HCC : Resection and Liver transplantation

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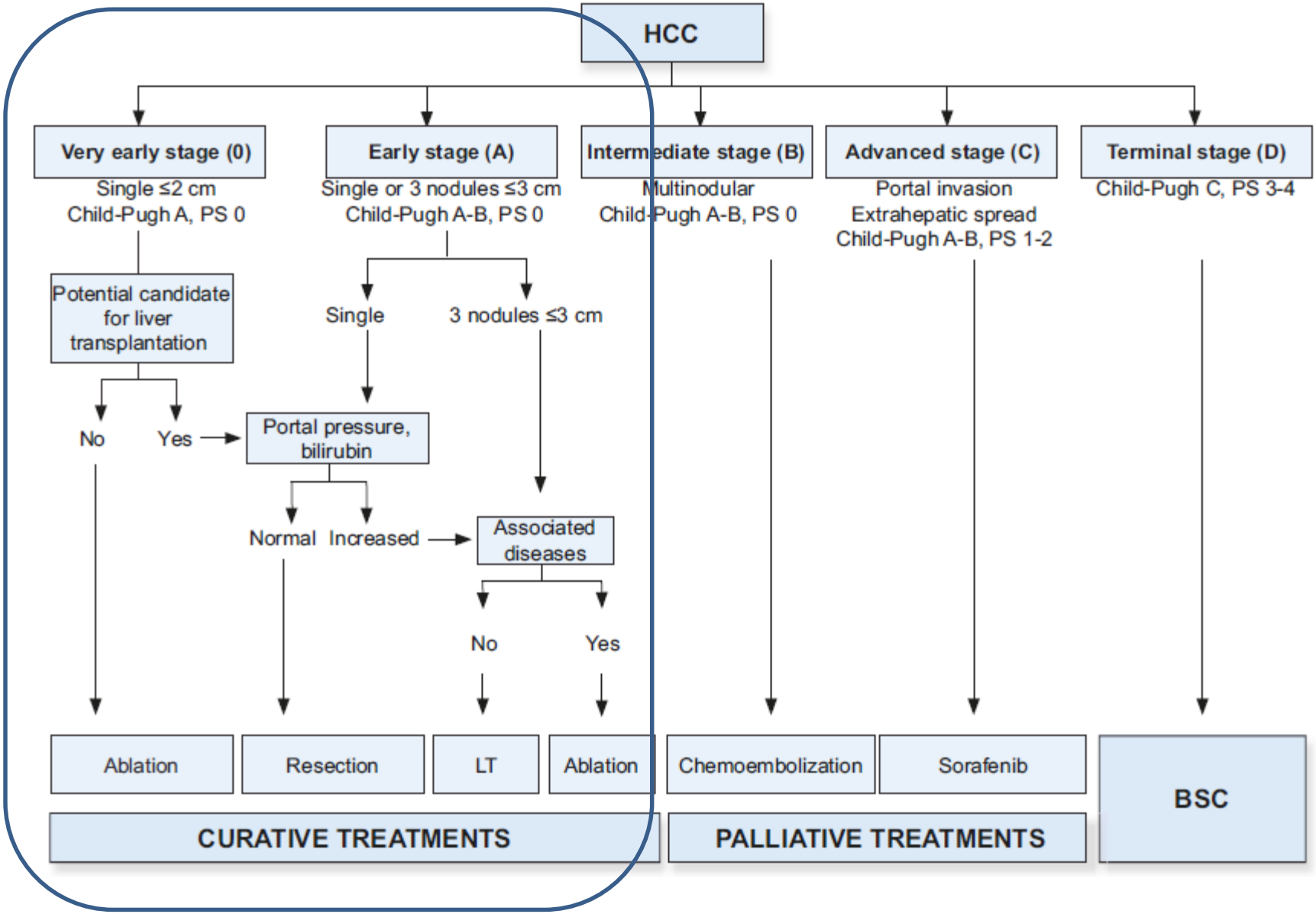


HCC treatment

- Surgical treatment : the first treatment choice.
- Resection and iver transplantation : excellent result in BCLC 0 and A patients.

Small HCC with Preserved liver function

- Choice of treatment : resection vs LT
- Treatment concept is now changing.
- Resection only → Resetion or
  LT if possible

