Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work.
eFigure 1. Study Population Workflow, 2012-2021
The number of patients for each cohort, waitlisted (WL), living donor (LD), and deceased donor (DD), are provided in the columns (boxes) above. Each row provides the total number of patients per cohort after filtering. Patients were filtered based on age greater than 17 years, placement or transplant date on or after January 1, 2012, re-transplantation status, missing MELD score and placement date.
eFigure 2. MELD-Na Score Distributions for Waitlisted Candidates and Live-Donor Liver Transplant Recipients

MELD-Na score distributions are provided at initial placement on waitlist for A) waitlisted candidates and B) at the time of transplant for patients receiving a live donor liver transplant (LDLT). ~55% of waitlisted candidates had a MELD-Na equal to or greater than 20. ~82% of LDLT patients had a MELD-Na equal to or greater than 20 at placement on the waitlist.
eFigure 3. One-Year Mortality Risk Across MELD-Na Categories for Patients Receiving Deceased-Donor Liver Transplantation (DDLT) vs Remaining on the Waitlist, 2011-2021

Relative hazard ratios were calculated at one-year on the waitlist and post-transplantation for deceased donor liver transplants (DDLT) across eight MELD-Na categories: 6-10, 11-13, 14-16, 17-19, 20-26, 27-30, 31-38, and 39+. A) one-year, unadjusted hazard ratios and B) covariate-adjusted Cox proportional hazard ratios were reported with 95% confidence intervals and significance thresholds. Unadjusted hazard ratios were calculated by dividing the mortality rate of DDLT patients by the mortality rate of waitlisted candidates. Adjusted hazard ratios were calculated using the Cox proportional hazard model and were adjusted for age at listing, sex, and primary diagnosis. Significance thresholds were labelled as: *p<0.05, **p<0.01, and ***p<0.001.
**eTable 1. Mortality Rate for Patients on the Waitlist vs LDLT**

| MELD-Na | Waitlist Deaths | PY | Rate/1000 PY | LDLT Deaths | PY | Rate/1000 PY |
|---------|-----------------|----|--------------|-------------|----|--------------|
| [06-10] | 1401            | 25024 | 55.9863     | 47          | 788 | 59.6447      |
| [11-13] | 1643            | 18226 | 90.1459     | 40          | 671 | 59.6125      |
| [14-16] | 2144            | 19053 | 112.5282    | 34          | 644 | 52.795       |
| [17-19] | 1968            | 14263 | 137.9794    | 25          | 407 | 61.4251      |
| [20-26] | 3615            | 20874 | 173.1819    | 13          | 268 | 48.5075      |

*MELD = model for end-stage liver disease, PY = patient years, LDLT = living donor liver transplant*
### eTable 2. Risk of Mortality for Patients on the Waitlist vs LDLT

| MELD-NA | Unadjusted | Adjusted |
|---------|------------|----------|
|         | HR         | CI       | P-Value | HR     | CI       | P-Value |
| [06-10] | 1.07       | (0.84 - 1.34) | 0.678 | 1.13   | (0.84 - 1.51) | 0.415 |
| [11-13] | 0.66       | (0.50 - 0.86) | 0.013 | 0.64   | (0.47 - 0.88) | 0.006 |
| [14-16] | 0.47       | (0.35 - 0.63) | <0.001 | 0.47   | (0.34 - 0.66) | <0.001 |
| [17-19] | 0.45       | (0.31 - 0.63) | <0.001 | 0.43   | (0.29 - 0.64) | <0.001 |
| [20-26] | 0.28       | (0.16 - 0.47) | <0.001 | 0.27   | (0.15 - 0.46) | <0.001 |

*MELD = model for end-stage liver disease, HR = hazard ratio, LDLT = living donor liver transplant*
eTable 3. Life-Years Saved After LDLT

| MELD  | Median Waitlist Days | Median Waitlist Years | LYFT   | Net Years Gained | P-Value |
|-------|----------------------|-----------------------|--------|-----------------|---------|
| [06-10] | 1966                | 5.383                 | 18.829 | 13.447          | <0.001  |
| [11-13] | 1886                | 5.164                 | 21.953 | 16.789          | <0.001  |
| [14-16] | 1844                | 5.049                 | 18.201 | 13.152          | <0.001  |
| [17-19] | 1729                | 4.734                 | 22.414 | 17.681          | <0.001  |

