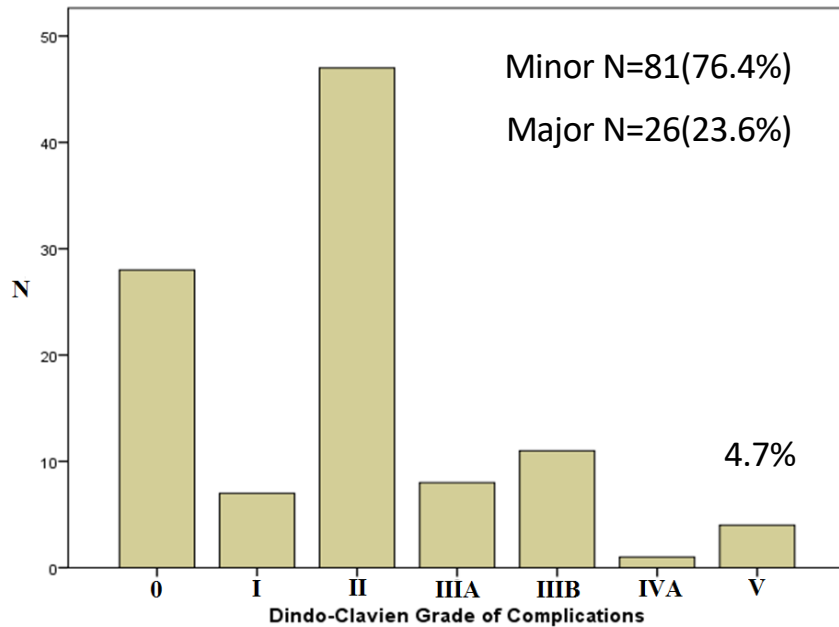
Laparoscopy, N=37 (35%)



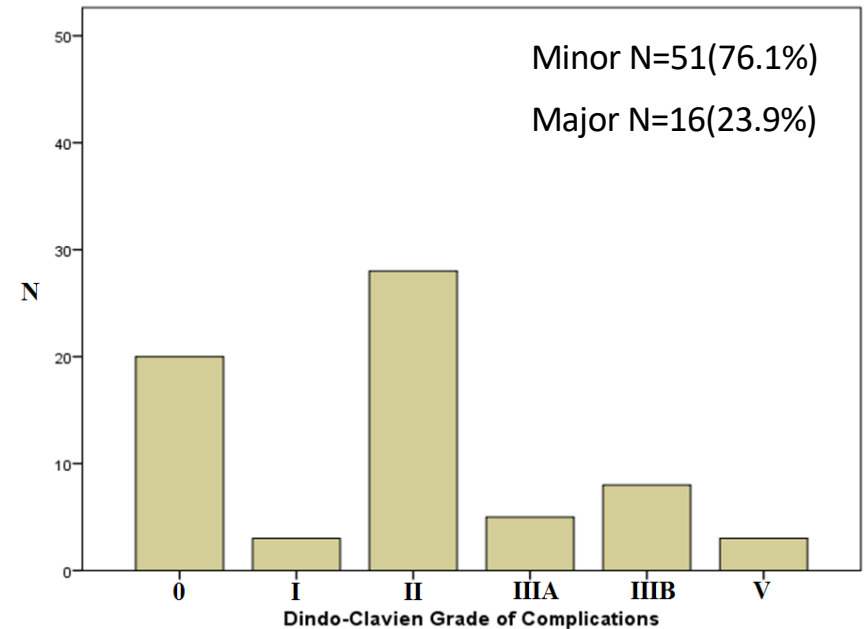
Laparotomy, N=70 (65%)

90-day Post-operative Outcomes

Overall Cohort, N = 107



Advanced Liver Disease Cohort (F3/F4), N = 67



* Five patients died in 90-day postoperative period: 2 from liver failure, 1 with ascites and sepsis from colonic perforation, 1 with biliary sepsis and 1 from suspected cardiac event after discharge

Long Term Post Operatives Outcomes

Post Operative Liver Failure and/or Ascite

n=241/107 (22%)



Mortalité 90-Jours n=5 (4.7%)

Insuff Hepatique PostOp n = 2

PneumoP, Emb Pul, Cause ? n=3



Persistent Ascites

Liver Decompensation n=9

Ascite n=9

Jaundice n=2

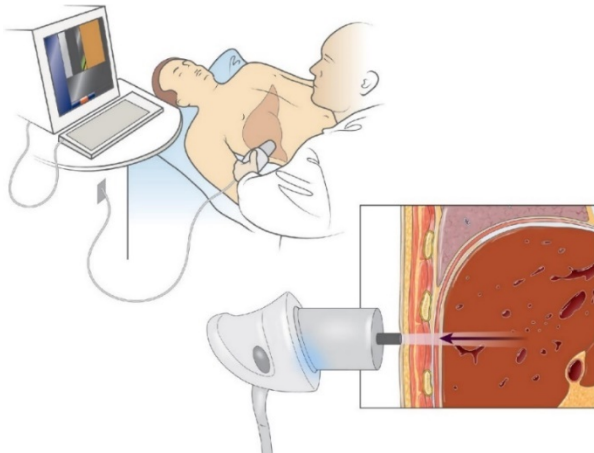
Encephalopathy n=1

9/72 (12%) des patients F3/F4
4 Recurrences / 1 Transplant

Direct and global liver parenchyma evaluation by physical measurement



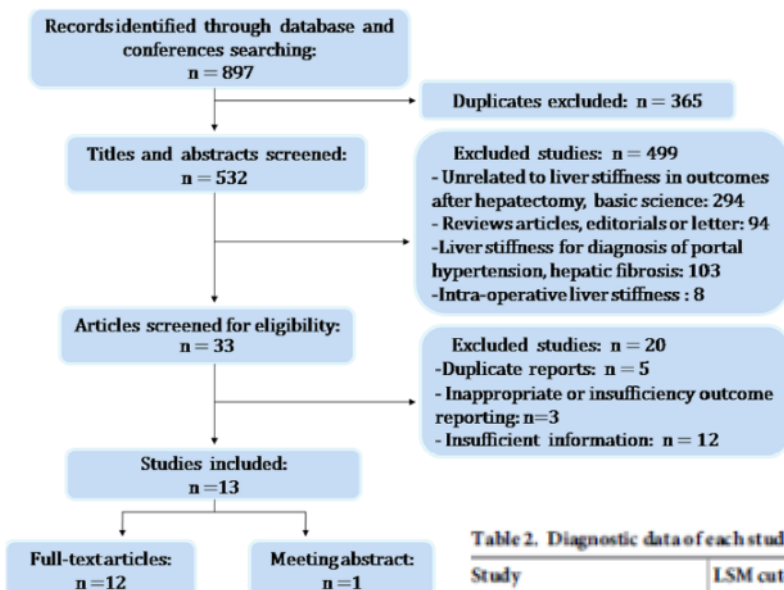
Elastometry for Stiffness and CAP for Steatosis



In absence of right large tumor

Prognostic value of liver stiffness measurement for the liver-related surgical outcomes of patients under hepatic resection: A meta-analysis

Zitong Huang^{1,2}*, Jingjing Huang^{1,2}*, Tianran Zhou^{1,2}, Hongying Cao³, Bo Tan^{1,2}*



Overall postoperative complications after hepatectomy

A total of 1942 patients were included and analyzed for the prognostic significance of LSM for liver-related surgical outcomes. The relationship LSM and overall postoperative complications after hepatectomy was evaluated in 13 studies. The pooled results of the meta-analysis revealed that preoperative LSM was significantly associated with the development of overall postoperative complications (OR 1.76, 95% CI 1.46–2.11, [Fig 2](#)).

Pays	N. Patient	Mean Cut off
Asie (n=4)	507	14 kPa
Europe (n=2)	330	11 kPa

Table 2. Diagnostic data of each studies evaluating the performance of TE for postoperative complications.

