

# An Evidence-Based Analysis for Liver Transplants: Insights for Organ Allocation Policy

*Emergent Research Forum Papers---Research In Progress*

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## Abstract (Required)

This study intends to utilize Evidence-Based Medicine (EBM) to support liver organ allocation policy making. The current liver organ allocation policy---the MELD scoring system suffers from several limitations in evaluating patients' post-transplant survival. This study intends to develop a more cost effective policy for liver organ allocation which includes both recipients' factors and donors' characteristics. Using the liver transplants data collected from UNOS (United Network for Organ Sharing), the impact of donors' cause of death (COD) on the survival risk of patients with Hepatic B surface antigen (HBsAg) test result positive is analyzed by the two-step analysis. First, the survival analysis is conducted in the entire population to detect the influence of HBsAg and Donor COD on graft survival. Second, the Kaplan-Meier method along with Cox proportional hazards models is adopted to explore whether there is an interaction effect between HBsAg and Donor COD.

## Keywords (Required)

Healthcare information systems, liver transplant, organ allocation policy.