

- b. Child-Pugh class A;
c. performance status 0;
d. tumor progressing after loco-regional therapies (resection, ablation, chemoembolization).

Study period: 01/04/2008–30/04/2010. The end of follow-up to perform final data analysis was established at 30/10/2010.

Results: Thirty three patients were enrolled according to the study design. Thirty one patients (94%) were progression free at the 2 months evaluation (primary study endpoint was achieved).

A persistent DC was obtained in 23 patients (70%). According to the study hypothesis these patients were considered again eligible for loco-regional therapies: 15 patients (65%) had ablation + chemoembolization; 5 had liver transplantation (22%); 3 had liver resection (13%).

Median survival was 20 months (range, 1–27) in the whole group (Figure 1), while it was 21 months (range, 1–27) in the DC subgroup (median time to progression = 15 months, range 2–23).

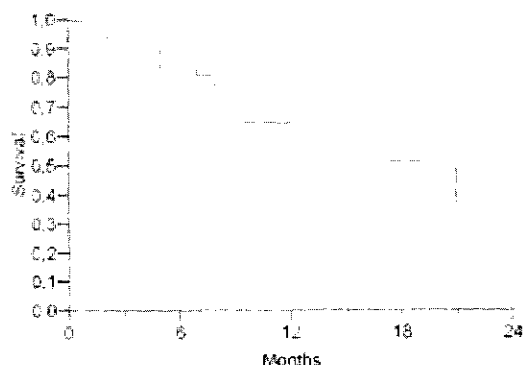


Figure 1. Survival curve of the study group.

Conclusion: Sorafenib achieves high DC rates in BCLC B HCC patients. In this selected group of sorafenib responders a biological downstaging may be hypothesized giving to the patient a new chance for loco-regional therapy.

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OUTCOME OF PATIENTS WITH HEPATOCELLULAR CARCINOMA LISTED FOR LIVER TRANSPLANTATION BEFORE AND AFTER THE MELD-BASED ALLOCATION SYSTEM WITHIN EUROTRANSPLANT. A BELGIAN MULTICENTRE RETROSPECTIVE STUDY

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Background: Since 16th December 2006, Eurotransplant (ET) implemented the MELD system for allocation of liver grafts, hepatocellular carcinoma (HCC) within the Milan criteria (MC) receiving 22 MELD points. This has modified the priorities for liver allocation in Belgium. The aim of our study was to analyse the effects of this new rule on the outcome of patients listed for liver transplantation (LT) for HCC in Belgium.

Methods: We compared, on an intention-to-treat (ITT) basis, 226 patients listed for HCC as first diagnosis in the pre-MELD era (October 1999 to October 2004) with 191 patients with the same indications in the post-MELD era (16th December 2006 to June 2009).

Results: The 2 groups were identical for age, gender, median MELD score (9 vs. 10) and median alpha-fetoprotein level at listing but in the post-MELD era, median Child-Pugh score was significantly lower: 7 vs. 6, $p=0.001$, as well as median tumor nodal number: 2 vs. 1, $p=0.003$. Treatment before listing was similar between both groups: 54% vs. 61%, $p=0.16$. Delisting rates were similar for the two eras (12%) whereas death while waiting decreased: 10% vs. 3%, $p<0.001$ and transplantation rate increased: 140 (62%) vs. 163 (85%), $p<0.001$. Median waiting time until LT was shorter in post-MELD era: 4 vs. 3 months, $p=0.001$. At transplantation, patients within MC were more numerous in post-MELD era on the explant: 47% vs. 82%, $p<0.001$. After transplantation, HCC recurrence at 2 years was similar in both groups: 17 (12%) vs. 21 (13%), $p=0.236$ and, the one year ITT mortality, was significantly lower in post-MELD era: 114/226 (50%) vs. 56/191 (29%), $p<0.001$. Multivariate analysis post-LT on the 417 patients disclosed that a tumor above MC on the explant was the best predictor factor of post-LT mortality (RR 1.9, CI: 1.1–3.6, $p=0.035$) whereas the best predictor factor of post LT HCC recurrence was vascular involvement on the explant (RR 3.2, CI: 1.7–7.6, $p=0.04$).

Conclusion: The implementation of MELD for liver allocation by ET has decreased the delay for LT as well as the one-year ITT mortality and increased the LT rate for patients listed for HCC in Belgium.

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PREDICTIVENESS OF WASH-OUT TIME INTENSITY CURVE ON HEPATOCELLULAR CARCINOMA RECURRENCE

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Background: The differentiation grade and presence of microvascular invasion predicts long-term survival after surgical treatment of a hepatocellular carcinoma (HCC). HCC on magnetic resonance imaging (MRI) usually depicts as hyperintense lesion on T2-weighted imaging with arterial enhancement and wash-out in the venous phase. We examined whether pre-operative MRI characteristics can predict differentiation grade and presence of microvascular invasion before hepatic resection.

Methods: Date of 597 patients with HCC were analysed, all slides of the resected specimen and the pre-operative MRI of all HCC patients treated with curative intent in a single reference center between 2000–2008 were prospectively analysed. Clinical, pathological and imaging findings were evaluated in uni- and multivariate analyses, a wash-out time intensity curve (TIC) was assessed.

Results: 87 patients with 104 nodules had at least one pre-operative MRI before surgical treatment with curative intent. According to the Lauwers classification; 15 nodules (14%) were differentiated as good, 50 nodules (48%) as moderate and 34 nodules (32%) as poor. 55 nodules (53%) showed microvascular invasion. 28 patients with recurrence of HCC, had a significant higher alpha-fetoprotein (AFP), a larger tumour size, more often microvascular invasion and more often a moderate or poor differentiated tumour. In 85 nodules (88%) there was wash-out of contrast during the dynamic phase. HCCs well differentiated showed significantly less wash-out compared to HCCs moderate or poor differentiated ($p<0.001$). HCCs without microvascular invasion also showed significant less wash-out ($p=0.032$). The shape of the TICs of patients with and without recurrence did not differ significantly. There was no significant