

**Tavola Rotonda: GOM E PDTA DELL'HCC NELLE
RETI ONCOLOGICHE REGIONALI E GESTIONE
DEL PAZIENTE CON HCC NEL TRIVENETO:
ESPERIENZE A CONFRONTO**



IL GOM-HCC A PADOVA

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Chirurgia Generale 2, Chief: Prof. U. Cillo

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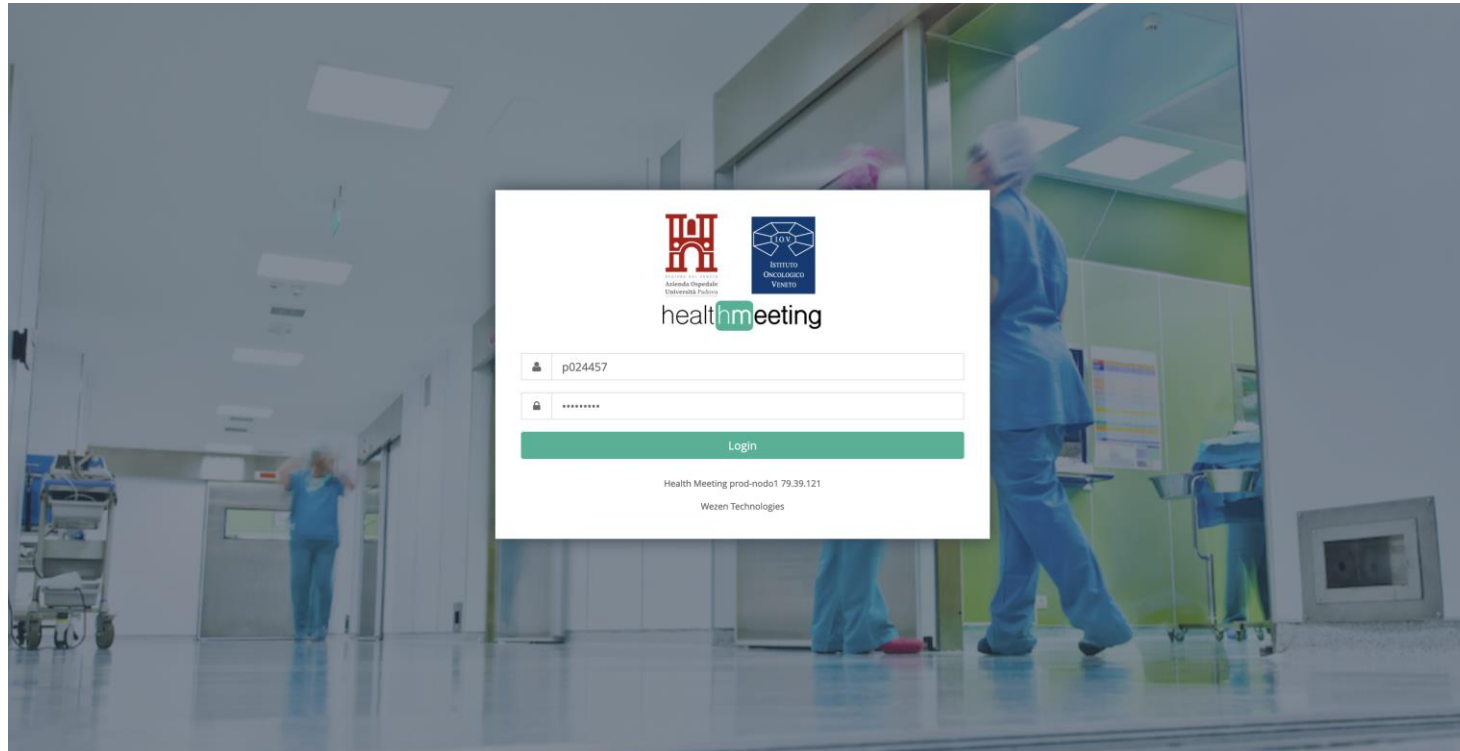


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Cadenza settimanale, ogni giovedì pomeriggio h15.00

