

Patient Journey

Approccio personalizzato al
paziente e esperienze a
confronto:
Epatocarcinoma e
Colangiocarcinoma

01 Febbraio 2024

VERONA
CROWNE PLAZA
Via Belgio, 16

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UOSD Trapianti Epatici
AOUI Verona

AIGOM
ASSOCIAZIONE ITALIANA
GRUPPI ONCOLOGICI MULTIDISCIPLINARI

DISCLOSURES

Novartis Grant

Amedeo Carraro, MD PhD FEBS
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AOUI Verona



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Case report: indication to liver transplantation

- ✓ **M, 69 year-old - 2022**
- ✓ **Multifocal HCC, HBV+ cirrhosis**

Past clinical history:

- ❖ No potus, cigarettes in the past
- ❖ HBV-cirrhosis treated with Entecavir
- ❖ Compensated liver function (MELD11); portal hypertension with esophageal varices F2-F3 (endoscopically treated), gastric varices
- ❖ L Saphenectomy (30 years ago)
- ❖ Anti-Sars- Cov-2 vaccine (2 doses) + infection (January 2022)



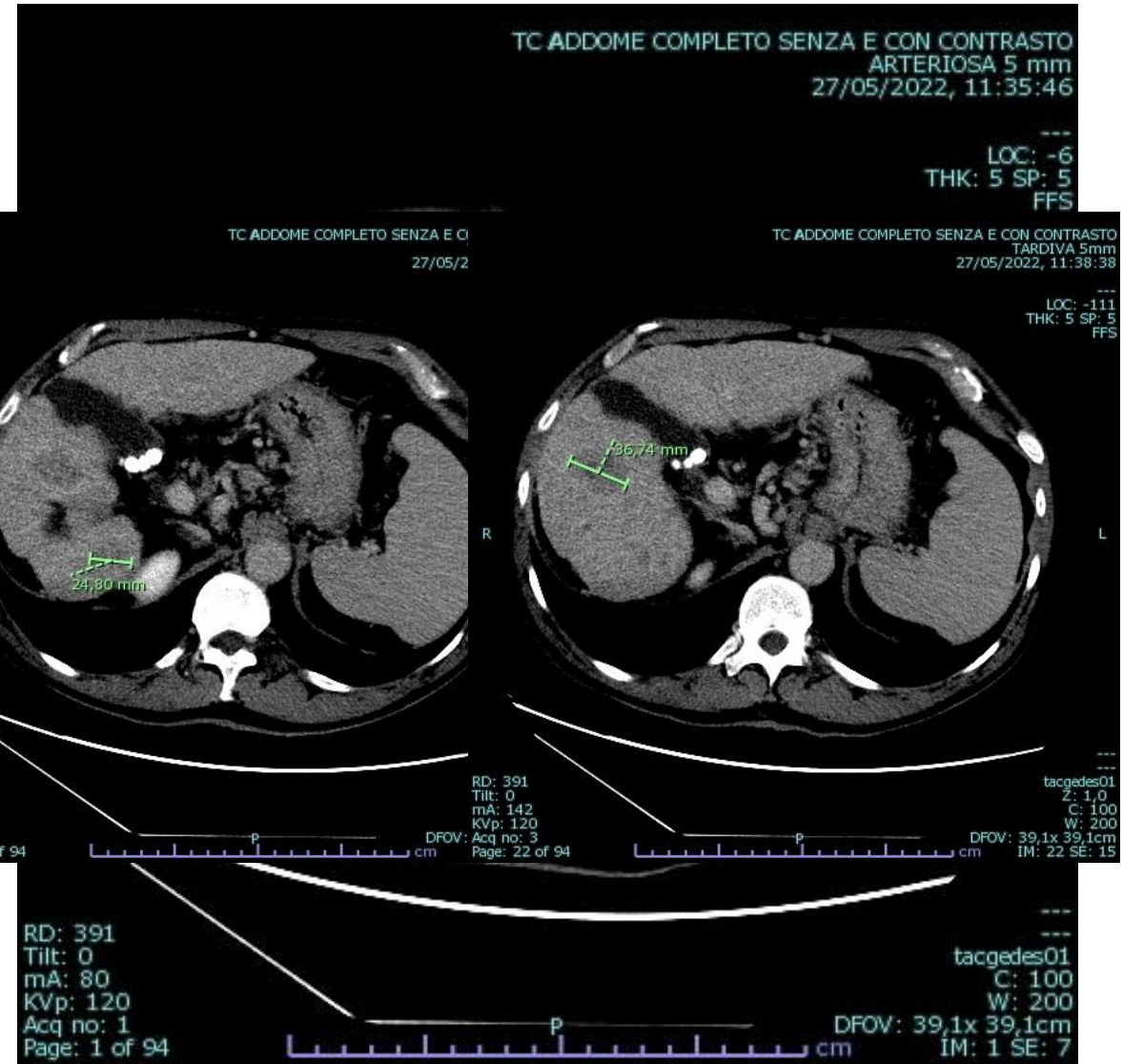
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✓ M, 69 year-old Multifocal HCC, HBV+ cirrhosis

Oncological clinical history: 05/2022 Abdomen CT scan



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- ✓ M, 69 year-old Multifocal HCC, HBV+ cirrhosis, MELD 12
- ✓ Milan out
- ✓ Portal hypertension, esophageal varices (F2-3), gastropathy;

Case	Year	Study	Outcome
Case 1	2019	Lee et al. (2019)	Survival 50% at 5 years
Case 2	2020	Chen et al. (2020)	Survival 40% at 5 years
Case 3	2021	Wang et al. (2021)	Survival 30% at 5 years
Case 4	2022	Li et al. (2022)	Survival 20% at 5 years
Case 5	2023	Zhang et al. (2023)	Survival 10% at 5 years
Case 6	2024	Qin et al. (2024)	Survival 5% at 5 years

