TRATAMENTO CIRÚRGICO DO CARCINOMA HEPATOCELULAR

INCA

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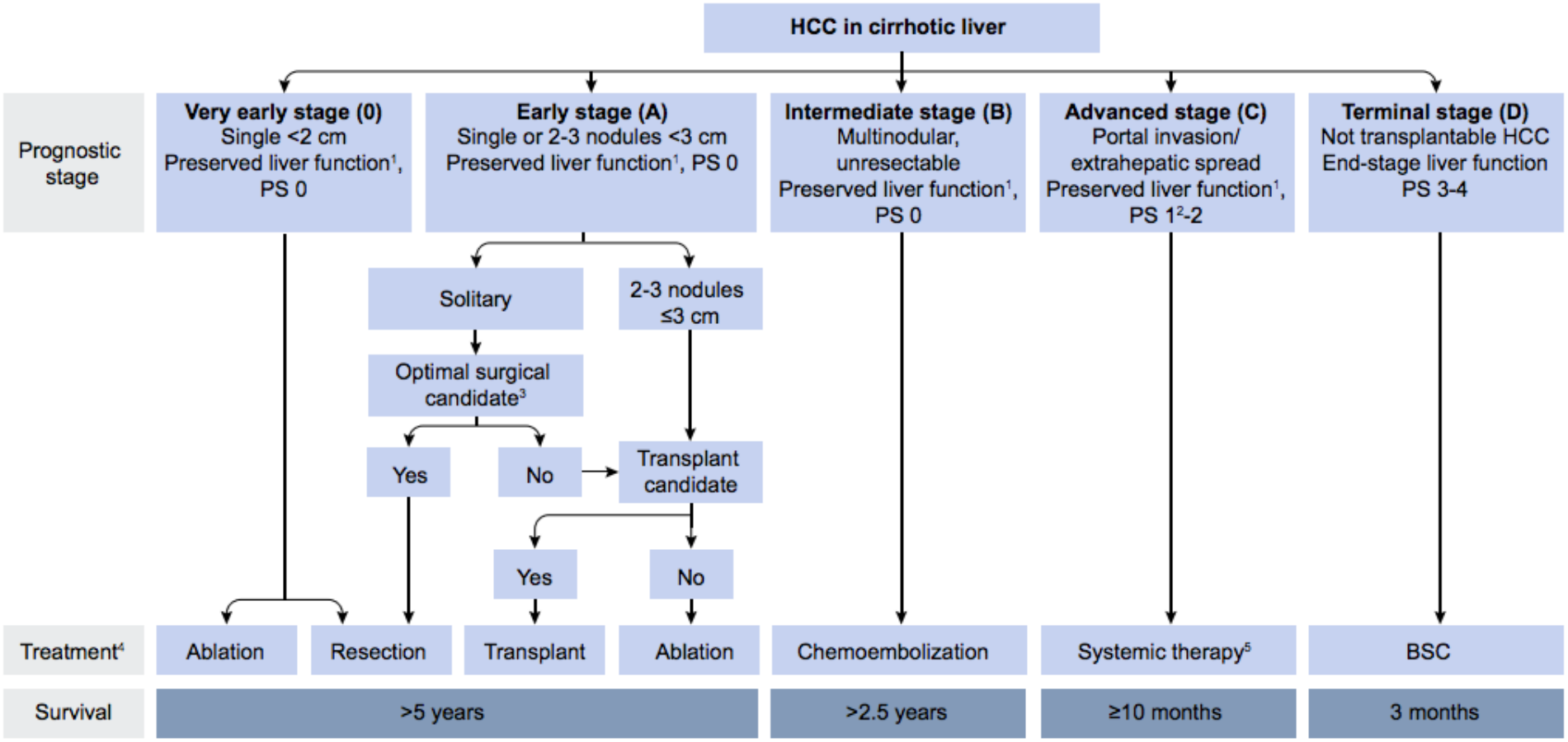
Universidade Federal do Maranhão - Brasil

Clinical Practice Guidelines

JOURNAL OF HEPATOLOGY

EASL Clinical Practice Guidelines: Management of hepatocellular carcinoma☆



Galle PR. et al. J Hepatol 2018 ;69 :182–236

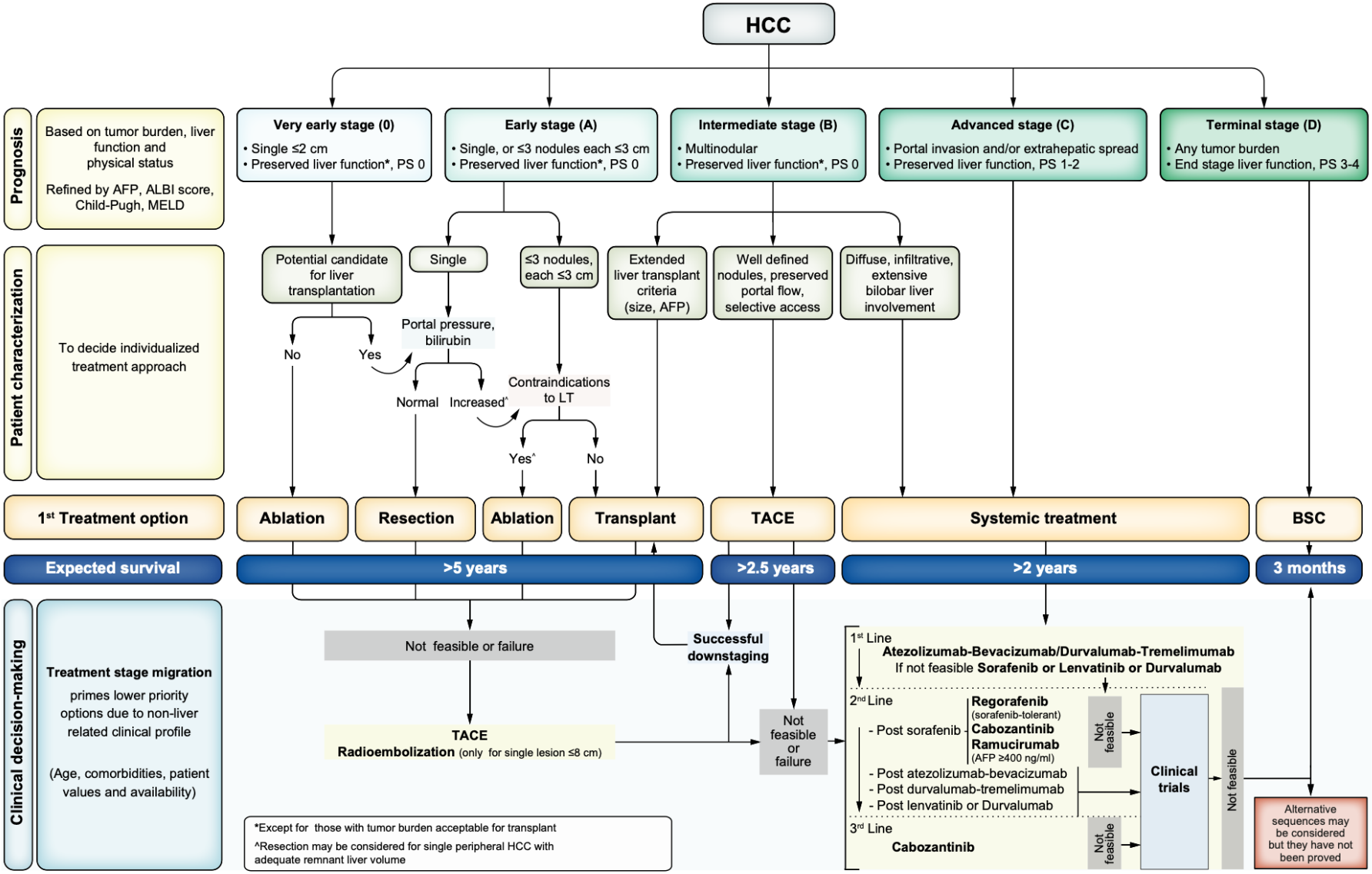
Review

JOURNAL
OF HEPATOLOGY

BCLC strategy for prognosis prediction and treatment recommendation: The 2022 update ☆

Maria Reig[1,2,*,†], Alejandro Forner[1,2], Jordi Rimola[3], Joana Ferrer-Fàbrega[4], Marta Burrel[5], Ángeles Garcia-Criado[3], Robin K. Kelley[6], Peter R. Galle[7], Vincenzo Mazzaferro[8], Riad Salem[9], Bruno Sangro[2,10], Amit G. Singal[11], Arndt Vogel[12], Josep Fuster[2,4], Carmen Ayuso[2,3], Jordi Bruix[1,2,*,†]

Reig M. et al. J Hepatol 2022;76 :681–93



Reig M. et al. J Hepatol 2022;76 :681–93

Carcinoma hepatocelular

Cirurgia	Terapia ablativa local	Terapia loco-regional	Terapia sistêmica
Ressecção*	Radiofrequência	Terapia transcateter	Quimioterapia
Transplante*	Alcoolização	Quimio-lipiodolização	Hormonioterapia
	Ácido acético	TACE	Imunoterapia
	Microondas	TACE-DEB	Terapia alvo
	Crioablação	TAE	
	Eletroporação	Radioterapia	
	Terapia fotodinâmica	TARE	

Child-Pugh

Clinical and biochemical parameters	Points 1	2	3
Albumin (g/dL)	>3.5	2.8–3.5	<2.8
Bilirubin (mg/dL)	<2	2–3	>3
Prothrombin time			
Seconds prolonged	<4	4–6	>6
%	>60	40–60	<60
INR	<1.7	1.7–2.3	>2.3
Encephalopathy	Absent	Moderate (Stage I–II)	Severe (Stage III–IV)
Ascites	Absent	Moderate	Refractory

Total points: 5–6 points, Child–Pugh A; 7–9 points, Child–Pugh B; 10–15 points, Child–Pugh C

Child-Pugh

MELD Score

- **Bilirrubina**
- **Creatinina**
- **INR**

MELD score

Carcinoma hepatocelular

Cirurgia	Terapia ablativa local	Terapia loco-regional	Terapia sistêmica
Ressecção*	Radiofrequência	Terapia transcateter	Quimioterapia
Transplante*	Alcoolização	Quimio-lipiodolização	Hormonioterapia
	Ácido acético	TACE	Imunoterapia
	Microondas	TACE-DEB	Terapia alvo
	Crioablação	TAE	
	Eletroporação	Radioterapia	
	Terapia fotodinâmica	TARE	

*Sobrevida em 5 anos de 60-80%

RESSECÇÃO

Fígado não cirrótico

- ❑ **Primeira linha de tratamento**

Fígado cirrótico *

- ❑ **Função hepática preservada**
- ❑ **Sem sinais de hipertensão porta significante**
- ❑ **Sem doença extra-hepática**
- ❑ **Sem invasão vascular**

***Apenas 10-20% são candidatos**

Cirrótico *vs* Não cirrótico

Lim et al. Br J Surg 2012

Liver resection

Recommendations

- Surgical resection is recommended as treatment of choice in patients with HCC arising on a non-cirrhotic liver (**evidence low; recommendation strong**).

Galle PR, et al. J Hepatol 2018 ;69 :182–236

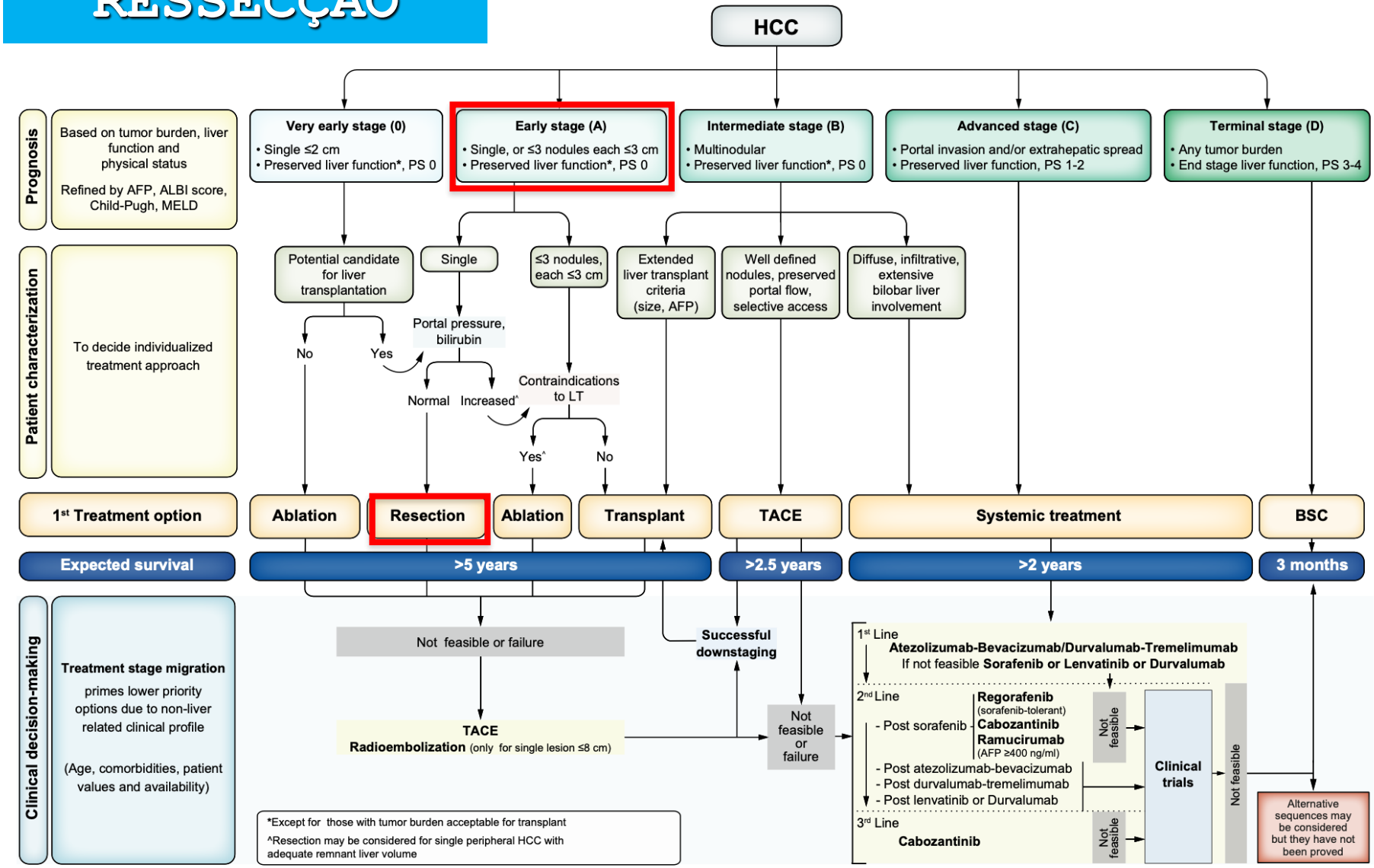
Ressecção do carcinoma hepatocelular

❑ Recorrência

Até 75% dos pacientes em 5 anos pós ressecção

- ❑ **Metástase do tumor primário original**
- ❑ **Tumor de novo (predisposição pela cirrose)**

RESSECÇÃO



Reig M. et al. J Hepatol 2022;76 :681–93

EVOLUÇÃO DA CIRURGIA DO FÍGADO

- Manuseio peri-operatório
- Seleção do paciente
- Refinamento da técnica
- Redução da mortalidade
- Cirurgia minimamente invasiva

*Mortalidade peri-operatória de 3-5% em centros de grande volume

RESSECÇÃO HEPÁTICA

- **MELD score < 9**
- **Child-Pugh A**
- **Ausência de HP significante**

≤

- **Ressecabilidade do tumor**

Tamanho
Número
Localização
Envolvimento microvascular

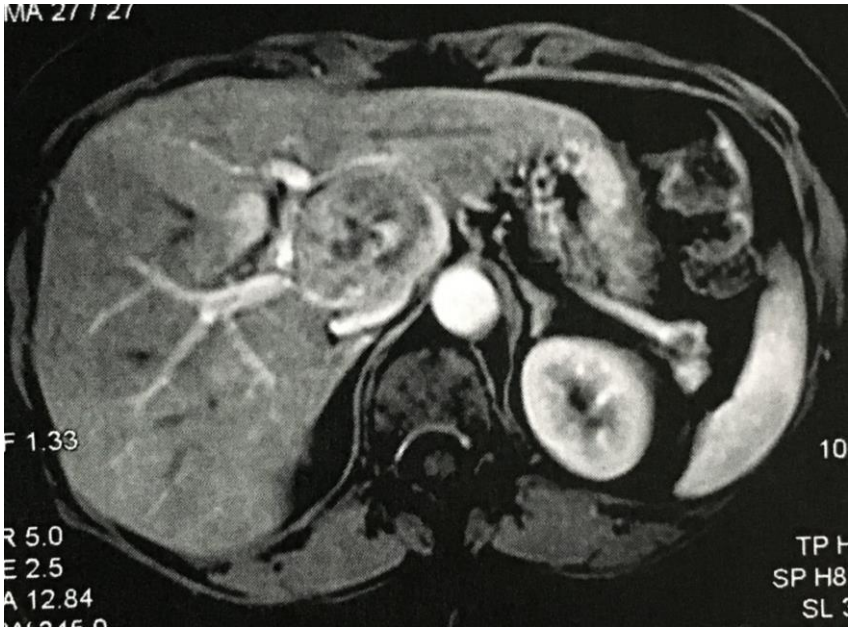
- **Estado geral preservado**

Scatton O, et al. J Surg Oncol 2015; 111:1007-15

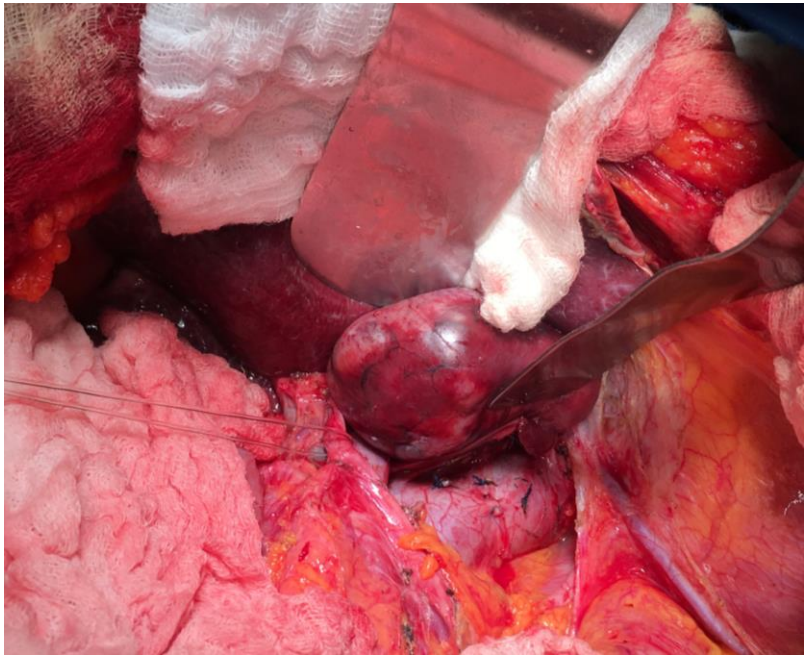
HIPERTENSÃO PORTA

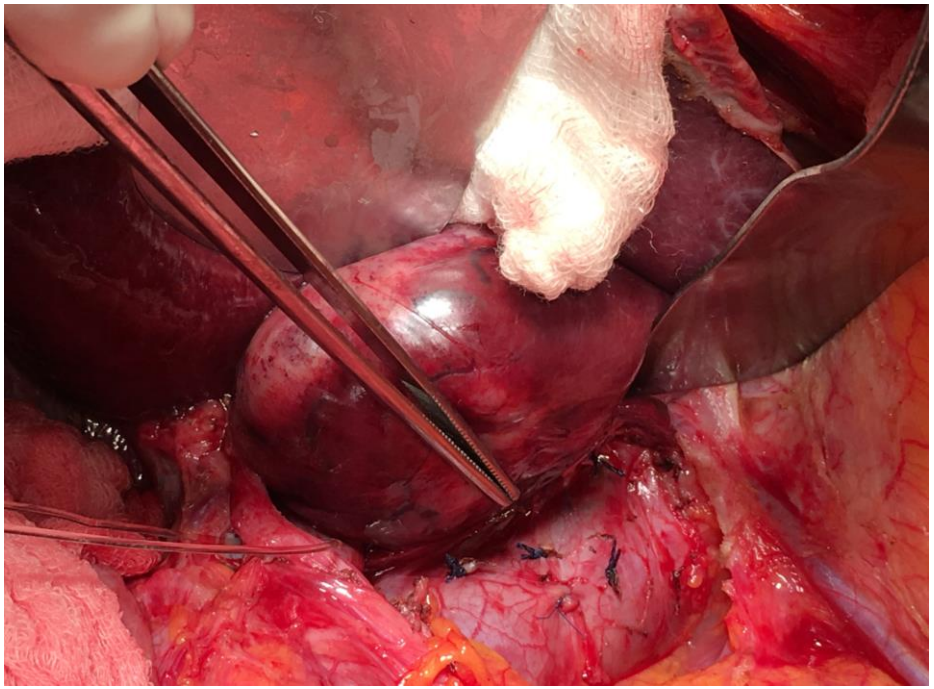
- Plaquetas < 100.000
- Esplenomegalia
- Varizes esofagogástricas (endoscopia)
- Gradiente da pressão venosa hepática < 10 mmHg

Hipertensão porta



F, feminino, 70 a,
CHC em lobo caudado
Fígado normal
Child A5, MELD 8
Sem hipertensão porta



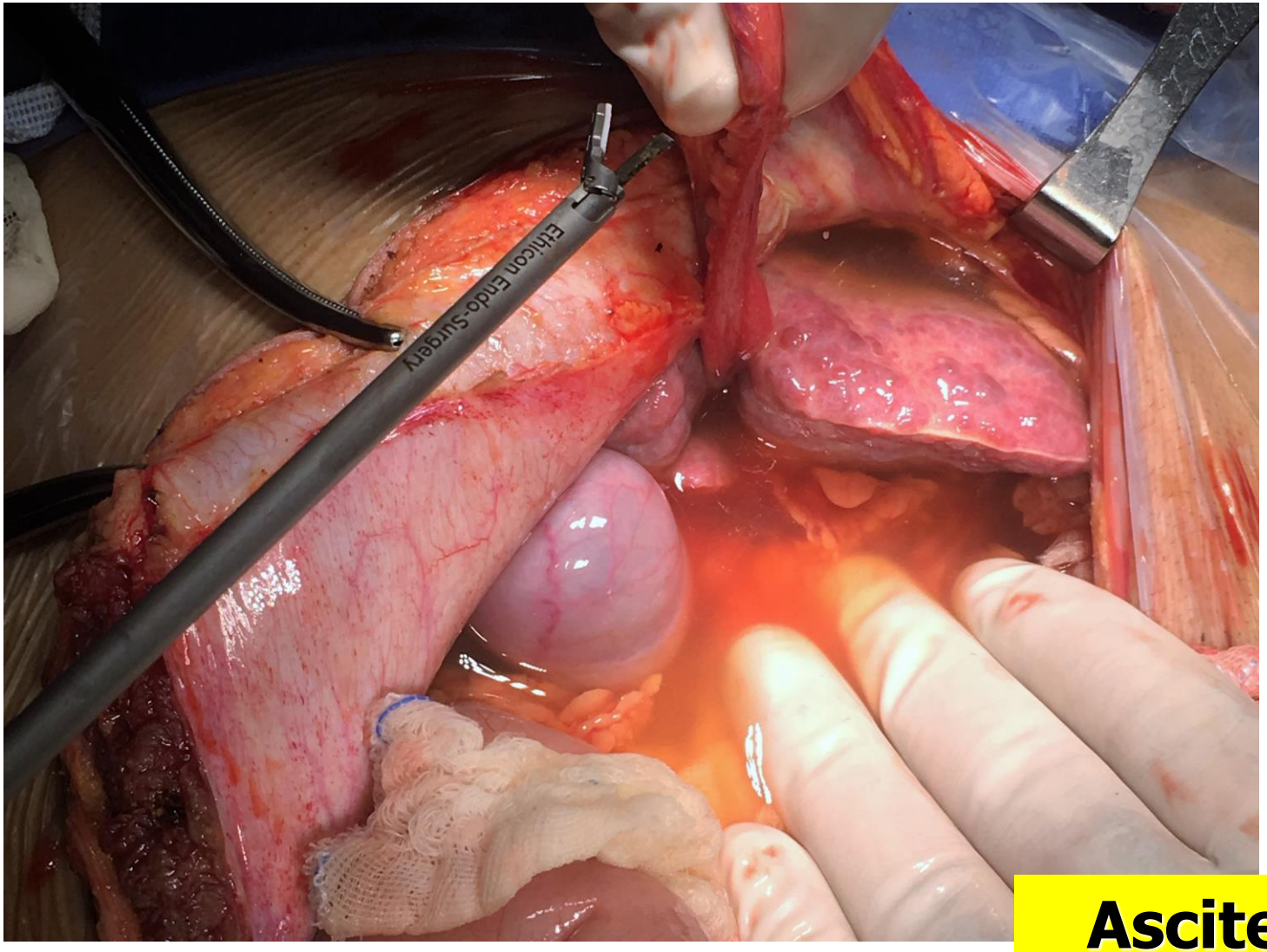


Cirurgia:
Ressecção de lobo caudado
Evolução satisfatória
Alta sem intercorrências