Dal 2020 su ONLINE su MEET

Dal 2018 su piattaforma Healthmeeting



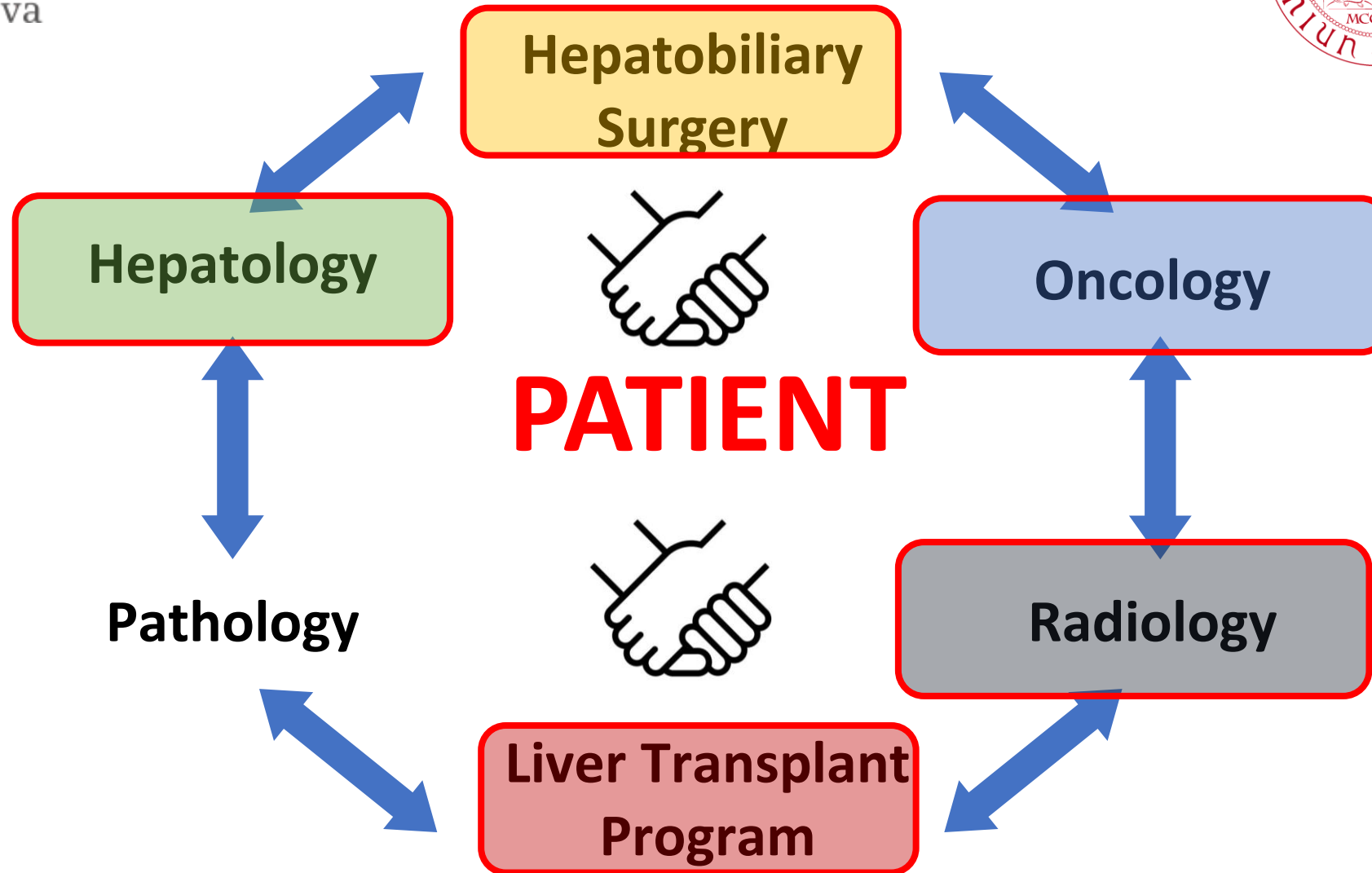
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IN UN CENTRO HUB AD ALTO VOLUME, NON TUTTI I PAZIENTI CON HCC POSSONO ESSERE DISCUSSI AL GOM. SOLO I CASI PIU' COMPLESI