Surg Clin N Am 104 (2024) 129–143

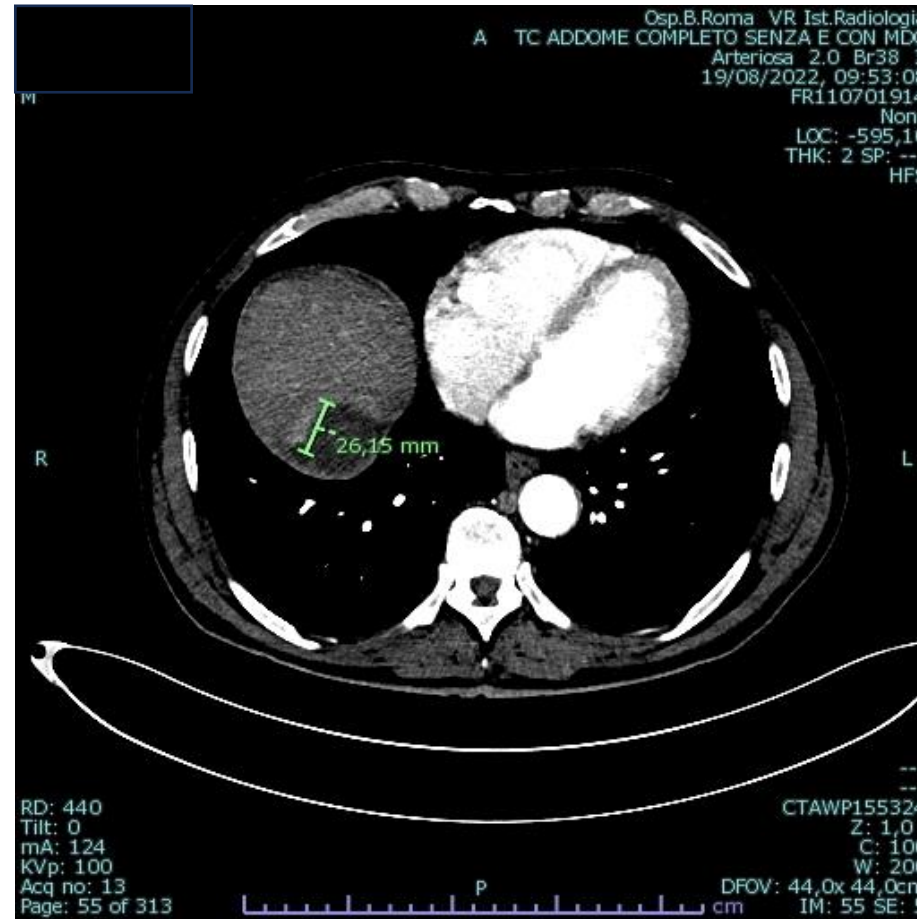
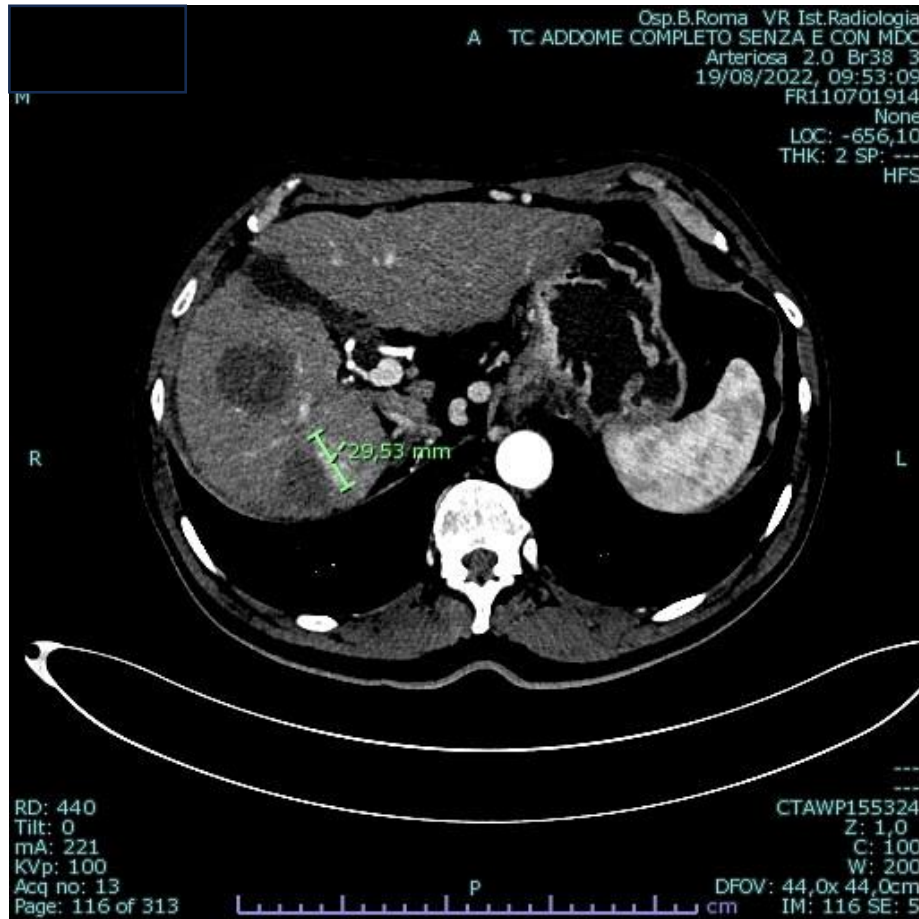
20/07/2022 Surgery: MW laparoscopic ablation (S5, S5-6 & S8)

