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).

**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-feto-protein 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: 114/225 (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 = 0.038) 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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### 663 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 Lauswes 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-feto-protein (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 fase. 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