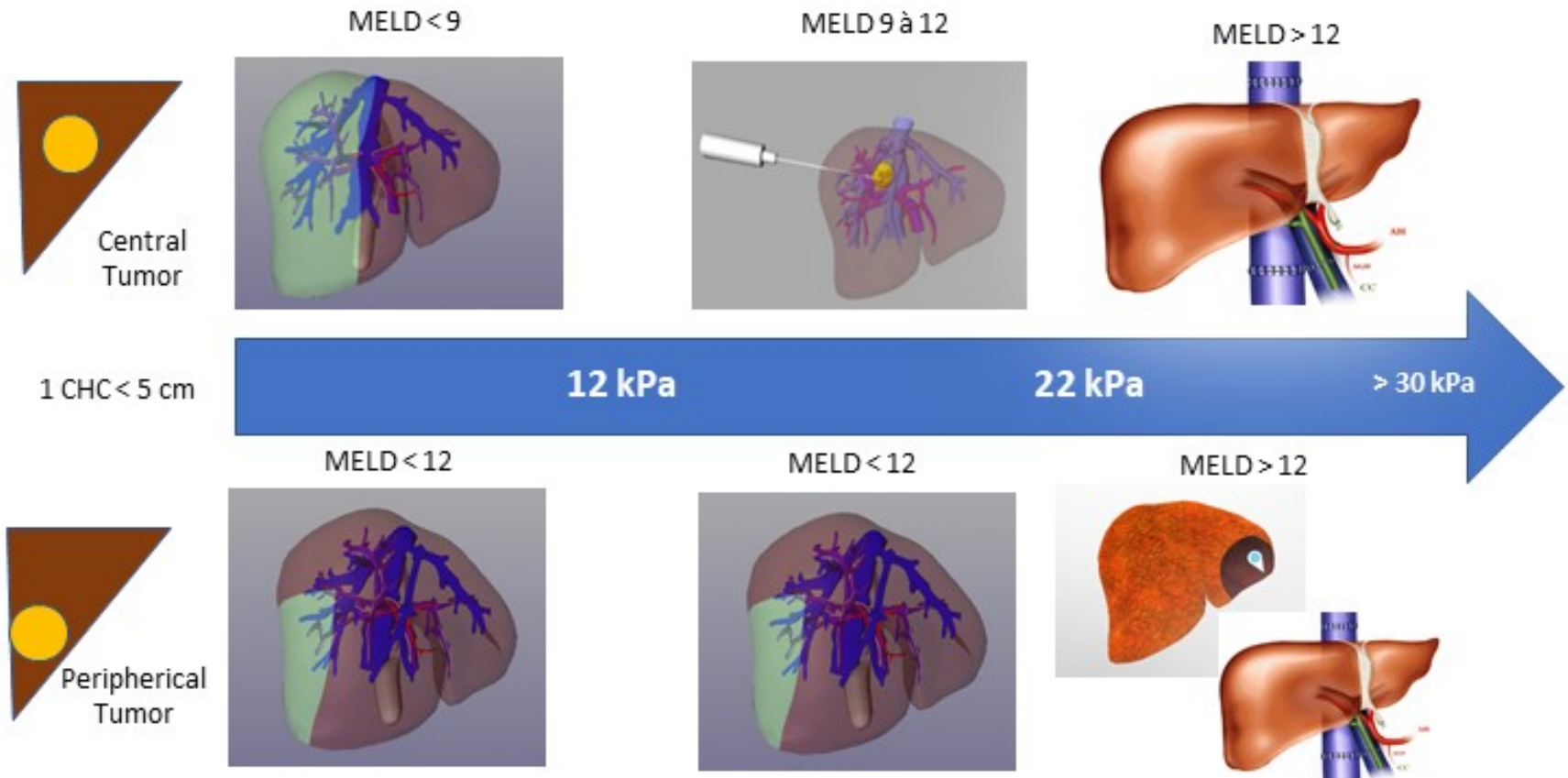
Study	LSM cut-off value(KPa)	Sensitivity (%)	Specificity (%)	BMI(Mean)	AUROC
Chong 2017	12	83	73	23.7	0.83
Donadon 2016	9.7	88.9	67.3	25.1	0.728
Li 2015	14.3	100	76.1	NA	0.915
Wong 2013	12	85.7	71.8	23.2	0.79
Cescon 2012	15.7	96.1	68.7	24.8	0.865
Kim 2008	25.6	71.4	88.6	24.0	0.824

LSM was an independent Risk Factor of mortality and po. Liver decompensation

Parameter	AUROC	95% CI	Cut-off	Se (%)	Sp(%)
LSM (kPa)	0.80	0.64 - 0.97	12	86	67
			15	43	82
			22	43	93
HVPG (mm Hg)	0.71	0.497 – 0.91	10	29	96

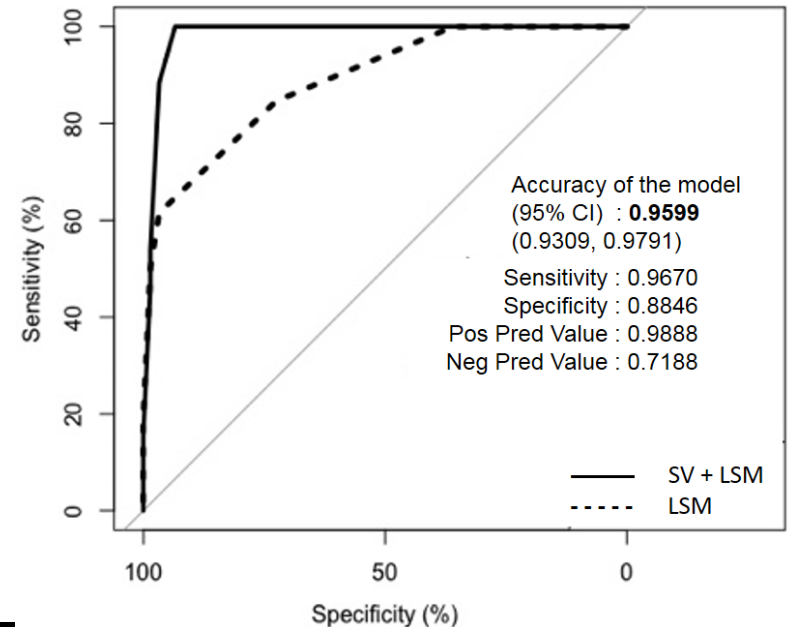
LSM was systematically measured preop. in 167 pts operated for HCC
HVPG was measured intra-operatively

12-22 kPa... Large Gray Zone...

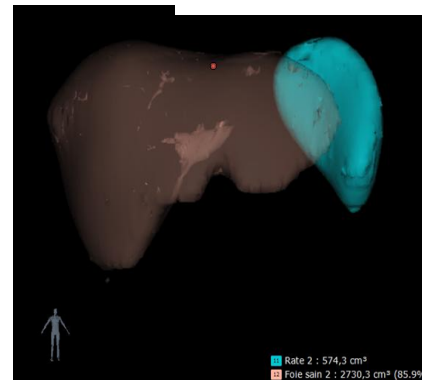
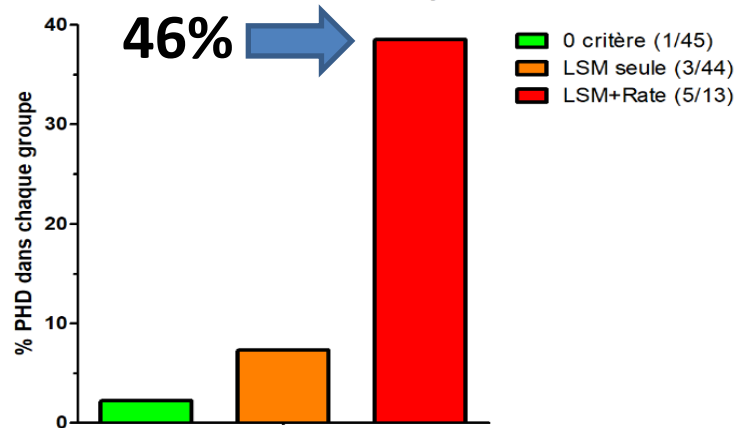


Spleen Volumetry improve stratification

Endpoint	Model Without	Model With
	Spleen Volumetry	Spleen Volumetry
PHD at 3 months AUROC (95%CI)	0.889 (0.88. 0.95)	0.983(0.98. 0.99)
Sensitivity	61.5	96.7
Specificity	96.7	93.4
Positive Predictive Value	64	59.1
Negative Predictive Value	96.4	100
p value (De Long's test)		0.0034



Risque de décompensation persistante >3mois en fonction du nombre de critères présents



> 400 cc



FIRST WORLD CONGRESS OF THE
**INTERNATIONAL
LAPAROSCOPIC
LIVER SOCIETY**

**LAPAROSCOPIC LIVER RESECTION:
FROM INNOVATION TO STANDARD
PRACTICE**

JULY 6-8 2017
**MAISON DE LA CHIMIE
PARIS - FRANCE**

Impact of **laparoscopic liver resection** in patients **with cirrhosis** on post-operative liver failure : A Propensity Score Analysis

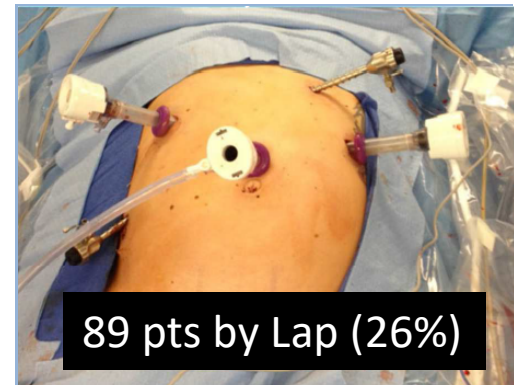
**M. Prodeau, S. Truant, E. Vibert, O. Farges, J.Y. Mabrut,
J. Hardwigsen, J.M. Régimbeau, G. Millet, O. Soubrane,
R. Adam, D. Cherqui, F.R. Pruvot, E. Boleslawski**