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✓ 08/2022: Abdomen CT scan



MD Tumour board

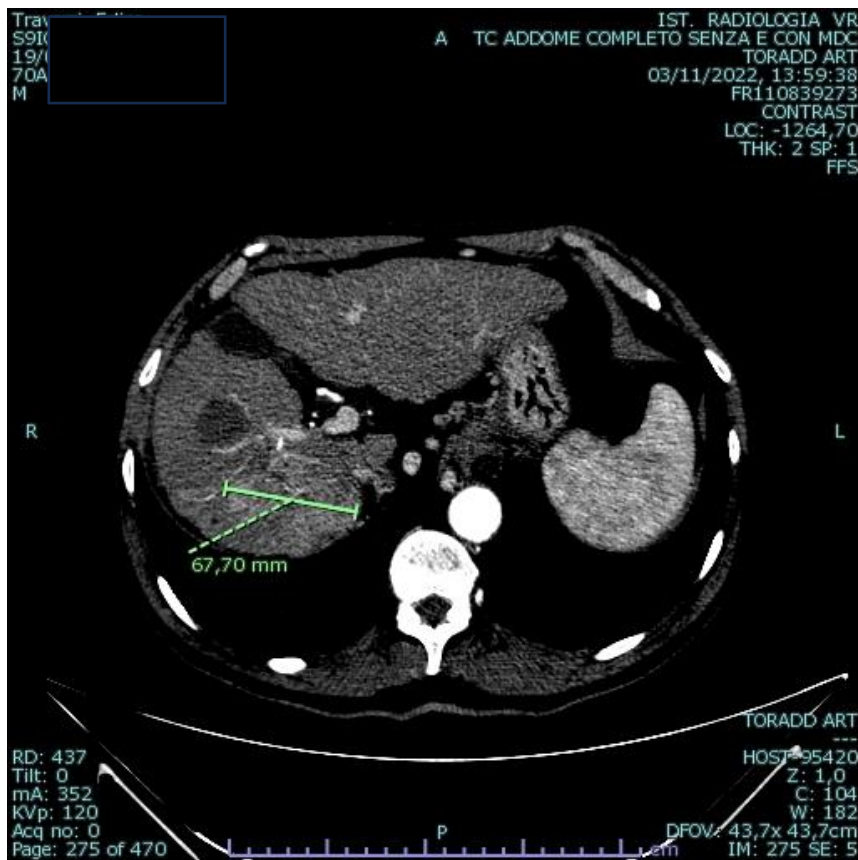


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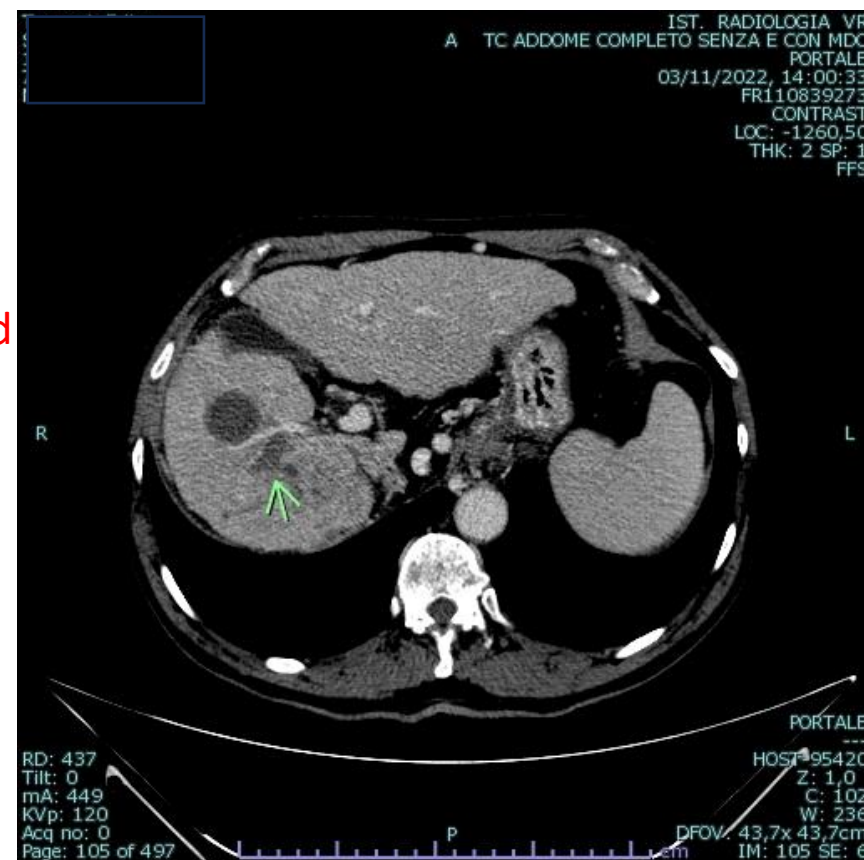
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- ✓ 03/11/2022: CT scan
- ✓ Fibroscan (stiffness 74.8 Kpa) → endoscopic treatment esophageal varices



MD
Tumour board



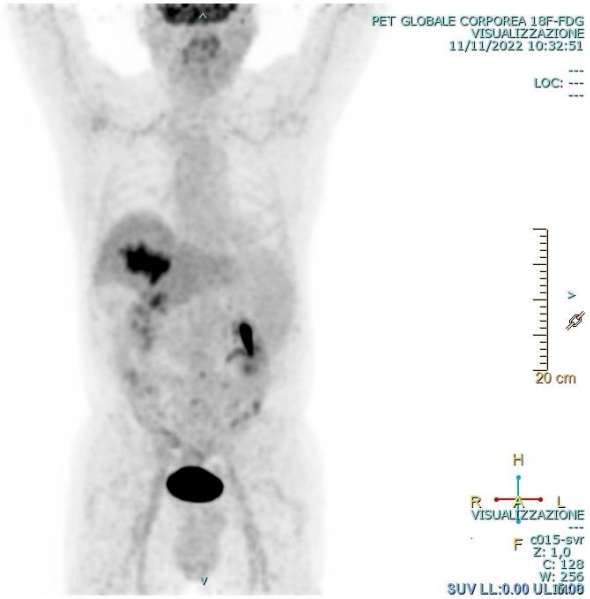
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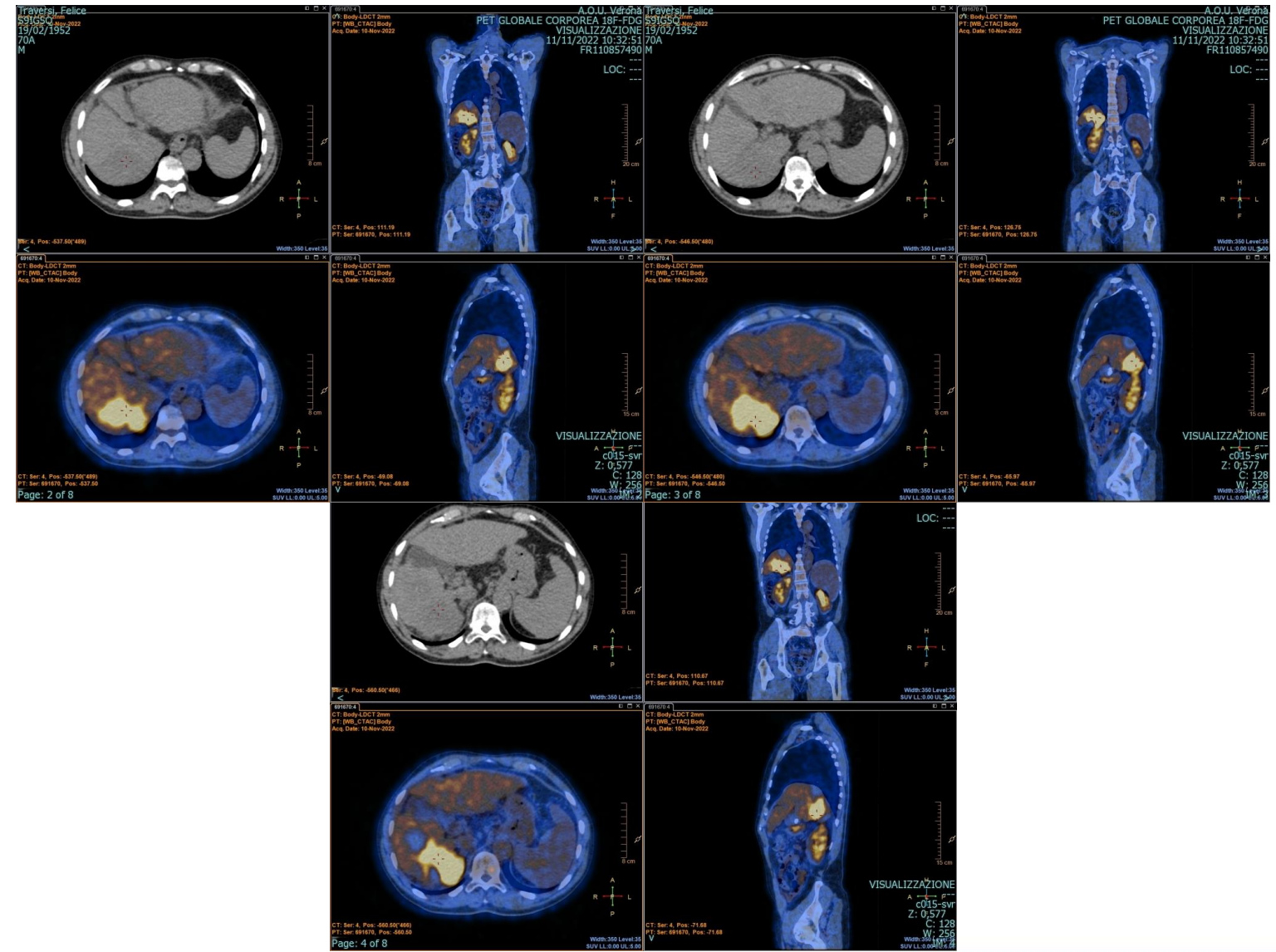
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✓ 11/2022: FDG-PET CT