MD Anderson Cancer Center

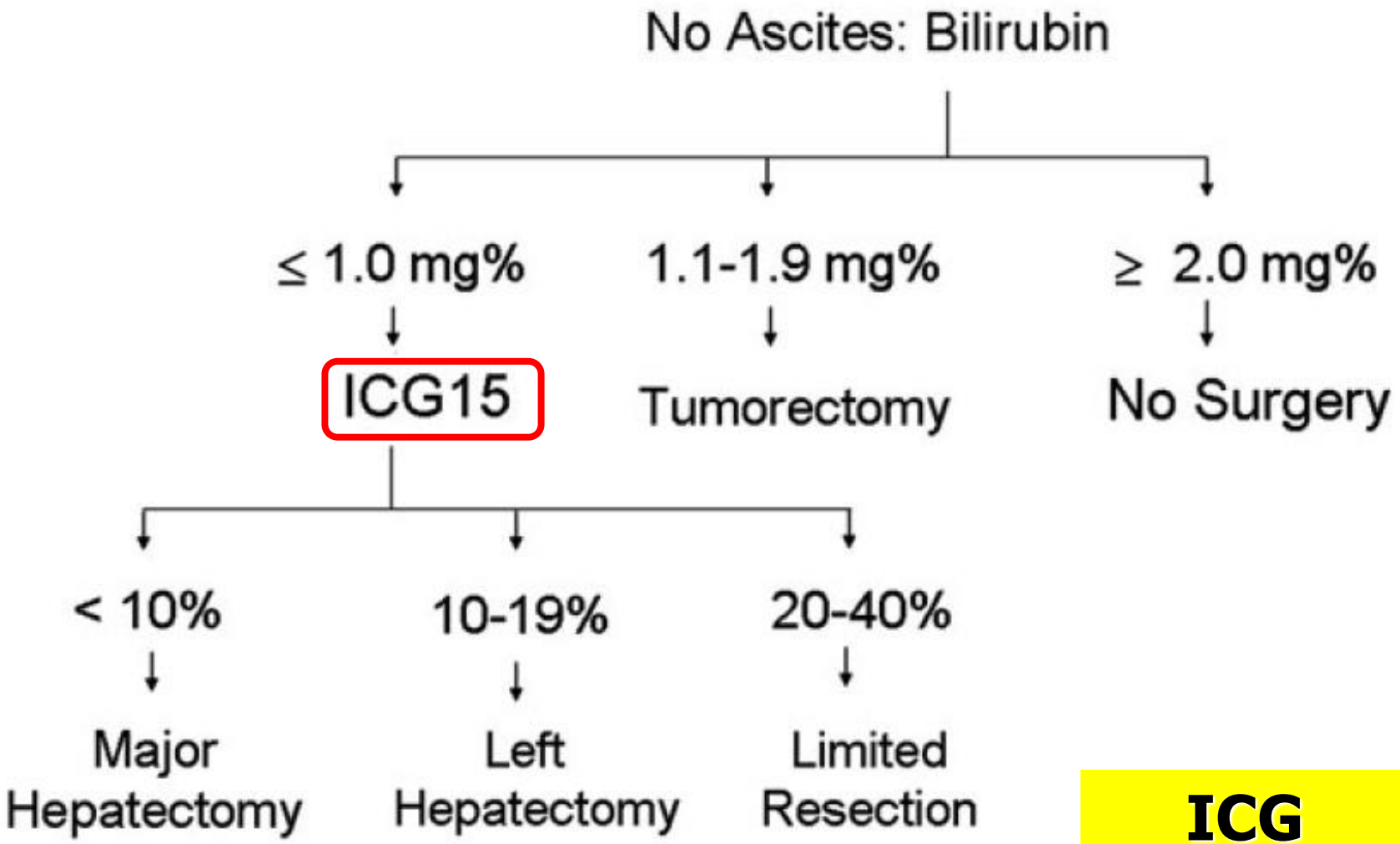
Resection	Criteria
Minor	Child–Pugh A
	Bilirubin $\leq$ 2 mg/dL
	Absence of ascites
	Platelets > 100.000/mm3
Major	Criteria for minor resection plus:
	Bilirubin $\leq$ 1 mg/dL
	Absence of portal hypertension
	Portal vein embolization for future liver remnant of < 40%

Ausência de ascite



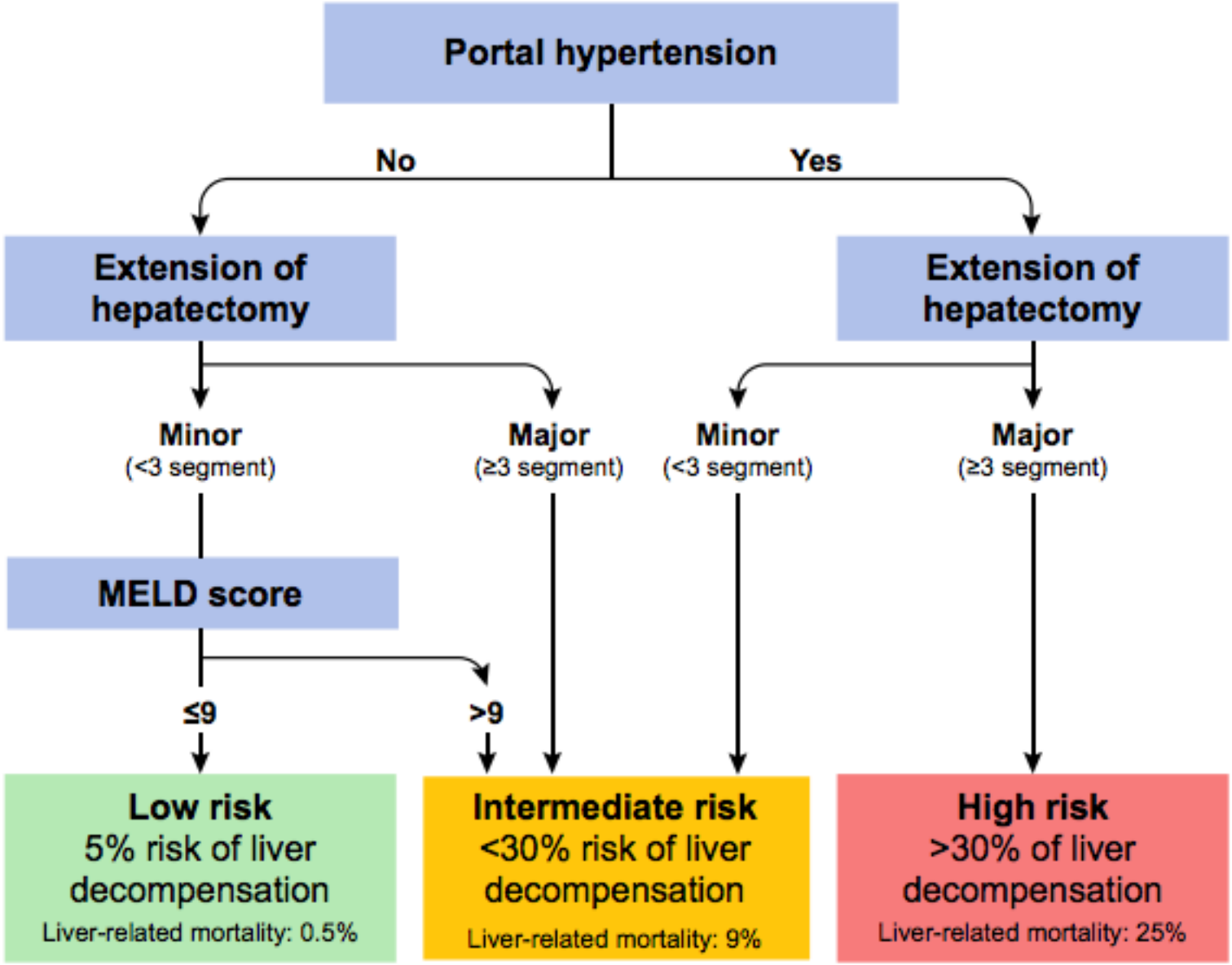
Ascite

Verde de Indocianina

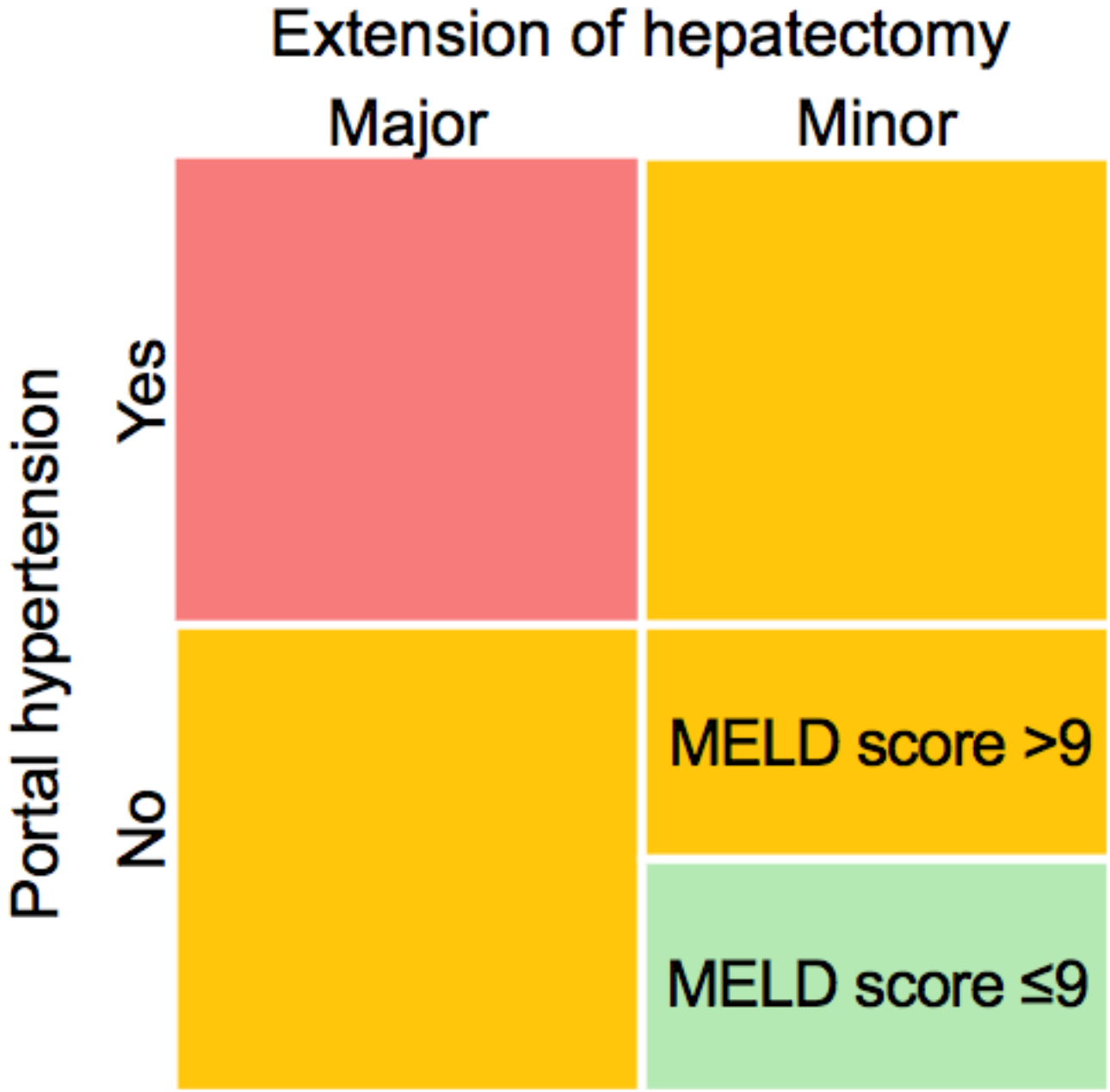


ICG

Yin L, et al. J Hepatol. 2014;61:82–8



Galle PR. et al. J Hepatol 2018 ;69 :182–236



Galle PR. et al. J Hepatol 2018 ;69 :182–236

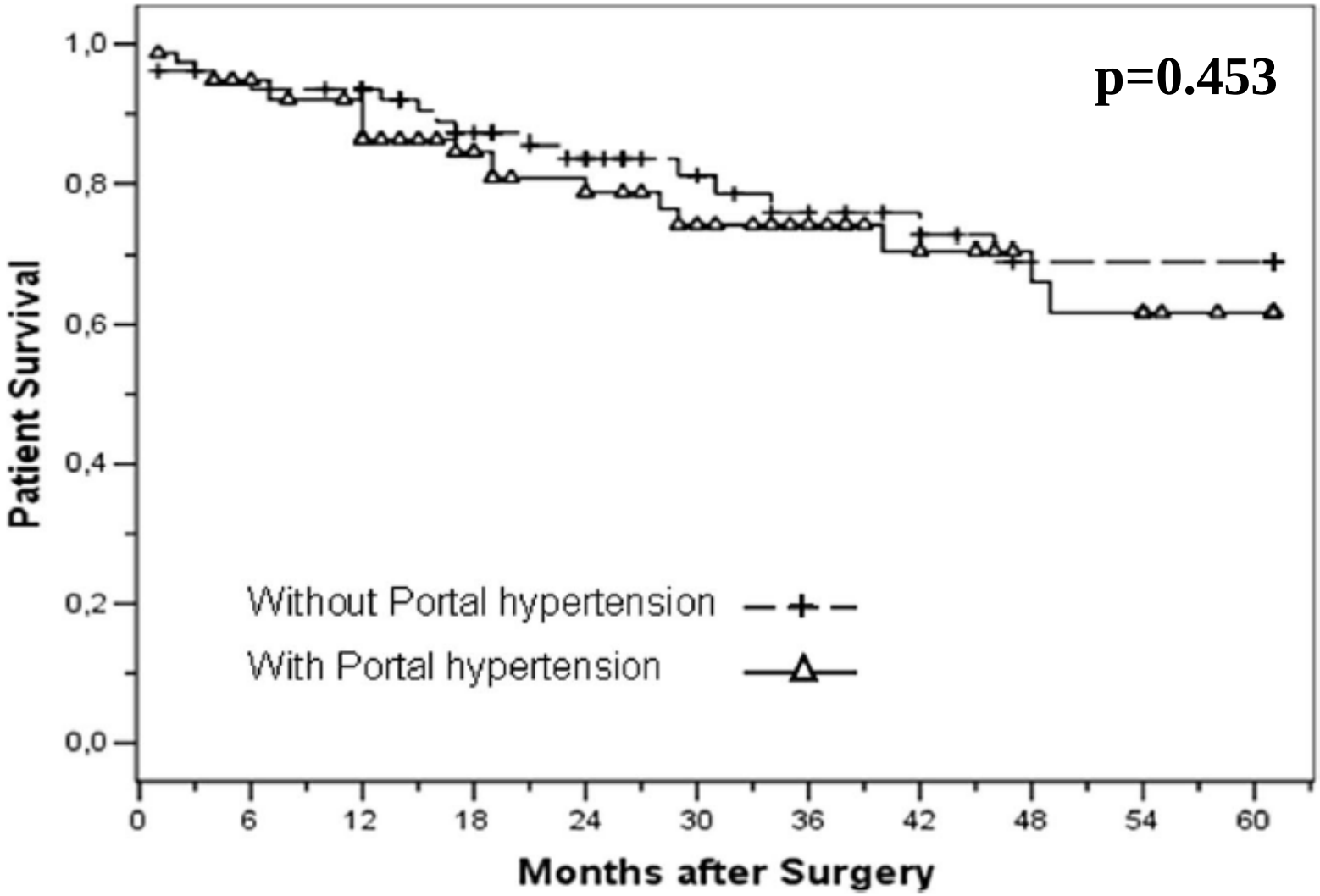
Is Portal Hypertension a Contraindication to Hepatic Resection?

Alessandro Cucchetti, MD, Giorgio Ercolani, MD,* Marco Vivarelli, MD,* Matteo Cescon, MD,* Matteo Ravaioli, MD,* Giovanni Ramacciato, MD,† Gian Luca Grazi, MD,* and Antonio Daniele Pinna, MD**

Background and Aims: The outcome of hepatic resection in cirrhotic patients has improved remarkably in recent years with improved surgical techniques and perioperative care; however, the role of portal hypertension is

trying to define the role of each therapeutic option. They reported well-defined indications for hepatectomy for HCC; in particular, portal hypertension was considered as a contraindication for liver

Cucchetti A, et al. Ann Surg 2009;250: 922-8

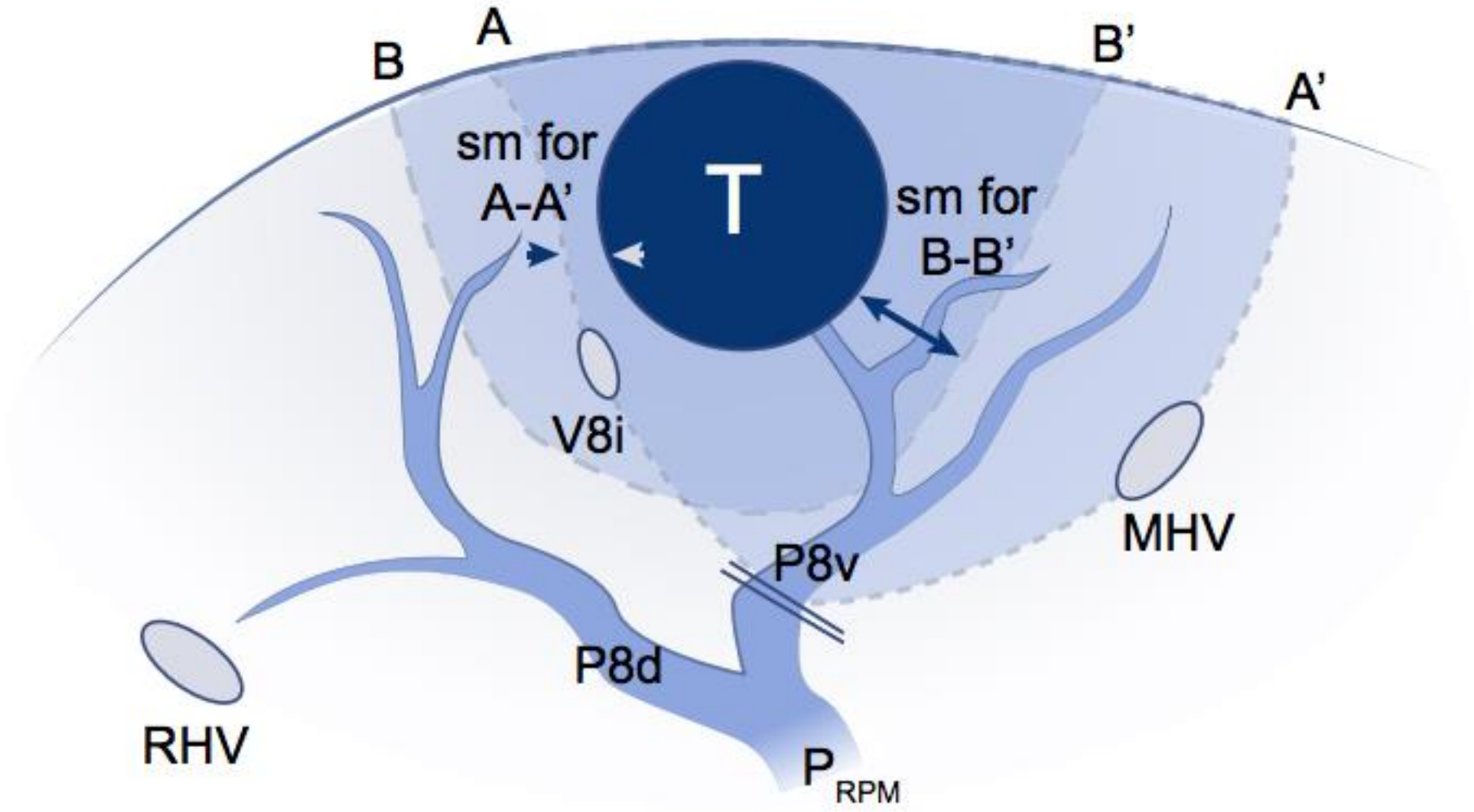


Cucchetti A, et al. Ann Surg 2009;250: 922-8

In conclusion, the EASL/AASLD guidelines clearly define indications for hepatic resection for HCC: patients with single HCC and completely preserved liver function without portal hypertension. These guidelines exclude from surgery many patients who could potentially benefit from curative resection. However, faced with the same MELD score and hepatectomy extent planning, the presence of esophageal varices, splenomegaly, and platelet count $<100{,}000/mm^3$ should not be considered as a contraindication for hepatic resection.