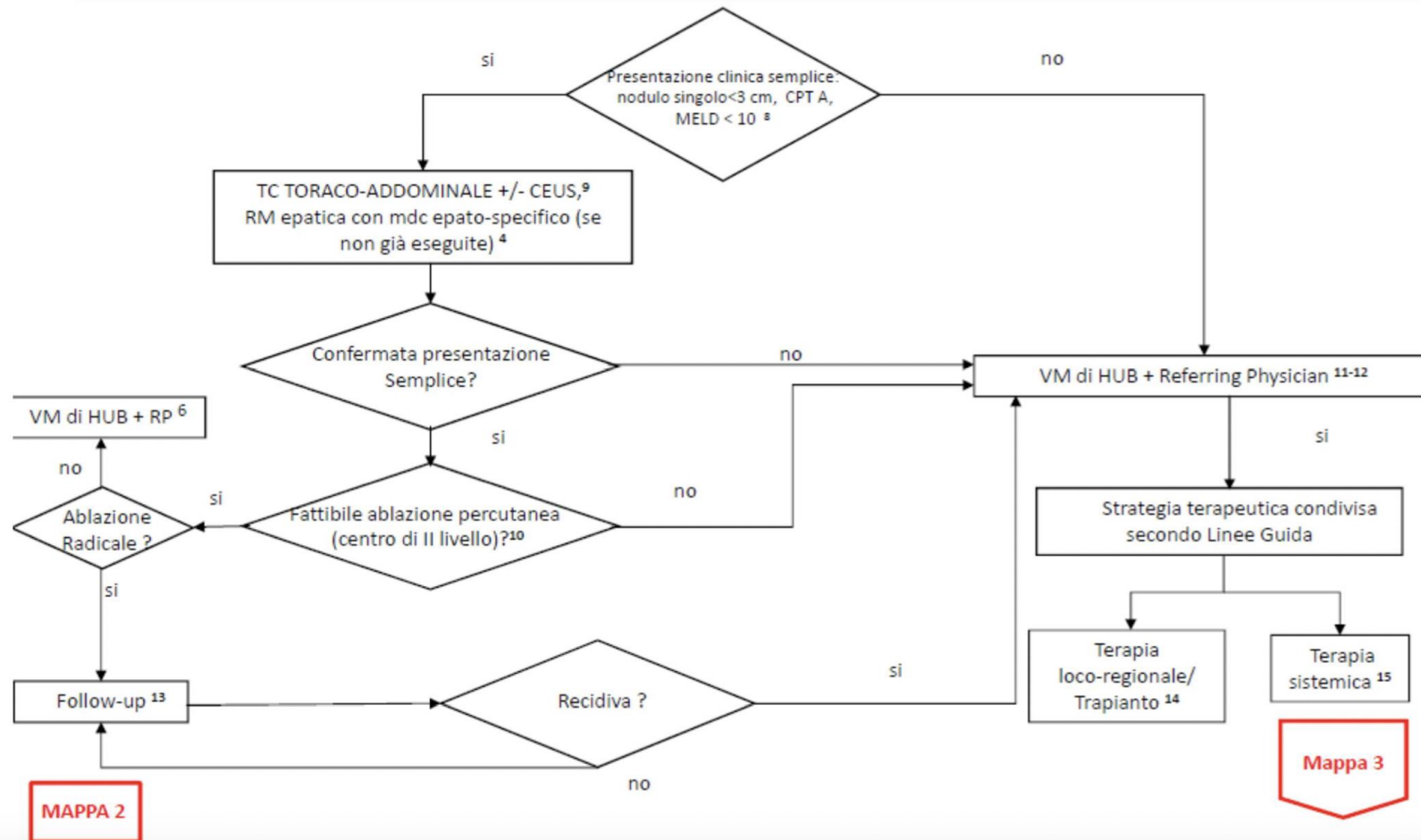


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MAPPA 1

Pazienti con diagnosi di HCC



MAPPA 2

MAPPA 3





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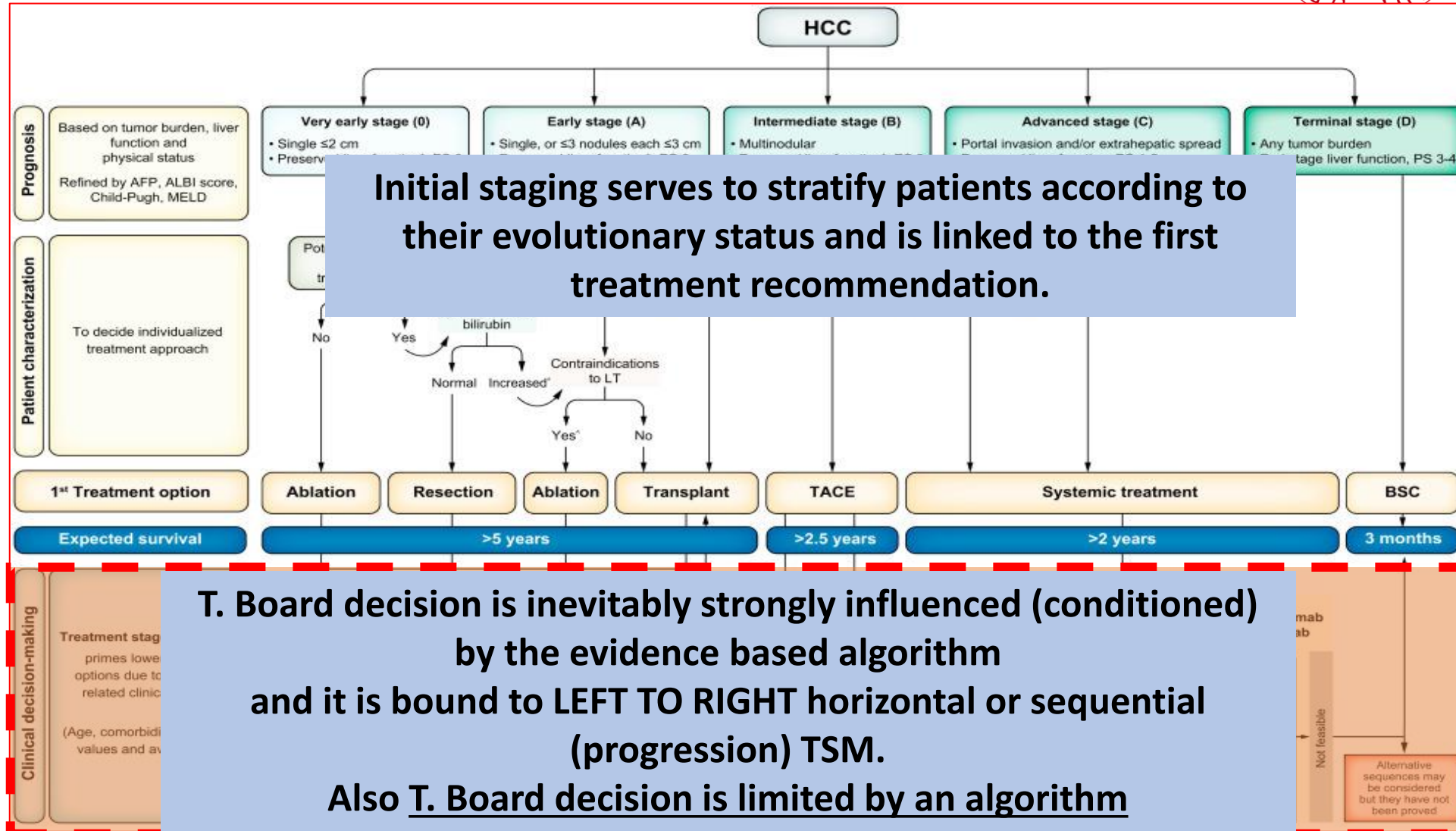