[WB_CTAC] Body
Acq. Date: 10-Nov-2022



Ser: 691670, Ang: 0
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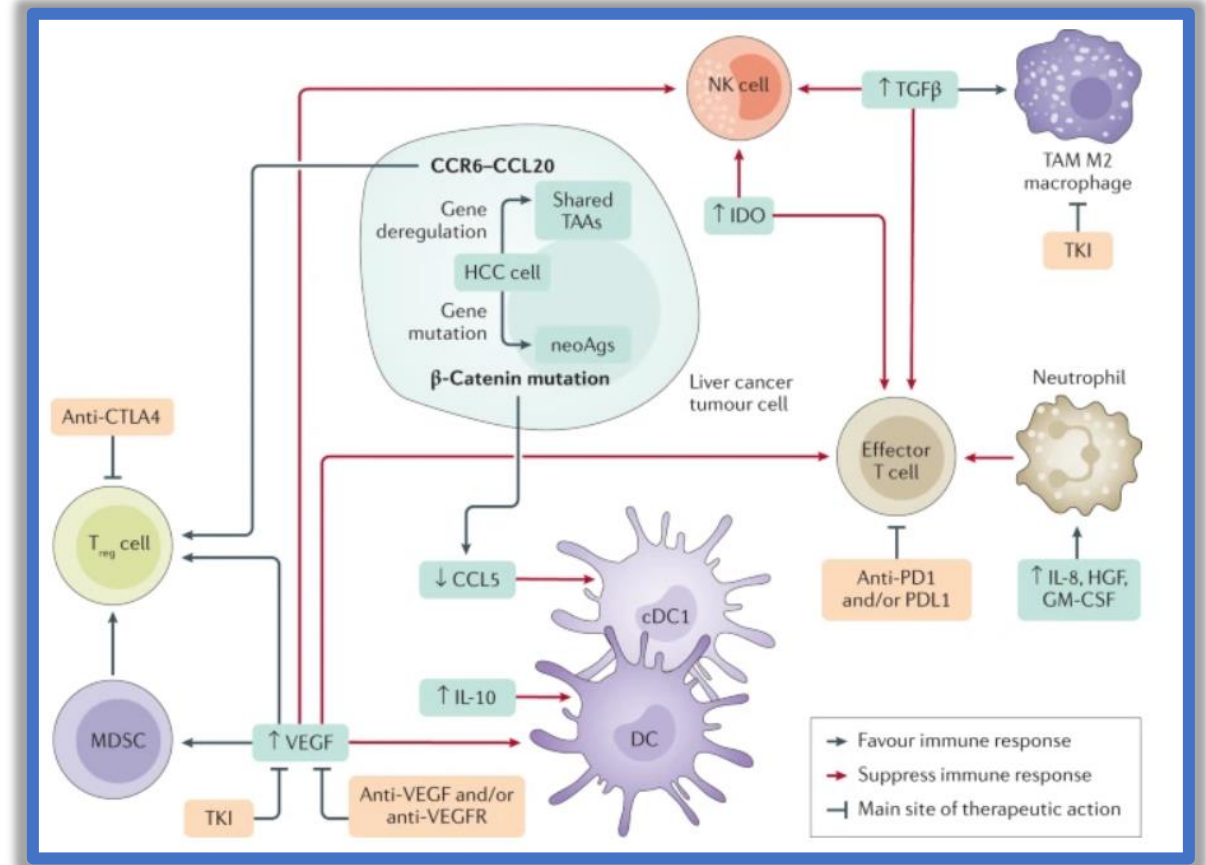
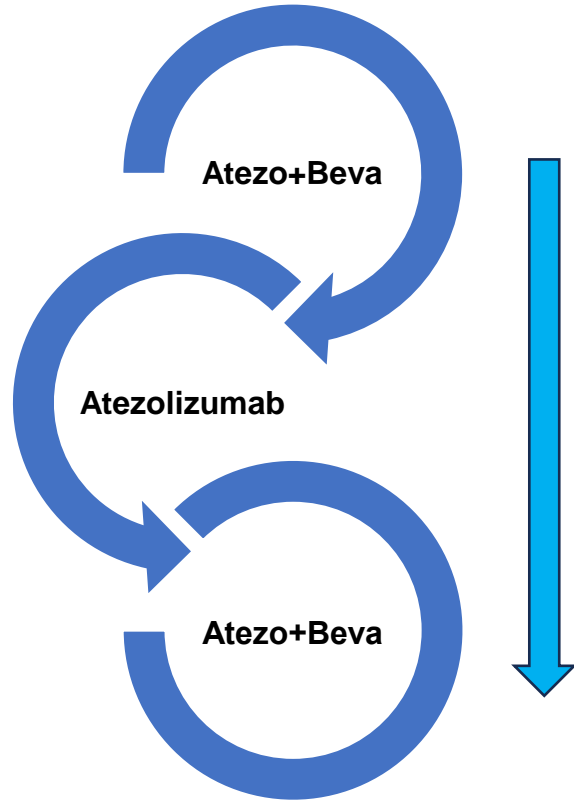
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Systemic Therapy: Atezolizumab + Bevacizumab