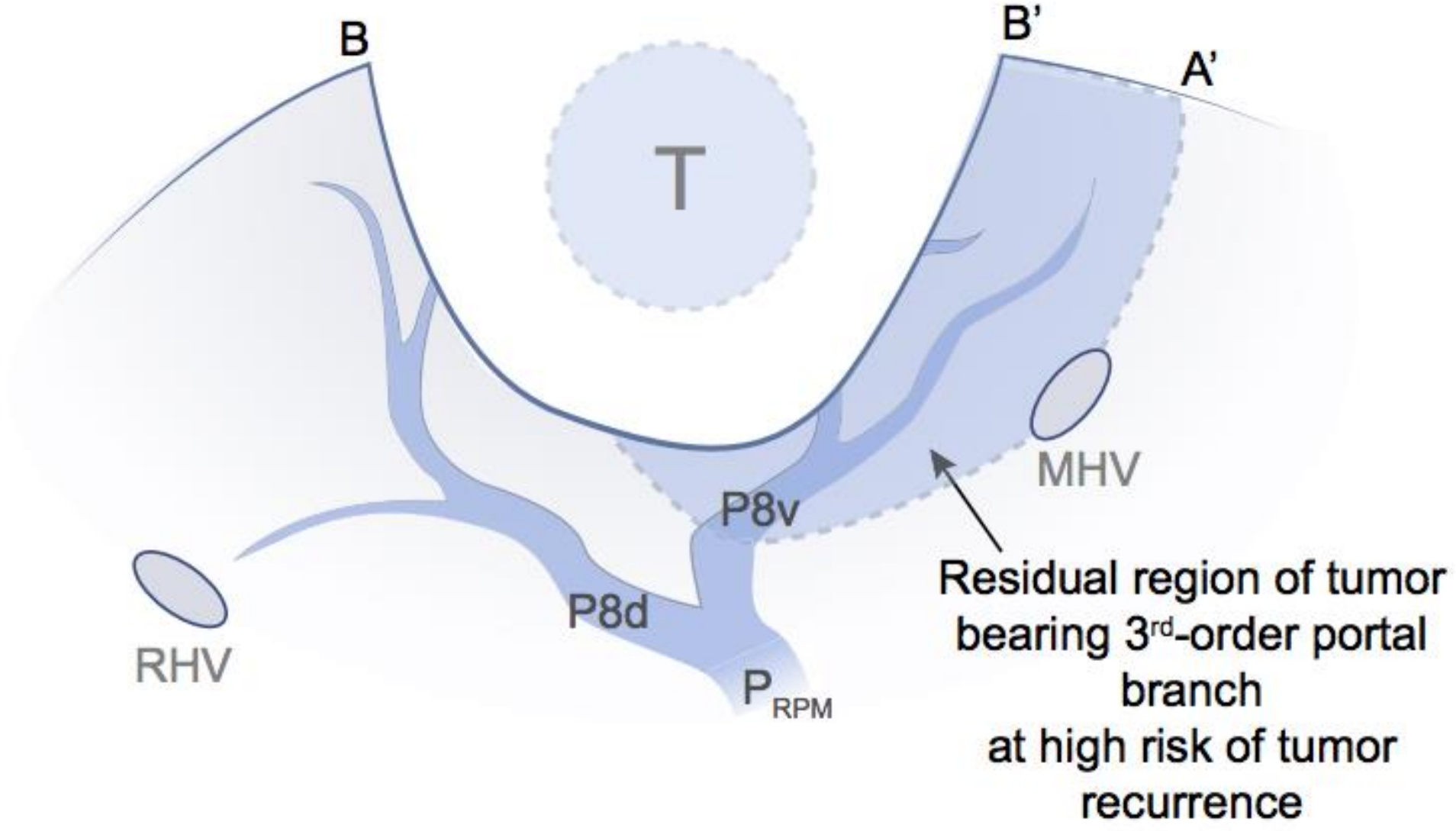
Cucchetti A, et al. Ann Surg 2009;250: 922-8

RESSECÇÃO ANATÔMICA

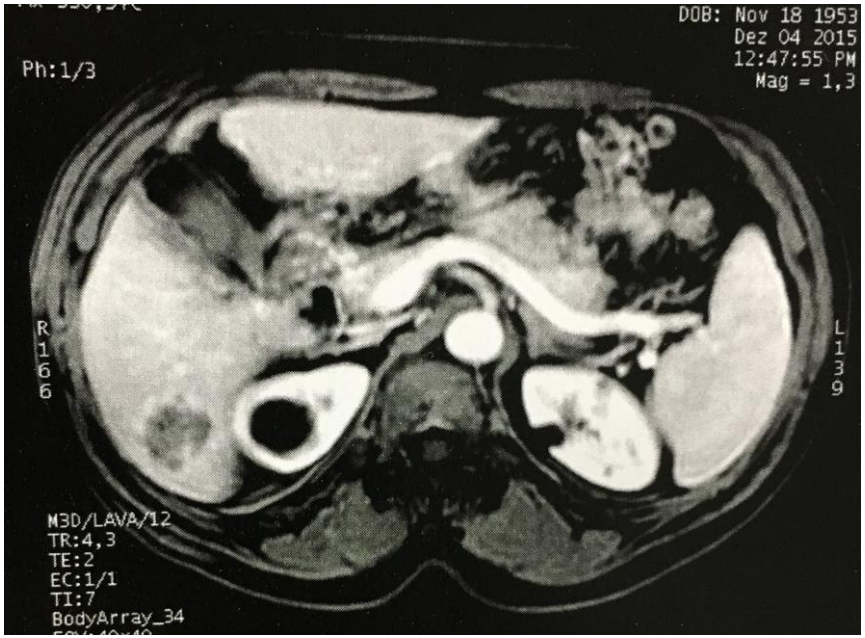


Galle PR. et al. J Hepatol 2018 ;69 :182–236

RESSECÇÃO NÃO ANATÔMICA

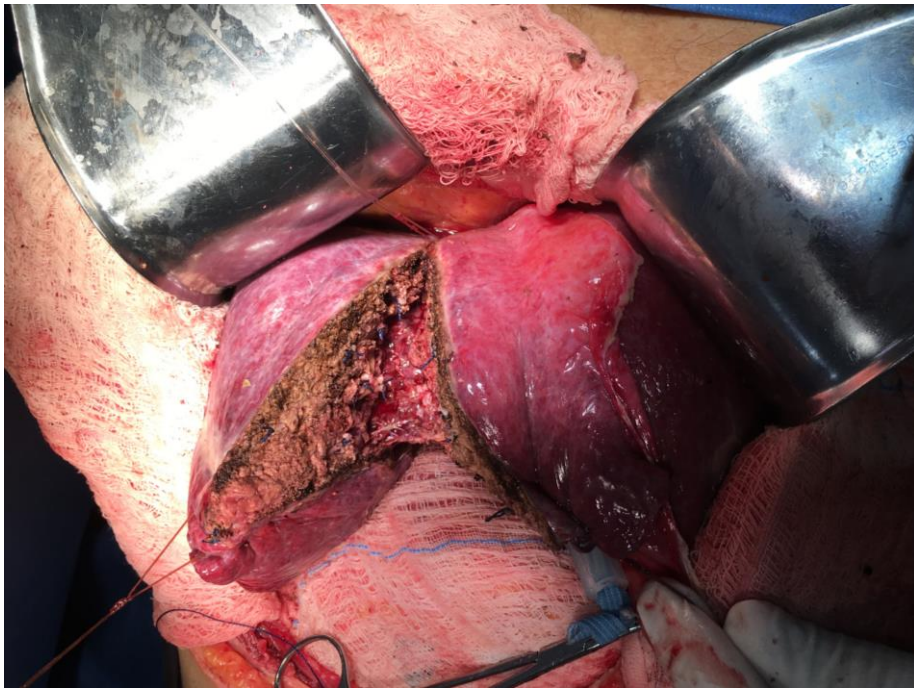


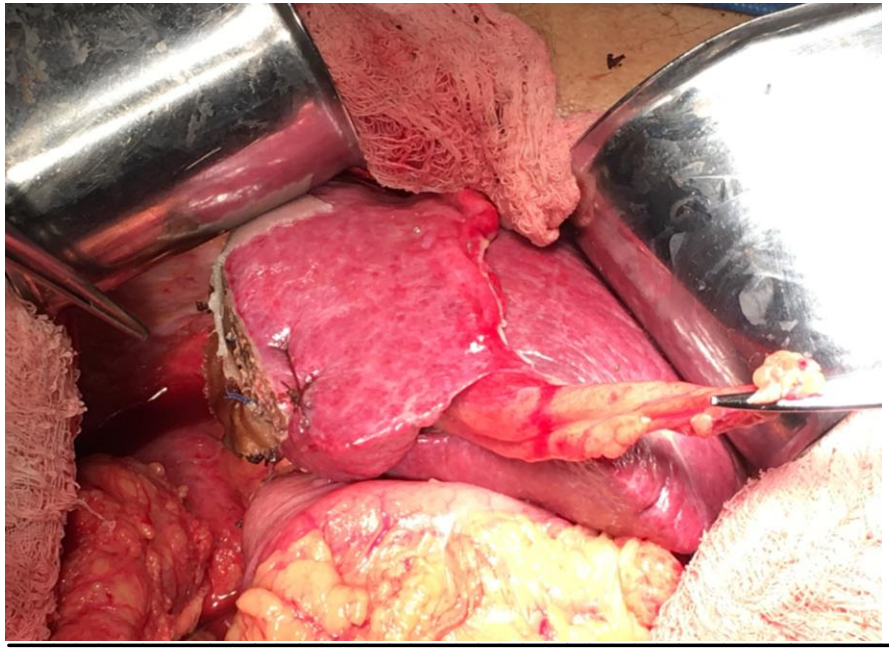
Galle PR. et al. J Hepatol 2018 ;69 :182–236



L, masculino, 62 a,
Hepatopatia crônica
2 nódulos (CHC)
Child A6, MELD 9
110.000 plaquetas

- **Doença multifocal**

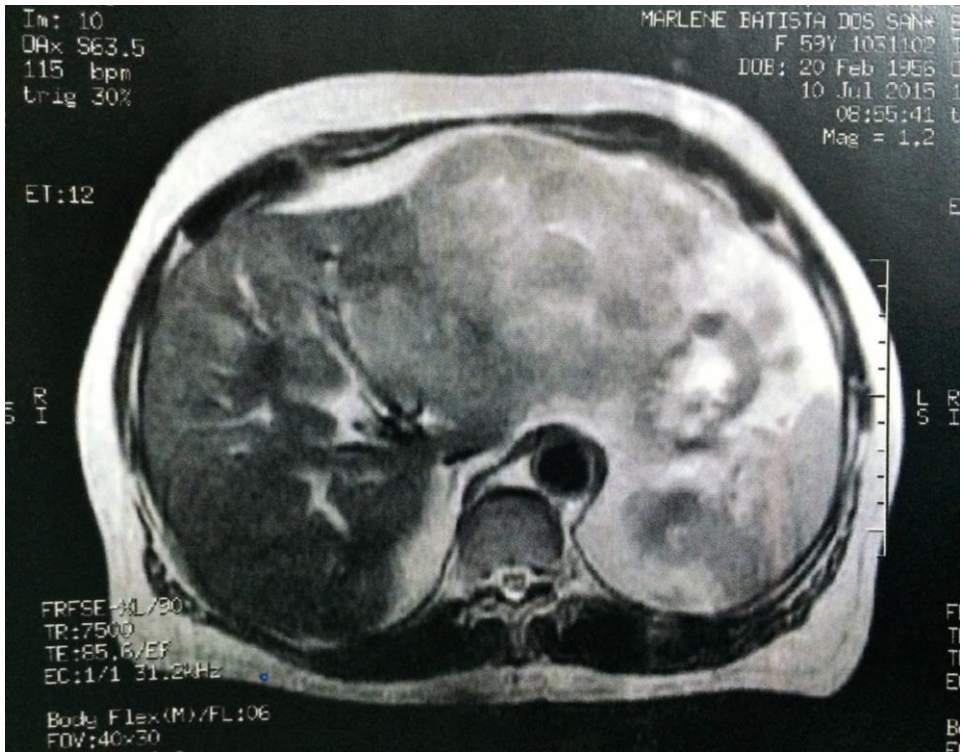


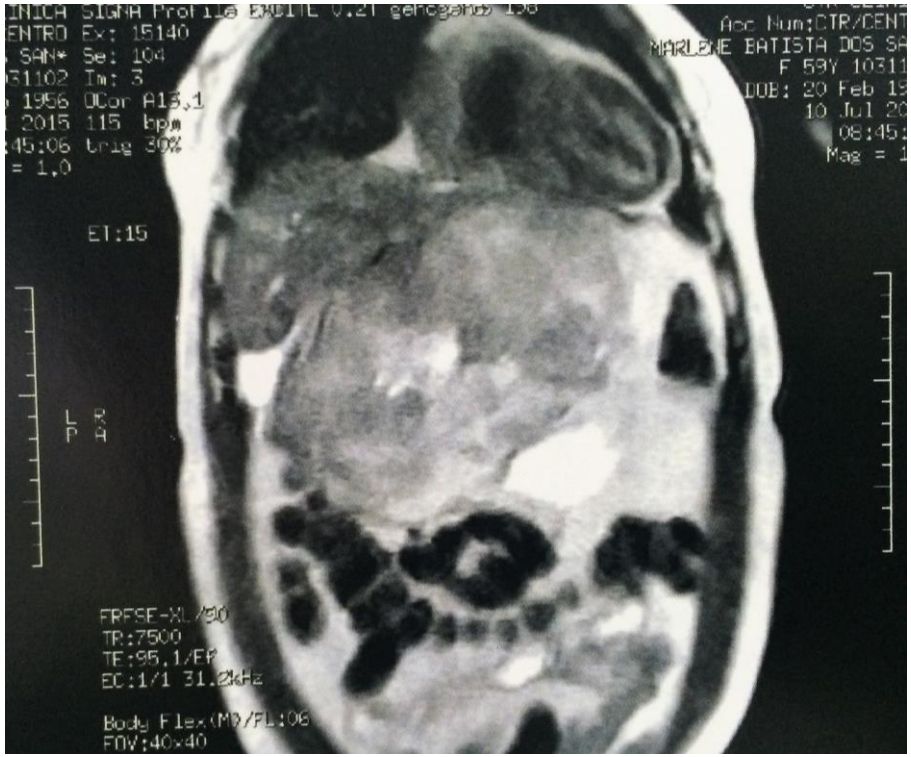


Cirurgia:
Hepatectomia direita (5-8)
Evolução com ascite
Alta sem intercorrências

Extensão tumoral intra-hepática

Tamanho





ALPPS

Ann Surg Oncol
DOI 10.1245/s10434-015-5007-0

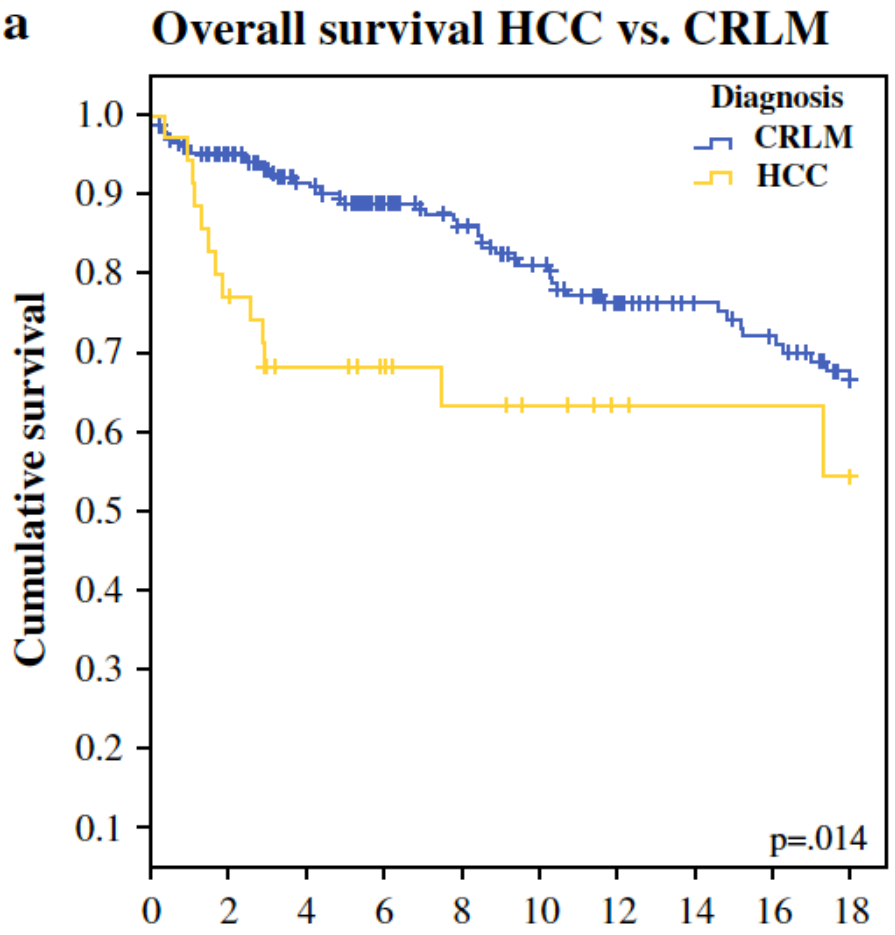
Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

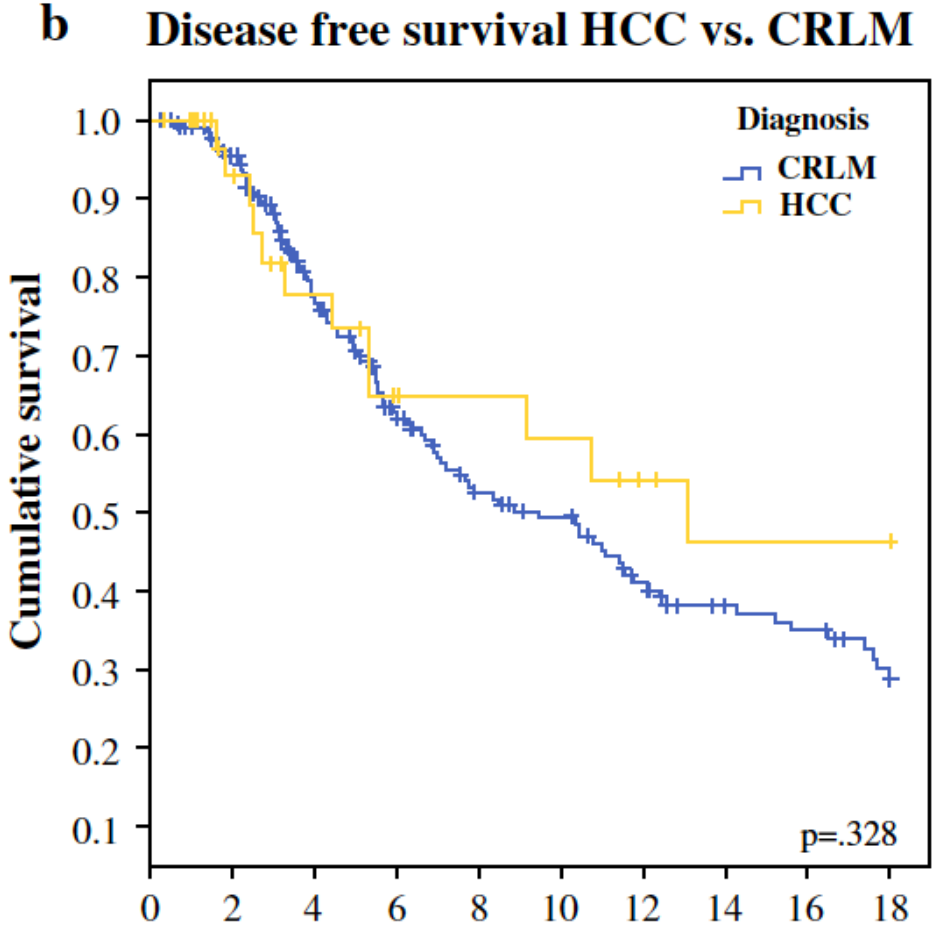
ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Should ALPPS be Used for Liver Resection in Intermediate-Stage HCC?

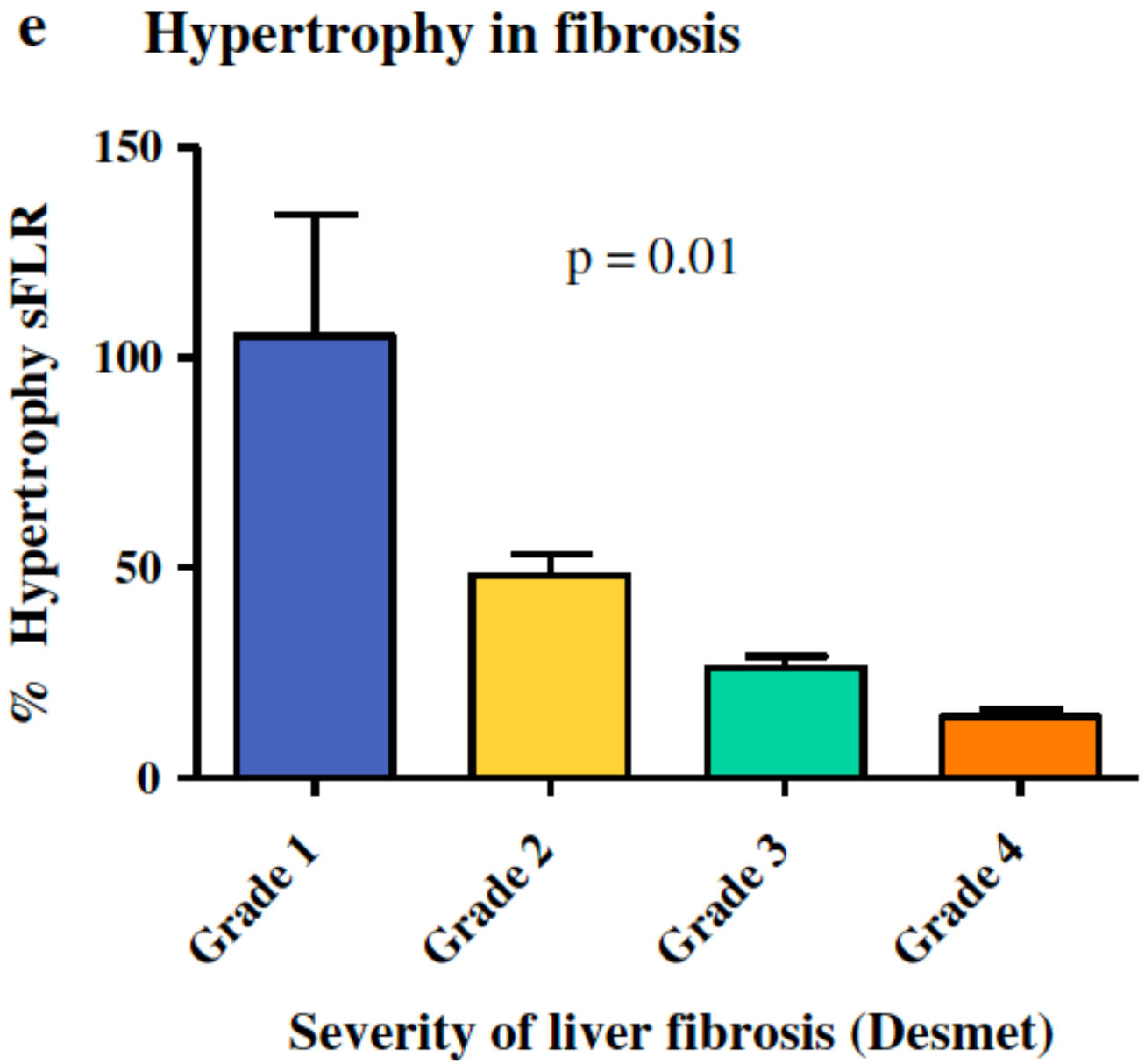
J. G. D'Haese, MD[1], J. Neumann, MD[2], M. Weniger, MD[1], S. Pratschke, MD[1], B. Björnsson, MD[3], V. Ardiles, MD[4], W. Chapman, MD, FACS[5], R. Hernandez-Alejandro, MD[6], O. Soubrane, MD[7], R. Robles-Campos, MD[8], M. Stojanovic, MD, PhD[9], R. Dalla Valle, MD[10], A. C. Y. Chan, MD, MBBS, FRCS, FCSHK, FHKAM (Surgery)[11], M. Coenen, PhD, MPH[12], M. Guba, MD[1], J. Werner, MD, MBA[1], E. Schadde, MD, FACS[13], and M. K. Angele, MD, FACS[1,14]