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The 2022 BCLC update



ALGORITHM

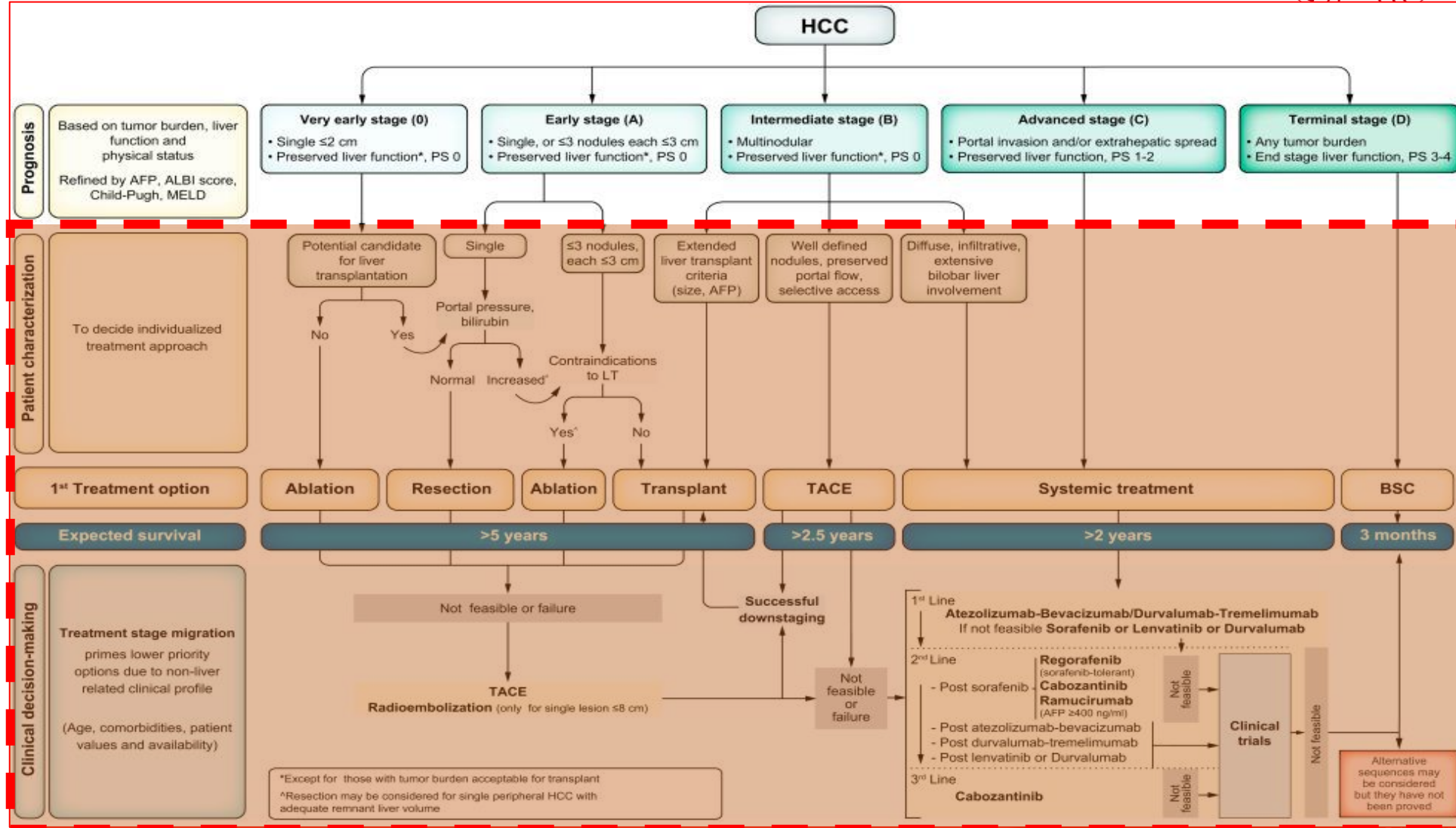
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The 2022 BCLC update