Sangro B. et al Nature Reviews Gastroenterology & Hepatology (2021)
Kudo M. Cancers 2020;12:1089

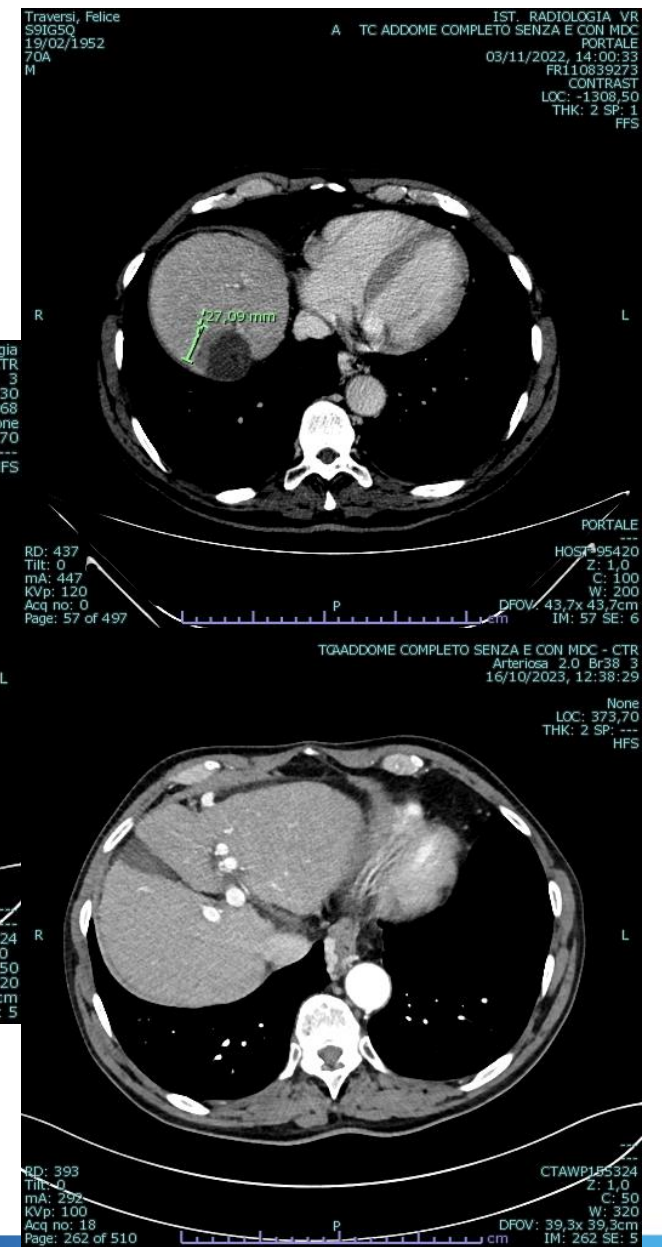
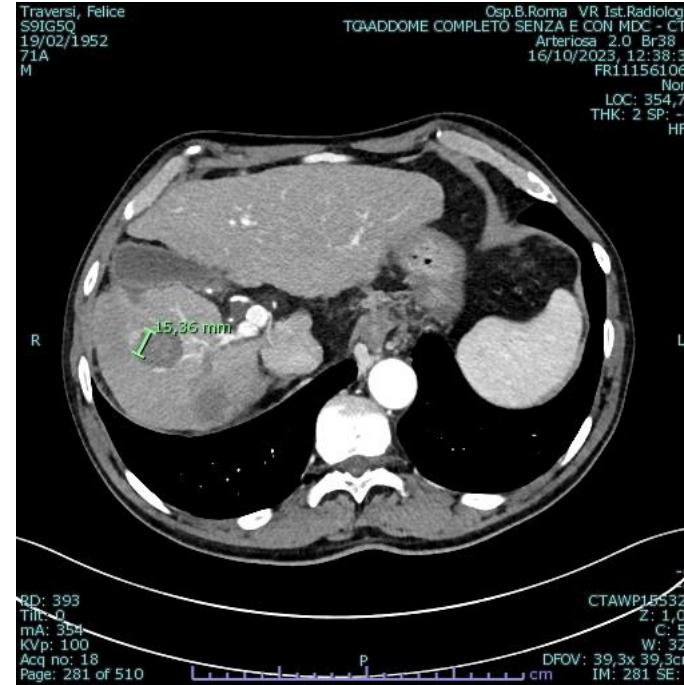
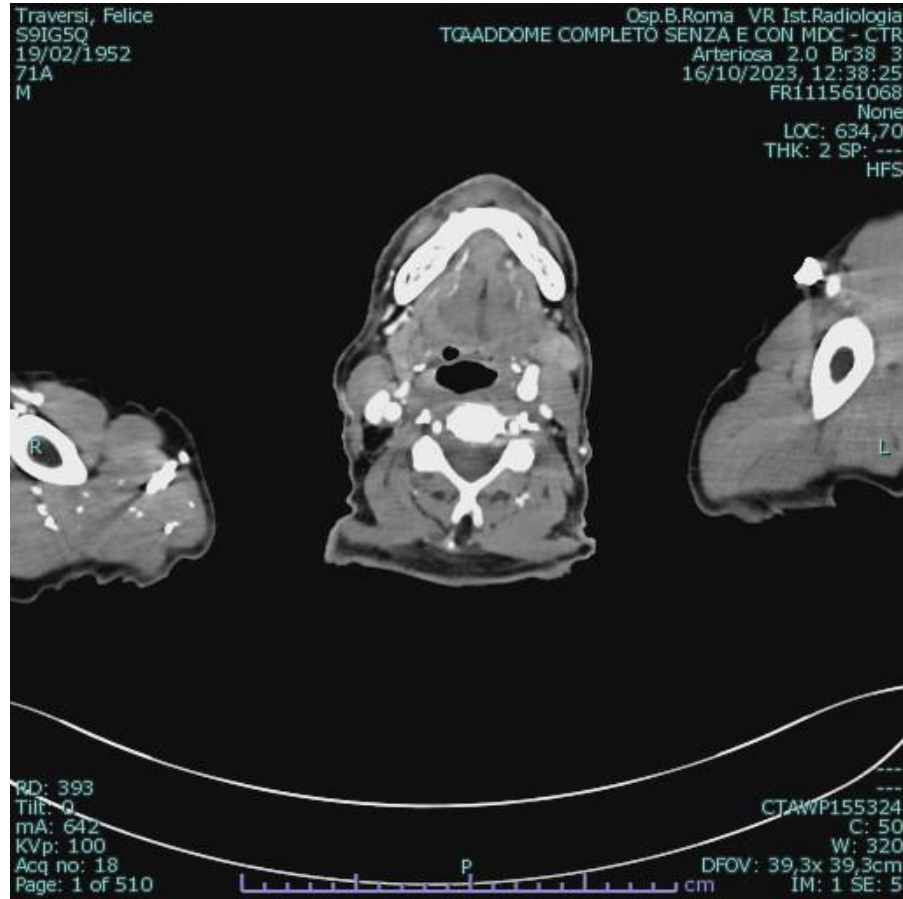
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Atezolizumab + Bevacizumab