D'Haese JG, et al. Ann Surg Oncol 2015





D'Haese JG, et al. Ann Surg Oncol 2015



D'Haese JG, et al. Ann Surg Oncol 2015

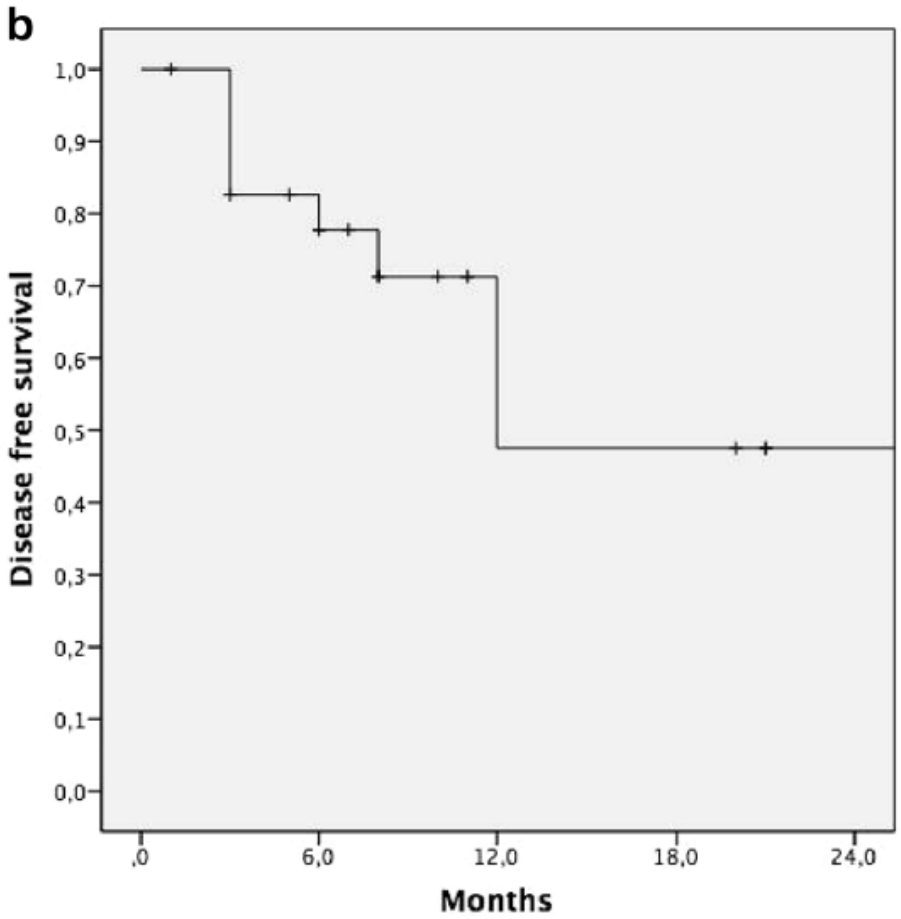
Updates in Surgery
https://doi.org/10.1007/s13304-018-0596-3

ORIGINAL ARTICLE

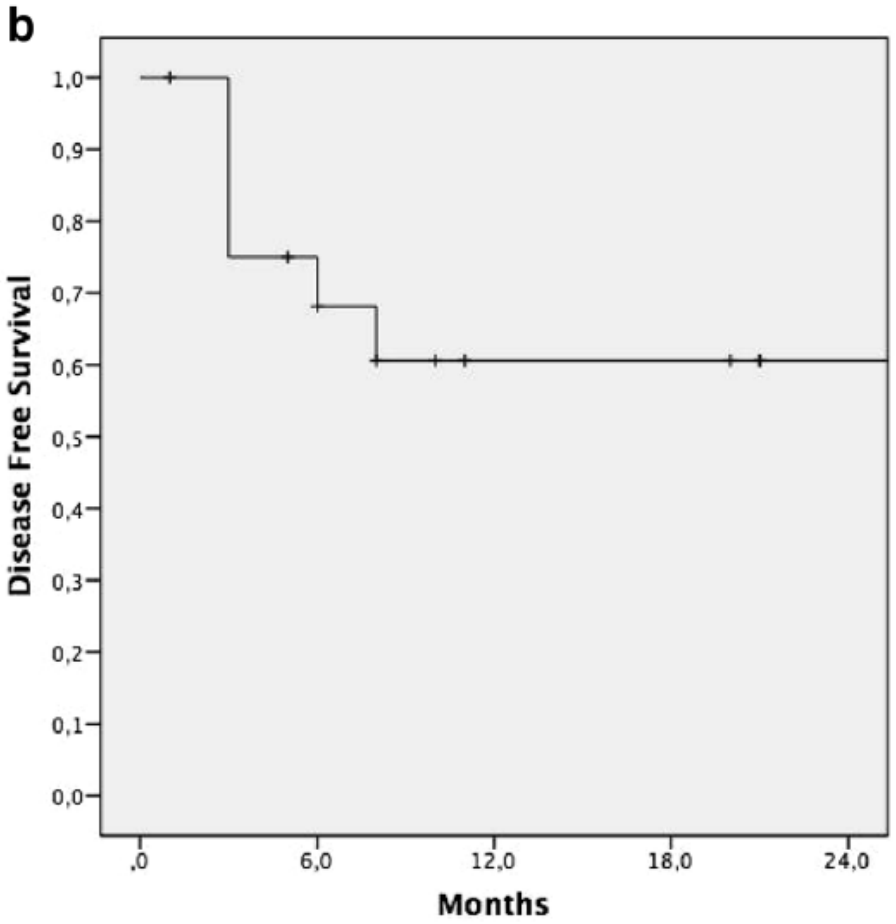
The ALPPS procedure: hepatocellular carcinoma as a main indication. An Italian single-center experience

Giovanni Vennarecci[1] · Daniele Ferraro[1] · Antonella Tudisco[1] · Giovanni Battista Levi Sandri[1] · Nicola Guglielmo[1] · Giammauro Berardi[1] · Isabella Sperduti[2] · Giuseppe Maria Ettorre[1]

ALPPS – SOBREVIDA LIVRE DE DOENÇA



TODA SÉRIE



HCC

Vennarecci G, et al. Updates Surg 2018

International Journal of Surgery Case Reports xxx (2016) xxx-xxx

Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.elsevier.com

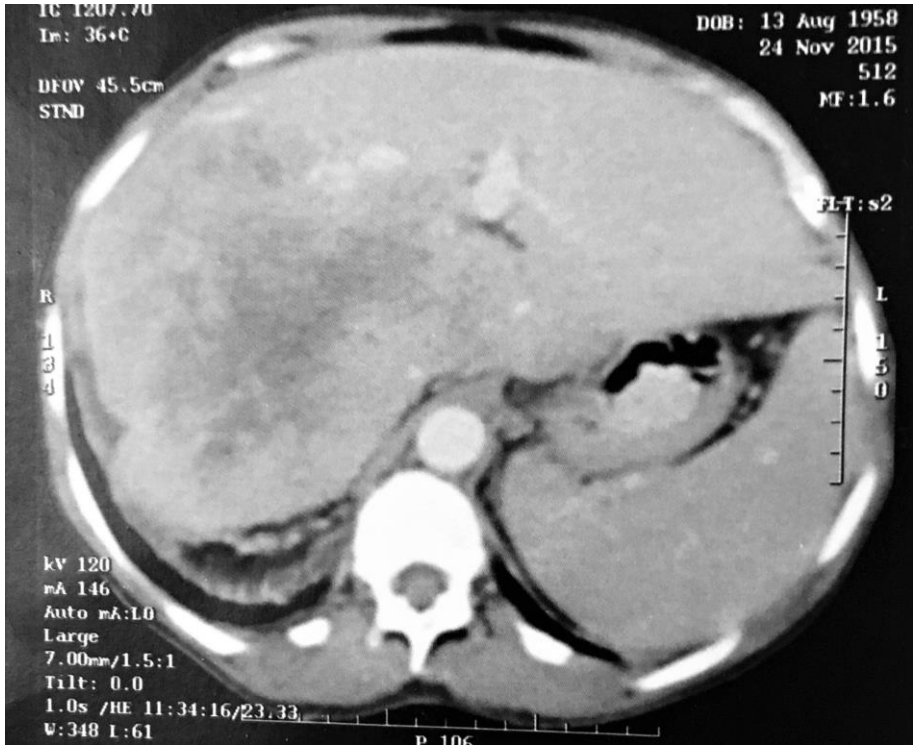
Case Report

The ALPPS procedure for hepatocellular carcinoma larger than 10 centimeters

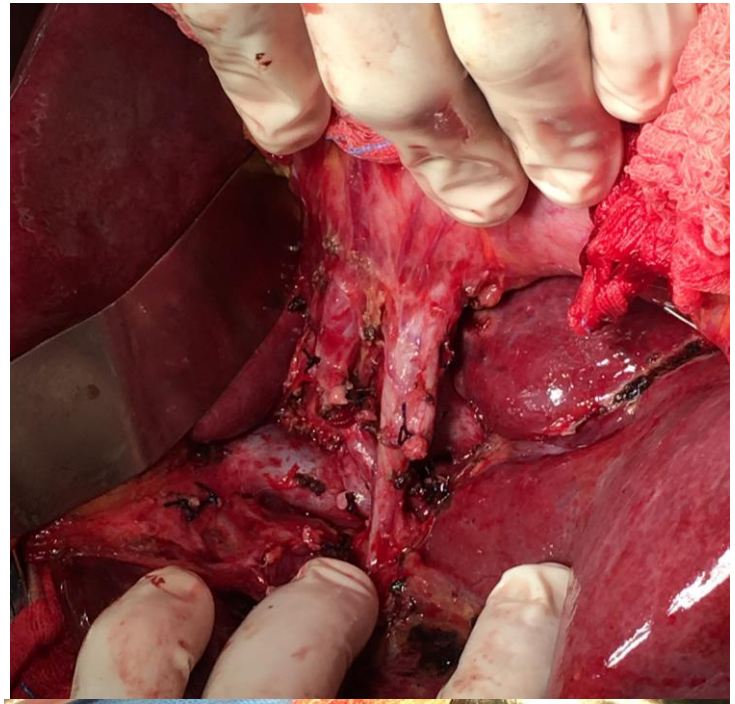
Orlando Jorge M. Torres *, Rodrigo Rodrigues Vasques, Thiago Henrique S. Silva, Miguel Eugenio L. Castelo-Branco, Camila Cristina S. Torres

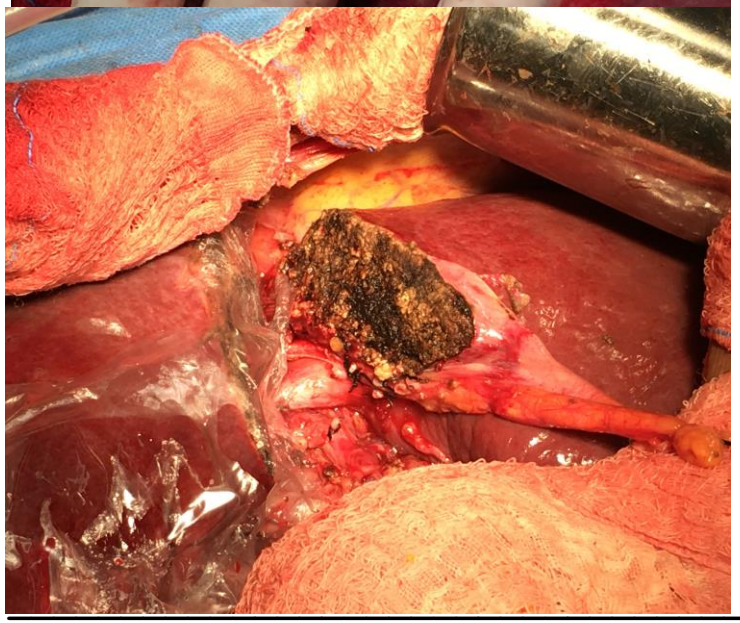
Department of Digestive Surgery, Federal University of Maranhão, São Luiz, MA, Brazil

Torres OJM, et al. Int J Surg Case Rep 2016.

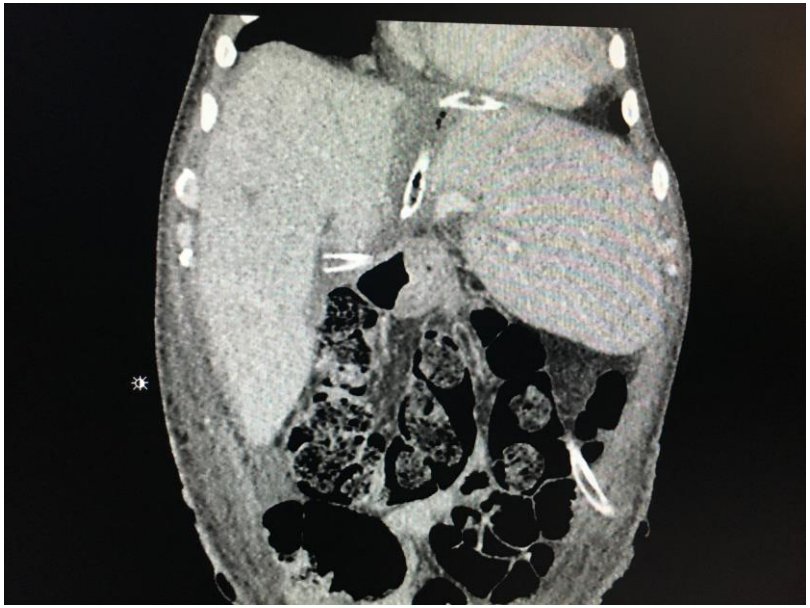


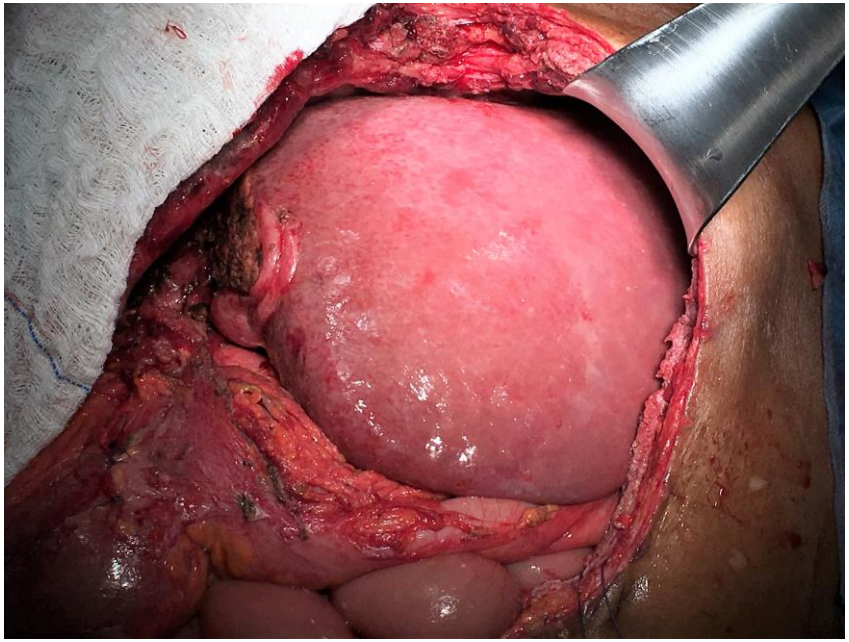
R, masculino, 57 a,
Hepatopatia crônica
Lesão única 19cm (CHC)
Child A5, MELD 9
AFP 508
123.000 plaquetas

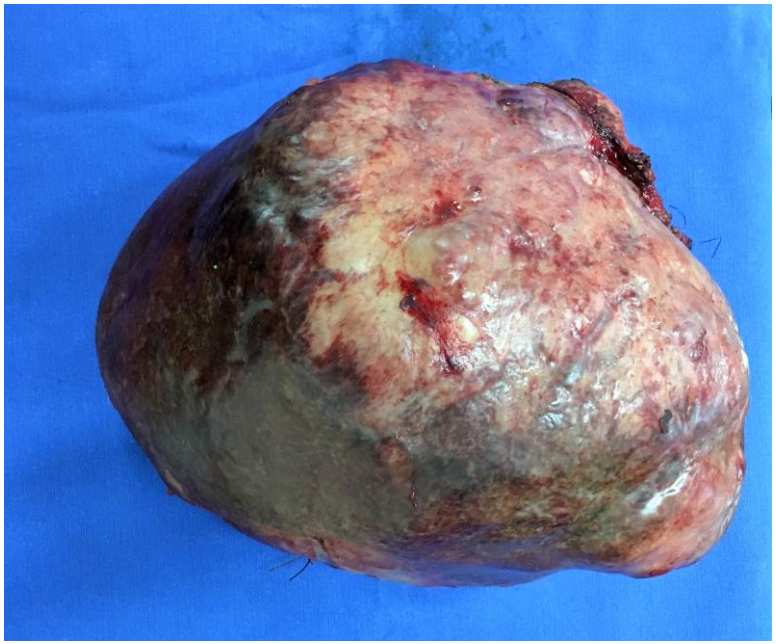




Conduta:
ALPPS







Pós-operatório:
Alta sem intercorrências

LAPAROSCOPIA

Dig Dis Sci (2011) 56:1937–1943
DOI 10.1007/s10620-011-1572-7

REVIEW

Meta-Analysis of Laparoscopic Versus Open Resection for Hepatocellular Carcinoma

Yan-Ming Zhou · Wen-Yu Shao · Yan-Fang Zhao · Dong-Hui Xu · Bin Li

World Journal of Gastroenterology

Submit a Manuscript: http://www.wjgnet.com/esps/
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DOI: 10.3748/wjg.v20.i25.8274

World J Gastroenterol 2014 July 7; 20(25): 8274-8281
ISSN 1007-9327 (print) ISSN 2219-2840 (online)

META-ANALYSIS

Laparoscopic *vs* open approach to resection of hepatocellular carcinoma in patients with known cirrhosis: Systematic review and meta-analysis

Ahmed Twaij, Philip H Pucher, Mikael H Sodergren, Tamara Gall, Ara Darzi, Long R Jiao

ORIGINAL ARTICLE

Laparoscopic Liver Resection for Hepatocellular Carcinoma

Ten-Year Experience in a Single Center

Eric C. H. Lai, MB ChB, MRCSEd, FRACS; Chung Ngai Tang, MB BS, FRCS; Joe P. Y. Ha, MB BS, FRCS; Michael K. W. Li, MB BS, FRCS

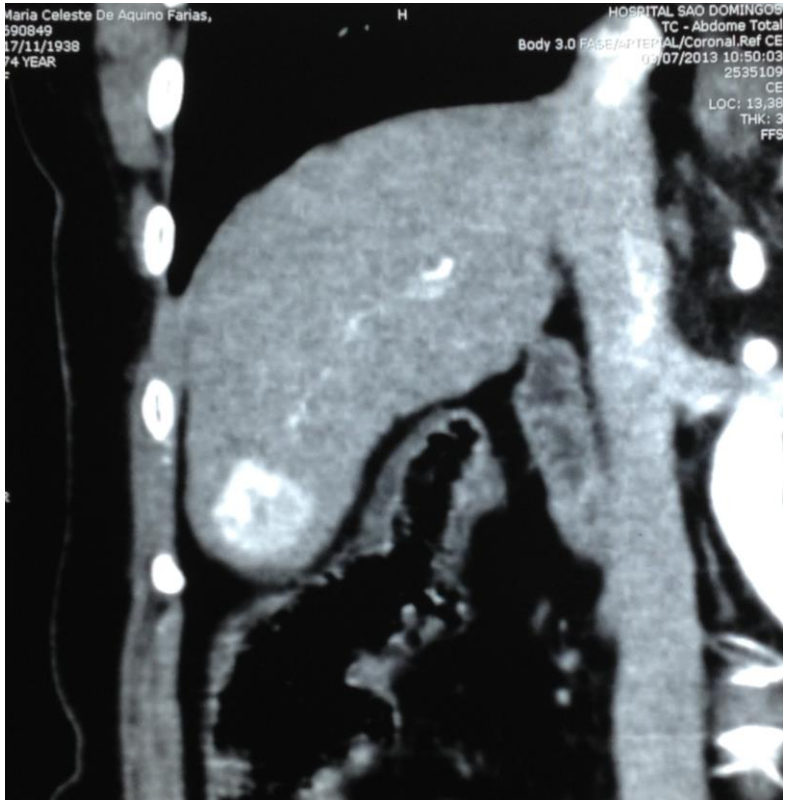
Surgical Endoscopy
https://doi.org/10.1007/s00464-018-6426-3

CrossMark

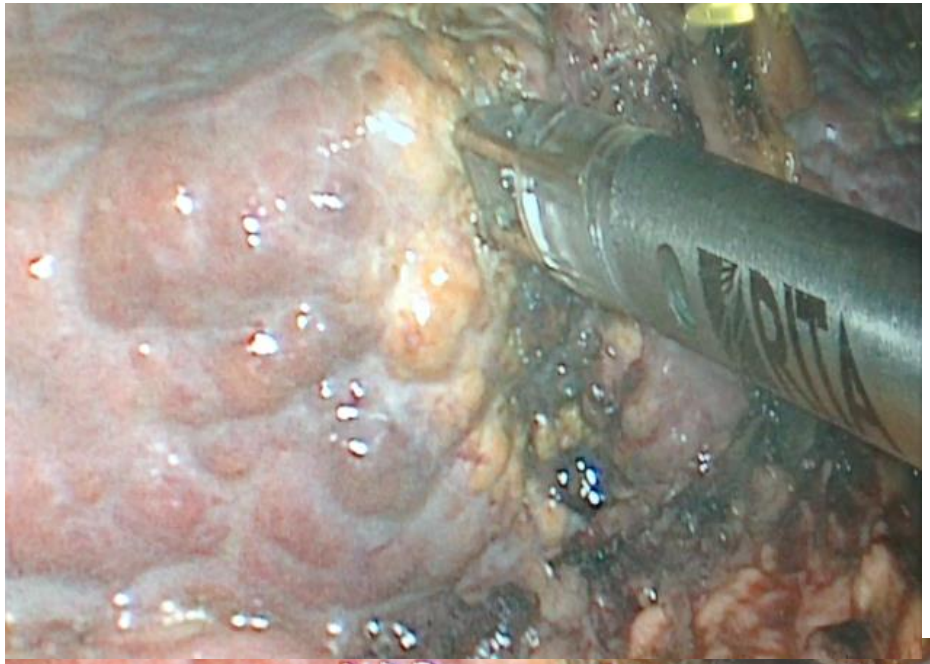
Laparoscopic liver resection of hepatocellular carcinoma located in unfavorable segments: a propensity score-matched analysis from the I Go MILS (Italian Group of Minimally Invasive Liver Surgery) Registry