The best candidates for liver resection

- Presence of portal HTN
  Hepatic vein portal gradient(HVPG)> 10mmHg

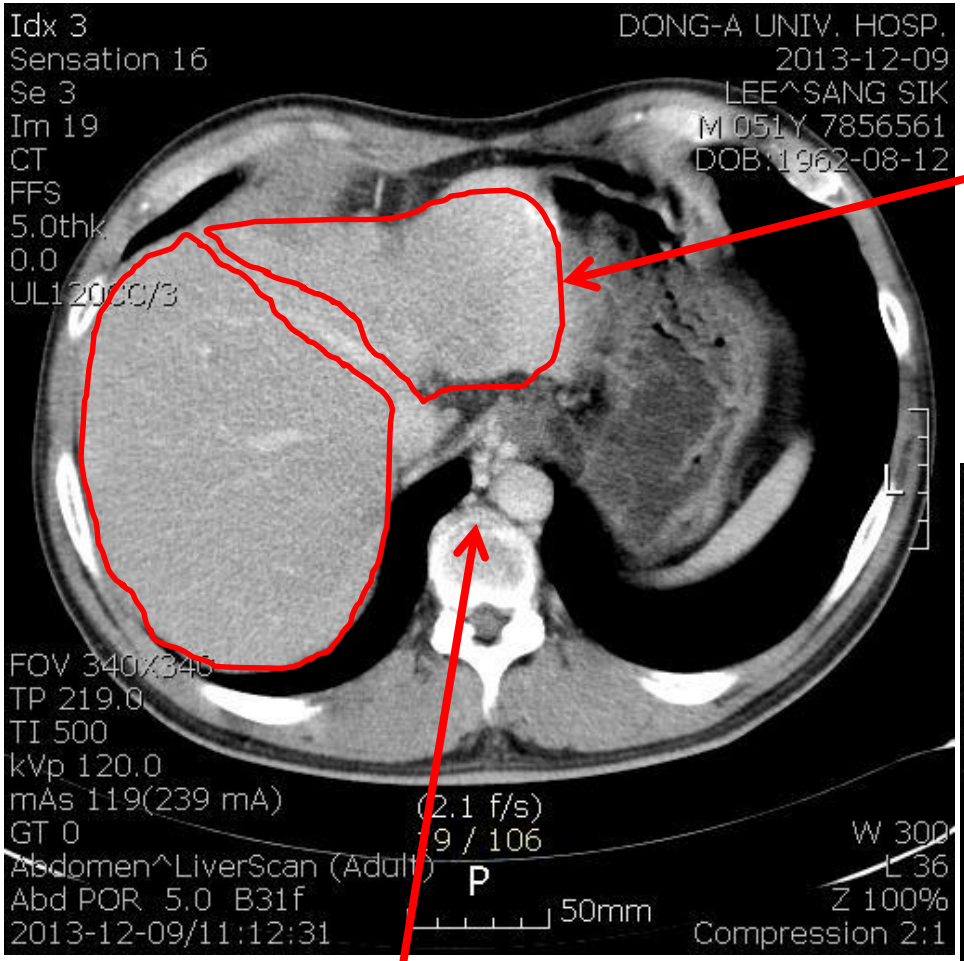
- The presence of esophageal varices, ascites, Plt count <100,000/mm^3, splenomegaly.
  → clinically significant portal HTN

- ICG R15 (?)

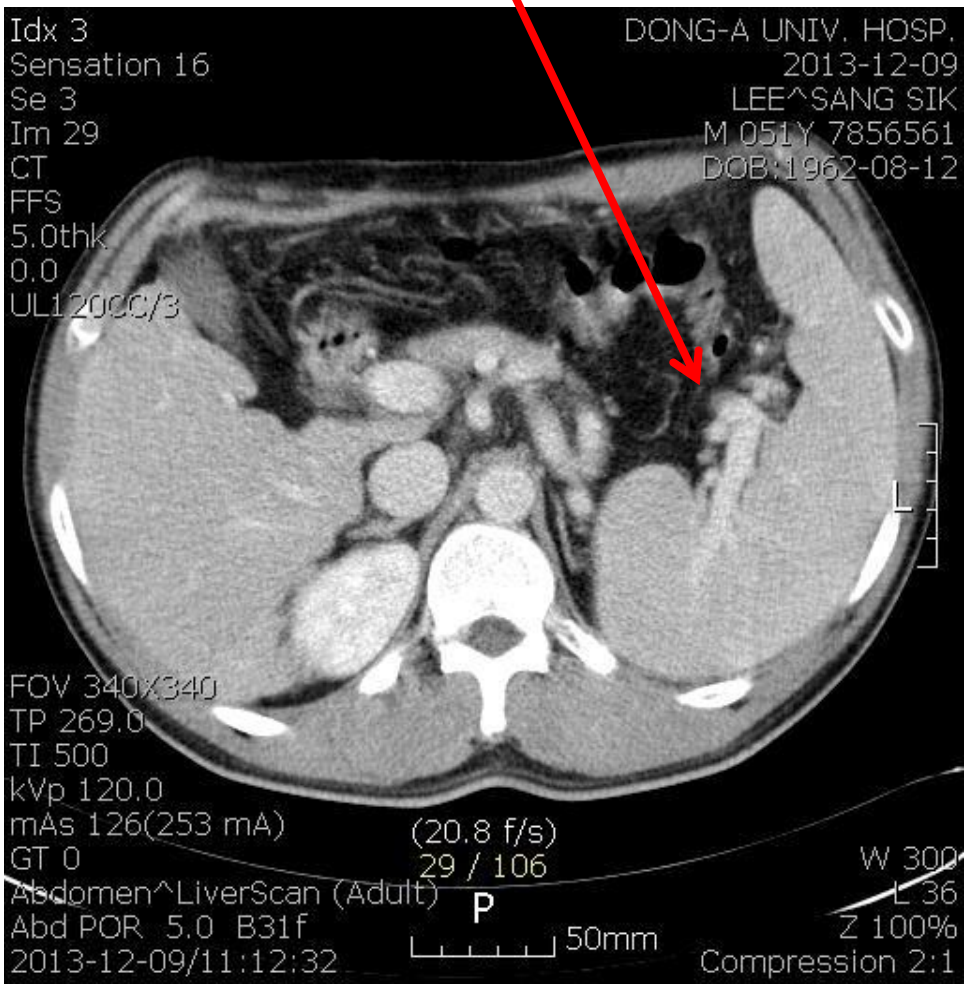
- Liver remnant volume.
  → post op liver function impairment

CT volumetry
for evaluation of liver remnant volume

The presence of splenomegaly



The presence of Esophageal varies



Recurrence after resection

- Occurs up to 80% of the patients at 5 years.

- 2/3 (early recurrence) in the first 2 years after treatment.
  → dissemination (tumor size, microvascular invasion, microsatellies, AFP levels, non-anatomical resection)

- 1/3 (late recurrence) after 2 years
  → de novo tumors in the oncogenic cirrhotic liver.