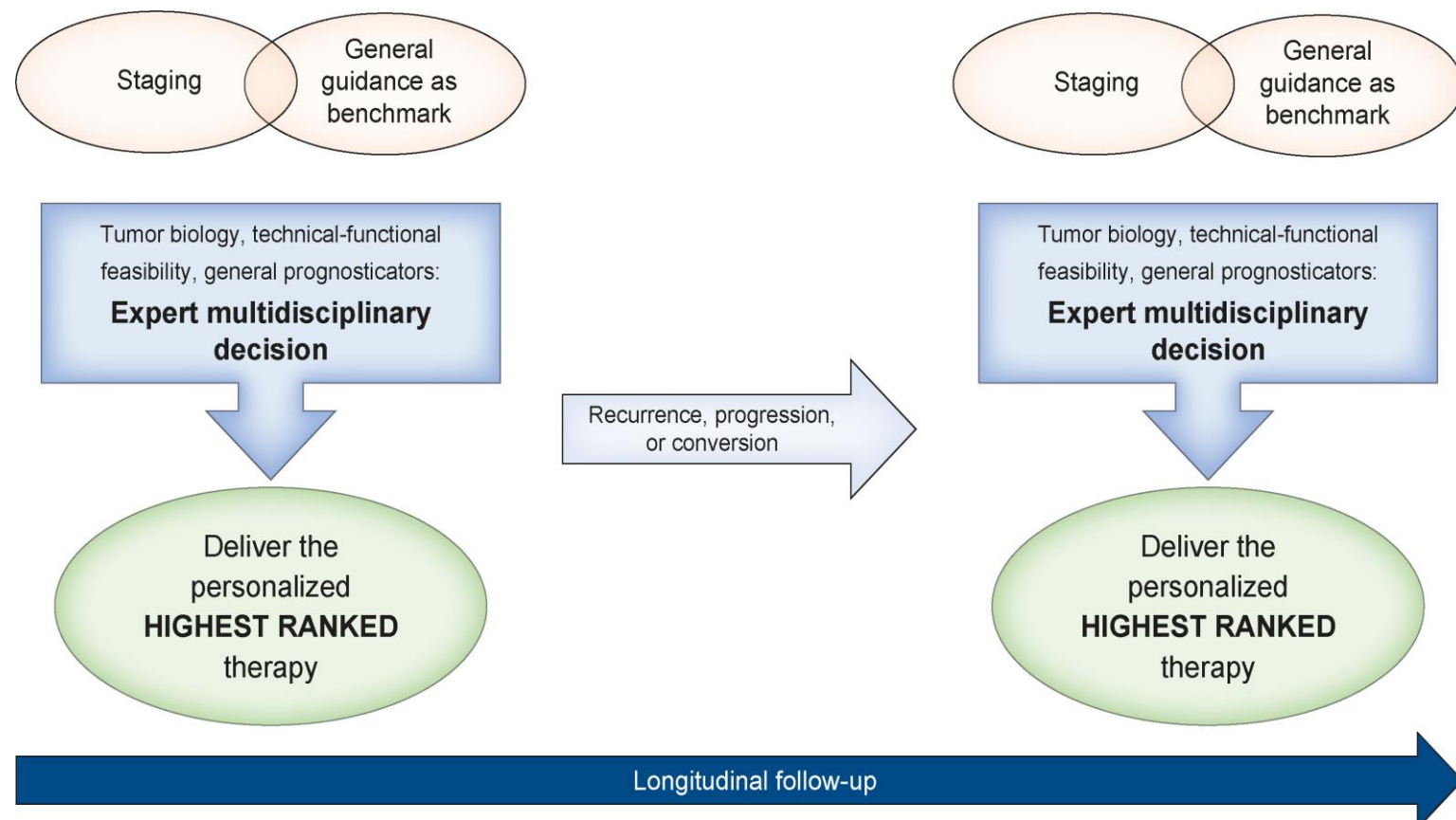


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Lancet Oncol 2023; 24: e312-22



Personalised management of patients with hepatocellular carcinoma: a multiparametric therapeutic hierarchy concept



Alessandro Vitale, Giuseppe Cabibbo, Massimo Iavarone, Luca Viganò, David J Pinato, Francesca Romana Ponziani, Quirino Lai, Andrea Casadei-Gardini, Ciro Celsa, Giovanni Galati, Martina Gambato, Laura Crocetti, Matteo Renzulli, Edoardo G Giannini, Fabio Farinati, Franco Trevisani, Umberto Cillo, on behalf of the HCC Special Interest Group of the Italian Association for the Study of the Liver*



Journal of Hepatology

Available online 22 January 2024

In Press, Journal Pre-proof [?](#) [What's this? ↗](#)



Expert Opinion

Merits and boundaries of the Barcelona Clinic Liver Cancer Staging and Treatment Algorithm: learning from the past to improve the future with a novel proposal.

Franco Trevisani^{1,2 a}, Alessandro Vitale^{3 a} , Masatoshi Kudo⁴, Laura Kulik⁵, Joon-Won Park⁶, David J. Pinato^{7,8}, Umberto Cillo³



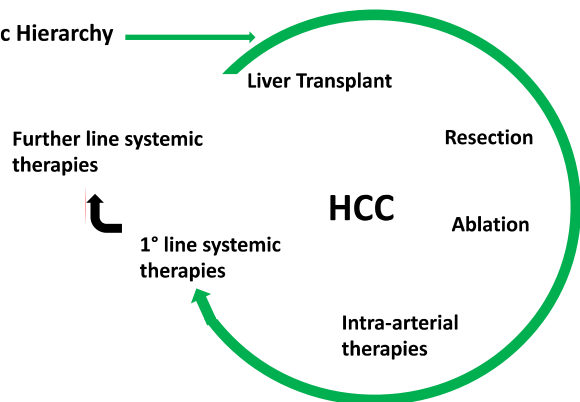
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Multi-parametric therapeutic Hierarchy



ENDPOINT = SURVIVAL BENEFIT

Ordinal Therapeutic Hierarchy



Multiparametric multidisciplinary expert decision based on:

- Frailty and Performance status
- Comorbidities
- Tumor burden
- Liver dysfunction
- Technical feasibility

Multi-society Italian guidelines. <https://doi.org/10.1016/j.dld.2023.10.028>