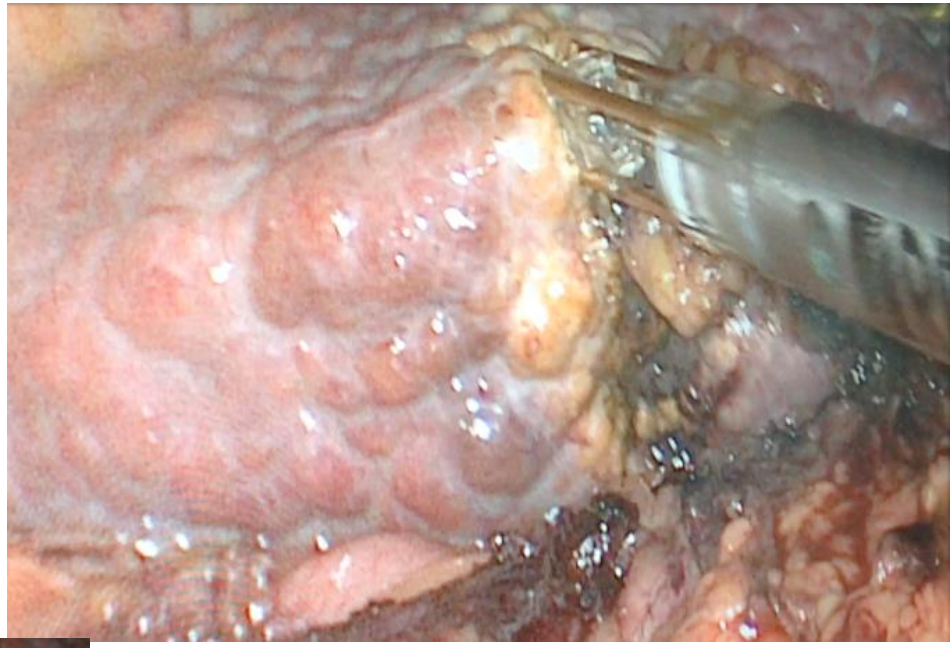
Giovanni Battista Levi Sandri[1] · Giuseppe Maria Ettorre[1] · Luca Aldrighetti[2] · Umberto Cillo[3] · Raffaele Dalla Valle[4] · Alfredo Guglielmi[5] · Vincenzo Mazzaferro[6] · Alessandro Ferrero[7] · Fabrizio Di Benedetto[8] · Salvatore Gruttadauria[9] · Luciano De Carlis[10] · Giovanni Vennarecci[1] on behalf of I Go MILS Group on HCC

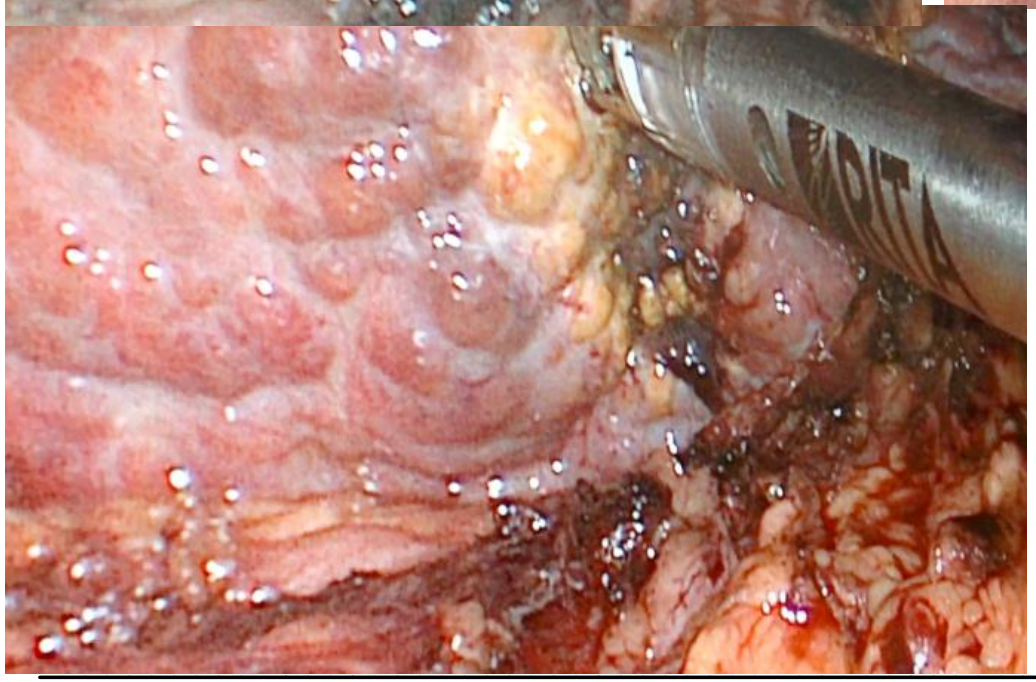
Zhou YM, et al. Dig Dis Sci 2011;56:1937-43
Twaij A, et al. World J Gastroenterol 2014
Lai EC, et al. Arch Surg 2009
Sandri GB, et al. Surg Endosc 2018



L, feminino, 72 a,
Hepatopatia crônica
Lesão única 6,5 cm Seg 6
Child A5, MELD 8
157.000 plaquetas







Hepatectomia laparoscópica
Com HABIB
Evolução favorável
Alta sem intercorrências

ORIGINAL ARTICLE

Laparoscopic resection of hepatocellular carcinoma: a French survey in 351 patients

Olivier Soubrane[1], Claire Goumard[1], Alexis Laurent[2], Hadrien Tranchart[3], Stéphanie Truant[4], Brice Gayet[5], Chadi Salloum[6], Guillaume Luc[7], Safi Dokmak[8], Tullio Piardi[9], Daniel Cherqui[2], Ibrahim Dagher[3], Emmanuel Boleslawski[4], Eric Vibert[6], Antonio Sa Cunha[7], Jacques Belghiti[8], Patrick Pessaux[9], Pierre-Yves Boelle[1,10,11] & Olivier Scatton[1]

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Soubrane O, et al. HPB 2016;16:357-65

Table 4 Pathological features in 351 patients submitted to laparoscopic liver resection for hepatocellular carcinoma (HCC)

Postoperative data	Value
Histological cirrhosis, *n* (%)	247 (70%)
Histological fibrosis F2, F3, *n* (%)	55 (16%)
Maximum tumour size, mm, median (range)	35 (5–170)
Single HCC, *n* (%)	302 (86%)
Multiple HCC, *n* (%)	49 (14%)
Bilobar HCC, *n* (%)	24 (7%)
Encapsulated HCC, *n* (%)	162 (46%)
Satellite nodules, *n* (%)	81 (23%)
Well or moderately differentiated HCC, *n* (%)	319 (91%)
Poorly differentiated HCC, *n* (%)	32 (9%)
Vascular invasion, *n* (%)	119 (34%)
Tumour-free margin, *n* (%)	323 (92%)
Margin, mm, median (range)	10 (0–78)

Soubrane O, et al. HPB 2016;16:357-65

Ann Surg Oncol
https://doi.org/10.1245/s10434-020-08452-3

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

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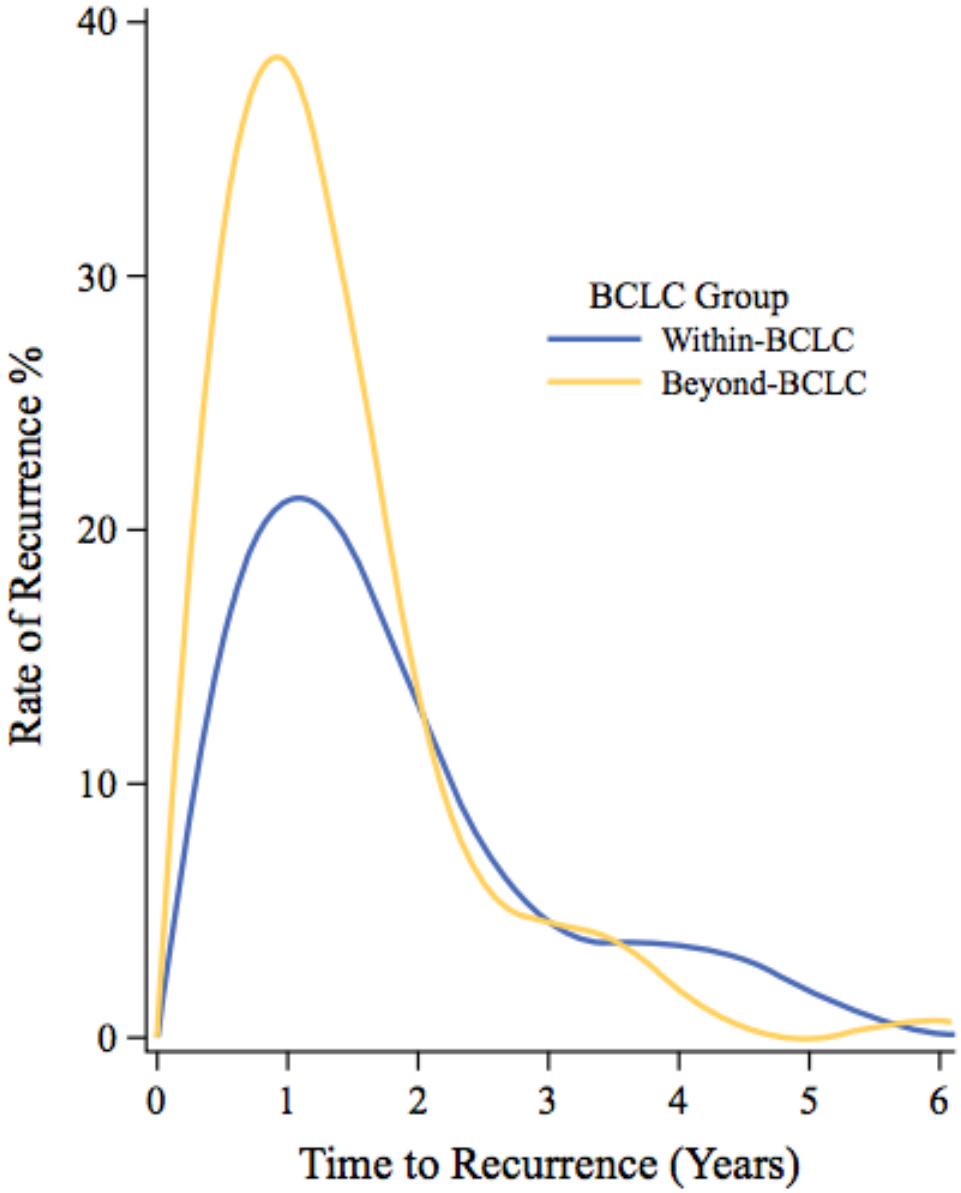
ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Recurrence Patterns and Outcomes after Resection of Hepatocellular Carcinoma within and beyond the Barcelona Clinic Liver Cancer Criteria

Diamantis I. Tsilimigras, MD[1], Fabio Bagante, MD[1,2], Dimitrios Moris, MD, PhD[1], J. Madison Hyer, MS[1], Kota Sahara, MD[1], Anghela Z. Paredes, MD, MS[1], Rittal Mehta, MPH[1], Francesca Ratti, MD[3], Hugo P. Marques, MD[4], Olivier Soubrane, MD[5], Vincent Lam, MD[6], George A. Poultsides, MD[7], Irinel Popescu, MD[8], Sorin Alexandrescu, MD[8], Guillaume Martel, MD[9], Aklile Workneh, MD[9], Alfredo Guglielmi, MD[2], Tom Hugh, MD[10], Luca Aldrighetti, MD[3], Itaru Endo, MD, PhD[11], and Timothy M. Pawlik, MD, MPH, PhD, FACS[1]



Tsilimigras DI, et al. Ann Surg Oncol 2020

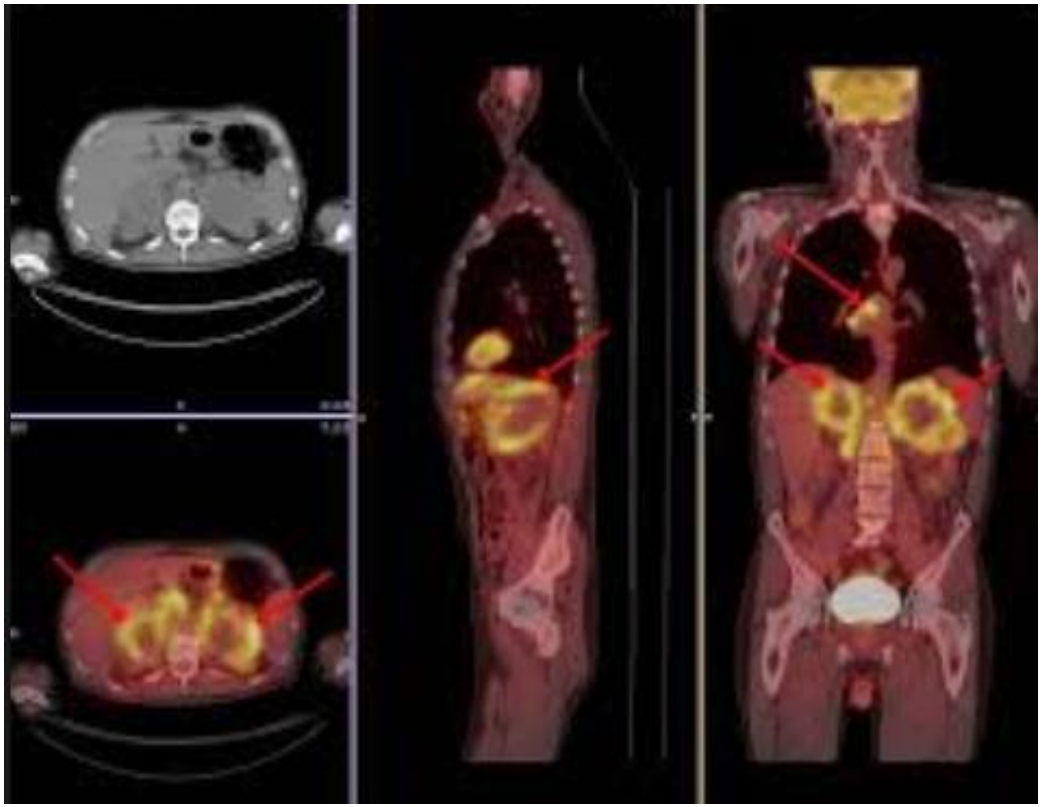
RISCO OPERATÓRIO

- **Geral – Idade > 70**
- **ASA escore >3**
- **Insuficiência renal crônica**
- **Desnutrição**

Scatton O, et al. J Surg Oncol 2015; 111:1007-15

DOENÇA EXTRA-HEPÁTICA

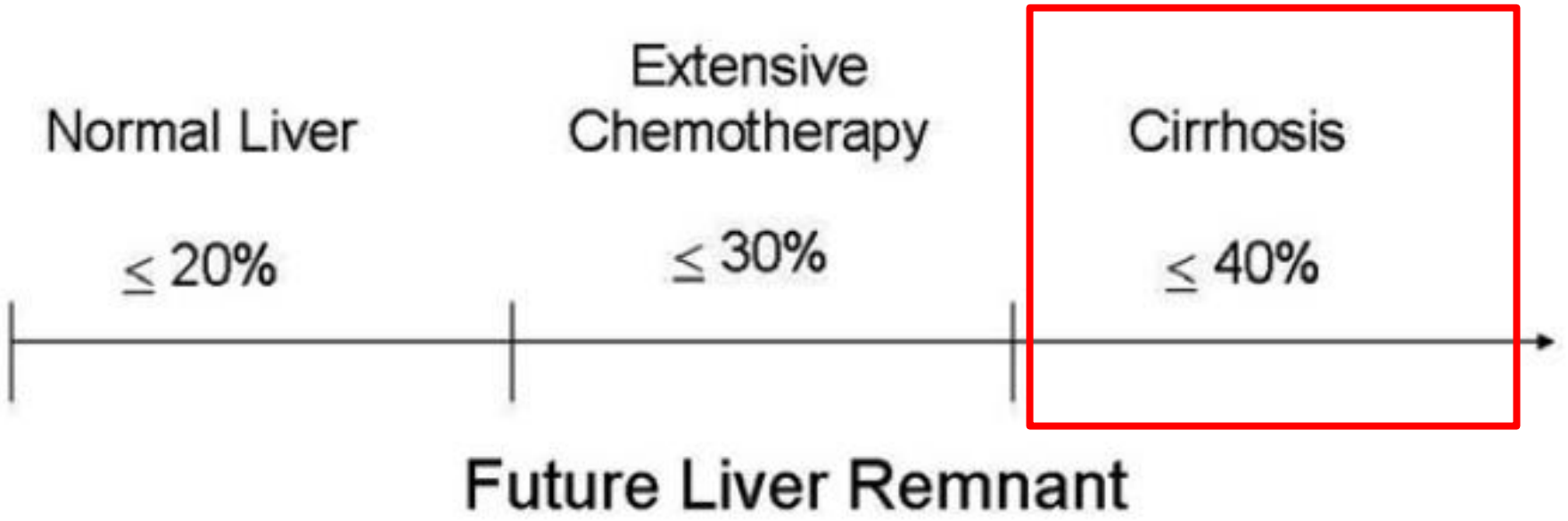
- **Metástase pulmonar (TC de tórax)**
- **Metástase óssea/cerebral (PET-CT)**



REMANESCENTE HEPÁTICO FUTURO

$$\text{sFLR} = \frac{\text{Measured FLR volume}}{\text{TLV} = -794 + 1267 \times \text{BSA}} = \%\ \text{of TLV}$$

EMBOLIZAÇÃO DA VEIA PORTA



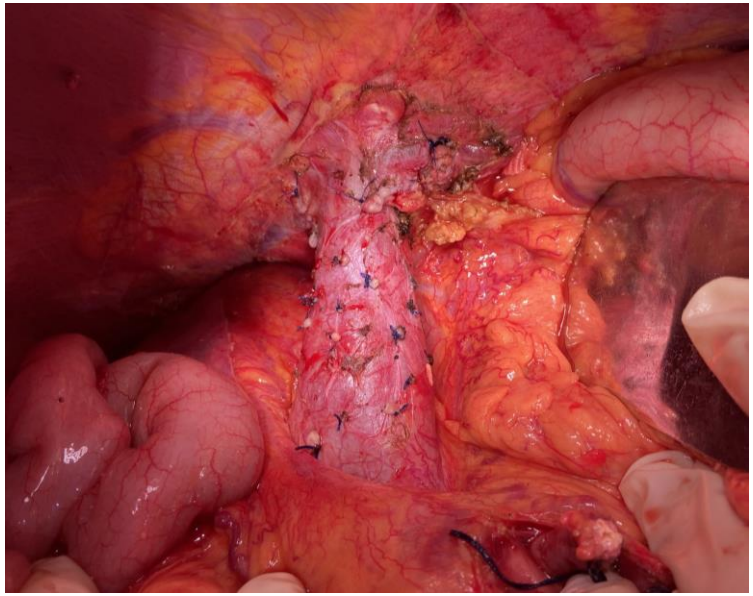
***Fígado cirrótico tem a capacidade de hipertrofia reduzida**

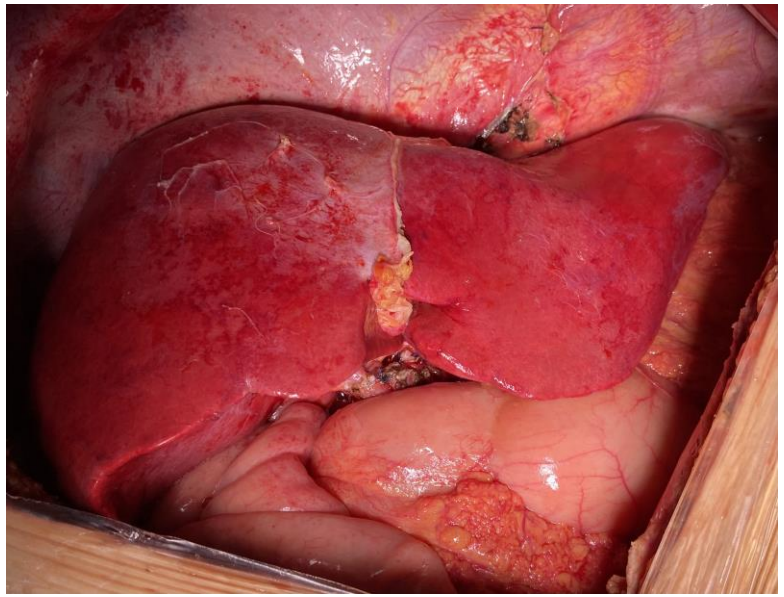
OUTRAS OPÇÕES

- **TACE-EVP sequencial**
- **Embolização da veia hepática**
- **Radioembolização em alta dose (Y90)**

***Fígado cirrótico tem a capacidade de hipertrofia reduzida**

TRANSPLANTE



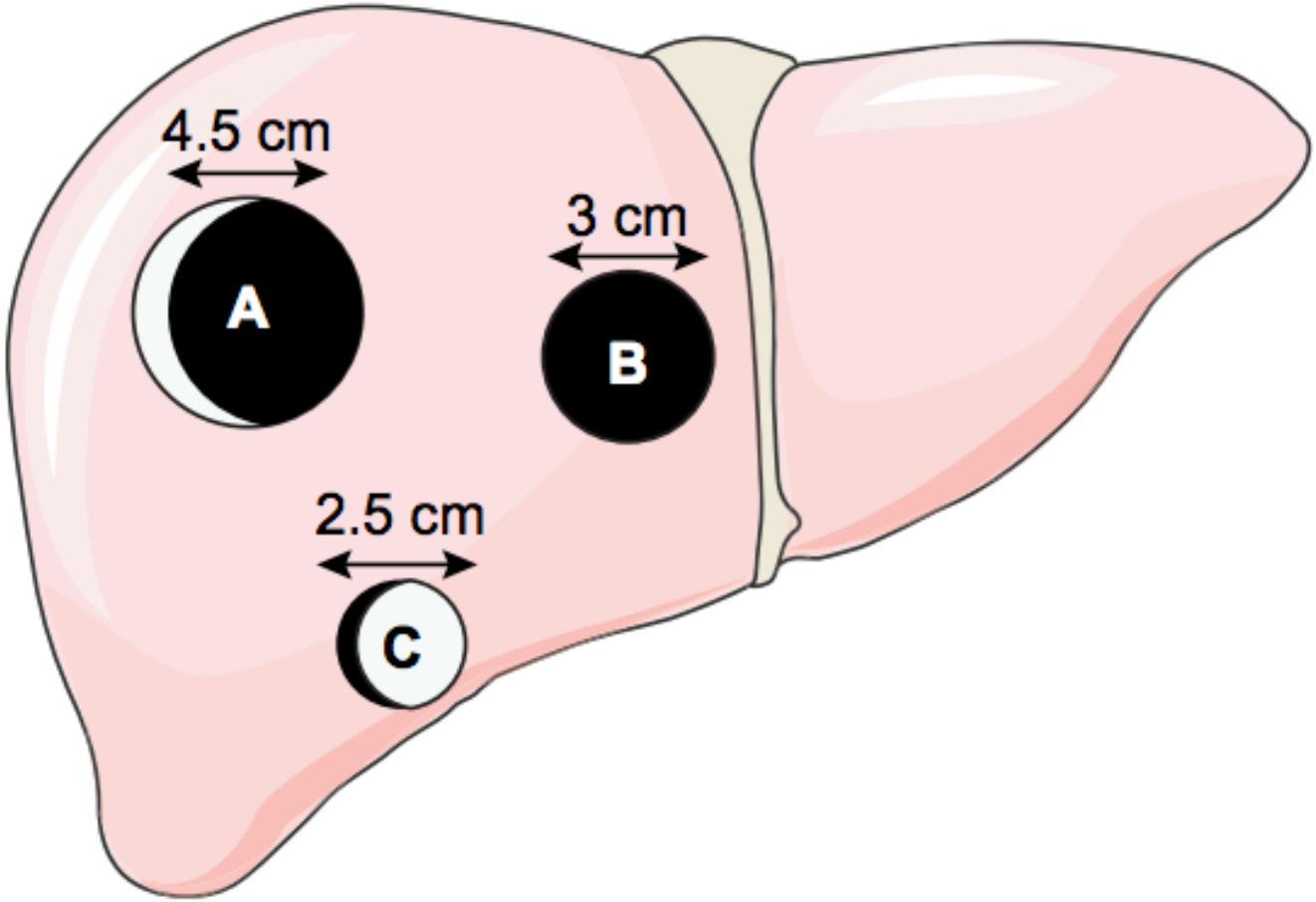


Liver transplantation

Recommendations

- LT is recommended as the first-line option for HCC within Milan criteria but unsuitable for resection (**evidence high; recommendation strong**). Milan criteria are the benchmark for selection of patients with HCC for LT and the basis for comparison with other suggested criteria.