Liver transplantation in HCC

- From oncologic point of view

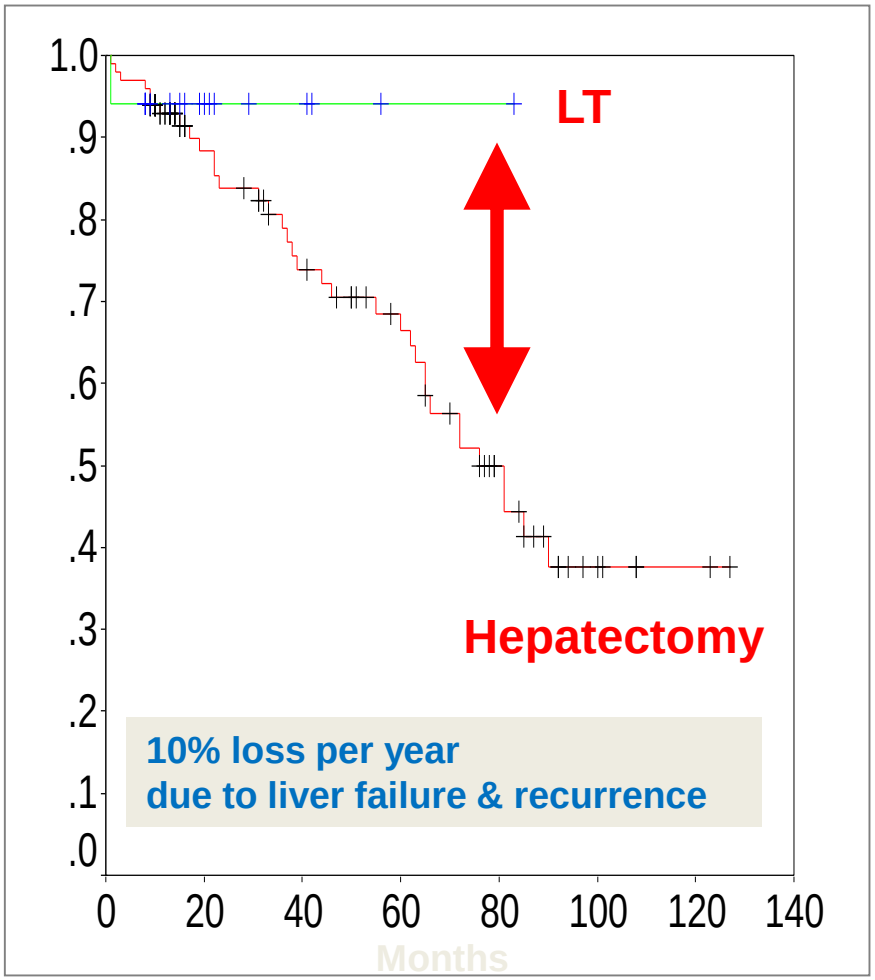
  → remove all the intrahepatic tumor foci
  → remove the oncogenic cirrhotic liver
  → correction of chronic liver disease

- LT is preferable to surgical resection or other treatments.

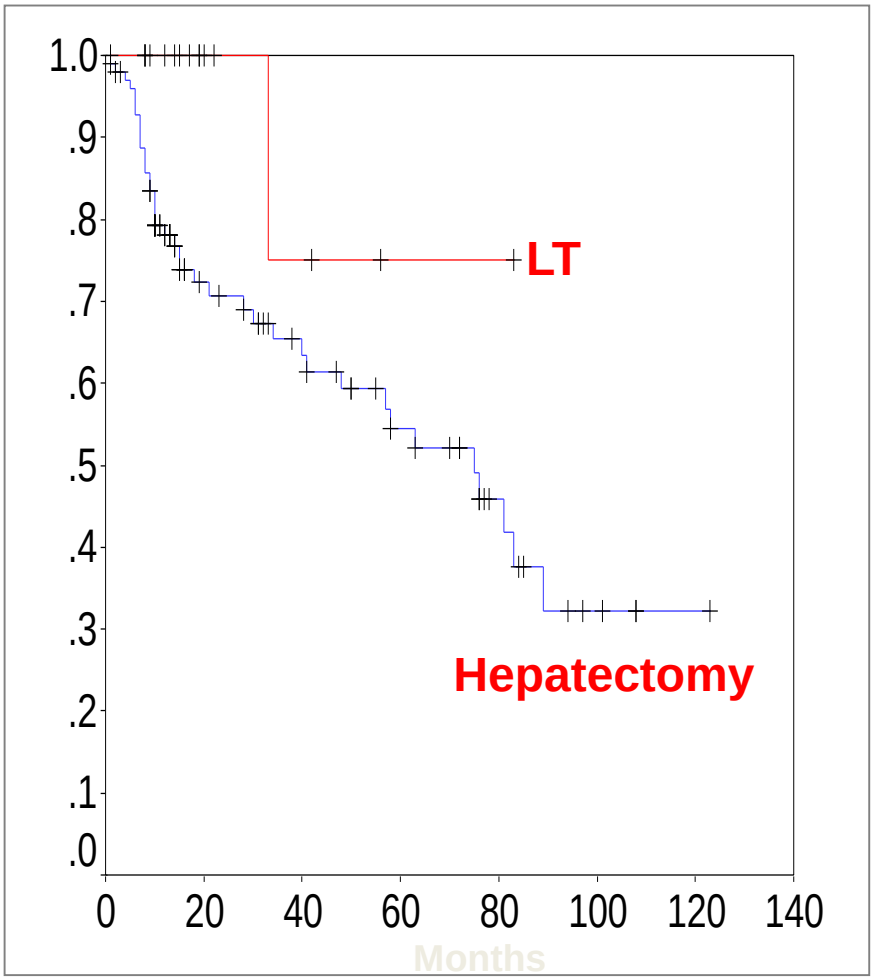
- good survival rate and low recurrence in well-selected patients.