PS 0 ECOG, NRS 0/10, Stable and good clinical condition - MELD 14
(aFP 30 ng/mL)



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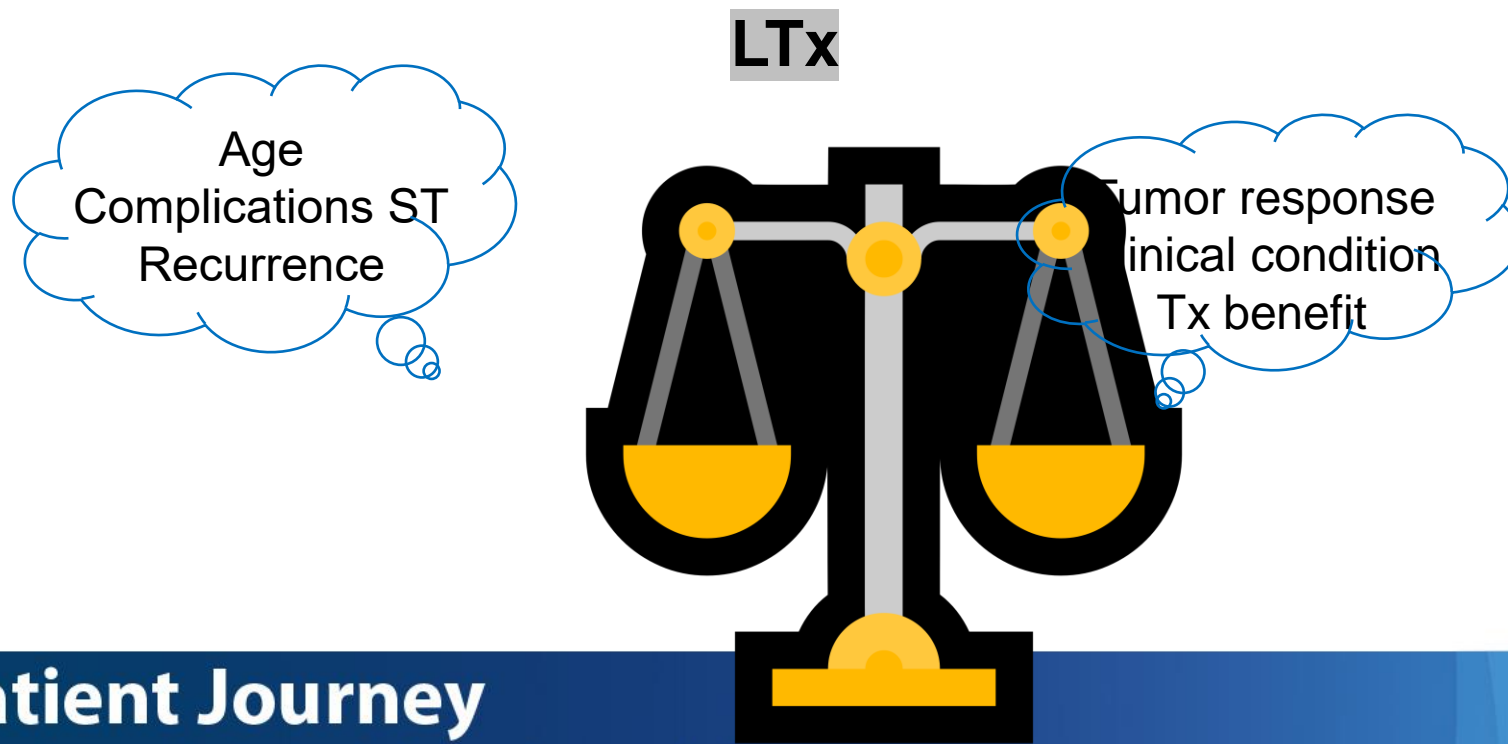
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Currently, there are limited but optimistic data to support the use of neoadjuvant systemic therapies in the treatment of HCC prior to liver transplantation. The use of immunomodulatory therapies in transplant candidates has previously been avoided due to reports of severe rejection and graft loss.



