

ClinicalTrials.gov Registration Summary

July 1, 2025

Study Title

Long-Term Outcomes of ABO-Incompatible Versus Compatible Living Donor Liver Transplantation: A Single-Center Retrospective Study

Brief Summary

This retrospective cohort study investigates the long-term outcomes of ABO-incompatible (ABO-I) versus ABO-compatible (ABO-C) living donor liver transplantation (LDLT). A total of 511 patients underwent LDLT between January 2012 and December 2022 at a single high-volume transplant center in Korea. Among them, 121 received ABO-I grafts using a rituximab-based desensitization protocol, while 390 underwent ABO-C LDLT. The study aims to compare overall survival and the incidence of biliary complications, as well as to identify risk factors specific to each group. This analysis provides insights into the long-term safety and efficacy of ABO-I LDLT in regions with low deceased donor organ availability.

Study Type

Observational
Retrospective Cohort

Enrollment

511 (Actual)

Study Dates

Study Start Date: January 1, 2012

Study Completion Date: December 31, 2022

Primary Completion Date: December 31, 2022

Primary Outcome Measure

Incidence of biliary complications (Time Frame: within 10 years post-transplantation)

Secondary Outcome Measures

- Overall patient survival (Time Frame: 3-, 5-, 10-year)
- Incidence of acute cellular rejection (Time Frame: 1 year)
- Hospital stay duration (Time Frame: up to 30 days post-transplant)

Biospecimen Retention

None

Conditions

- Liver Disease
- Liver Transplantation

Intervention

None (Observational study)

Eligibility Criteria

Inclusion: All adult patients who underwent LDLT at the study center from 2012 to 2022.

Exclusion: Pediatric patients, deceased donor recipients, multi-organ transplants.

Study Location

Center Name: National Cancer Center

City: Goyang

Country: South Korea

Responsible Party

Principal Investigator: Dr. Seoung Hoon Kim

Institution: National Cancer Center

Contact Email: kshlj@hanmail.net

Ethics Approval

Approved by Institutional Review Board of National Cancer Center

Approval Number: NCC2023-0110