Single HCC < 3 cm in liver of Child A

Overall survival

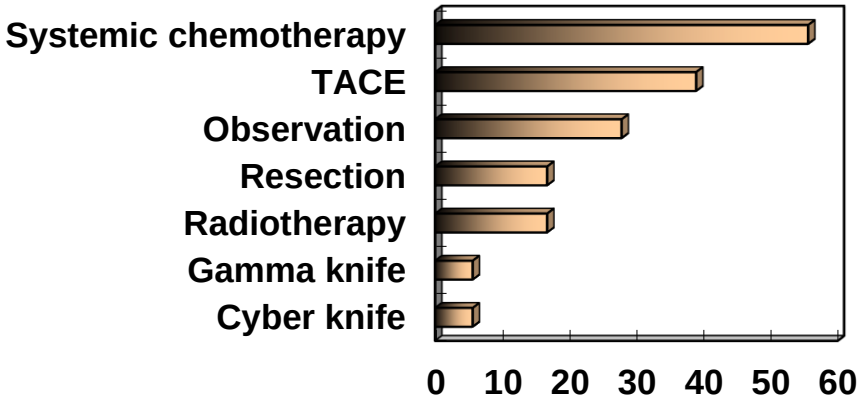


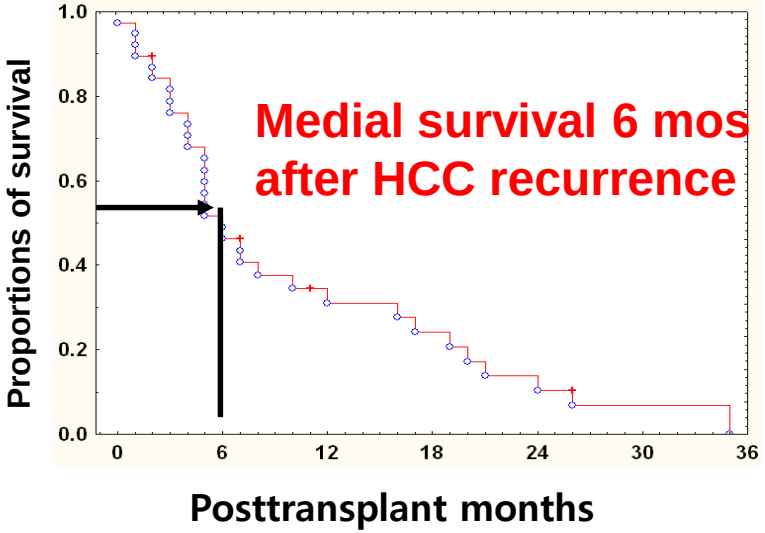
Recurrence-free survival



Risk of post LT HCC recurrence

- Poor prognosis after recurrence despite treatment.





HCC recurrence after LT

- No effective recurrence treatment
- Avoidance of high-risk patients is the only way to improve patients survival to date.
- ***How strictly select?***

Selection criteria for HCC

- **Milan criteria**

→ Maximal 3 mass and largest mass =< 3cm

→ single mass =< 5cm

→ without vascular invasion or extrahepatic spread

5 YSR > 70%
5 YDRR 5-15%

Vol. 334 No. 11 TRANSPLANTATION IN PATIENTS WITH HEPATOCELLULAR CARCINOMA AND CIRRHOSIS 693

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.