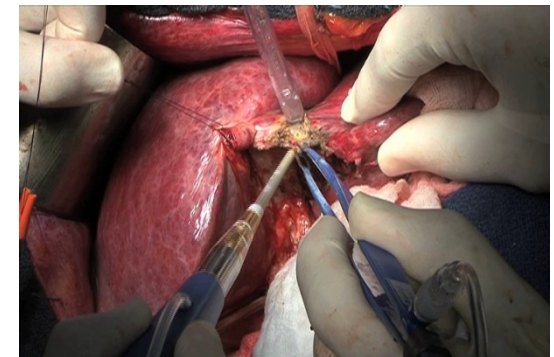
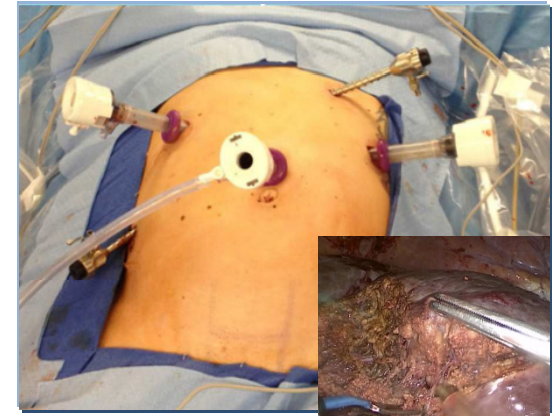
The ACHBT French
Hepatectomy
Study Group

Oct 2012 – June 2016
6 French HPB Centers

343 Hepatectomies in F3/F4



	Matched-LAP	Matched-OPEN
Age (years)	65.3	65.3
BMI (kg/m ²)	26.9	26.9
MELD	8.6	8.5
Platelets (x 1000/mm ³)	167	167
ICG (15 min)	15.2 %	15.0 %
HVPG (mmHg)	7.9	8.1
LS (kPa)	21.8	21.9
RLV (%)	88.6	87.6

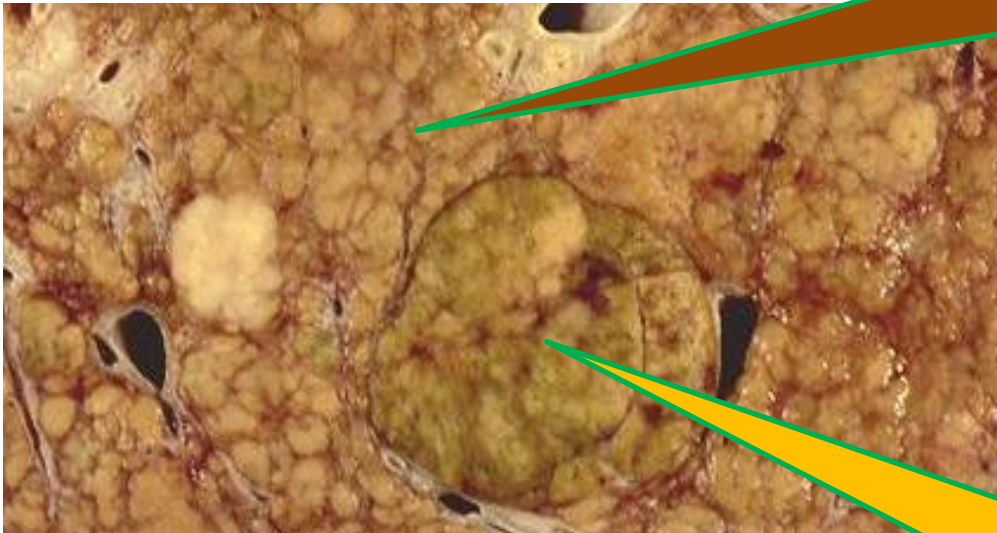


Incidence of Post-Operative Liver Failure

16% in LAP and 32% in OPEN

OR 0.31 [0.12-0.78]; $p < 0.001$

Feasibility of liver resection ?
Response in the liver...



Postop. Courses

De Novo recurrence

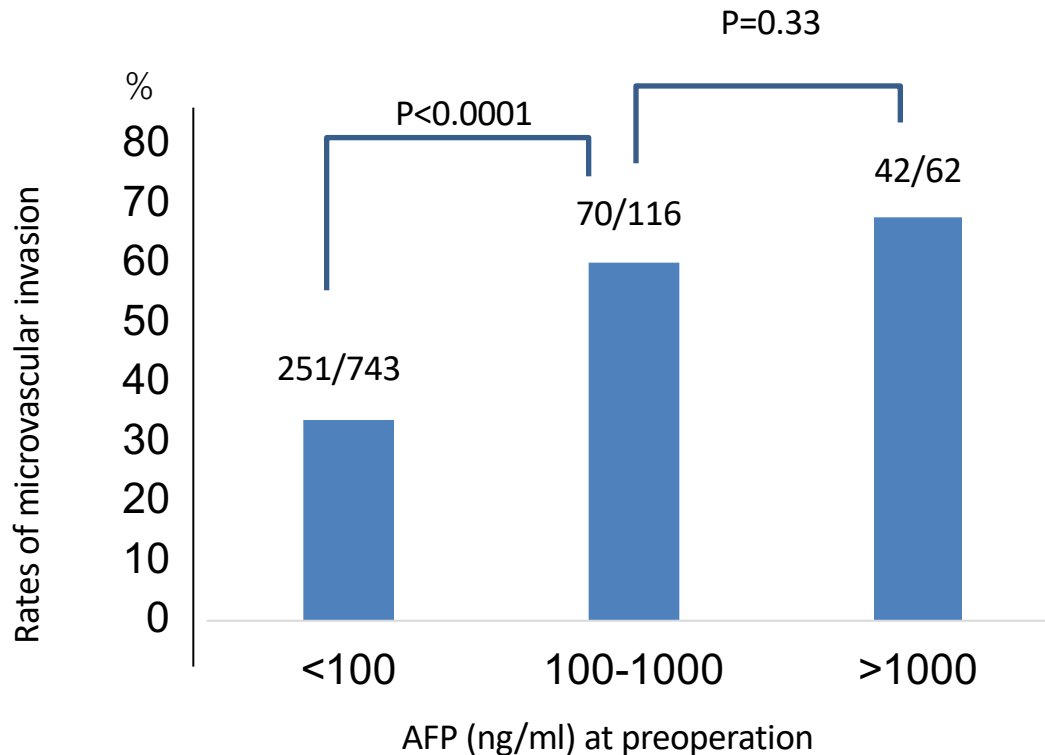
Utility of liver resection ?
Response in the cancer...

Local recurrence

Extra-hepatic Disease

AFP to evaluated HCC aggressiveness

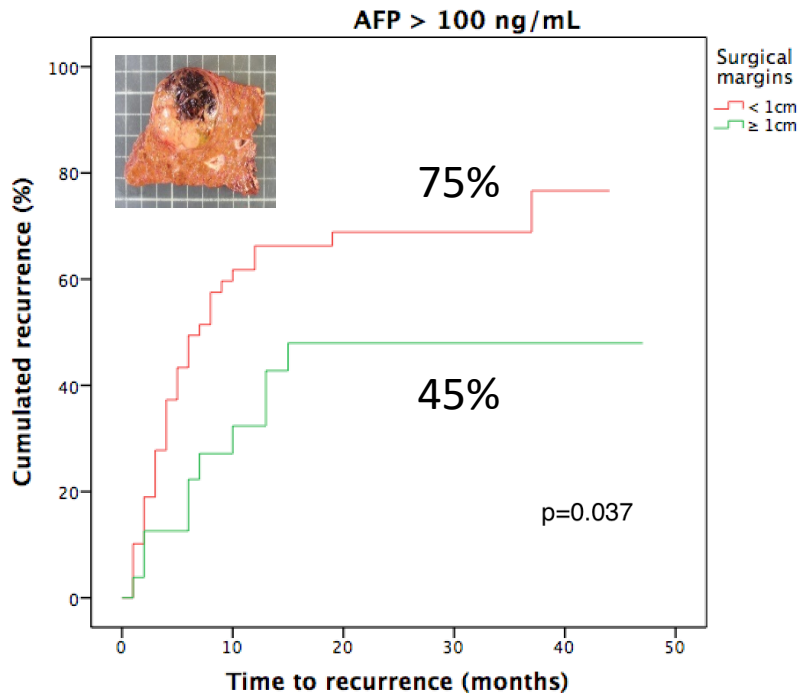
Rates of **microvascular** invasion among the patients who underwent hepatic resection or transplantation (n=921)



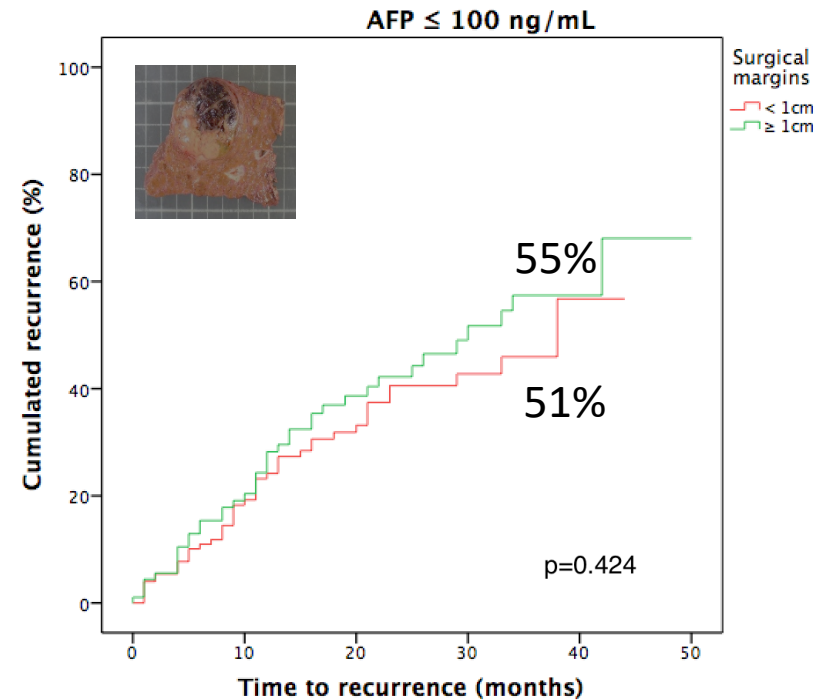
Surgical margin impact depend of preop. AFP rate

