

Hepatocellular Cancer Reference Handout

HCC Dx

Diagnosis

Can diagnose on imaging alone! No biopsy required

Triple Phase CT or MRI

Triple Phase CT = Standard of Care

Arterial phase: tumor enhances > liver

Venous phase: tumor enhances < liver

Delayed phase: persistent wash-out

Li-RADS Score (1-5) =

Li-Rads 1-3 = benign

Li-Rads 4 + AFP < 400 = biopsy

Li-Rads 4 + AFP > 400 = HCC

Li-Rads 5 = HCC

Tumor Markers

AFP: can be elevated from infections, as well as cancer

BCLC Stage	Lesions	Liver Function	Prognosis (OS)
BCLC Stage A Early	1-3 Intra-hepatic lesions	Preserved Childs-Pugh A-B (≤ 9)	> 5 years
BCLC Stage B Intermediate	> 3 Intra-hepatic lesions	Preserved Childs Pugh A-B (≤ 9)	2-5 years
BCLC Stage C Advanced	Extra-hepatic lesions	Preserved Childs Pugh A-B (≤ 9)	1-2 years
BCLC Stage D End Stage	Extra-hepatic lesions	Abnormal Childs Pugh C (≥ 10)	< 6 months

HCC Tx Paradigm

BCLC Stage	Treatment
BCLC Stage A Early	Transplant Candidate → Transplant Not Transplant Candidate → Resect or Ablate
BCLC Stage B Intermediate	Embolization Chemoembolization, Radioembolization, Bland Embolization
BCLC Stage C Advanced	Systemic Therapy Atezolizumab/Bevacizumab, Tremelimumab/Durvalumab, Lenvatinib, or Sorafenib
BCLC Stage D End Stage	Palliative care
All Stages + hepatitis infection	Anti-viral therapy

HCC Dx

BCLC Stage A = Early

YES a Transplant Candidate

Milan Criteria: Transplant Eligibility Criteria

- 1 tumor < 5 cm
- 3 tumors < 3 cm each

Not BCLC Stage C/D

- No extra-hepatic spread
- No macrovascular involvement

NOT a Transplant Candidate

Locoregional Therapy:

1. Surgical resection
2. Radiofrequency Ablation (RFA)
= Microwave Ablation

BCLC Stage B = Intermediate

Embolization

Destruction of tumor blood supply

1. **Chemoembolization = TACE: trans-arterial chemoembolization**
Injection of chemotherapy into the hepatic artery
2. **Radioembolization**
Injection of radioactive isotopes (ex: Y-90 or I-131) into the hepatic artery
3. **Bland Embolization**
Embolization of hepatic artery without chemicals or radioactive isotopes

Firm Contraindications:

- Extra-hepatic spread/PVT involvement (BCLC Stage C)
- Child-Pugh C/Liver dysfunction: bilirubin >3 (BCLC Stage D)

BCLC Stage C = Advanced

Front Line:

Atezolizumab + Bevacizumab

Childs-Pugh A (consider in B)
Contraindications: AI disease, untx varices, bleeding, stroke, thrombosis, ileus

Tremelimumab + Durvalumab

Childs-Pugh A or B
Contraindications: AI disease

Lenvatinib

Childs-Pugh A only
Contraindications: PVT involvement

Sorafenib

Childs-Pugh A or B

Second Line:

Nivolumab +/- Ipilimumab
Pembrolizumab
Cabozantinib
Regorafenib
Ramucirumab