Galle PR, et al. J Hepatol 2018 ;69 :182–236



AFP serum level
150 ng/ml

↓

45 ng/ml

Galle PR, et al. J Hepatol 2018 ;69 :182–236

Critérios de Milão

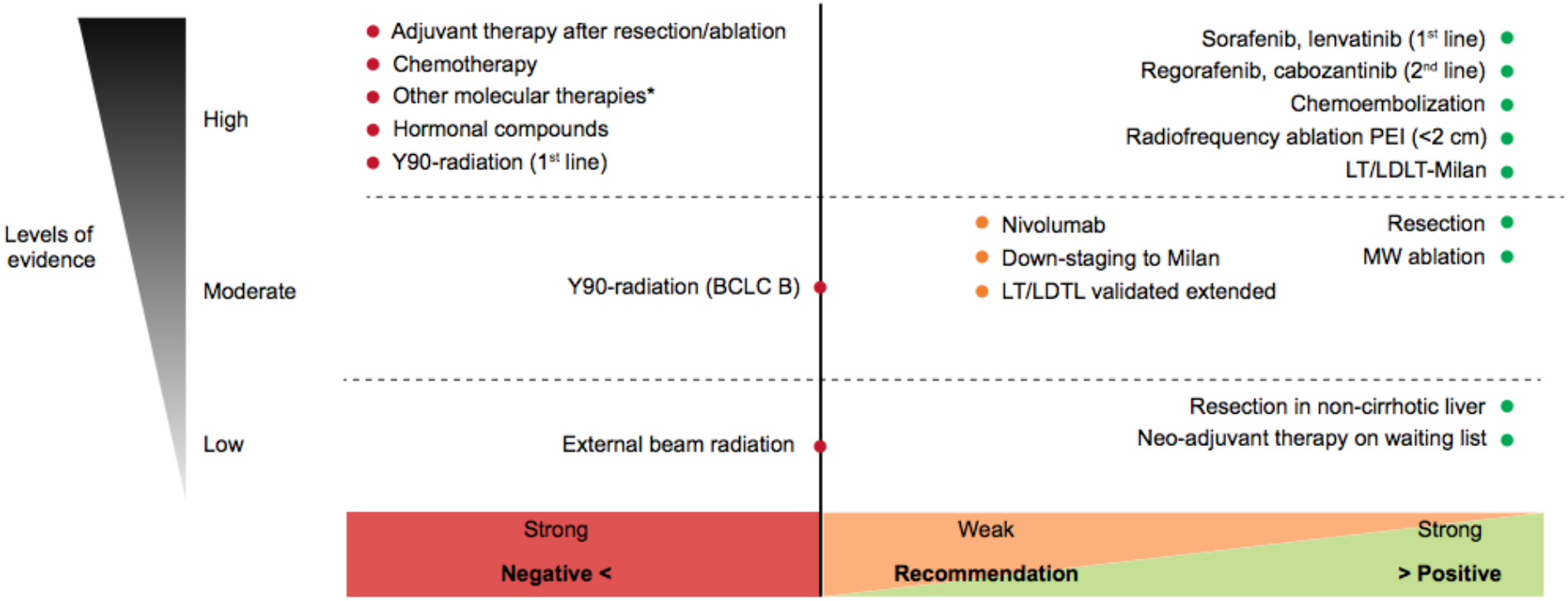
paciente cirrótico com:

nódulo único < 5cm

até 3 nódulos < 3cm

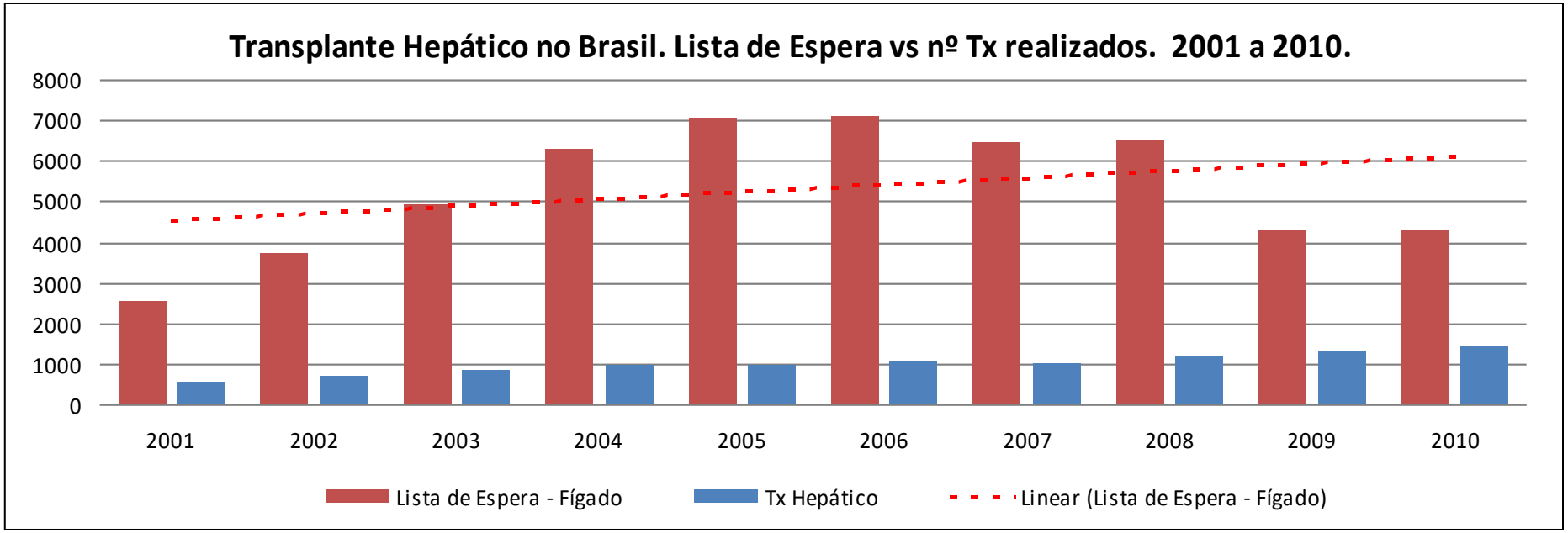
ausência de invasão macrovascular ou metástases

Critérios de Milão



Galle PR, et al. J Hepatol 2018 ;69 :182–236

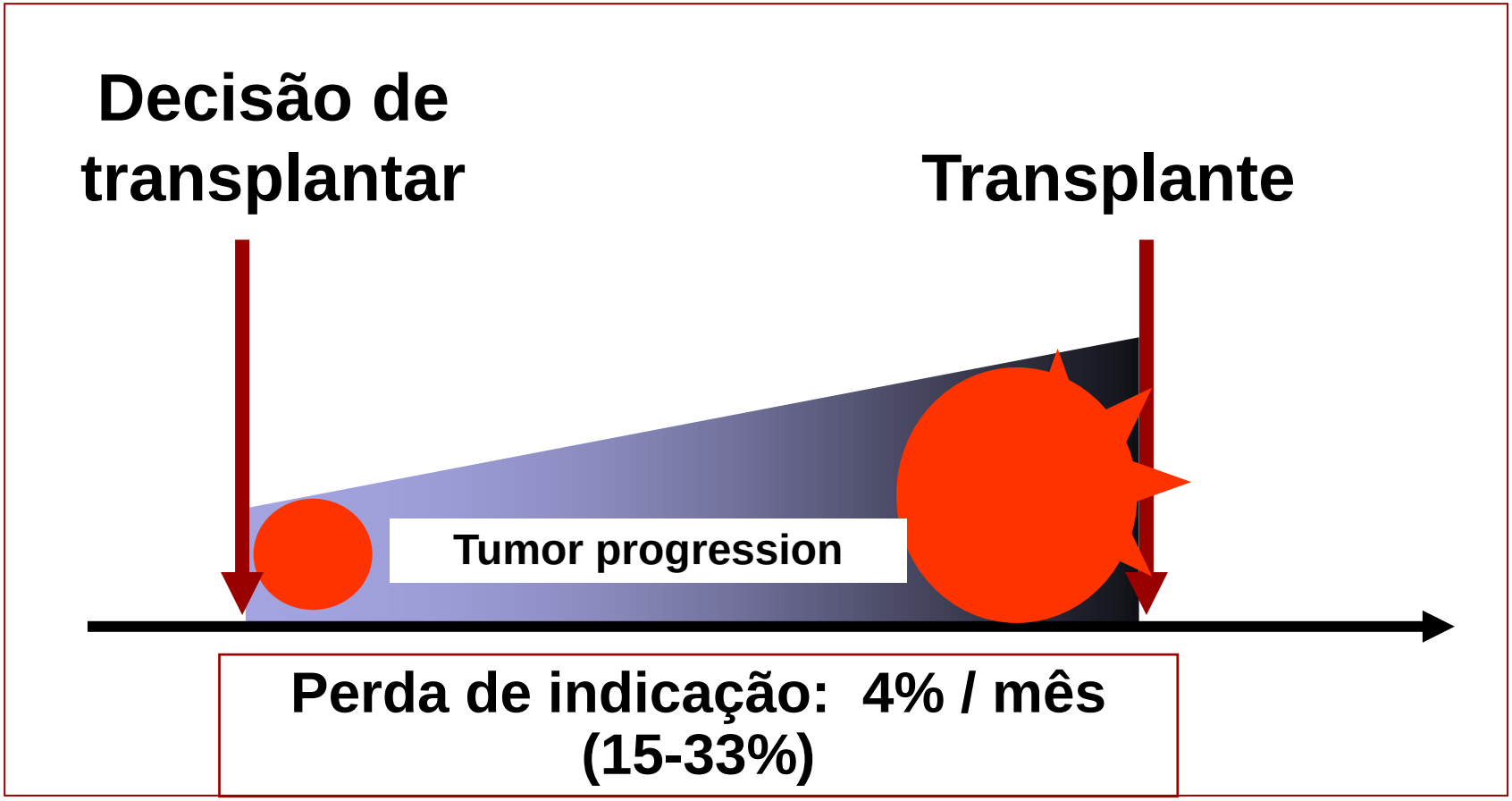
Necessidade de Transplante de Fígado - Brasil



Tx Fígado - Brasil		
Nº Tx em 2010:	**1413**	
Lista de Espera - 2010:	**4304**	
% Tx 2010/Lista de Espera:		**33%**

FALTA DE ÓRGÃOS!!!

Transplante para CHC



Yao FY, et al. Liver Transpl. 2002
Roayaie S et al. Clin Liver Dis 2005

Mortalidade na Lista de Espera - CHC

Mortalidade na lista de espera (MLE)	Jan 2013 - dez 2013
Mortalidade global	34,1%
Mortalidade pediátrica	29,15%
Mortalidade Adulto	34,4%
Mortalidade CHC (Milan + Downstaging)	28,25%

Source: Secretaria de Estado da Saúde do Estado de SP – Sistema Estadual de Transplantes

Available online at www.sciencedirect.com
ScienceDirect
EJSO 35 (2009) 11–15
EJSO the Journal of Cancer Surgery
www.ejso.com

For Debate

Liver resection for HCC with cirrhosis: Surgical perspectives out of EASL/AASLD guidelines

L. Capussotti [a,b,*], A. Ferrero [a,b], L. Viganò [a,b], R. Polastri [a,b], M. Tabone [c]

Table 1
Tumor characteristics in recent large published series

28-75% **24-39%** **3-14%**

Author	Year	Pts	Diameter (cm)		Multiple HCC	Major vascular invasion
			Median	>5 cm		
Fong[41]	1999	154	–	116 (75.3%)	42 (27.3%)	–
Poon[40]	2001	377	–	229 (60.7%)	–	–
Grazi[20]	2001	264	–	95 (36%)	0%	–
Belghiti[44]	2003	187	6	–	70 (39%)	16 (9%)
Vauthey/Nagorney[44]	2003	169	8	–	55 (33%)	24 (14%)
Ikai[44]	2003	230	3.5	–	72 (31%)	24 (10%)
Makuuchi[45]	2005	203		57 (28.1%)	57 (28.1%)	14 (6.9%)
Italian multicenter study[46]	2006	150	–	–	36 (24%)	5 (3.3%)

Capussotti L, et al. Eur J Surg Oncol 2009;35:11-15

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the Journal of Cancer Surgery
ELSEVIER
EJSO 35 (2009) 11–15
www.ejso.com

For Debate

Liver resection for HCC with cirrhosis: Surgical perspectives out of EASL/AASLD guidelines

L. Capussotti [a,b,*], A. Ferrero [a,b], L. Viganò [a,b], R. Polastri [a,b], M. Tabone [c]

[a] *Department of Surgery, Ospedale Mauriziano "Umberto I", Largo Turati 62, 10128 Torino, Italy*
[b] *Unit of Surgical Oncology, Institute for Cancer Research and Treatment, Candiolo, Italy*
[c] *Department of Gastroenterology, Ospedale Mauriziano "Umberto I", Largo Turati 62, 10128 Torino, Italy*

Accepted 20 June 2007
Available online 3 August 2007

Abstract

EASL/AASLD guidelines clearly define indications for liver surgery for HCC: patients with single HCC and completely preserved liver function without portal hypertension. These guidelines exclude from operation many patients that could benefit from radical resection and that are daily scheduled for hepatectomy in surgical centers. Patients with large tumors or with portal vein thrombosis cannot be transplanted or treated by interstitial treatments. In selected cases liver resection may obtain good long-term outcomes, significantly better than non-curative therapies. In cases of multinodular HCC, liver transplantation is the treatment of choice within Milan criteria; patients beyond these limits can benefit from liver resection, especially if only two nodules are diagnosed: even if they have a worse prognosis, survival results after liver surgery are better than those reported after TACE or conservative treatments. EASL/AASLD guidelines excluded from operating patients with portal hypertension but data about this topic are not conclusive and further studies are necessary. Selected patients with mild portal hypertension could probably be scheduled for liver resection and, considering the shortage of donors, listing for transplantation could be avoided.

In conclusion, guidelines for HCC treatment should consider good results of liver resection for advanced HCC, and indications for hepatectomy should be expanded in order not to exclude from radical therapy patients that could benefit from it.

Capussotti L, et al. Eur J Surg Oncol 2009;35:11-15

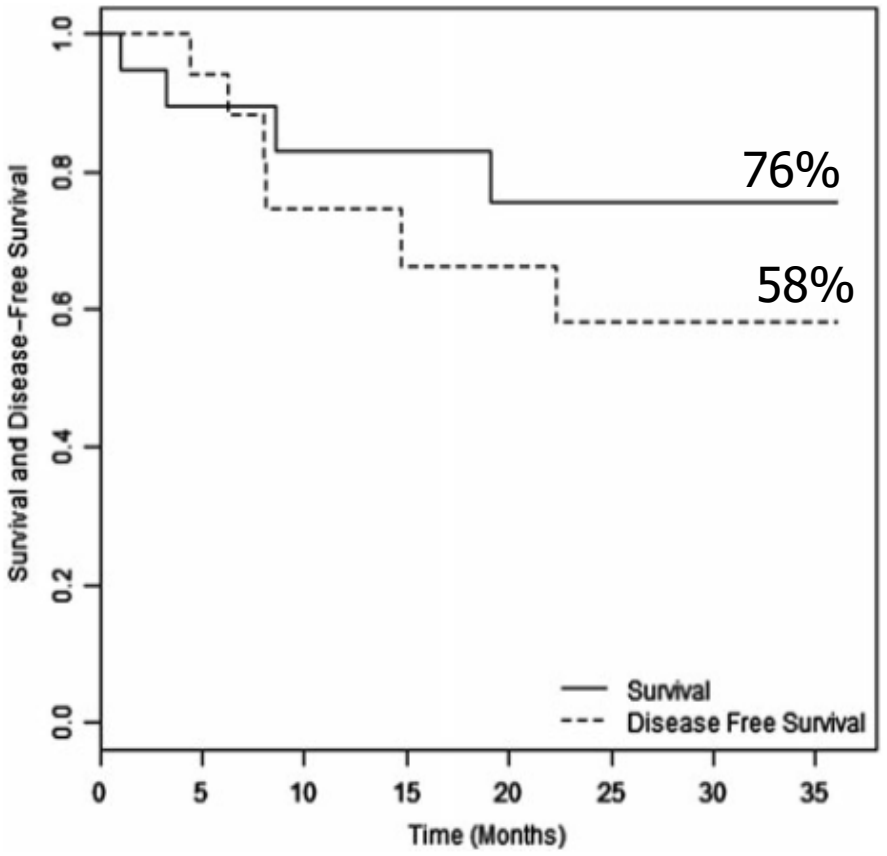
JOURNAL OF LAPAROENDOSCOPIC & ADVANCED SURGICAL TECHNIQUES
Volume 24, Number 4, 2014

Laparoscopic Resection of Hepatocellular Carcinoma: When, Why, and How? A Single-Center Experience

Paulo Herman, MD, Marcos Vinicius Perini, MD, Fabricio Ferreira Coelho, MD,
Jaime Arthur Pirolla Kruger, MD, Renato Micelli Lupinacci, MD, Gilton Marques Fonseca, MD,
Felipe de Lucena Moreira Lopes, MD, and Ivan Cecconello, MD

- CHC: n=30 (35,2%) – 2007/2013
- 21 homens, média idade= 54,7 a
- Procedimentos:
  - 10 não-anatômicas
  - 14 bissegmentectomia 2/3
  - 4 bissegmentectomia 6/7
  - 1 hepatectomia D
  - 1 hepatectomia E

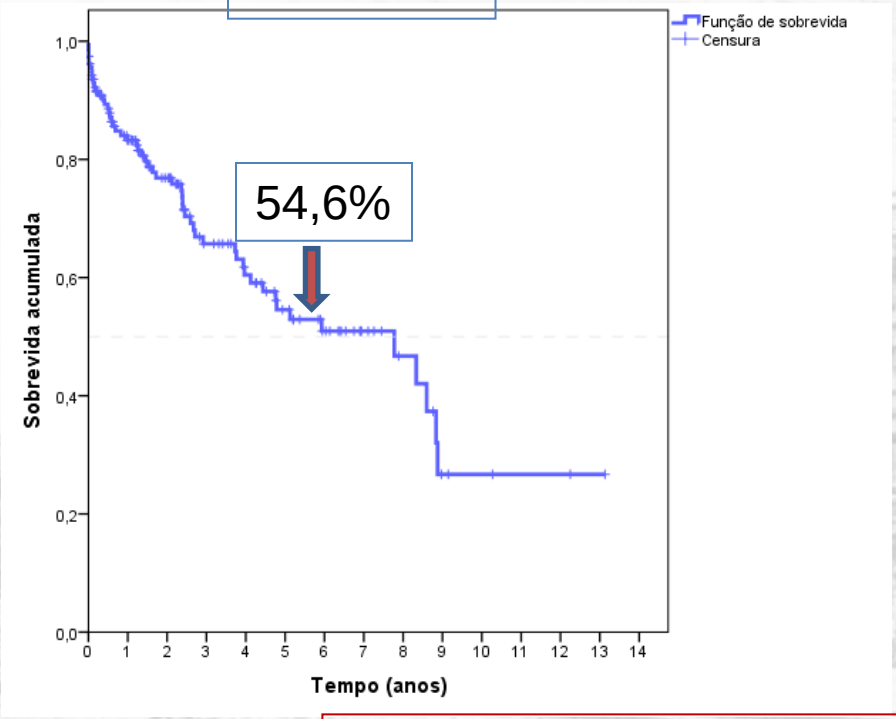
- Margens livres = 100%
- Conversão= 13,3%
- Mortalidade= 3,3%



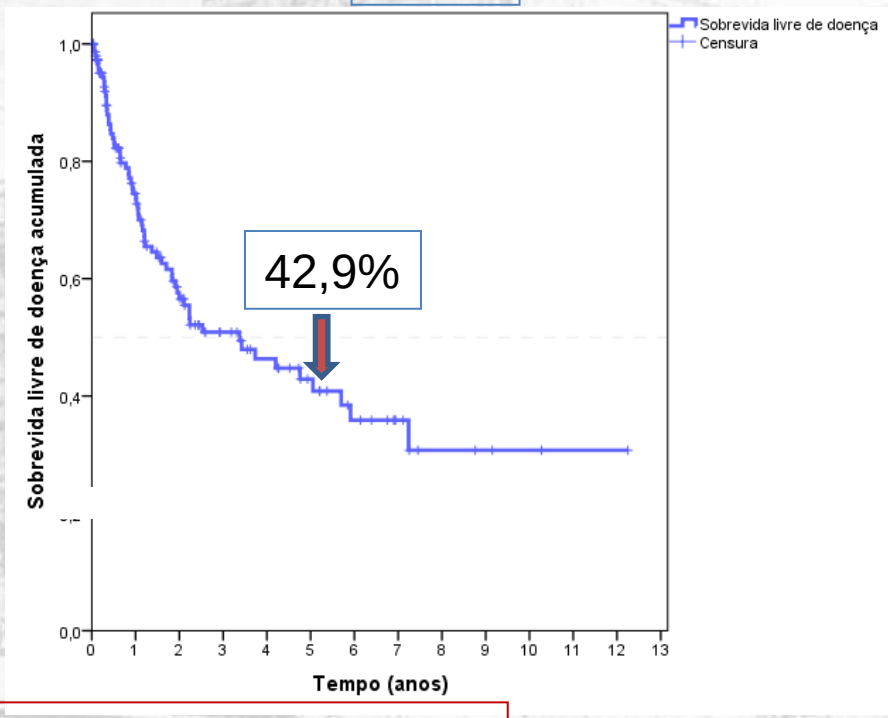
Herman P, et al. 2013

HCFMUSP 2010-2017
213 pacientes ressecados

SV Global



SVLD



CHC < 5cm

SG (5a) = 56,3%; SLD (5a) = 51,2%

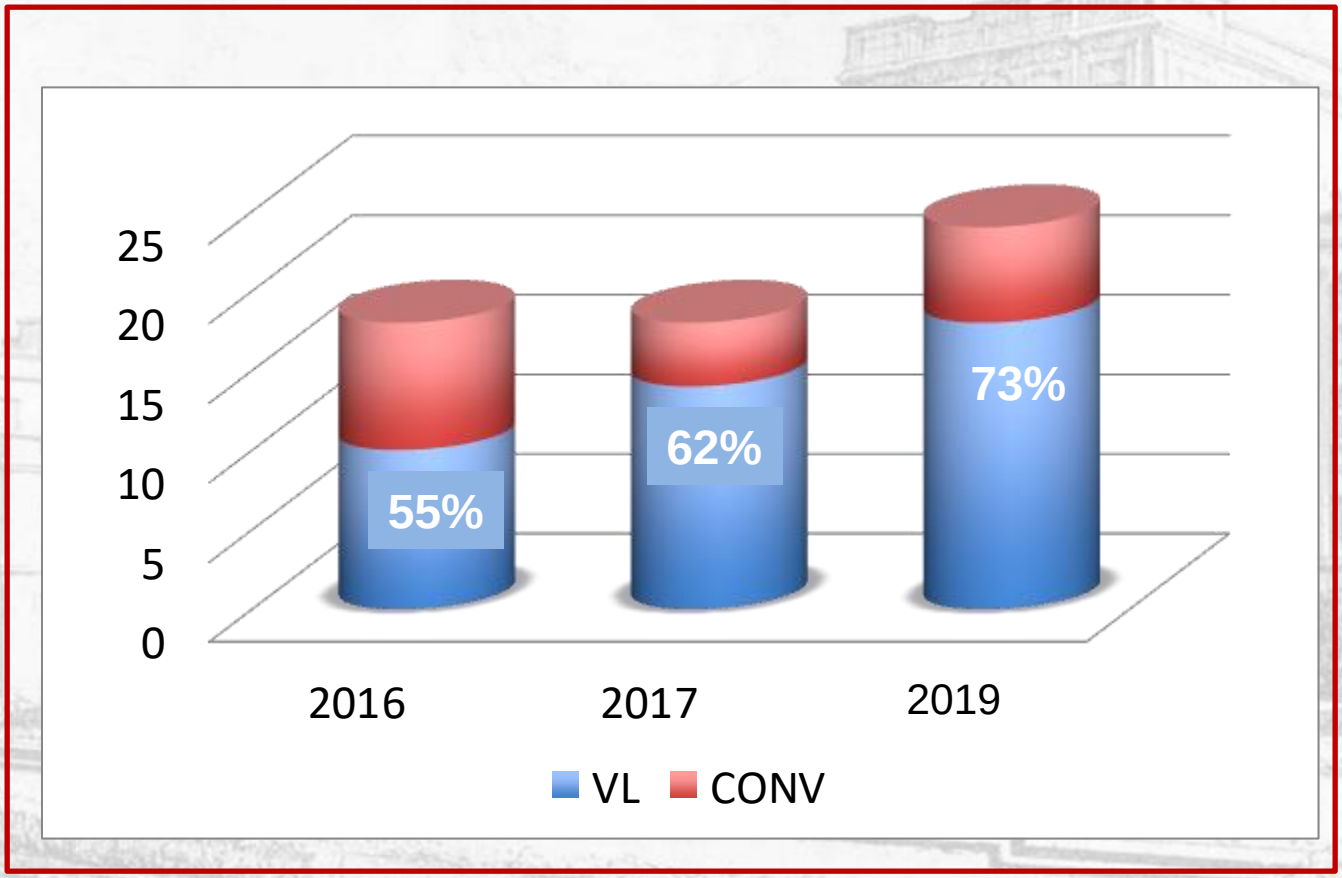
Cortesia: Prof. Paulo Herman (USP)