2012- 2016 : 334 pts operated for HCC in 4 HPB Centers in France

AFP > 100 : Margin > 1 cm is mandatoy



AFP < 100 : Margin > 1 cm is not mandatoy



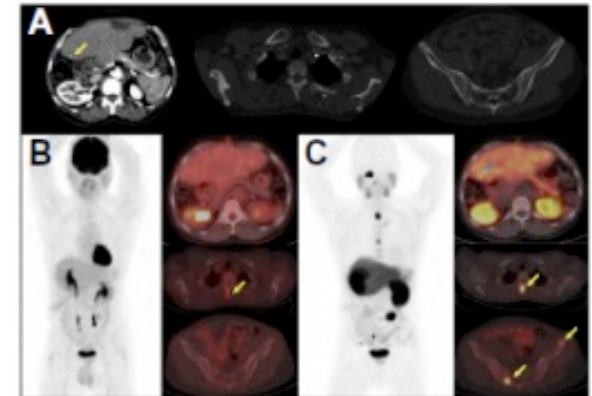
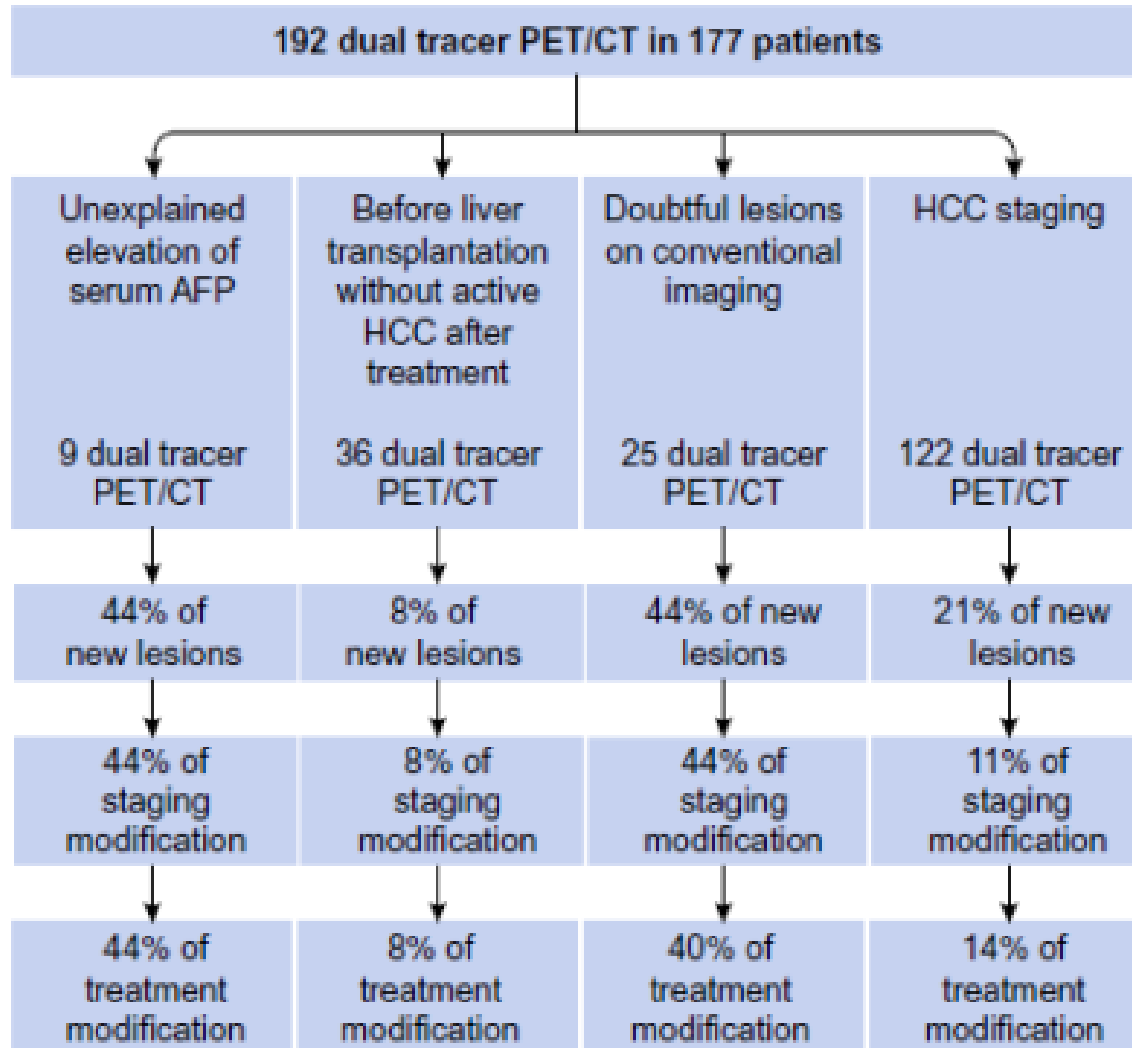
Median of Follow-up : 17 months

Golse et al., Vibert. Ann Surg Submitted

Positron emission tomography/computed tomography with 18F-fluorocholine improve tumor staging and treatment allocation in patients with hepatocellular carcinoma

Julia Chalaye^{1,†}, Charlotte E. Costentin^{2,*†}, Alain Luciani³, Giuliana Amadeo², Nathalie Ganne-Carrié^{4,5}, Laurence Baranes³, Manon Allaire⁶, Julien Calderaro⁷, Daniel Azoulay⁸, Pierre Nahon^{4,5}, Olivier Seror^{5,9}, Ariane Mallat², Michael Soussan¹⁰, Christophe Duvoux², Emmanuel Itti¹, Jean Charles Nault^{4,5,*}

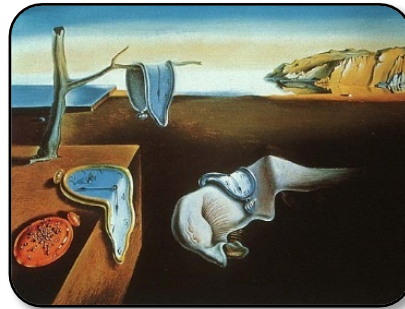
JOURNAL OF HEPATOLOGY



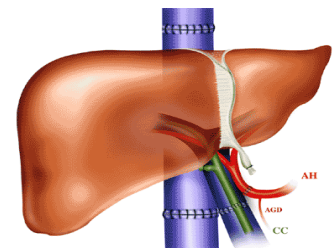
26 New Lesion : 24
Confirmed on Follow-up
1 Breast Met
1 Patient Lost of FU

14% of Clinical Consequences

Resection Then Transplantation....