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Authors	Year	No. of patients	ICIs	Mean immunotherapy course	Immunosuppression	Mean time between immunotherapy and LT	Rejection	Recurrence
Schwacha-Eipper <i>et al.</i> (26)	2020	1	Nivolumab	34	N/A	6 weeks	N	N
Chen <i>et al.</i> (45)	2021	5	Nivolumab	3	Tac, MMF	9 weeks	N	2/5 Y
Kang <i>et al.</i> (46)	2021	1	Pembrolizumab	3	Sirolimus, Tac	138 d	N	N
Dehghan <i>et al.</i> (47)	2021	1	Nivolumab	17	Steroids, MMF, Tac	5 weeks	Y	N/A
Abdelrahim <i>et al.</i> (48)	2022	1	Atezolizumab	6	Tac, MMF	8 weeks	N	N
Dave <i>et al.</i> (49)	2022	5	Nivolumab	N/A	N/A	105 d	2/5 Y	N/A
Sogbe <i>et al.</i> (50)	2021	1	Durvalumab	N/A	Steroids, MMF, Tac	>3 months	N	N
Schnickel <i>et al.</i> (51)	2022	5	Nivolumab	N/A	Steroids, MMF, Tac	14.6 months	2/5 Y	N
Tabrizian <i>et al.</i> (52)	2021	9	Nivolumab	13	Steroids, MMF, Tac	40.8 months	1/9 Y	N
Lizaola-Mayo <i>et al.</i> (53)	2021	1	Ipilimumab Nivolumab	N/A	Tac, MMF, ATG, steroids	9 weeks	N	N
Chen <i>et al.</i> (54)	2021	1	Toripalimab	10	Tac, steroids	93 d	Y	N/A
Qiao <i>et al.</i> (55)	2021	7	Pembrolizumab Camrelizumab	3	Basiliximab, steroids, cyclosporine, Tac, sirolimus, MMF	1.3 months	1/7 Y	N/A
Nordness <i>et al.</i> (60)	2020	1	Nivolumab	44	Steroids, MMF, Tac	8 d	Y	N/A
Aby <i>et al.</i> (61)	2022	1	Nivolumab	23	Steroids, MMF, Tac	16 d	Y	N/A

ICI, immune checkpoint inhibitor; LT, liver transplantation; MMF, mycophenolate mofetil; Tac, tacrolimus; ATG, anti-thymocyte globulin; N, No; Y, Yes; N/A, not available.

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The remainder of evidence around PD-1 inhibitor use in this patient population is limited to case reports, and further investigations are required to determine whether this will be a viable treatment option in the future.

Chin J Cancer Res 2023;35(2):92-107

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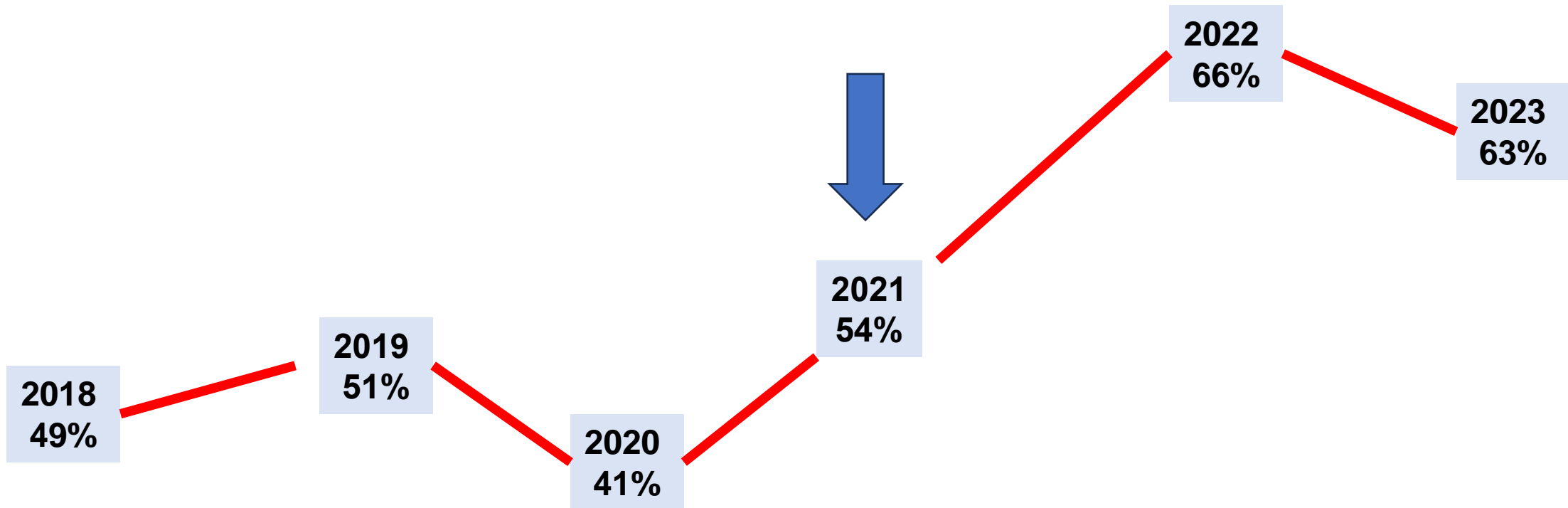
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UOSD - Liver Transplant Unit

Dr. A. Carraro

University Hospital Trust, Verona



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MD Tumour board & Liver Tx...

Future goals of HCC treatment

Which?



overall survival



recurrence rate



drop-out from the
transplant list

How?



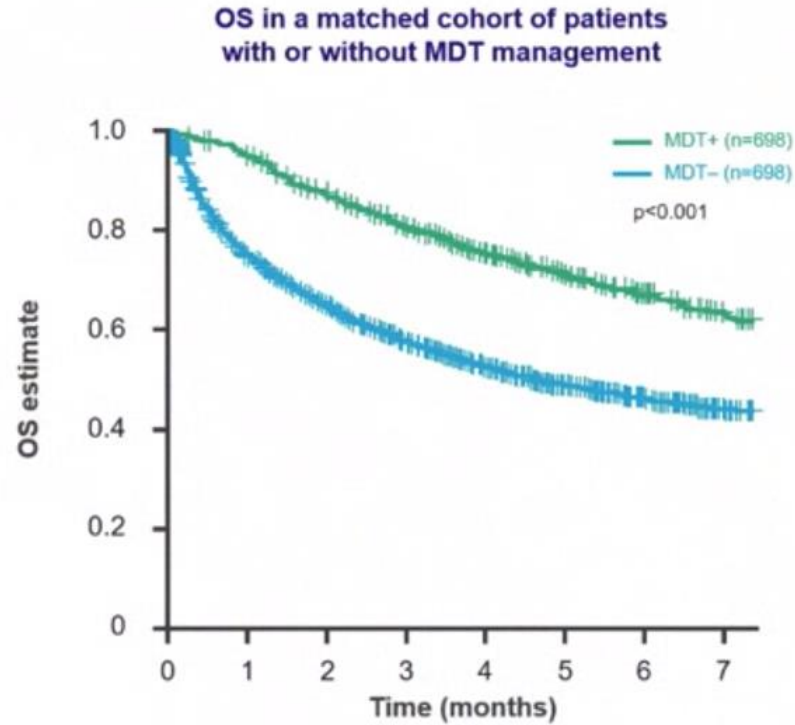
- Optimize criteria for transplantability
- Maximize the effectiveness of loco-regional techniques
- Choice of the best perioperative systemic therapy
- Optimize patient selection and personalize treatment schemes