Selection criteria for HCC

- **UCSF criteria**

→ Maximal 3 mass and largest mass =< 4.5 cm

→ single mass =< 6.5cm

→ Total tumor diameter =< 8cm

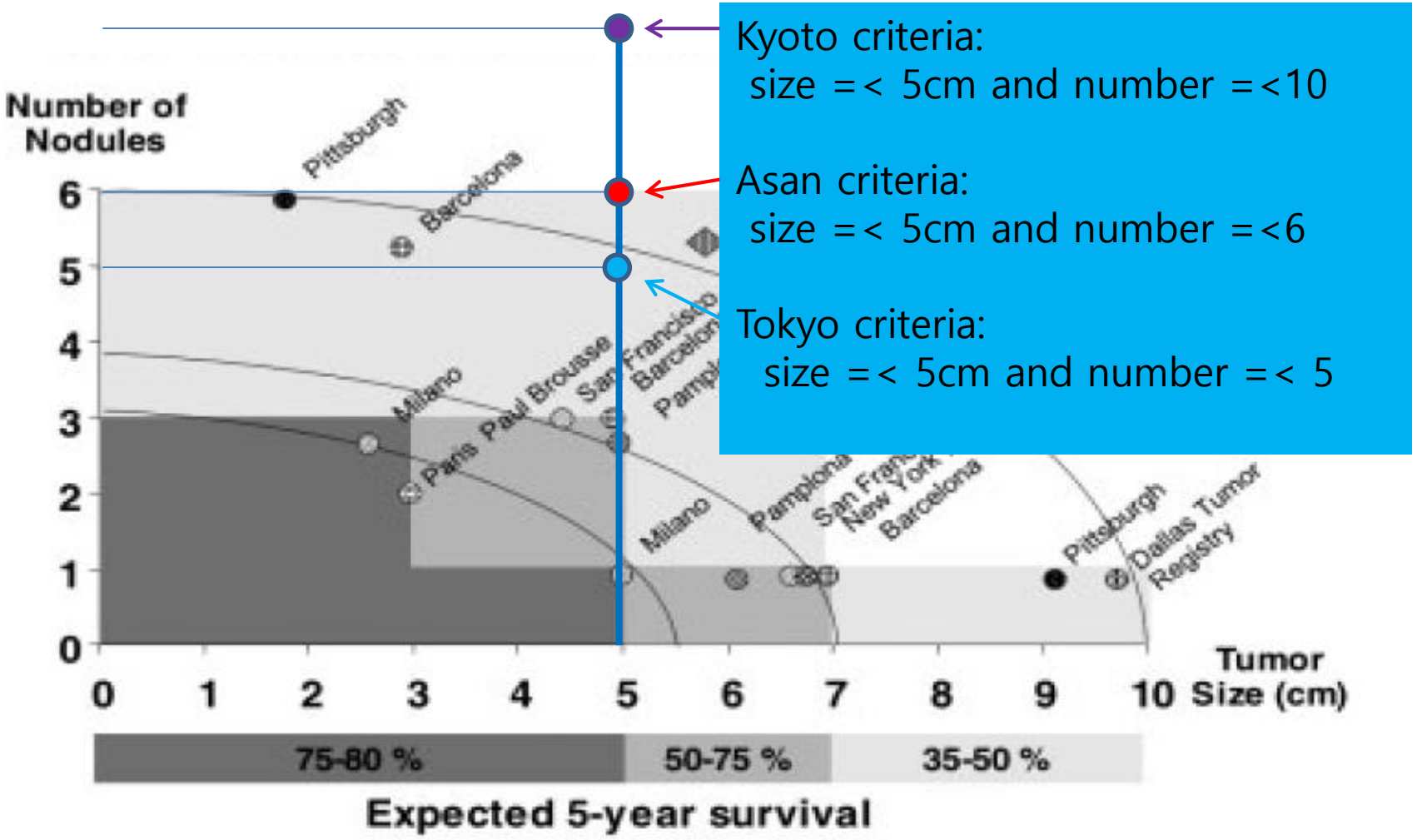
→ No gross vascular invasion

Liver Transplantation for Hepatocellular Carcinoma: Expansion of the Tumor Size Limits Does Not Adversely Impact Survival

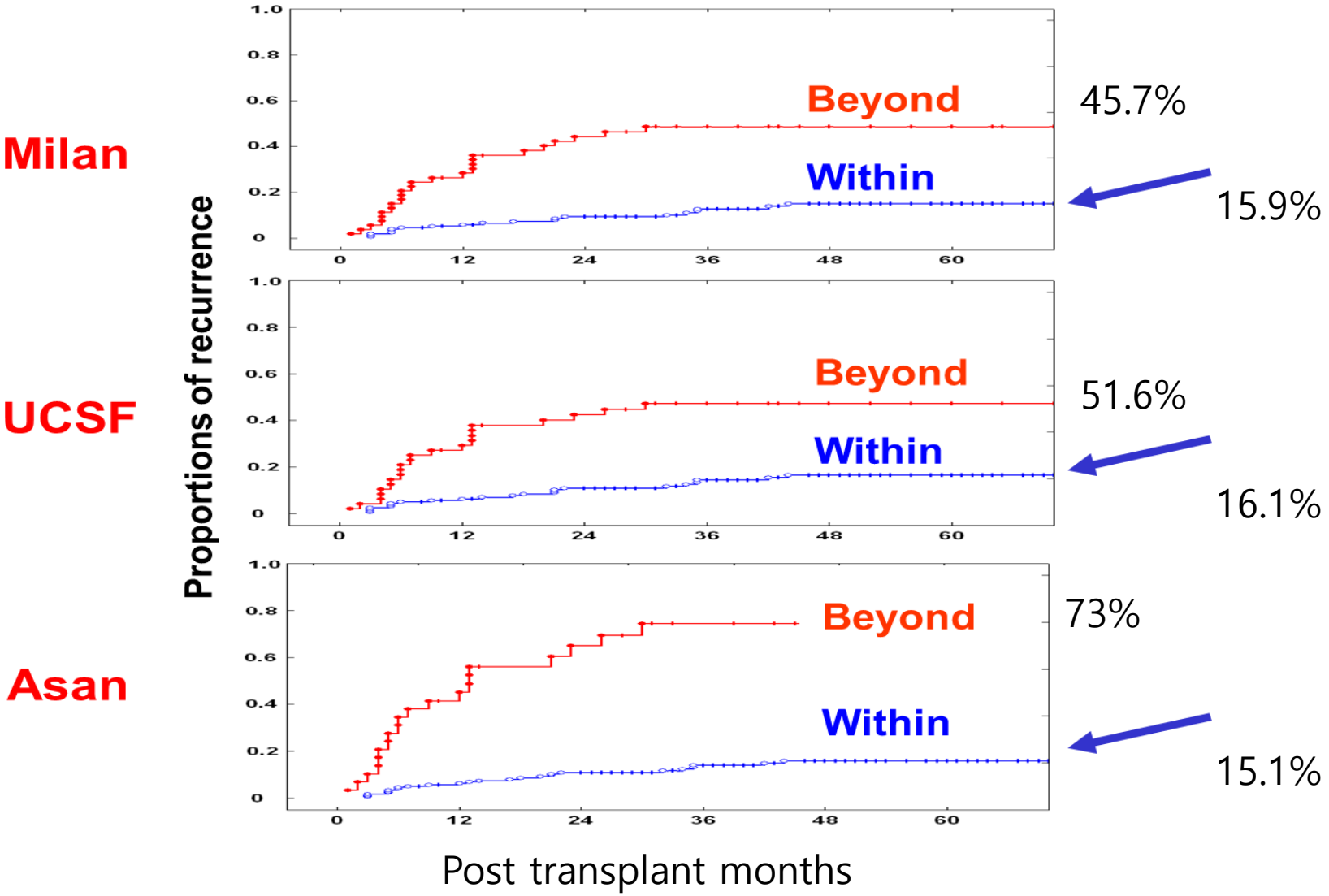
Francis Y. Yao,[1,5] Linda Ferrell,[2,5] Nathan M. Bass,[1,5] Jessica J. Watson,[3] Peter Bacchetti,[3,5] Alan Venook,[1,5] Nancy L. Ascher,[4,5] and John P. Roberts[4,5]