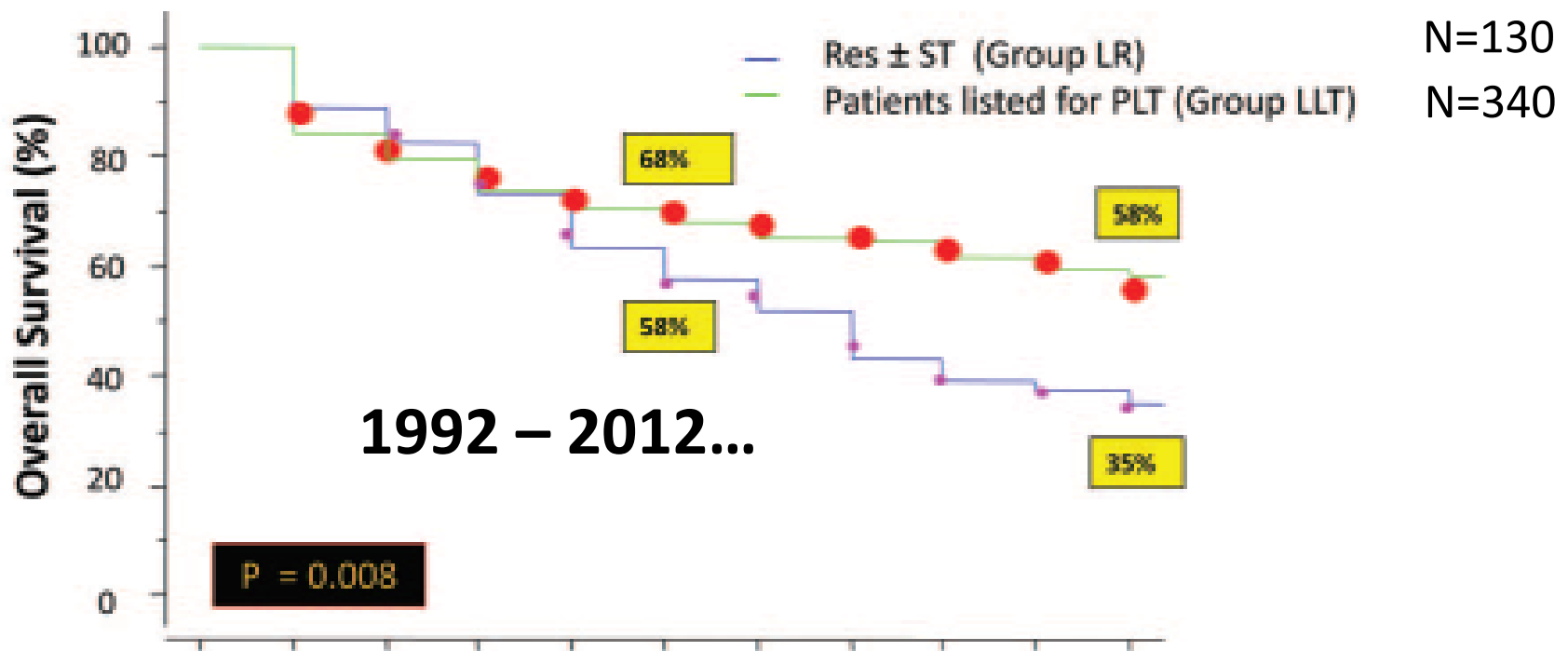
If recurrence



Salvage LT

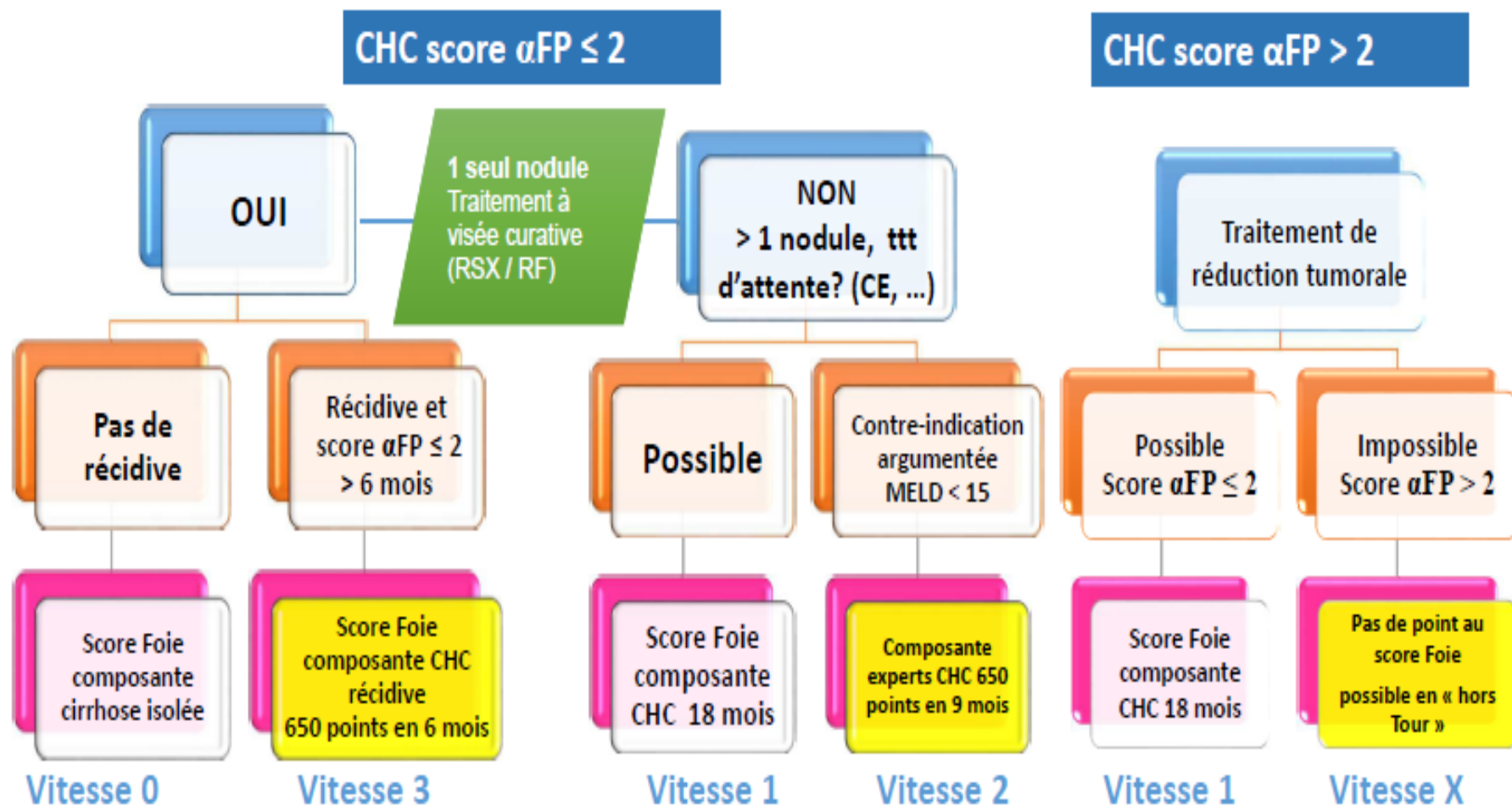
Salvage Versus Primary Liver Transplantation for Early Hepatocellular Carcinoma: Do Both Strategies Yield Similar Outcomes?

Prashant Bhangui, MD,*†‡ Marc Antoine Allard, MD,*†§ Eric Vibert, MD, PhD,*†¶ Daniel Cherqui, MD,*†¶
 Gilles Pelletier, MD,*†¶ Antonio Sa Cunha, MD,*†§ Catherine Guettier, MD,*†¶
 Jean-Charles Duclos Vallee, MD,*†¶ Faouzi Saliba, MD,*†¶ Henri Bismuth, MD,*
 Didier Samuel, MD, PhD,*†¶ Denis Castaing, MD,*†¶ and René Adam, MD, PhD*†§



Feasibility of Salvage LT : 31/90 (34%)

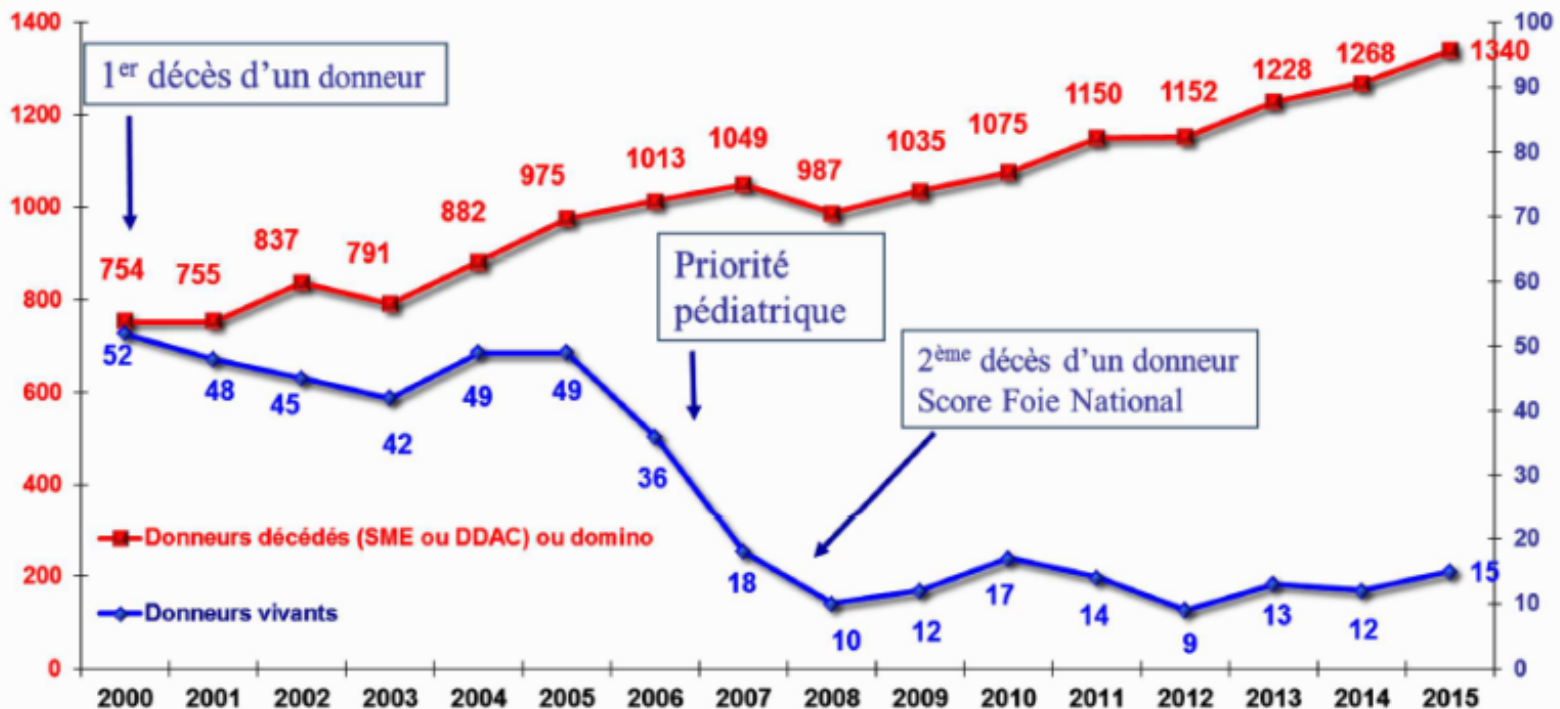
ALGORITHME DE PRIORISATION D'ACCÈS À LA GREFFE DES PATIENTS INSCRITS POUR CHC EN FONCTION LA RÉPONSE AU TRAITEMENT D'ATTENTE



13/ an

Living Donor in France....