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Tumour board: clinical impact



Consistent association between MDT management and OS

Subgroup	HR (95% CI) for mortality
Age	
<60 years (n=786)	0.72 (0.57-0.91)
≥60 years (n=610)	0.61 (0.47-0.80)
Sex	
Men (n=1,180)	0.66 (0.55-0.80)
Women (n=216)	0.77 (0.50-1.20)
Aetiology	
HBV (n=1,080)	0.71 (0.57-0.87)
Other aetiology (n=316)	0.59 (0.42-0.82)
ALBI grade	
1 (n=876)	0.80 (0.63-1.01)
2 (n=500)	0.56 (0.43-0.74)
3 (n=20)	0.16 (0.03-0.81)
BCLC stage	
0 (n=250)	1.07 (0.61-1.86)
A (n=760)	0.83 (0.65-1.07)
B (n=174)	0.40 (0.25-0.63)
C (n=210)	0.38 (0.26-0.53)
AFP level	
<200ng/mL (n=1,074)	0.75 (0.61-0.93)
≥200ng/mL (n=322)	0.50 (0.37-0.68)
Overall	0.68 (0.57-0.81)

Sinn et al PlosOne 2019

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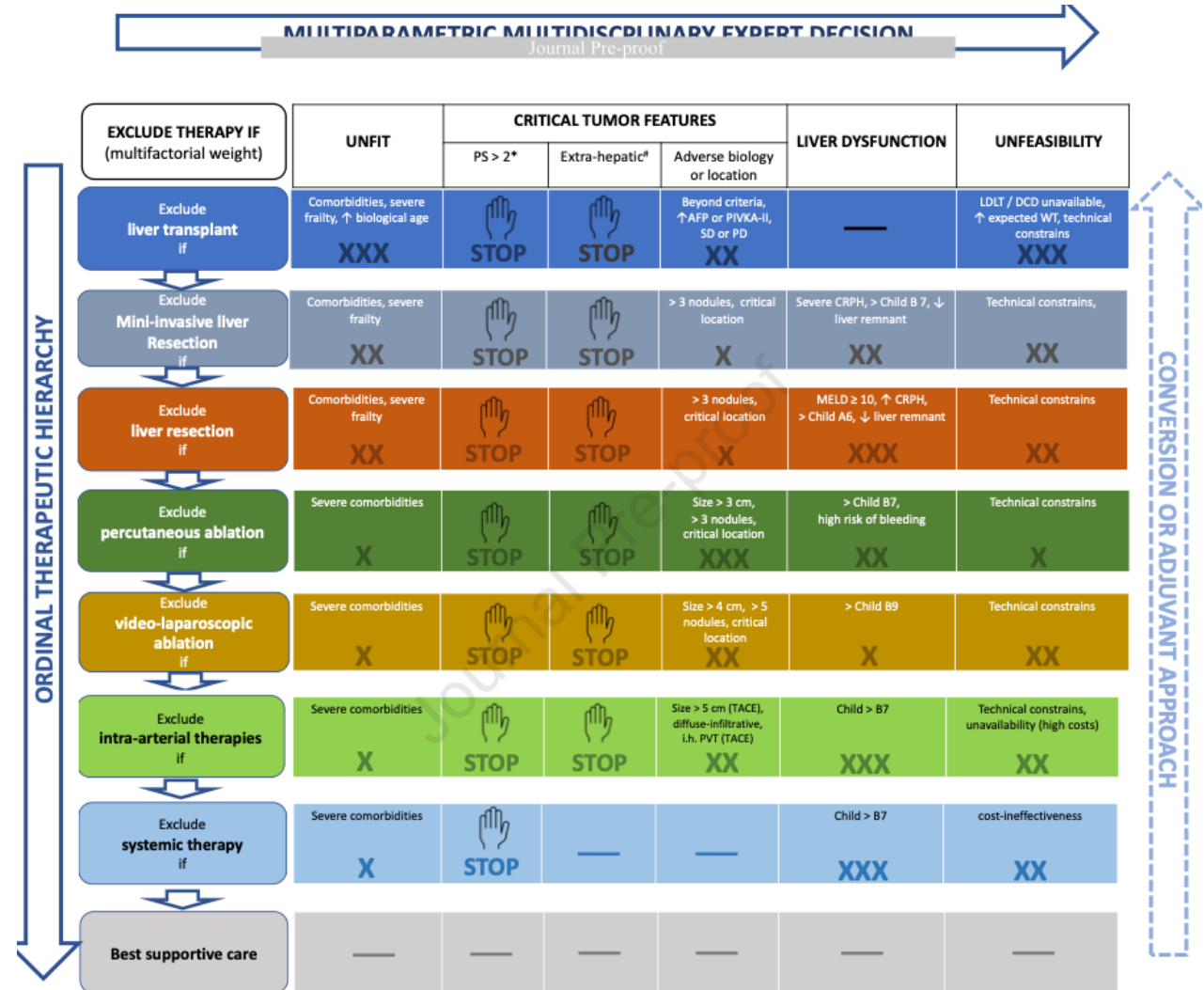
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the concept of "converse therapeutic hierarchy"

....Although the BCLC system remains the benchmark against which other therapeutic frameworks must be judged, the era of precision medicine requires patient-tailored therapeutic choices ...

Journal of Hepatology (2024)
[https:// doi.org/10.1016/j.jhep.2024.01.010](https://doi.org/10.1016/j.jhep.2024.01.010).



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CONCLUSION

MD tumour board -- mutiparametric vision

- ❖ Defining a personalization of the treatment
- ❖ Expanding the Boundaries for LTx in HCC

integration a comprehensive patient clinical assessment, biomarkers, technical aspects and considerations on resource availability.

«shift» – when possible – of the therapeutic strategy

Timing