SERVIÇO DE CIRURGIA DO FÍGADO
HOSPITAL DAS CLÍNICAS · FMUSP

HCFMUSP

213 pacientes com CHC ressecados

Aberta X Laparoscópica



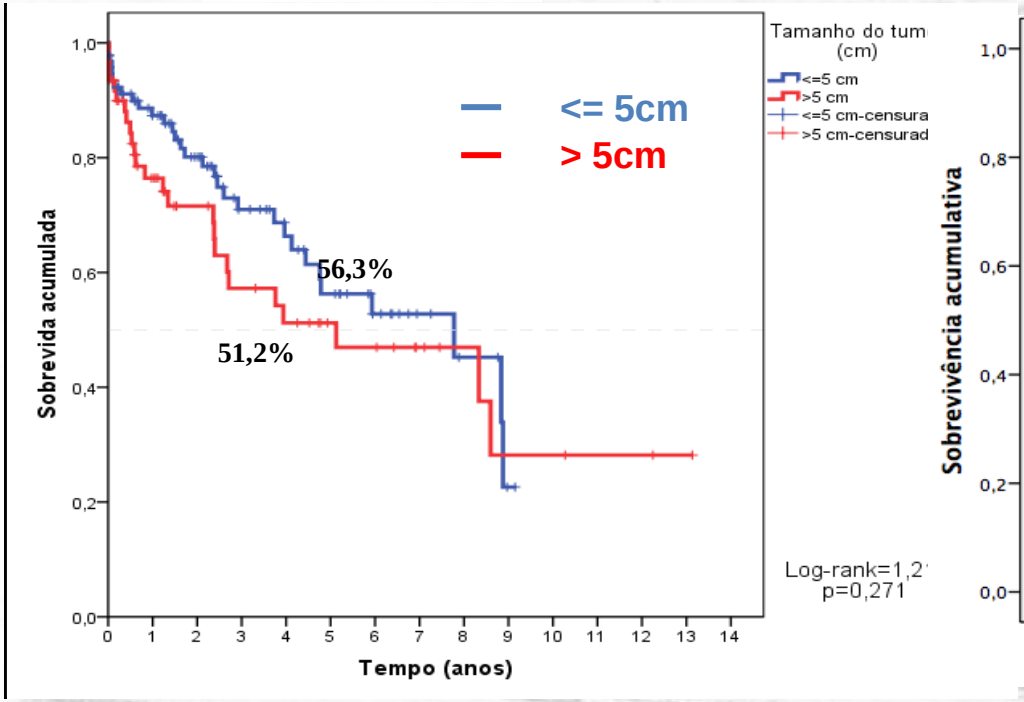
Cortesia: Prof. Paulo Herman (USP)

MEDICINA USP

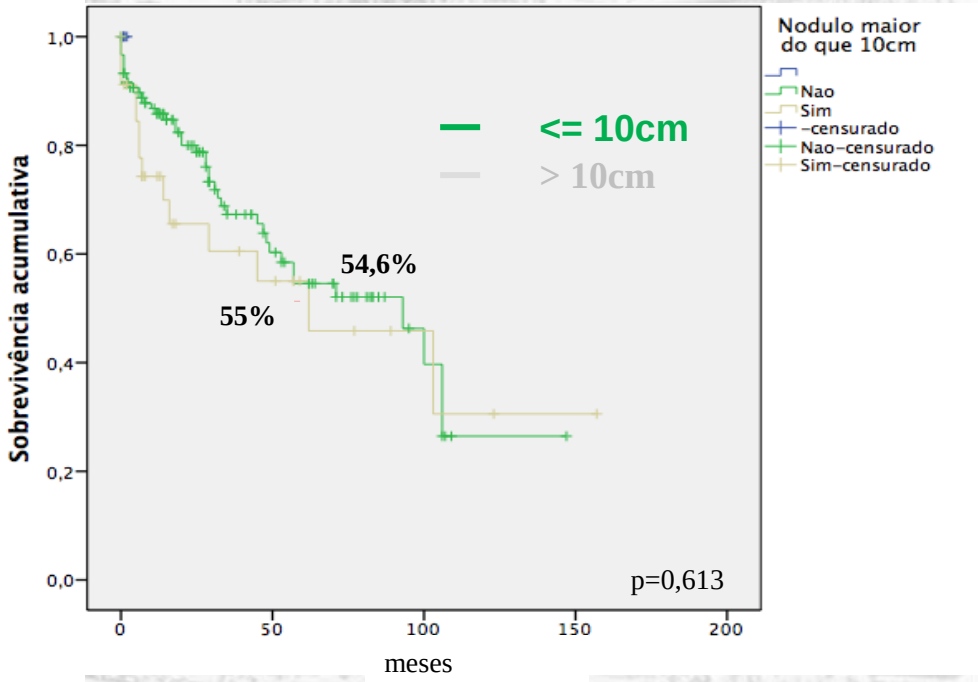
SERVIÇO DE CIRURGIA DO FÍGADO
HOSPITAL DAS CLÍNICAS · FMUSP

n=213 → 2010-2017

Sobrevida Global

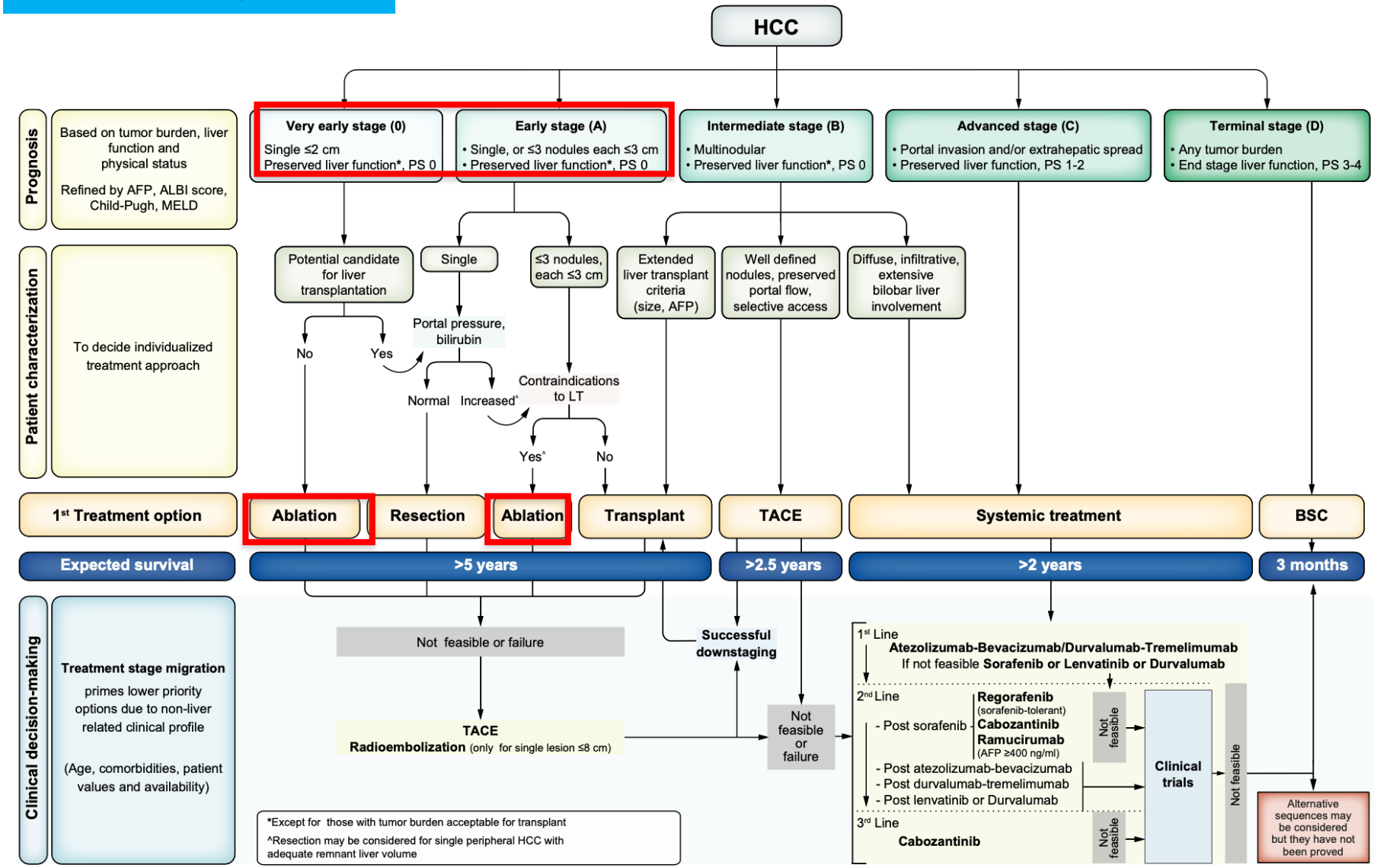


Sobrevida Global



Cortesia: Prof. Paulo Herman (USP)

ABLAÇÃO



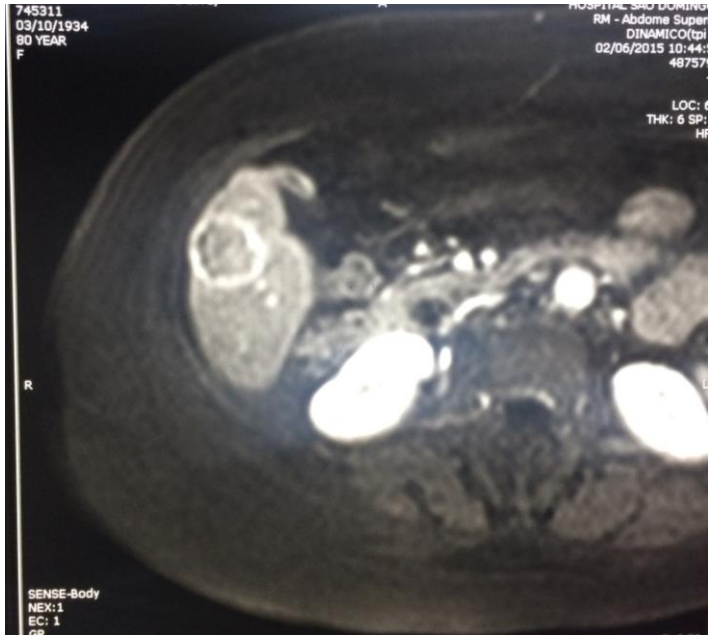
Reig M. et al. J Hepatol 2022;76 :681–93

Local ablation and external radiation

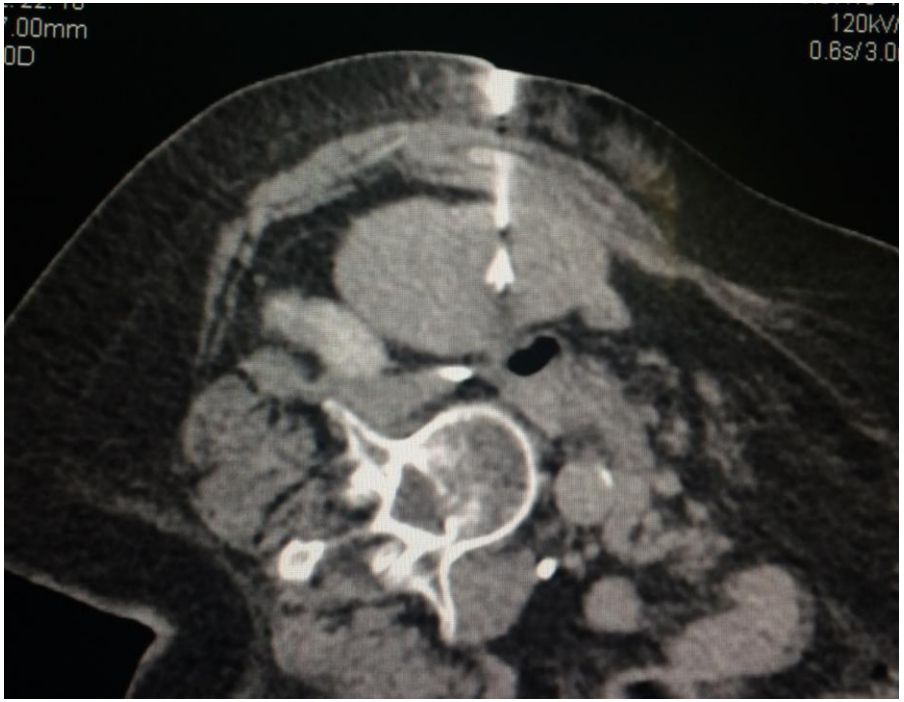
Recommendations

- Thermal ablation with radiofrequency is the standard of care for patients with BCLC 0 and A tumours not suitable for surgery (**evidence high; recommendation strong**). Thermal ablation in single tumours 2 to 3 cm in size is an alternative to surgical resection based on technical factors (location of the tumour), hepatic and extrahepatic patient conditions.

Galle PR, et al. J Hepatol 2018 ;69 :182–236



C, feminino, 80 a,
CHC em lobo segmento 6
Fígado cirrótico
Child A5, MELD 9
Sem hipertensão porta
Comorbidades



Conduta:
Ablação por RF:
Evolução satisfatória
Alta sem intercorrências

DOI:10.1111/hpb.12446 HPB

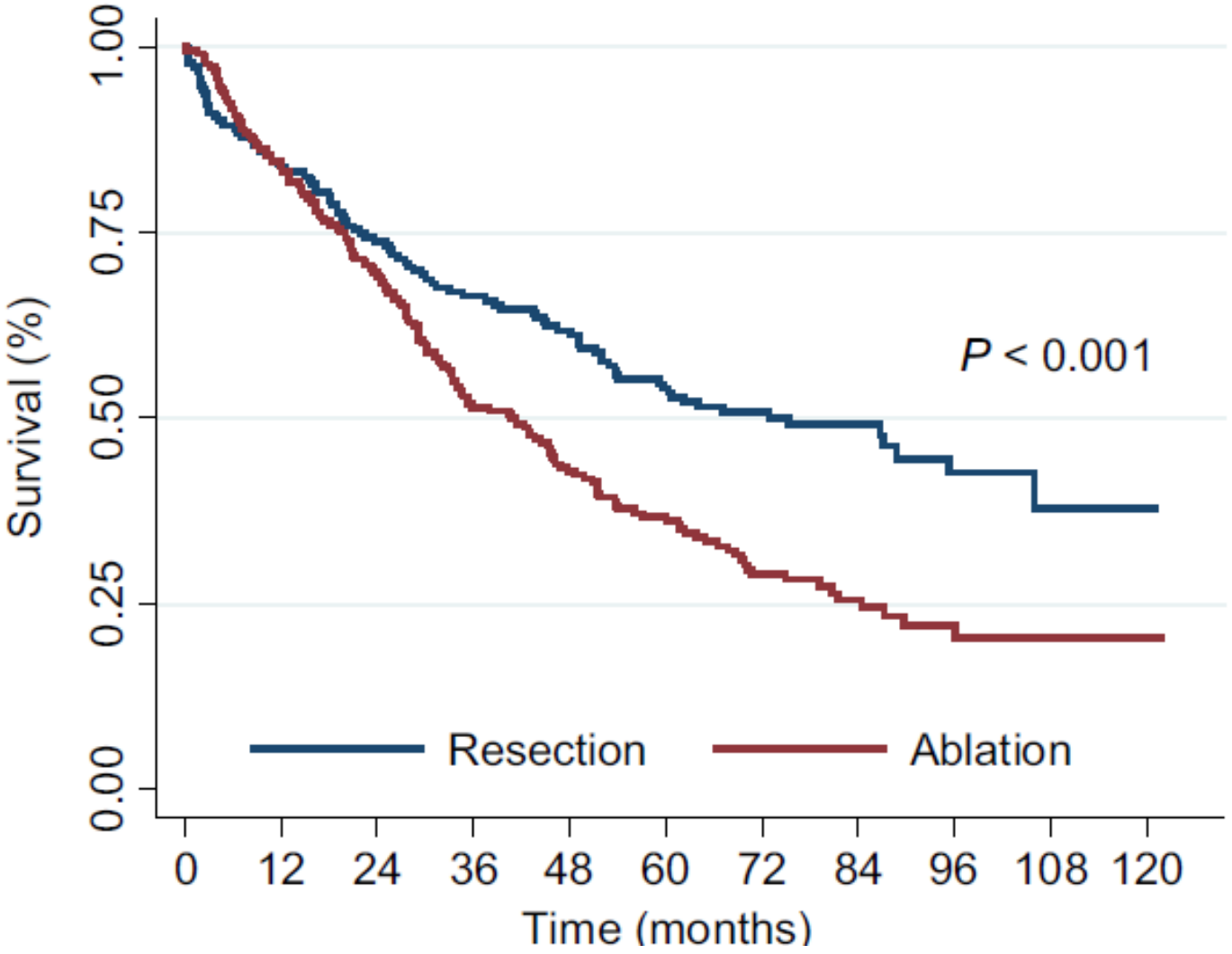
ORIGINAL ARTICLE

Surgical resection versus ablation for hepatocellular carcinoma ≤ 3 cm: a population-based analysis

John T. Miura[1], Fabian M. Johnston[1], Susan Tsai[1], Dan Eastwood[2], Anjishnu Banerjee[2], Kathleen K. Christians[1], Kiran K. Turaga[1] & T. Clark Gamblin[1]

[1]Division of Surgical Oncology, and [2]Department of Biostatistics, Medical College of Wisconsin, Milwaukee, WI, USA

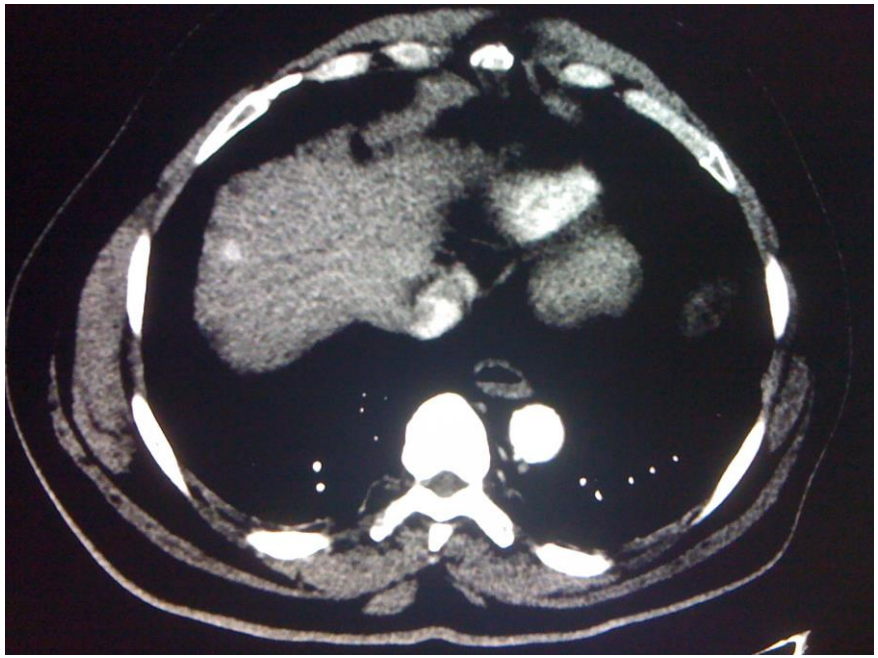
Miura JT, et al. HPB 2015;17:896-901



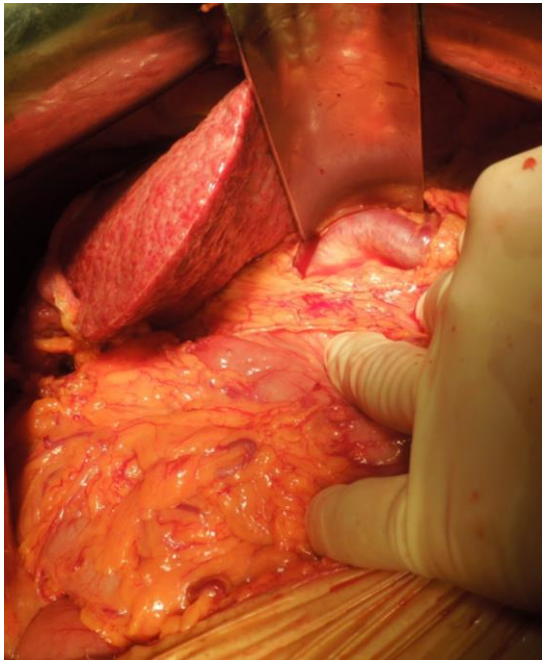
Miura JT, et al. HPB 2015;17:896-901

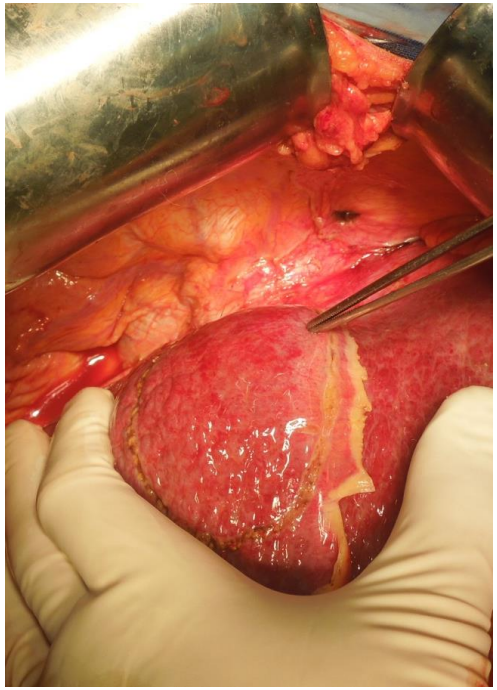
In conclusion, the present study provides further evidence supporting HR over ablation for patients with small, unifocal, HCC tumours. Numerous factors, both patient and tumour specific, continue to have a major influence on treatment allocation. Therefore, it would be short-sighted to suggest that ablation has no role for this subset of HCC tumours. Instead, in the setting of a good surgical candidate, treatment strategies should continue to emphasize a HR first approach for single, <3 cm HCC tumours, with ablation being reserved for patients less suited for the operating room.