Evolution de l'activité de greffe hépatique à partir de donneurs vivants

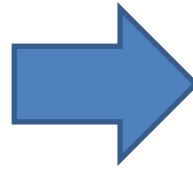


Is more justified to transplant young or old people ? For me, old people....

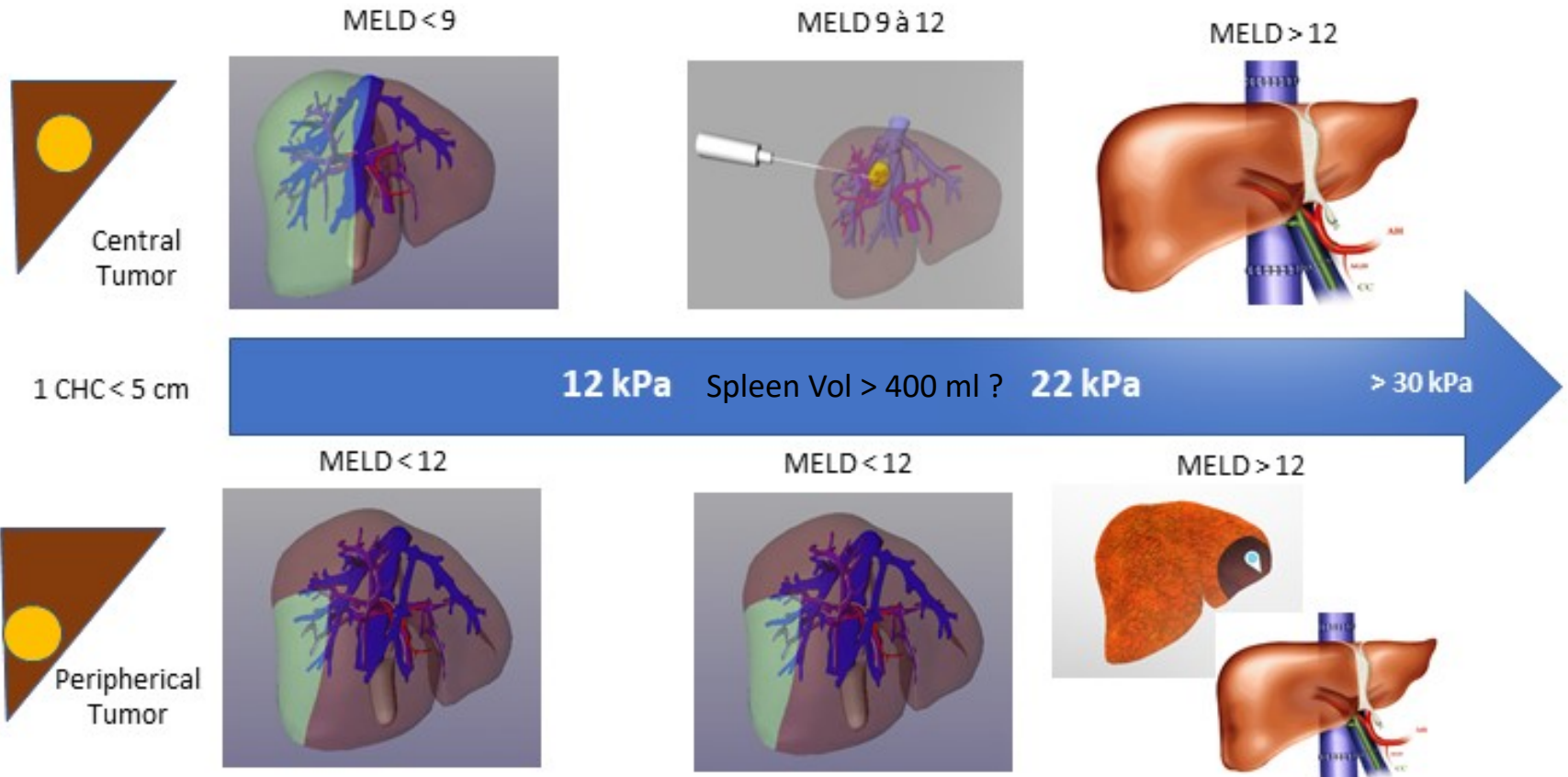


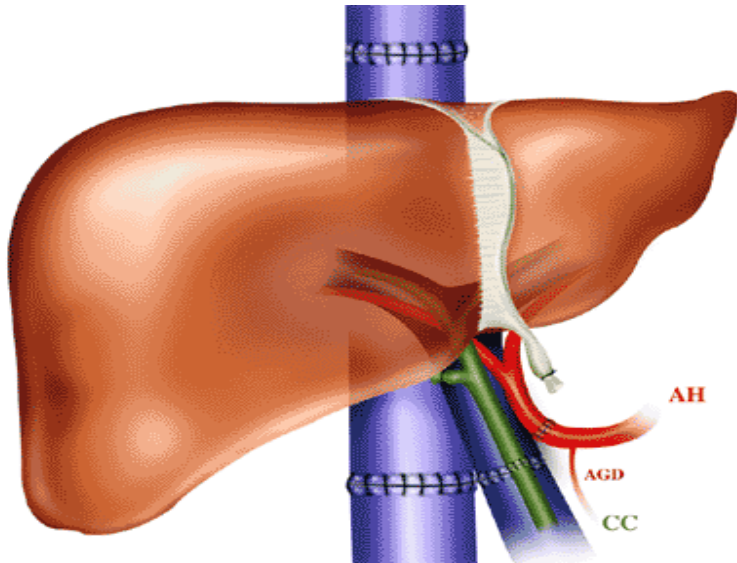
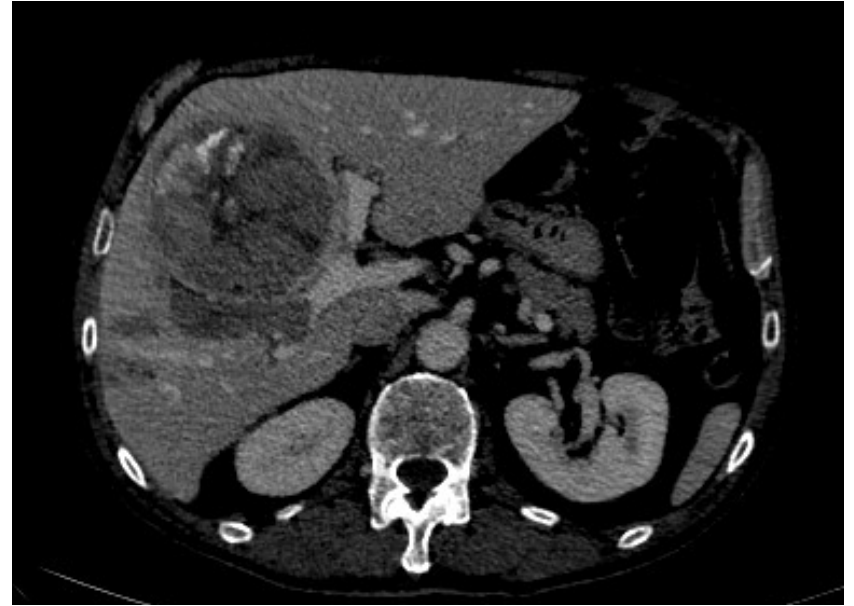
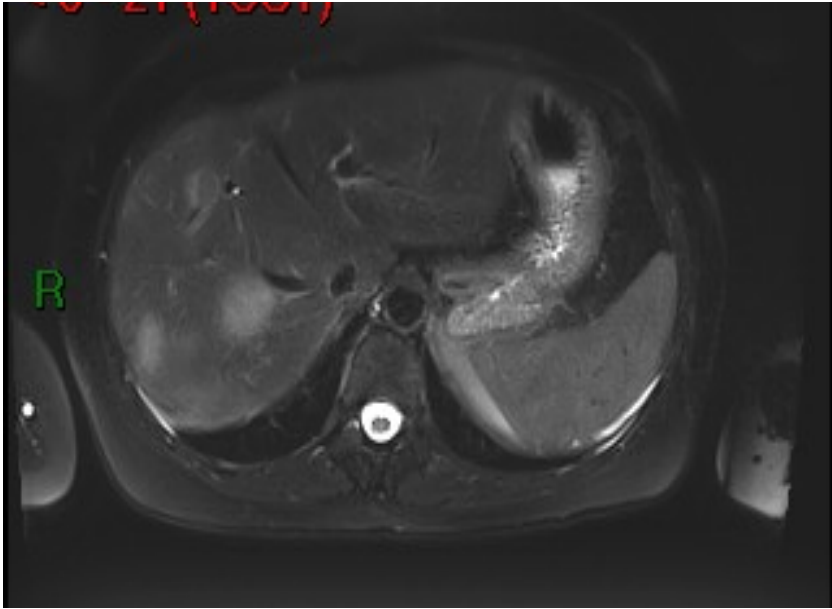
Not access to liver transplantation (>70 years) in case of liver recurrence after hepatectomy contrary to younger patient

AFP > 100 ng/ml ?