The HCC criteria for LDLT:

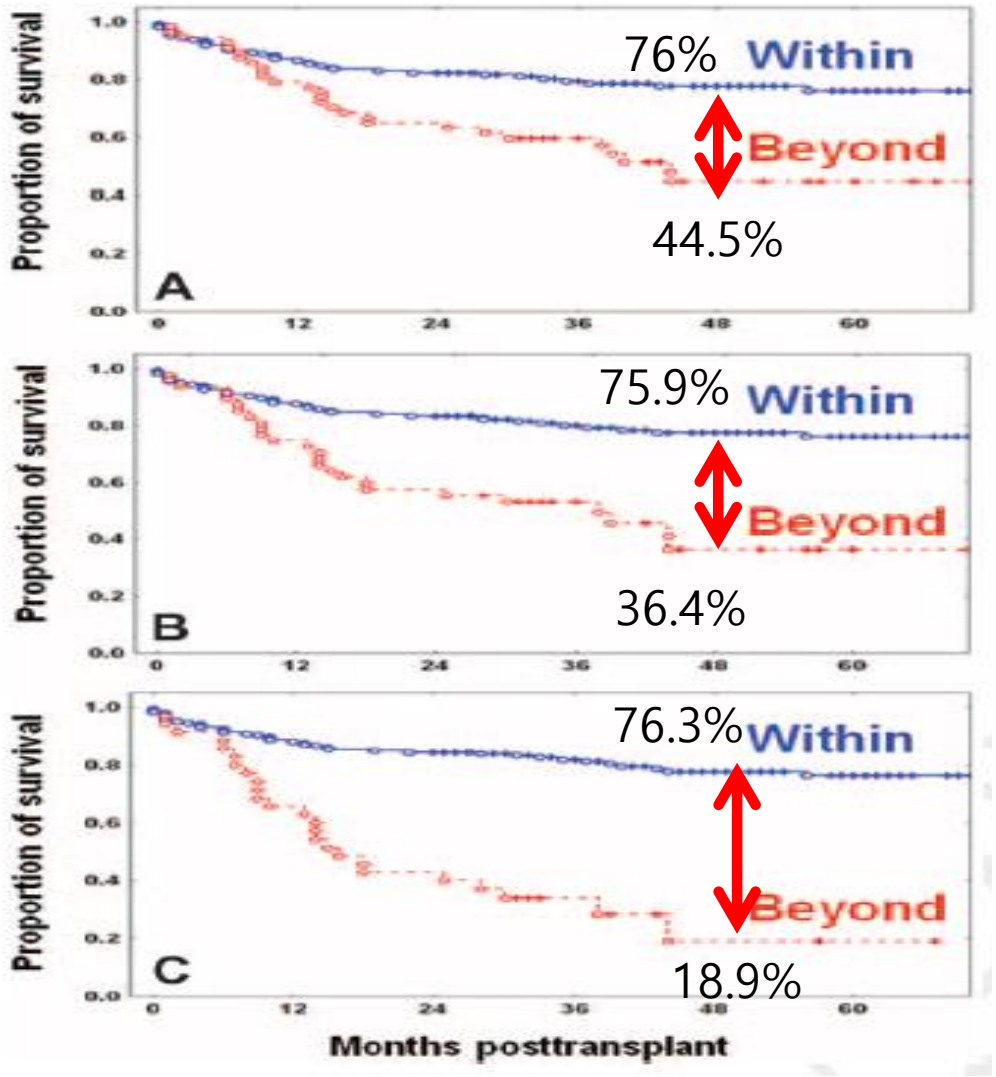
limit in size, liberal in number



Similar HCC recurrence rates within criteria



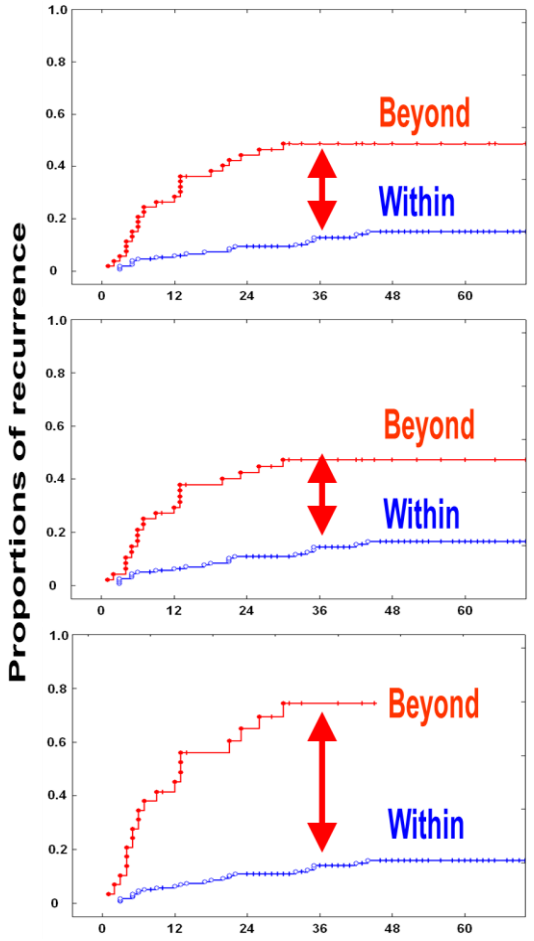
Similar HCC survival rates within criteria