Multiparametric multidisciplinary expert decision →

Exclude therapy if (multifactorial weight)	Unfit	Critical tumor features			Liver dysfunction	Unfeasibility
		PS >2*	Extra-hepatic*	Adverse biology or location		
Exclude liver transplant if	Comorbidities, severe frailty, 1 biological age XXX	STOP	STOP	Beyond criteria, 1AFP or PIVKA- II, SD or PD XX	—	LDLT/DCD unavailable, 1 expected WT, technical constrains XXX
Exclude mini-invasive liver resection if	Comorbidities, severe frailty XX	STOP	STOP	>3 nodules, critical location X	Severe CRPH, >Child-Pugh B 7, ↓ liver remnant XX	Technical constrains XX
Exclude liver resection if	Comorbidities, severe frailty XX	STOP	STOP	>3 nodules, critical location X	MELD ≥10, 1 CRPH, >Child-Pugh A6, ↓ liver remnant XXX	Technical constrains XX
Exclude percutaneous ablation if	Severe comorbidities X	STOP	STOP	Size >3 cm, >3 nodules, critical location XXX	>Child-Pugh B7, high risk of bleeding XX	Technical constrains X
Exclude video-laparoscopic ablation if	Severe comorbidities X	STOP	STOP	Size >4 cm, >5 nodules, critical location XX	>Child-Pugh B9 X	Technical constrains XX
Exclude intra-arterial therapies if	Severe comorbidities X	STOP	STOP	Size >5 cm (TACE), diffuse-infiltrative, i.h. PVT (TACE) XX	Child-Pugh >B7 XXX	Technical constrains, unavailability (high costs) XX
Exclude systemic therapy if	Severe comorbidities X	STOP	—	—	Child >B7 XXX	Cost-ineffectiveness XX
Best supportive care	—	—	—	—	—	—