Marge > 1 cm



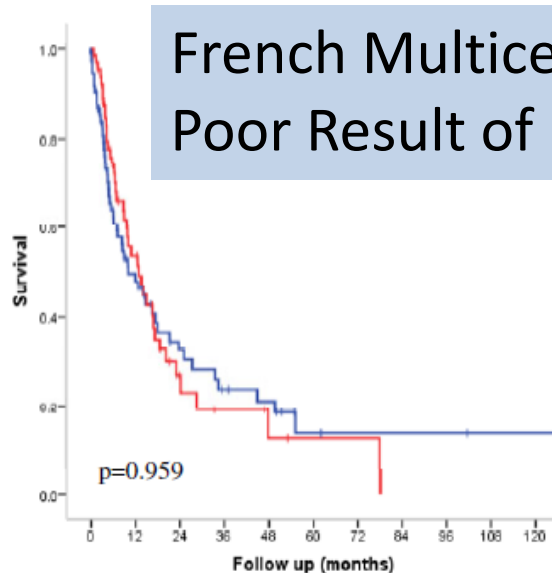


Sorafenib vs surgical resection for hepatocellular carcinoma with macrovascular invasion: A propensity score analysis

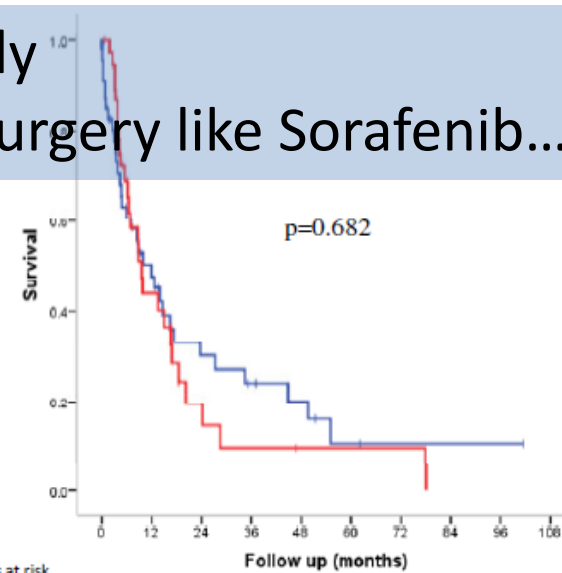
Liver International, 2017

Charlotte E. Costentin , Thomas Decaens, Alexis Laurent, Jean-Charles Nault, Bernard Paule, Christian Letoublon, Alain Luciani, Julien Calderaro, René Adam, Ivan Bricault, Giuliana Amaddeo, Daniel Cherqui, Ariane Mallat, Didier Samuel, Christophe Duvoux, Nathalie Ganne-Carrié, Françoise Roudot-Thoraval, Eric Vibert ... [See fewer authors](#) 

— resection
— Sorafenib



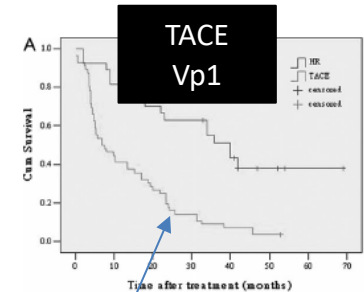
Patients at risk		0	12	24	36	48	60	72	84	96	108	120
resection	75	29	15	10	8	3	2	2	2	1	1	
sorafenib	68	26	8	4	3	1	1	0				



Patients at risk		0	12	24	36	48	60	72	84	96	108
Resection	46	19	10	7	5	2	1	1	1	1	
Sorafenib	39	12	4	2	1	1	1	1	0		

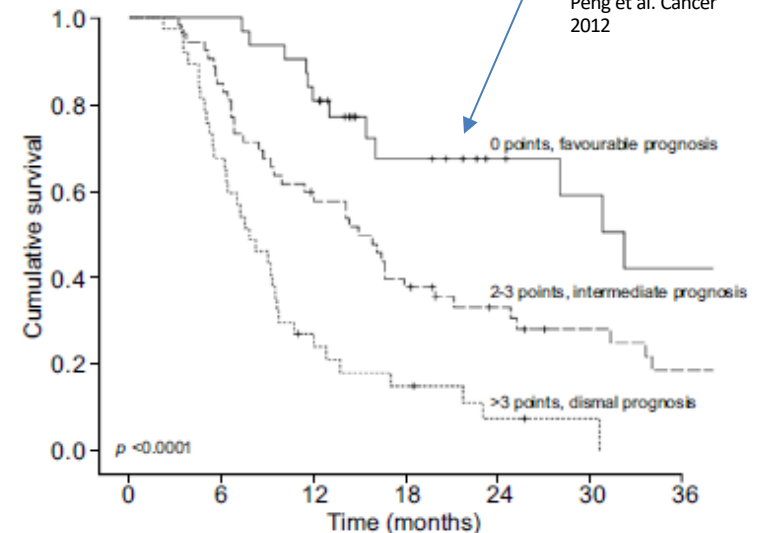
Development of a prognostic score to predict response to Yttrium-90 radioembolization for hepatocellular carcinoma with portal vein invasion

Carlo Spreafico¹, Carlo Sposito², Marta Vaiani¹, Tommaso Cascella¹, Sherrie Bhoori², Carlo Morosi¹, Rodolfo Lanocita¹, Raffaele Romito², Carlo Chiesa³, Marco Maccauro³, Alfonso Marchianò¹, Vincenzo Mazzaferro^{2,4,*}



Peng et al. Cancer 2012

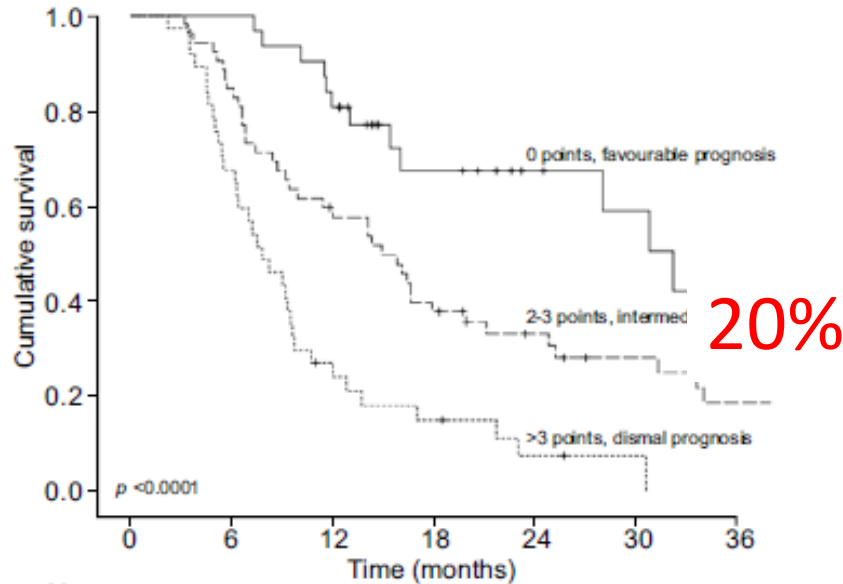
2010-2015 : 120 Malades / Dosimétrie



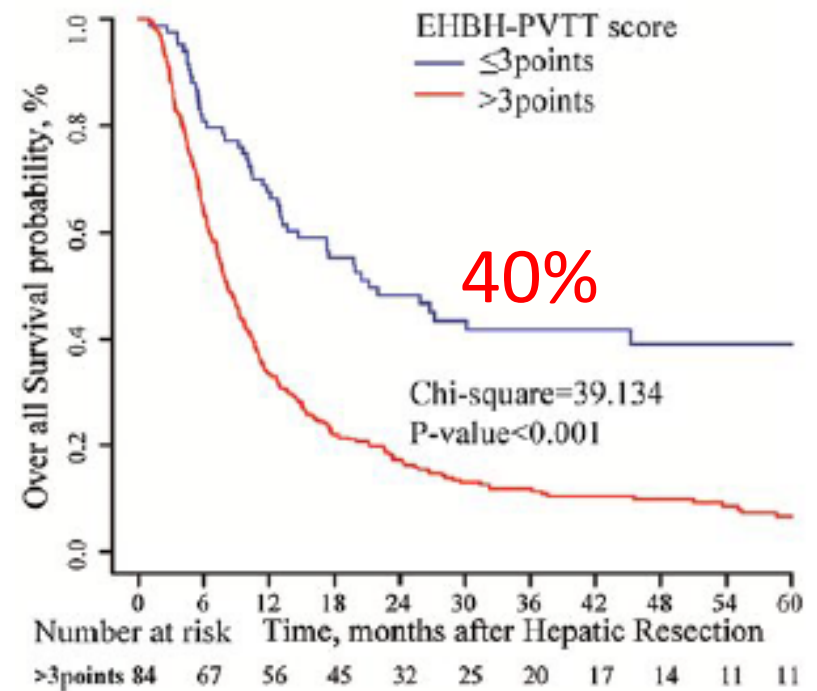
Patients at risk	0	6	12	18	24	30	36
0 points	31	30	25	14	9	7	5
2-3 points	52	44	30	19	13	9	6
>3 points	37	25	9	5	2	1	0