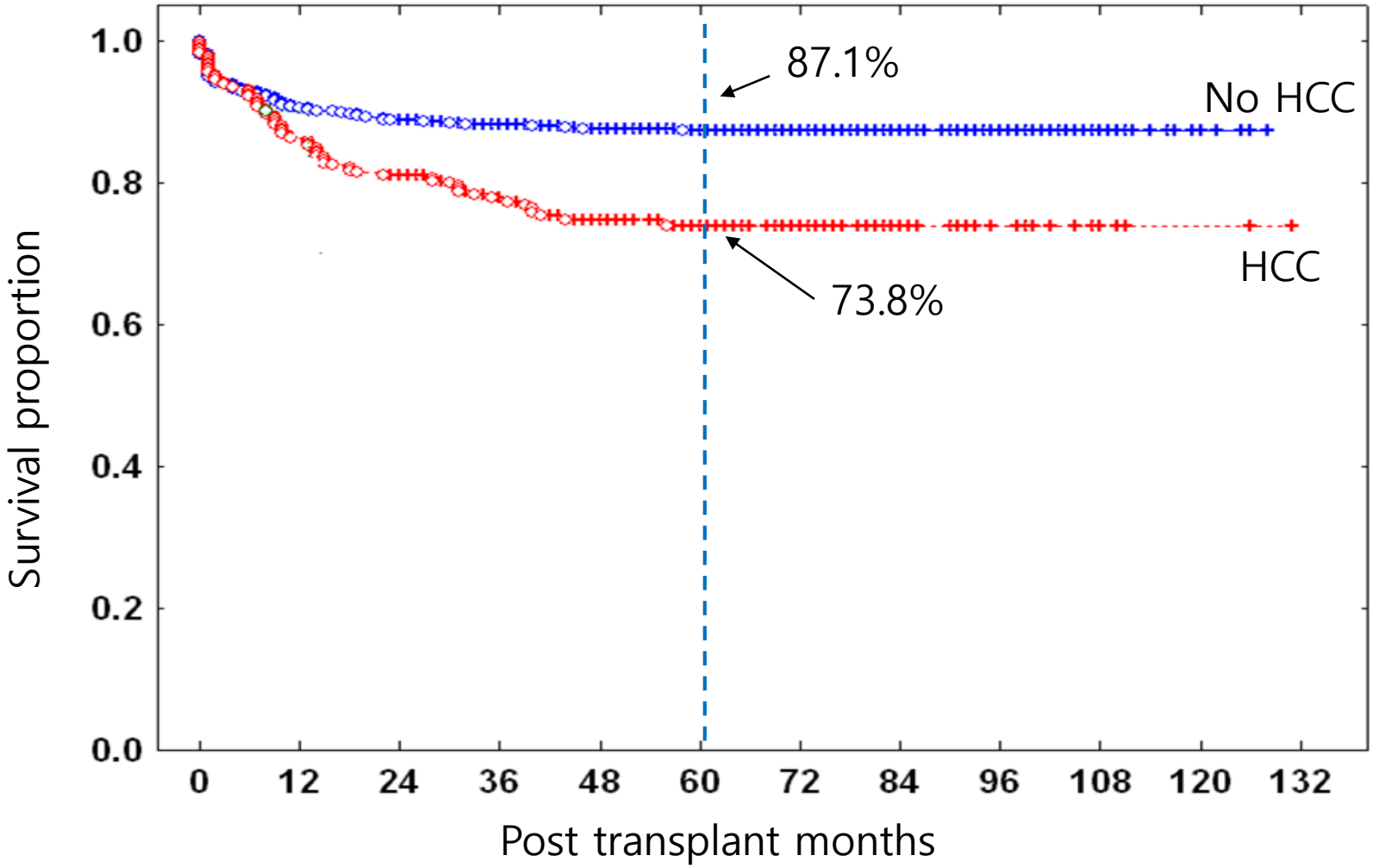
Milan

UCSF

Asan



Overall patient survival

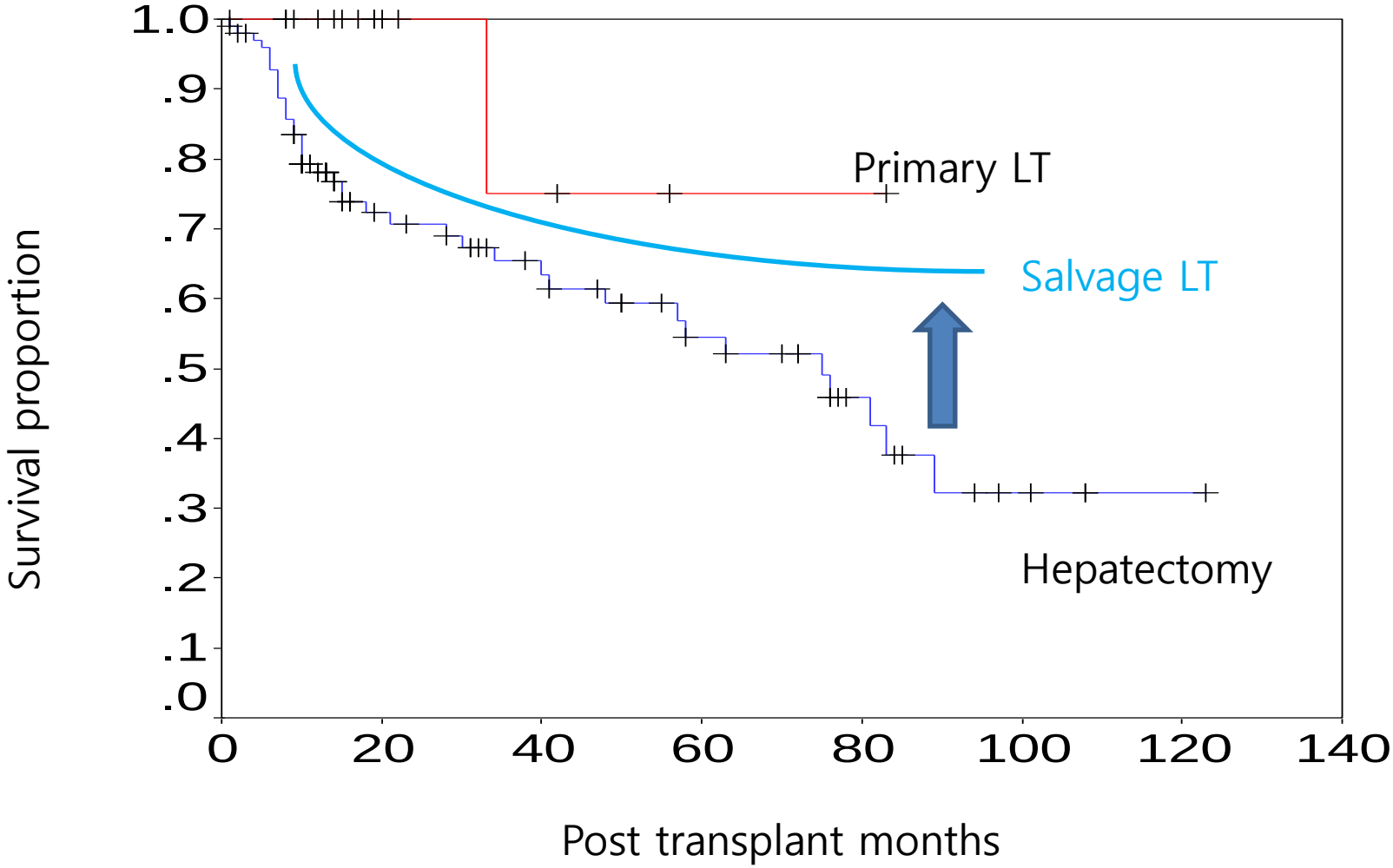


Salvage LT

- Two types of salvage LT

① Recurrent HCC after resection