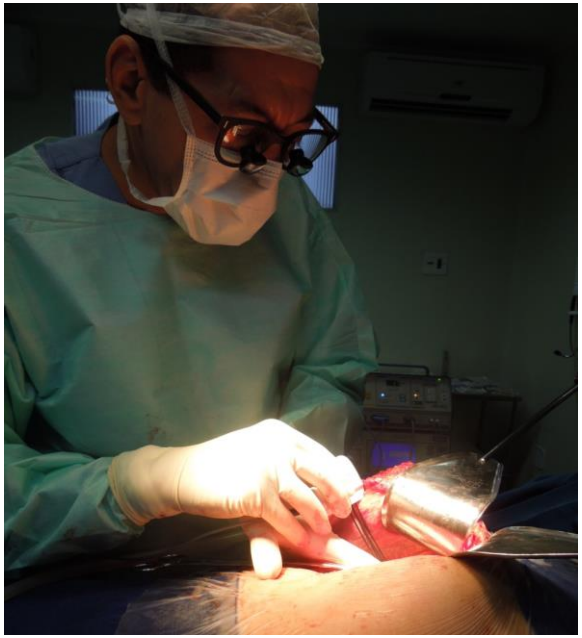
Miura JT, et al. HPB 2015;17:896-901



F, masculino, 66 anos
Cirrose, vírus C.
CHC (2 cm) em segmento 8
Child A6 MELD 9
Hipertensão porta
Sem comorbidades

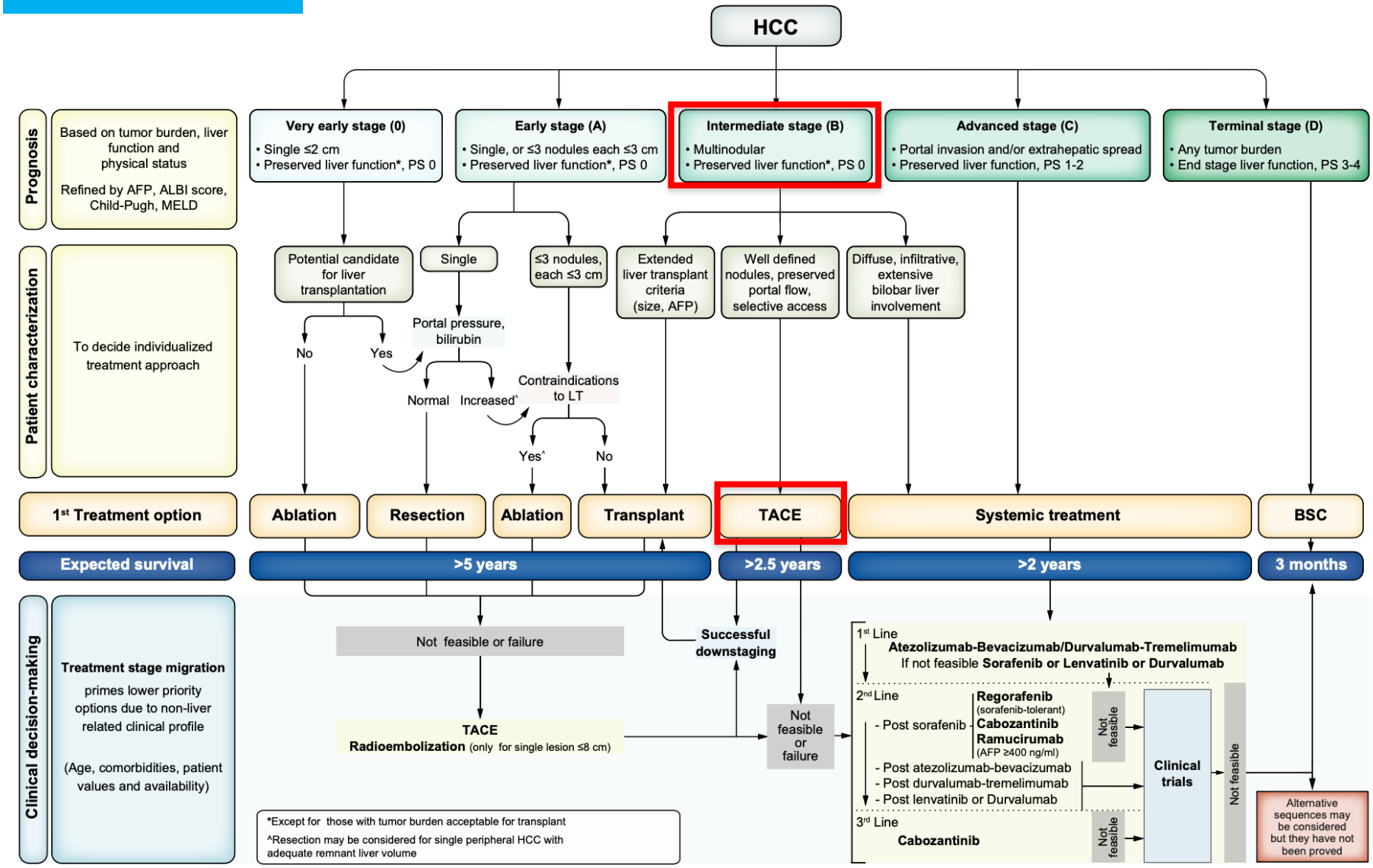






Hepatectomia com Habib
Evolução favorável
Alta sem intercorrências

TACE



Reig M. et al. J Hepatol 2022;76 :681–93

Transarterial therapies

Recommendations

- TACE is recommended for patients with BCLC stage B and should be carried out in a selective manner (**evidence high; recommendation strong**). The use of drug-eluting beads has shown similar benefit to conventional TACE (cTACE; gelfoam-Lipiodol® particles) and either of the two can be utilised (**evidence high; recommendation strong**). TACE should not be used in patients with decompensated liver disease, advanced liver and/or kidney dysfunction, macroscopic vascular invasion or extrahepatic spread (**evidence high; recommendation strong**). There is insufficient evidence to recommend bland embolisation, selective intra-arterial chemotherapy and lipiodolisation (**evidence moderate**).

Galle PR, et al. J Hepatol 2018 ;69 :182–236

Liver Cancer

Liver Cancer
DOI: 10.1159/000505093
Received: September 26, 2019
Accepted: November 22, 2019
Published online: January 28, 2020

Meta-Analysis

Comparison of Partial Hepatectomy and Transarterial Chemoembolization in Intermediate-Stage Hepatocellular Carcinoma: A Systematic Review and Meta-Analysis

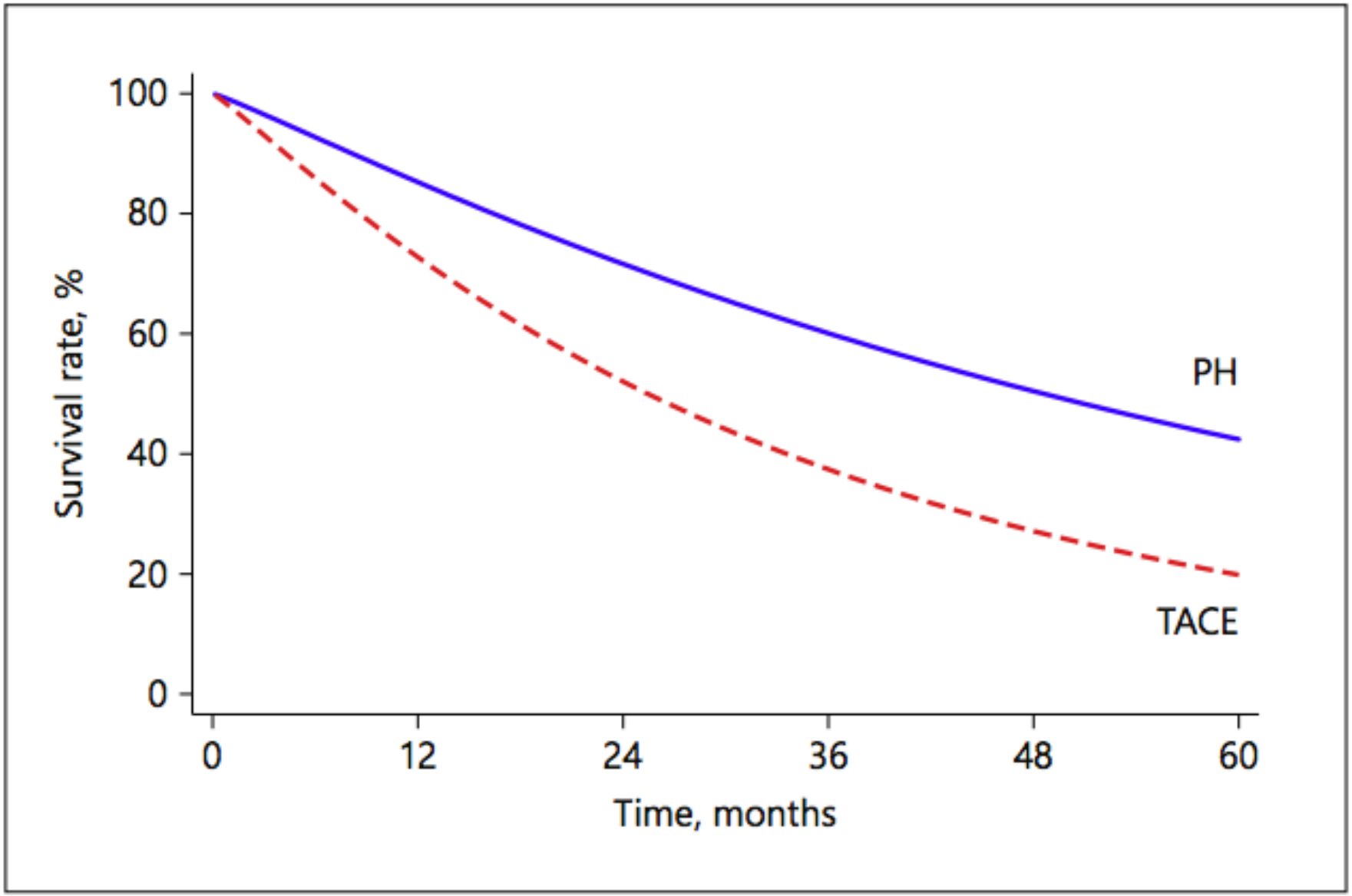
Ismail Labgaa[a] Patrick Taffé[b] David Martin[a] Daniel Clerc[a]
Myron Schwartz[c] Norihiro Kokudo[d] Alban Denys[e] Nermin Halkic[a]
Nicolas Demartines[a] Emmanuel Melloul[a]

Labgaa I, et al. Liver câncer 2020

TACE vs Ressecção

- **1.730 pacientes**
  Hepatectomia 750
  TACE 980
- **BCLC B**
- **Metanálise**
- **Sobrevida global**
- **Mortalidade em 90 dias pós-procedimento**

Labgaa I, et al. Liver câncer 2020



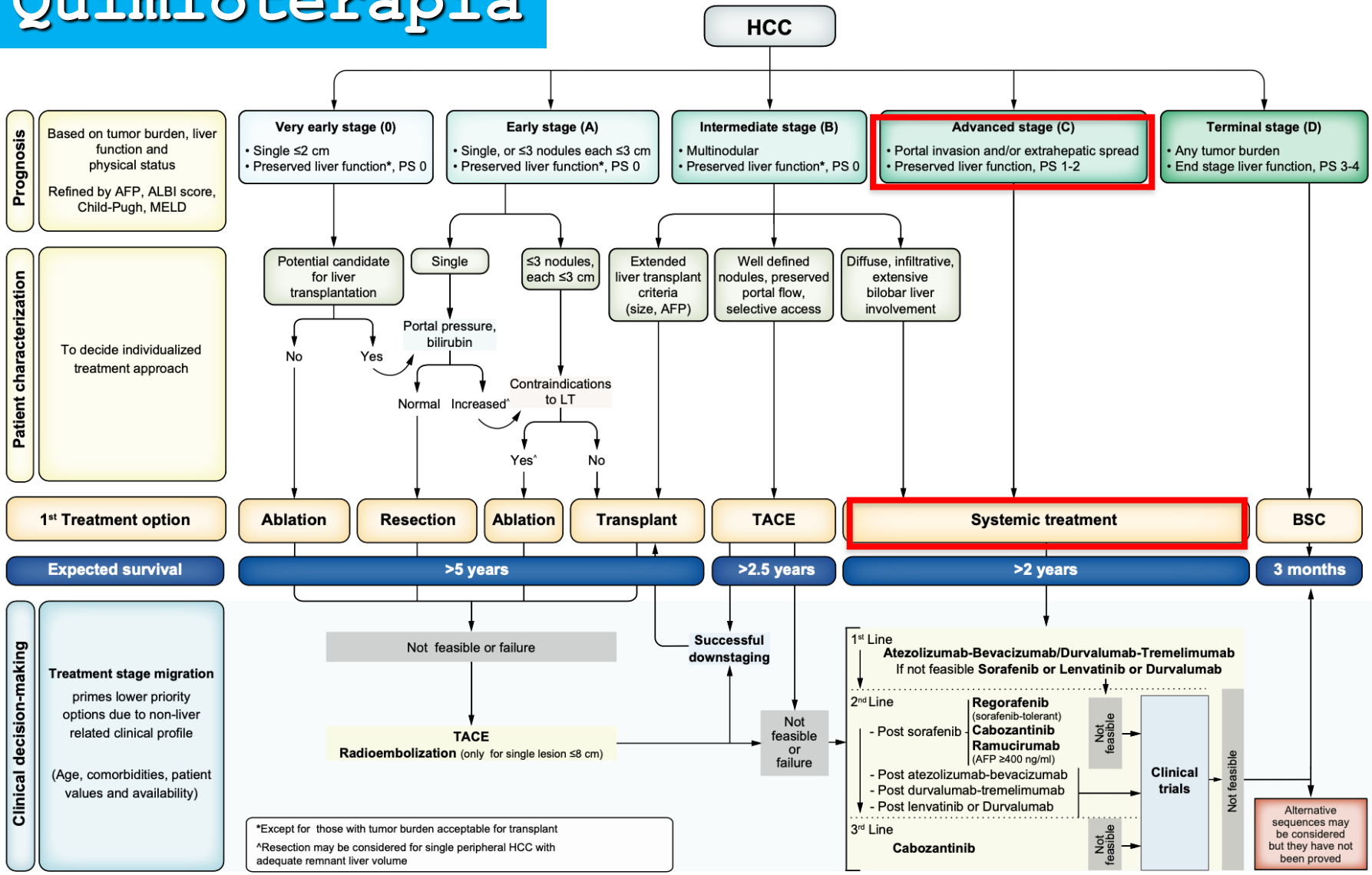
Labgaa I, et al. Liver câncer 2020

TACE

Conclusions: In patients with intermediate HCC, PH was associated with increased long-term survival compared to TACE, with comparable postprocedural mortality. These results suggest considering PH as treatment option in intermediate HCC and highlight the urgent need to refine the selection of patients with BCLC-B stage who may benefit from PH.

Labgaa I, et al. Liver câncer 2020

Quimioterapia



Reig M. et al. J Hepatol 2022;76 :681–93

Systemic therapies

Recommendations

- Sorafenib is the standard first-line systemic therapy for HCC. It is indicated for patients with well-preserved liver function (Child-Pugh A) and with advanced tumours (BCLC–C) or earlier stage tumours progressing upon or unsuitable for loco-regional therapies (**evidence high; recommendation strong**).

Galle PR, et al. J Hepatol 2018 ;69 :182–236

ORIGINAL ARTICLE

A Snapshot of the Effective Indications and Results of Surgery for Hepatocellular Carcinoma in Tertiary Referral Centers: Is It Adherent to the EASL/AASLD Recommendations?

An Observational Study of the HCC East-West Study Group

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TABLE 2. Pattern of Presentation According to the BCLC Classification

BCLC Class	n (%)
BCLC 0-A [n = 931]*	
Single ≤2 cm	204 (22)
Single ≤5 cm	604 (65)
Up to 3 tumors, none >3 cm	123 (13)
BCLC B [n = 666]	
Single >5 cm	456 (68.5)
Multiple	210 (31.5)
BCLC C [n = 222]	
PV invasion	60 (27)
First-order PV	20 (9)
Second-order PV	16 (7)
Third-order PV	24 (11)
HV invasion	77 (35)
IVC invasion	15 (7)
PV + HV invasion	63 (28)
PV + IVC invasion	—
HV + IVC invasion	7 (3)

*The number of patients for whom the data were available.
HV indicates hepatic vein; IVC, inferior vena cava; PV, portal vein.

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TABLE 3. Surgical Procedures Stratified According to the BCLC Classification

	BCLC 0-A	BCLC B	BCLC C	*P**
Type of resection [n = 1674]†				
Minor	684 (88)	365 (58)	102 (38)	**0.000**
Major	93 (12)	268 (42)	162 (62)	
No. removed segments [n = 1674]				
≤1	565 (73)	231 (37)	53 (20)	**0.000**
2	119 (15)	134 (21)	49 (18)	
3	14 (2)	53 (8)	41 (16)	
>3	79 (10)	215 (34)	121 (46)	

Bold values indicate statistically significant.
Values given are number (percentage).
*χ^2 test.
†The number of patients for whom the data were available.

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Mortalidade pós-operatória – 2,7%

	30 Dias (%)	90 Dias (%)
BCLC 0-A	1,6	2,0
BCLC B	3	3
BCLC C	2,5	3

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TABLE 6. Main Published Studies of Surgical Resection for BCLC B, C, and B-C HCC in the Last Decade

Author	Year	BCLC Class	No. Patients	3-yr OS, %	5-yr OS, %	3-yr DFS, %	5-yr DFS, %	Operative Mortality, %
Minagawa et al[14]	2001	C	18	42	42	—	—	5
Ng et al[15]	2005	B	380	50	39	38	26	2.4
Chirica et al[17]	2008	B-C	20	56	45	20	17	5
Ishizawa et al[19]	2008	C	98	71	56	37	25	0.2
Wang et al[12]	2008	B	243	64	50	—	—	—
		C	14	29	29	—	—	—
Torzilli et al[18]	2008	B	24	80	—	44	—	0
		C	28	74	—	17	—	3.6
Present series	2011	B	737	71	57	38	27	3.1
		C	297	49	38	28	18	2.5

DFS indicates disease-free survival; OS, overall survival.

29-57%

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Conclusões

The herein analyzed numbers are large enough to request an update of the EASL/AASLD therapeutic guidelines related to BCLC B and C patients: for the latter, if within Child class A and performance status 0-1, evaluation by a surgical team specifically expert in liver surgery should be mandatory. It is hoped that this study will also stimulate prospective studies able to better disclose the proportion of patients harboring intermediate or advanced HCC who could benefit from a surgical approach.

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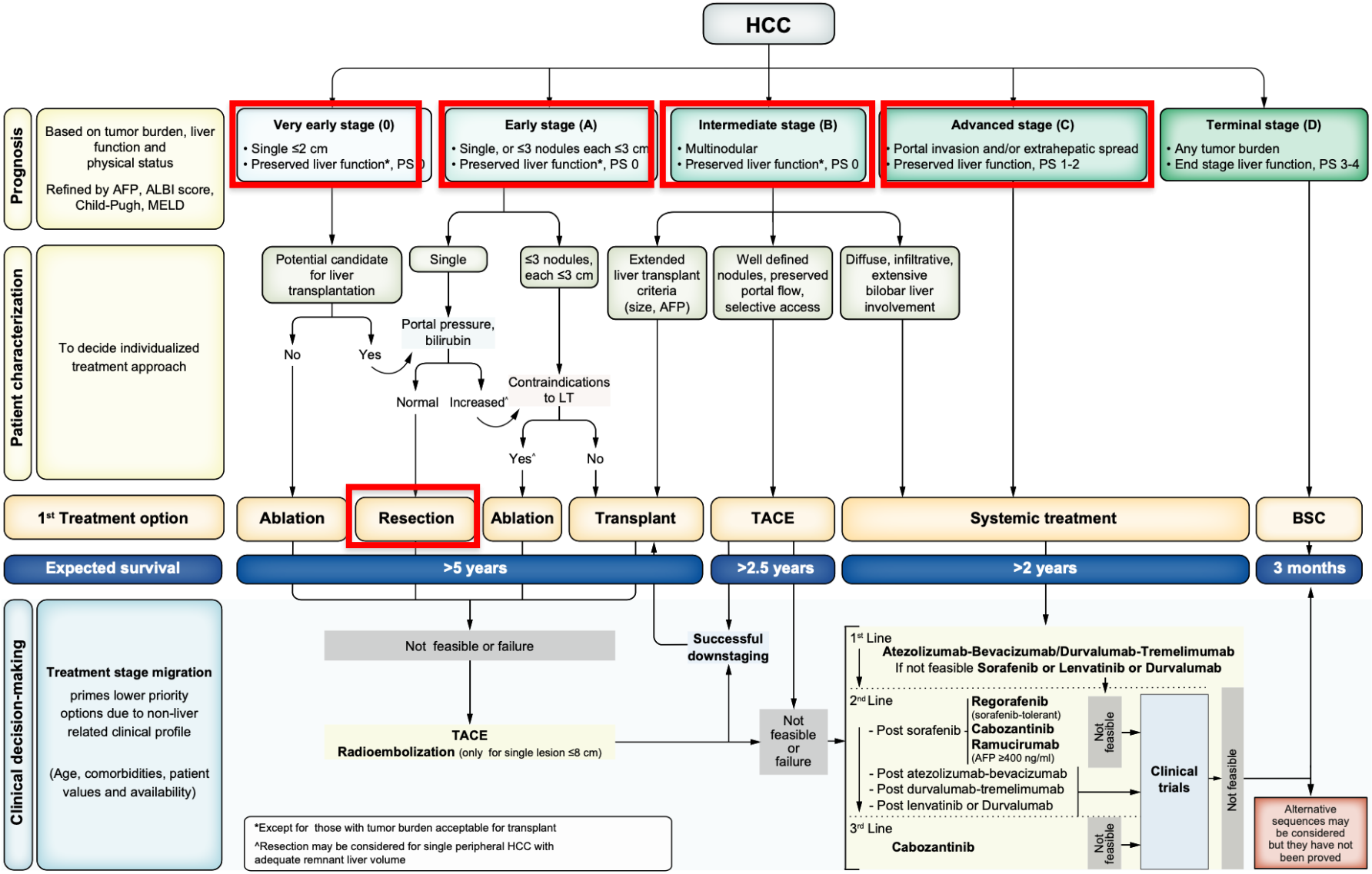

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