Variable	HR (95% CI)	p value	β	Points
Bilirubin serum level				
≤1.2 mg/dl	ref.	0.037		0
>1.2 mg/dl	1,636 (1,030-2,597)		0.492	2
PVTT extension				
PV1 (segmental)	ref.	<0.0001		0
PV2 (second order)	1,900 (1,126-3,205)		0.642	2
PV3 (main right/left)	3,017 (1,793-5,074)		1.104	3
Tumor burden				
≤50% liver volume	ref.	<0.0001		0
>50% liver volume	2,642 (1,608-4,342)		0.972	3

In Vp2/Vp3, Survival after Y90 is lower than after Upfront Surgery.... But Upfront Surgery is rare



Patients at risk	0	6	12	18	24	30	36
0 points	31	30	25	14	9	7	5
2-3 points	52	44	30	19	13	9	6
>3 points	37	25	9	5	2	1	0



An Eastern Hepatobiliary Surgery Hospital/Portal Vein Tumor Thrombus Scoring System as an Aid to Decision Making on Hepatectomy for Hepatocellular Carcinoma Patients With Portal Vein Tumor Thrombus: A Multicenter Study

Xiu-Ping Zhang,^{1,2} Yu-Zhen Gao,² Zhen-Hua Chen,¹ Min-Shan Chen,^{1,2} Le-Qun Li,^{1,2} Tian-Fu Wen,^{1,2} Li Xu,^{1,2} Kang Wang,¹ Zong-Tao Chai,¹ Wei-Xing Guo,¹ Jie Shi,¹ Dong Xie,¹ Meng-Chao Wu,^{1,2} Wan Yee Lau,^{1,2} and Shu-Qun Cheng^{1,2}

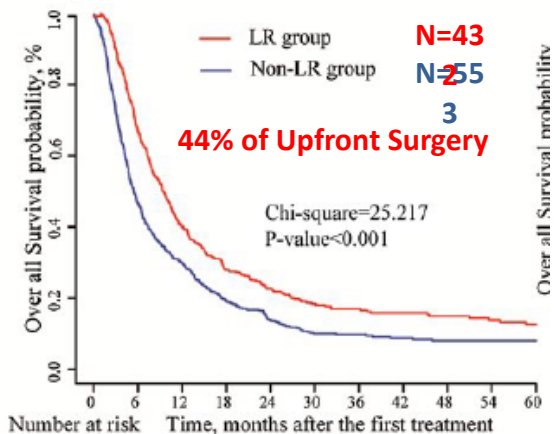
HEPATOLOGY, VOL. 69, NO. 5, 2019

67 pts / 985 pts

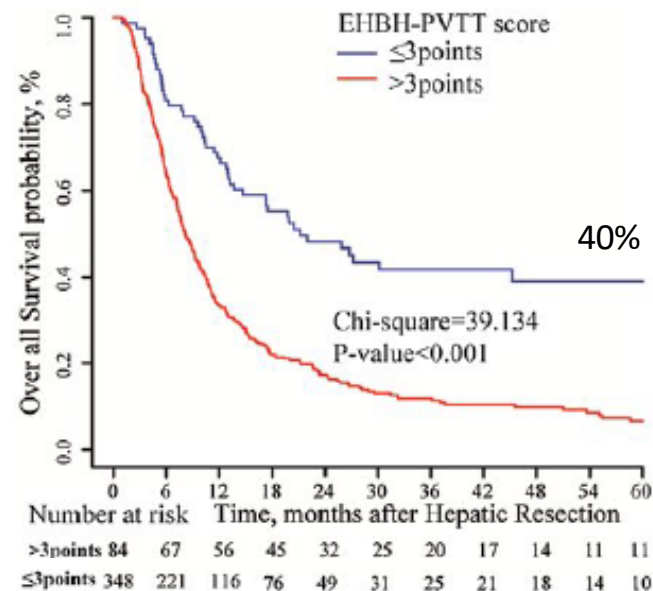
Only 6.8% of Patients with EHBH-PVTT < 3 pts

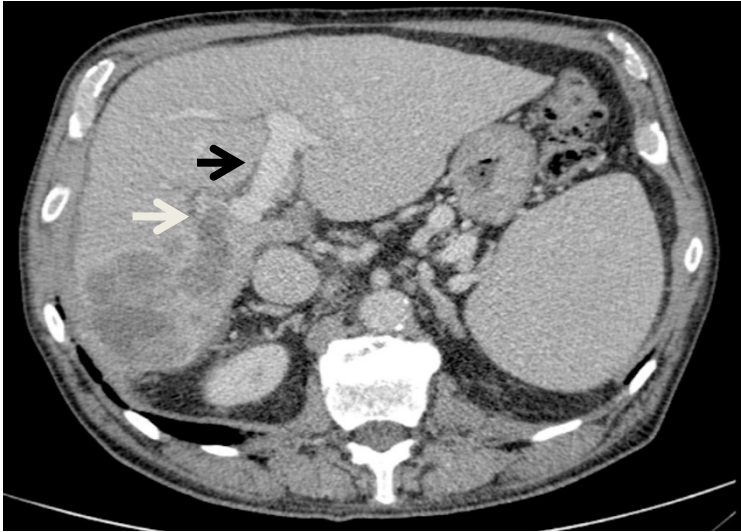


2004-2010 : 985 pts with HCC with Sectorial and/or Pedicular TVP



Variable	Cut-off	Points
Bilirubin	> 17 μmol/L	1
AFP	< 20 ng/ml	0
	20 – 400	1
	> 400 ng/ml	2
Diameter	< 3 cm	0
	3 – 5	1
	> 5 cm	2
Satellite Nodules	No	0
	Yes	1

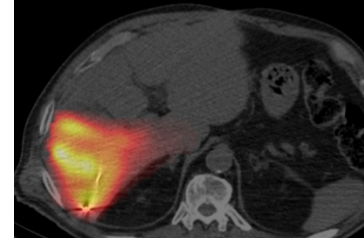




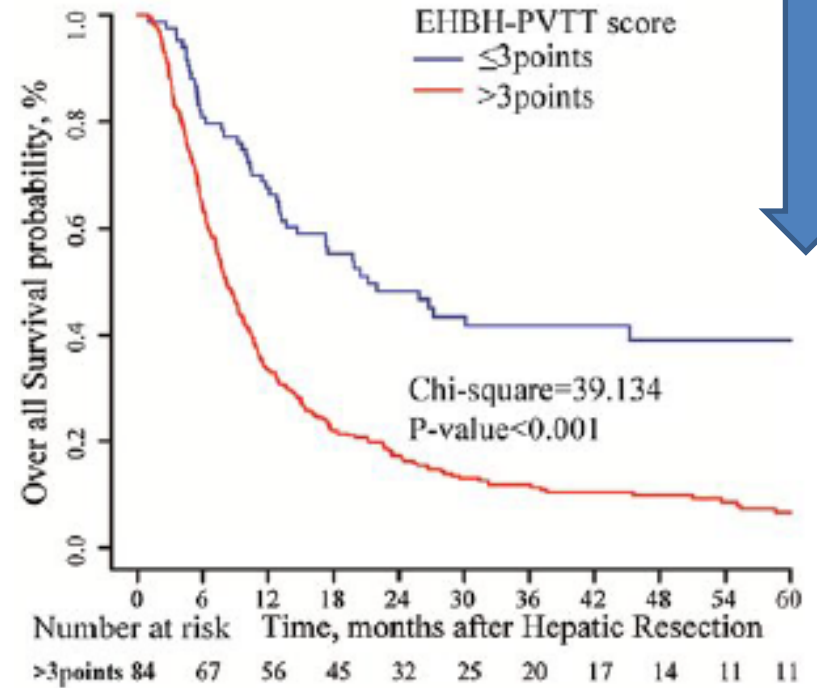
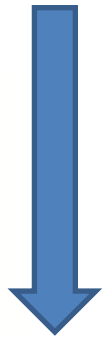
CHC 6 cm – VP2

AFP 2300 ng/ml

EHBH – PVTT Score = 4



**EHBH- PVT
Score < 3**



Bi-Centric Exp with Surgery after Y90

10 pts with Large Tumor with or not PVT

SEX	AGE	SIZE (cm)	TVP	AFP	SURGERY	PO Course	FOLLOW-UP	RECURRENT	SURVIVAL	SURVIVAL (MONTHS)
F	81	9	Vp0	34	Major Hep	Nle	15/07/19	YES (Liver)	YES	46
M	74	10	Vp0	7	Major Hep	Chylous fistula	19/06/19	YES (Liver)	YES	36
M	66	9	Vp0	8.5	Major Hep	Nle	13/06/19	NO	YES	28
M	66	9	Vp0	8.5	Major Hep	Nle	13/06/19	NO	YES	28
F	60	6	Vp2		Major Hep	Nle	20/08/19	NO	YES	30
M	58	5	Vp2		Minor Hep	Nle	25/01/19	NO	YES	43
M		7	Vp3	3337	Major Hep	Nle	14/10/17	YES (Liver)	NO	12
M		9	Vp3	115	Major Hep	Nle	05/06/18	YES (Liver)	NO	57
M		11	Vp4	3761	Major Hep	Biliary fistula	28/06/19	YES (Chest)	YES	39
F		16	Vp3	21300	Major Hep	Nle	12/07/19	NO	YES	31