② Hepatic failure after liver resection

Single HCC <3 cm in livers of Child A



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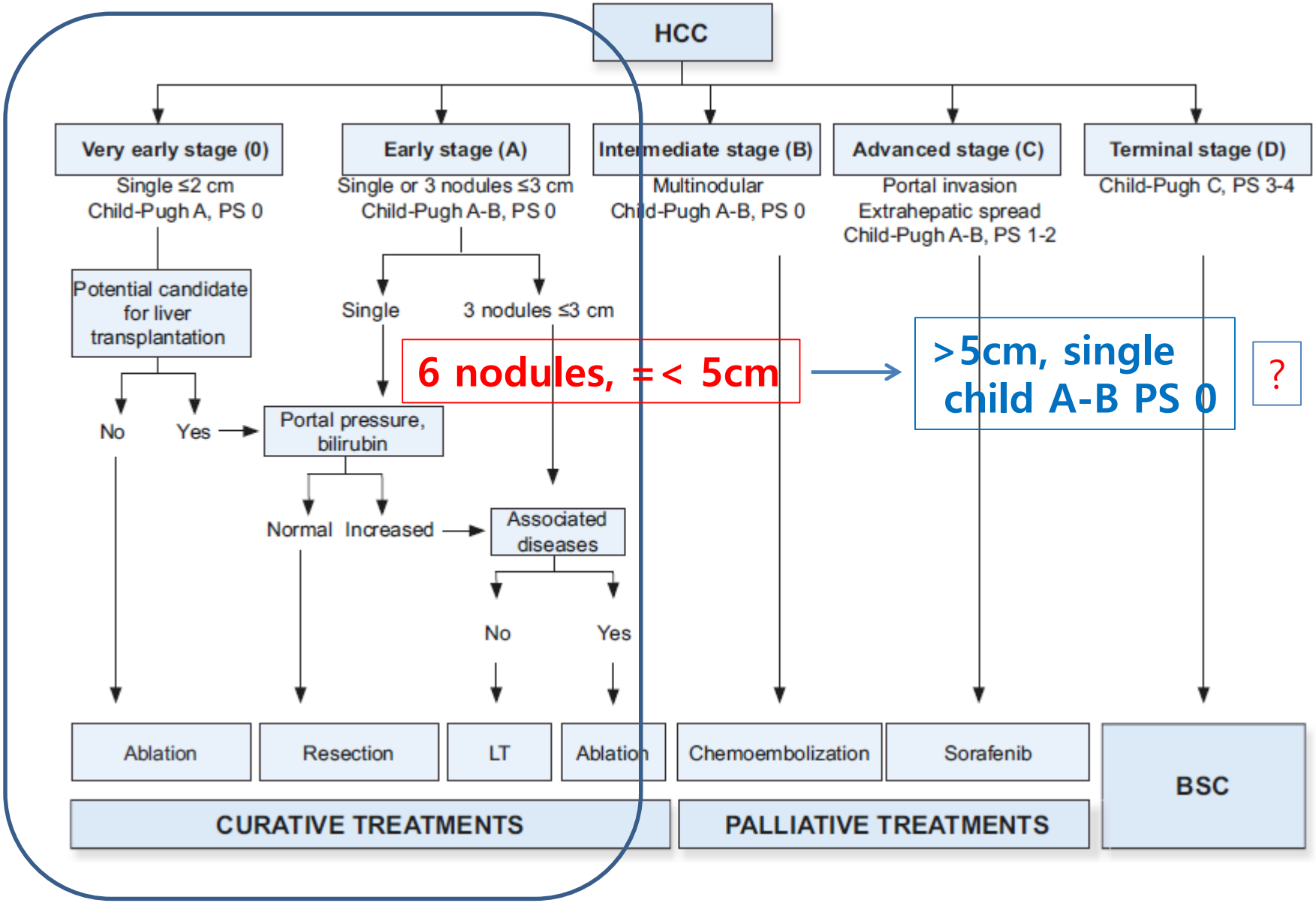


Thank you