

## Gobal Discrepancy in Surgical Indication

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Hepatocellular carcinoma (HCC) usually appears in the setting of underlying liver disease. Therefore, HCC should be managed in multidisciplinary settings. Under these circumstances, several practice guidelines were introduced in the world. Clinically useful practice guidelines should be based on evidences, but socio-economic and medical status of the country should be considered as well. In this symposium, 6 well-known global practical guidelines (BCLC-AASLD (1) (<http://www.aasld.org/practiceguidelines/>), NCCN ([www.nccn.org](http://www.nccn.org)), 2 from Japan (2, 3), APASL (4), Korean (5)) were compared in terms of resection and liver transplantation (LT). BCLC-AASLD from Europe and the United States stressed more on LT for the patients within Milan criteria. Indication for resection is limited

to Child A patients with single HCC. However, the Guidelines from the Asia had more extended indication of liver resection. If tumor is "resectable", resection is first recommended in the Asian guidelines. In terms of liver function, the Asian guidelines have relatively wide indication. The number of living donor LT in Korea is the highest in the world. Under this circumstance, indication for HCC in Korea is inevitably expanding, especially in LDLT. Compared to other guidelines, therefore, Korean guideline allowed a limited but more expanded indication of liver transplantation into patients with Child A and/or living donor liver recipients with outside Milan HCC. However, to make more practical guidelines, high quality evidence from Korea and validation study of

**Table 1.** Comparison of various guidelines (resection) - Indication

	BCLC-AASLD(2010)	NCCN(2010)	Evidence-based guideline in Japan	Consensus-based manual in Japan	APASL(2010)	Korean (2009)
Liver function	Child A, normal bilirubin and hepatic vein pressure gradient <10 mmHg	Child A-B (B; normal LFT, no Portal HTN)	Liver damage stage A-B	Child A-B	Satisfactory liver function reserve	Child A-B (B;slightly elevated portal HTN and hyperbilirubinemia)
Number	Single	Single	≤3	>4	No limitation	No limitation (first choice in single)
Tumor size	No limitation	No limitation	No limitation	No limitation	No limitation	No limitation
Multi-nodular	Not recommend	Can be considered	Yes (≤3)	sometimes performed even when ≥4 nodules	Can be considered	Yes
Major vascular invasion	Not recommend	Can be considered	May be selected in child A	May be selected in child A-B	Can be considered	controversial

current Korean guideline are needed.

### References

1. Forner A, Reig ME, de Lope CR, Bruix J. Current strategy for staging and treatment: the BCLC update and future prospects. *Semin Liver Dis* 2010;30:61-74.
2. Kokudo N, Makuuchi M. Evidence-based clinical practice guidelines for hepatocellular carcinoma in Japan: the J-HCC guidelines. *J Gastroenterol* 2009;44(Suppl 19):119-21.
3. Kudo M, Okanoue T. Management of hepatocellular carcinoma in Japan: consensus-based clinical practice manual proposed by the Japan Society of Hepatology. *Oncology* 2007;72(Suppl 1):2-15.
4. Omata M, Lesmana LA, Tateishi R, Chen PJ, Lin SM, Yoshida H, et al. Asian Pacific Association for the Study of the Liver consensus recommendations on hepatocellular carcinoma. *Hepatol Int* 2010;4:439-74.
5. 대한간암연구회\_국립암센터. 2009 간세포암종 진료 가이드라인. 2009 [cited; Available from: [http://www.klcsg.or.kr/html/sub03\\_02.asp](http://www.klcsg.or.kr/html/sub03_02.asp)]