Ordinal therapeutic hierarchy ↓

Weight of each variable as a relative contraindication in the multifactorial assessment:
 — Irrelevant **X** Low **XX** Intermediate **XXX** Relevant STOP Contraindication

Vitale A, ... Cillo U. Lancet Oncology 2023

Trevisani F, Vitale A, ... Cillo U. JHEP 2024

Exclude therapy if (multifactorial weight)	Unfit	Critical tumor features			Liver dysfunction	Unfeasibility
		PS >2*	Extra-hepatic ^c	Adverse biology or location		
Exclude liver transplant if	Comorbidities, severe frailty, † biological age XXX	STOP	STOP	Beyond criteria, †AFP or PIVKA-II, SD or PD XX	—	LDLT/DCD unavailable, † expected WT, technical constraints XXX
Exclude mini-invasive liver resection if	Comorbidities, severe frailty XX	STOP	STOP	>3 nodules, critical location X	Severe CRPH, >Child-Pugh B 7, † liver remnant XX	Technical constraints XX
Exclude liver resection if	Comorbidities, severe frailty XX	STOP	STOP	>3 nodules, critical location X	MELD ≥10, † CRPH, >Child-Pugh A6, † liver remnant XXX	Technical constraints XX
Exclude percutaneous ablation if	Severe comorbidities X	STOP	STOP	Size >3 cm, >3 nodules, critical location XXX	>Child-Pugh B7, high risk of bleeding XX	Technical constraints X
Exclude video-laparoscopic ablation if	Severe comorbidities X	STOP	STOP	Size >4 cm, >5 nodules, critical location XX	>Child-Pugh B9 X	Technical constraints XX
Exclude intra-arterial therapies if	Severe comorbidities X	STOP	STOP	Size >5 cm (TACE), diffuse-infiltrative, i.h. PVT (TACE) XX	Child-Pugh >B7 XXX	Technical constraints, unavailability (high costs) XX
Exclude systemic therapy if	Severe comorbidities X	STOP	—	—	Child >B7 XXX	Cost-ineffectiveness XX
Best supportive care	—	—	—	—	—	—

Weight of each variable as a relative contraindication in the multifactorial assessment:
 — Irrelevant **X** Low **XX** Intermediate **XXX** Relevant STOP Contraindication

Conversion or adjuvant approach



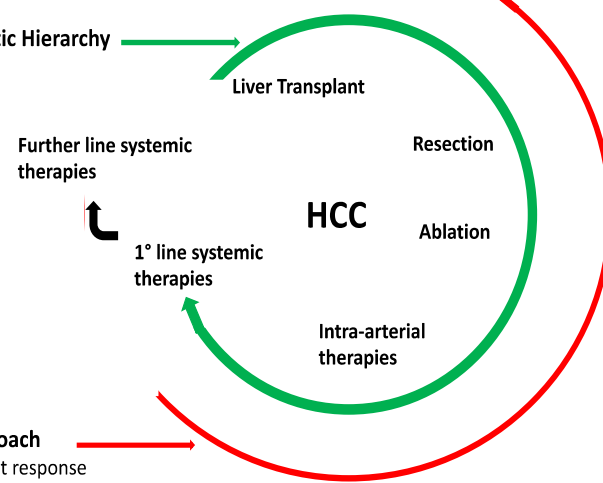
Converse therapeutic Hierarchy

ENDPOINT = CONVERSION

Multiparametric multidisciplinary expert decision based on:

- Frailty and Performance status
- Comorbidities
- Tumor burden
- Liver dysfunction
- Technical feasibility

Ordinal Therapeutic Hierarchy



Conversion approach
Based on treatment response and multidisciplinary decision



HCC treatment according to Therapeutic Hierarchy concept



Please insert progressive patient number

Only for in-protocol patients

HCC treatment according to Therapeutic Hierarchy concept



Personal data

Only for in-protocol patients

Name:

Surname:

Date of birth:

HCC treatment according to Therapeutic Hierarchy concept



Clinical data – Liver function

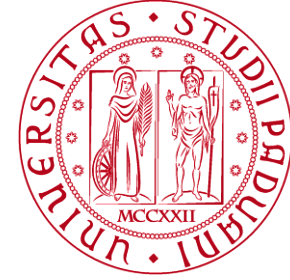
Only for in-protocol patients

Liver cirrhosis:	YES	NO					
Etiology:	HCV	HBV	ETOH	MASLD	Other		
Variceal bleeding:	YES	NO					
EPS:	YES	NO	EPS Grade:	1 - 2	3 - 4		
Ascites:	YES	NO	Ascites Grade:	1	2	3	