*MELD = model for end-stage liver disease, LYFT = life years saved following transplant*
| Table 4. Patient Characteristics in Cohorts, 2012-2015 and 2016-2021 |
|---------------------------------------------------------------|
| **2012-2015** | **Total (N=46079)** | **P-value** | **2016-2021** | **Total (N=73196)** | **P-value** |
| **W (N=45150)** | **L (N=929)** | | **W (N=71305)** | **L (N=1891)** | |
| **Age** | | | | | |
| Mean (SD) | 55.1 (10.5) | 52.3 (12.9) | 55.1 (10.6) | <0.001 | 55.2 (11.5) | 53.3 (13.3) | 55.1 (11.5) | <0.001 |
| Median [Min, Max] | 57.0 [18.0, 81.0] | 55.0 [18.0, 75.0] | 57.0 [18.0, 81.0] | | 58.0 [18.0, 82.0] | |
| **Sex** | | | | | |
| F | 16144 (35.8%) | 404 (43.5%) | 16548 (35.9%) | <0.001 | 26704 (37.5%) | 911 (48.2%) | 27615 (37.7%) | <0.001 |
| M | 29006 (64.2%) | 525 (56.5%) | 29531 (64.1%) | | 44601 (62.5%) | 980 (51.8%) | 45581 (62.3%) | |
| **Race** | | | | | |
| Caucasian | 31649 (70.1%) | 760 (81.8%) | 32409 (70.3%) | <0.001 | 49796 (69.8%) | 1509 (79.8%) | 51305 (70.1%) | <0.001 |
| Hispanic/Latino | 6684 (14.8%) | 104 (11.2%) | 6788 (14.7%) | | 11807 (16.6%) | 243 (12.9%) | 12050 (16.5%) | |
| Black or African American | 4226 (9.4%) | 28 (3.0%) | 4254 (9.2%) | | 5409 (7.6%) | 62 (3.3%) | 5471 (7.5%) | |
| Asian | 1984 (4.4%) | 27 (2.9%) | 2011 (4.4%) | | 3030 (4.2%) | 56 (3.0%) | 3086 (4.2%) | |
| American Indian or Alaska Native | 350 (0.8%) | 3 (0.3%) | 353 (0.8%) | | 726 (1.0%) | 10 (0.5%) | 736 (1.0%) | |
| Native Hawaiian or Other Pacific Islander | 83 (0.2%) | 3 (0.3%) | 86 (0.2%) | | 132 (0.2%) | 2 (0.1%) | 134 (0.2%) | |
| Missing | 174 (0.4%) | 4 (0.4%) | 178 (0.4%) | | 405 (0.6%) | 9 (0.5%) | 414 (0.6%) | |
| **Ethnicity** | | | | | |
| Latino | 6717 (14.9%) | 104 (11.2%) | 6821 (14.8%) | 0.0075 | 11931 (16.7%) | 245 (13.0%) | 12176 (16.6%) | <0.001 |
| Non-Latino or unknown | 38433 (85.1%) | 825 (88.8%) | 39258 (85.2%) | 0.0075 | 59374 (83.3%) | 1646 (87.0%) | 61020 (83.4%) | |
| **Education** | | | | | |
| Associate/bachelor’s degree | 7677 (17.0%) | 249 (26.8%) | 7926 (17.2%) | <0.001 | 14107 (19.8%) | 475 (25.1%) | 14582 (19.9%) | <0.001 |
| Attended College/Technical School | 11071 (24.5%) | 197 (21.2%) | 11268 (24.5%) | <0.001 | 17548 (24.6%) | 453 (24.0%) | 18001 (24.6%) | |
| Grade School (0-8) | 2238 (5.0%) | 25 (2.7%) | 2263 (4.9%) | 3822 (5.4%) | 76 (4.0%) | 3898 (5.3%) | |
| High School (9-12) | 18310 (40.6%) | 305 (32.8%) | 18615 (40.4%) | 26991 (37.9%) | 547 (28.9%) | 27538 (37.6%) | |
| None | 144 (0.3%) | 4 (0.4%) | 148 (0.3%) | 247 (0.3%) | 3 (0.2%) | 250 (0.3%) | | |
| Primary Etiology                              | <0.001 | <0.001 |
|----------------------------------------------|--------|--------|
| Alcoholic cirrhosis                          | 8085 (17.9%) | 8206 (17.8%) |<0.001|
| NASH cirrhosis                               | 5363 (11.9%) | 5485 (11.9%) |<0.001|
| Hepatitis C cirrhosis                        | 13591 (30.1%) | 13790 (29.9%) |<0.001|
| Hepatitis B cirrhosis                        | 857 (1.9%) | 868 (1.9%) |<0.001|
| Hepatocellular carcinoma                     | 5047 (11.2%) | 5119 (11.1%) |<0.001|
| Non-HCC malignancy                           | 321 (0.8%) | 346 (0.9%) |<0.001|
| Cholestatic Liver Disease (PSC, PBC, BA)     | 3286 (7.3%) | 3499 (7.5%) |<0.001|
| Non-cholestatic cirrhosis (other)            | 6088 (13.2%) | 6230 (13.2%) |<0.001|
| Missing                                      | 14 (0.0%) | 15 (0.0%) |<0.001|
| Other                                        | 2498 (5.5%) | 2521 (5.5%) |<0.001|

NASH = non-alcoholic steatohepatitis; HCC = Hepatocellular carcinoma; PSC = Primary Sclerosing Cholangitis; PBC = primary biliary cholangitis; BA = Biliary atresia