

Figure S1. Cumulative incidence of CMV infection within 12 months after LDLT.

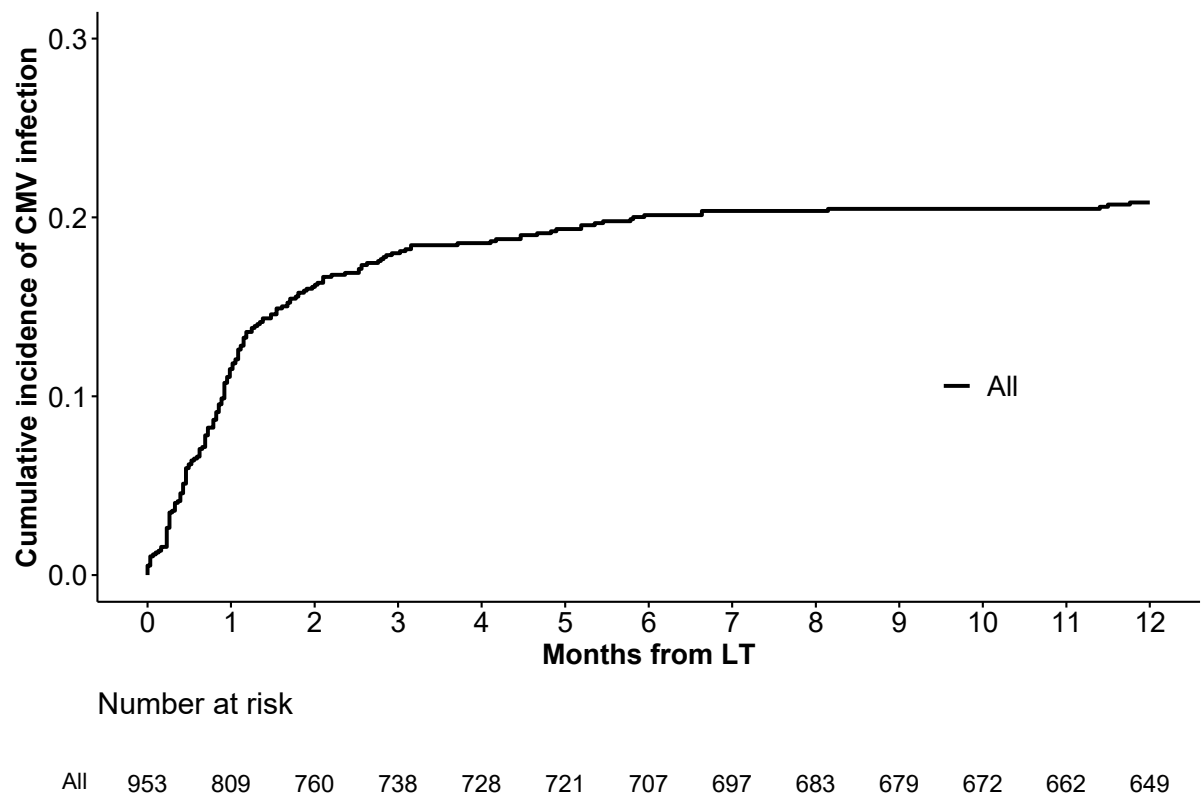


Figure S2. Density plot for days from LDLT to CMV infection.