HCC treatment according to Therapeutic Hierarchy concept



Clinical data – Scores

Only for in-protocol patients

Child – Pugh:	<input type="text"/>	LFI:	<input type="text"/>
MELD:	<input type="text"/>	ECOG:	<input type="text"/>
Meld-Na:	<input type="text"/>	CCI:	<input type="text"/>
ALBI:	<input type="text"/>		





HCC treatment according to Therapeutic Hierarchy concept



Clinical data – Cancer features

Only for in-protocol patients

Extra-hepatic disease:	<input type="checkbox"/> YES	<input type="checkbox"/> NO	Number of nodules:	<input type="checkbox"/>
Neoplastic PVT:	<input type="checkbox"/> YES	<input type="checkbox"/> NO	Diameter of the largest nodule (cm)	<input type="checkbox"/>
Previous HCC treatments	<input type="checkbox"/> YES	<input type="checkbox"/> NO	Specify previous treatments	<input type="checkbox"/>





HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Liver transplantation

YES

NO

HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Liver transplantation

YES

Need for downstaging or bridging treatments?

Click here to continue in the
therapeutic hierarchy

YES

NO

Click here to start again

HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Liver transplantation

NO

Why not?

Select one or more

Patient's fitness

Comorbidities
Severe frailty
High biological age

PS > 2

Critical tumor features

Extrahepatic
disease

HCC beyond criteria
High AFP or PIVKA-II
SD or PD

Unfeasibility

High expected WT
LDLT/DCD unavailable
Technical constrains



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Mini-invasive liver resection

YES

NO



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HCC treatment according to Therapeutic Hierarchy concept



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Chosen treatment:

Mini-invasive liver resection

YES

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HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Mini-invasive liver resection

NO

Why not?

Select one or more

Patient's features

Comorbidities
Severe frailty

PS > 2

HCC features

Extrahepatic
disease

> 3 nodules
Critical location

Liver dysfunction

Severe CRPH
Low FLR
Child-Pugh > B8

Unfeasibility

Technical
constrains



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Open liver resection

YES

NO



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Open liver resection

YES

[Click here to start again](#)

HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Open liver resection

NO

Why not?

Select one or more

Patient's features

Comorbidities
Severe frailty

PS > 2

HCC features

Extrahepatic
disease

> 3 nodules
Critical location

Liver disfunction

MELD >10, CPH > A6
CRPH
Low FLR

Unfeasibility

Technical
constrains



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Percutaneous ablation

YES

NO

HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Percutaneous ablation

YES

Click here to start again

HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Percutaneous ablation

NO

Why not?

Select one or more

Patient's features

Severe comorbidities

PS > 2

HCC features

Extrahepatic
disease

Size > 3 cm
> 3 nodules
Critical location

Liver dysfunction

CPH > B7
High bleeding risk

Unfeasibility

Technical
constrains



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Laparoscopic ablation

YES

NO



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Laparoscopic ablation

YES

Click here to start again

HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Laparoscopic ablation

NO

Why not?

Select one or more

Patient's features

Severe comorbidities

PS > 2

HCC features

Extrahepatic
disease

Size > 4 cm
> 4 nodules
Critical location

Liver dysfunction

Child-Pugh > B9

Unfeasibility

Technical
constrains



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Intra-arterial treatments

YES

NO



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HCC treatment according to Therapeutic Hierarchy concept



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Chosen treatment:

Intra-arterial treatments

YES

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HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Intra-arterial treatments

NO

Why not?

Select one or more

Patient's features

Severe comorbidities

PS > 2

HCC features

Extrahepatic
disease

Size > 5cm (TACE)
PVT (TACE)

Liver disfunction

Child-Pugh > B7

Unfeasibility

Technical constrains
Unvailability



HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Systemic treatment

YES

NO

Specify kind of treatment



HCC treatment according to Therapeutic Hierarchy concept

Chosen treatment:

Systemic treatment

NO

Why not?

Select one or more

Patient's features

Severe comorbidities

PS > 2

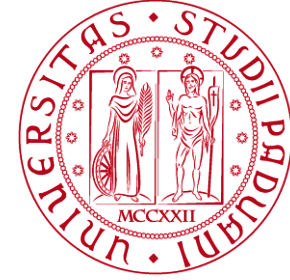
Liver dysfunction

Child-Pugh > B7

Unfeasibility

Cost-ineffectiveness

HCC treatment according to Therapeutic Hierarchy concept



Chosen treatment:

Best supportive care

YES

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