

E-030

## Evaluating The SALT Prediction Model (Survival After Liver Transplantation For Hepatocellular Carcinoma): An External Validation Study For 5 Years

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**Background** : The SALT (Survival After Liver Transplantation) calculator was developed in a previous study using data from 578 patients who underwent LDLT (Living Donor Liver Transplantation) for HCC (Hepatocellular Carcinoma) between June 2006 and July 2018 in Seoul National University Hospital (SNUH). This model identified several factors significantly associated with HCC-specific death(HCCD) and demonstrated significant internal and external validation results. This study aims to validate the SALT calculator using an additional cohort of 266 LDLT for HCC patients from SNUH between August 2018 and December 2022.

**Methods** : The validation was performed using R program version 4.4.0. The performance metrics included the c-index, calibration plot, and 5-year AUROC

**Results** : Mean follow up period was 37 months (12-65). The bootstrap-corrected Uno's c-index using cumulative incidence of HCCD at 3-year, and 5-year was 0. 8 (95% CI 0.62 - 0.96) and 0.81 (95% CI 0.65 - 0.94). The calibration slope of 3-year and 5-year cumulative incidence was 2.26 (95% CI: 0.64 - 4.14) and 1.68 (95% CI: 0.57 - 2.81). The 3-years AUROC value showed 0.805 and 5 years showed 0.8255.

**Conclusions** : The SALT calculator remains a significant predictive tool for HCC-specific survival after liver transplantation, especially after a certain amount of time. Further validation and enhancement with multi-centered data are planned to improve its accuracy and applicability.

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