Outcome of ABO-incompatible adult living-donor liver transplantation for patients with hepatocellular carcinoma

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Background
Living-donor liver transplantation can simultaneously cure hepatocellular carcinoma and underlying liver cirrhosis, improving long-term results in patients with hepatocellular carcinoma. ABO-incompatible living-donor liver transplantation could expand the living-donor pool, reduce waiting times for deceased-donor liver transplantation, and improve long-term survival for some patients with hepatocellular carcinoma. Here, we retrospectively reviewed the medical records of patients undergoing living-donor liver transplantation for hepatocellular carcinoma from November 2008 to December 2015 at a single institution in Korea.

Methods
We retrospectively reviewed the medical records of patients undergoing living-donor liver transplantation for hepatocellular carcinoma from November 2008 to December 2015 at a single institution in Korea. In total, 165 patients underwent ABO-incompatible and 753 patients underwent ABO-compatible living-donor liver transplantation for hepatocellular carcinoma.

Results
Comparison of recipient and donor clinical characteristics between ABO-incompatible and -compatible adult living-donor liver-transplantation recipients after propensity matching.

Perioperative details of recipients and recurrence of HCC in a propensity matched cohort.

Comparison of the overall survival rates and disease-free survival rates between ABOi and ABOc adult LDLT recipients in a propensity matched cohort.

Conclusion
These findings suggested that ABO-incompatible liver transplantation is a feasible option for hepatocellular carcinoma patients, especially those with compensated cirrhosis with HCC within conventional Milan criteria.