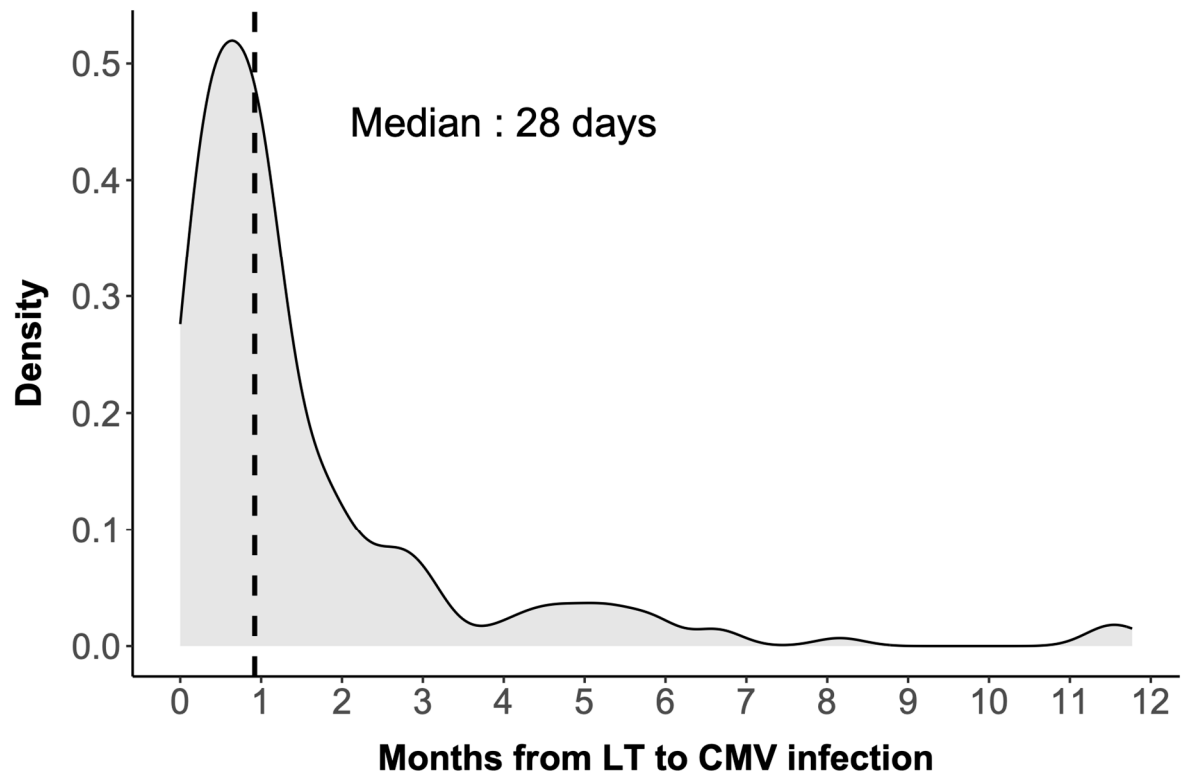


Table S1. Uni- and multivariable Cox regression for graft survival

| Variables | | HR (univariable) | HR (multivariable) |
|--------------------------|-----------|----------------------------|---------------------------|
| CMV_infection | No | - | - |
| | Yes | 2.50 (1.58-3.95, p<0.001) | 1.93 (1.16-3.20, p=0.012) |
| Age | | 1.01 (0.98-1.03, p=0.662) | - |
| Sex | Male | - | - |
| | Female | 1.37 (0.84-2.22, p=0.206) | - |
| BMI | | 0.97 (0.90-1.04, p=0.402) | - |
| LT_year | 2012-2015 | - | - |
| | 2016-2018 | 1.05 (0.62-1.81, p=0.846) | - |
| | 2019-2021 | 1.35 (0.66-2.75, p=0.417) | - |
| Hypertension | No | - | - |
| | Yes | 1.33 (0.79-2.25, p=0.281) | - |
| Diabetes_mellitus | No | - | - |
| | Yes | 1.58 (0.99-2.52, p=0.056) | 1.33 (0.82-2.16, p=0.251) |
| Cardiovascular_disease | No | - | - |
| | Yes | 1.85 (0.85-4.03, p=0.124) | - |
| Underlying_liver_disease | Alcoholic | - | - |
| | Viral | 0.97 (0.56-1.71, p=0.928) | - |
| | Others | 0.96 (0.46-1.97, p=0.906) | - |
| HCC | No | - | - |
| | Yes | 0.88 (0.55-1.39, p=0.572) | - |
| Pretransplant_MELD | | 1.04 (1.02-1.07, p=0.002) | 1.02 (0.99-1.06, p=0.240) |
| Pretransplant_stay | OPD | - | - |
| | Ward | 1.79 (1.12-2.85, p=0.015) | 1.63 (0.99-2.67, p=0.055) |
| | ICU | 3.42 (0.82-14.19, p=0.090) | 1.48 (0.33-6.70, p=0.613) |
| Refractory_ascites | No | - | - |
| | Yes | 1.33 (0.64-2.77, p=0.449) | - |
| Encephalopathy | No | - | - |
| | Yes | 1.04 (0.53-2.02, p=0.919) | - |
| ABO_incompatibility | No | - | - |
| | Yes | 1.32 (0.80-2.18, p=0.272) | - |
| Donor_age | | 1.02 (1.00-1.04, p=0.038) | 1.02 (1.00-1.04, p=0.108) |
| Donor_sex | Male | - | - |
| | Female | 1.20 (0.75-1.92, p=0.440) | - |
| Donor_BMI | | 1.04 (0.94-1.14, p=0.464) | - |
| Macrovesicular_steatosis | <10% | - | - |
| | >=10% | 1.01 (0.56-1.84, p=0.968) | - |
| OP_time | | 1.00 (1.00-1.00, p=0.001) | 1.00 (1.00-1.01, p=0.002) |
| Transfusion_RBC | | 1.03 (1.01-1.05, p=0.007) | 0.99 (0.95-1.03, p=0.595) |
| Reoperation | No | - | - |
| | Yes | 1.75 (0.84-3.65, p=0.136) | - |
| cr_preLT | | 1.21 (0.98-1.49, p=0.081) | 1.10 (0.81-1.50, p=0.542) |
| albumin_preLT | | 1.44 (0.96-2.15, p=0.075) | 3.08 (1.80-5.27, p<0.001) |
| glucose_preLT | | 1.00 (0.99-1.00, p=0.595) | - |
| hb_preLT | | 0.84 (0.75-0.94, p=0.003) | 0.78 (0.67-0.90, p=0.001) |
| plt_preLT | | 1.00 (0.99-1.00, p=0.541) | - |
| wbc_preLT | | 1.01 (0.92-1.10, p=0.844) | - |
| neutro_preLT | | 1.01 (0.92-1.12, p=0.788) | - |
| lympho_preLT | | 0.62 (0.36-1.07, p=0.086) | 0.76 (0.45-1.30, p=0.320) |
| TAC_mean | | 1.04 (0.98-1.11, p=0.225) | - |
| TAC_max | | 1.03 (1.00-1.06, p=0.091) | 1.02 (0.99-1.06, p=0.160) |
| MMF_use | No | - | - |
| | Yes | 0.92 (0.57-1.47, p=0.725) | - |
| mTORi_use | No | - | - |
| | Yes | 1.08 (0.50-2.36, p=0.847) | - |

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|-------------|-----|---------------------------|---|
| Steroid_use | No | - | - |
| | Yes | 1.12 (0.35-3.56, p=0.846) | - |

Table S2. Full results of univariable logistic regression for CMV infection

| Variables | OR (95% CI) | P |
|--|---------------------|-------|
| Age | 0.98 (0.95-1.00) | 0.084 |
| Sex, female | 2.31 (1.46-3.67) | 0.001 |
| BMI | 0.96 (0.89-1.02) | 0.187 |
| Year of LT (2012-2015) | | |
| 2016-2018 | 1.00 (0.60-1.67) | 1.000 |
| 2019-2021 | 1.00 (0.53-1.89) | 1.000 |
| Hypertension | 1.28 (0.77-2.13) | 0.333 |
| Diabetes mellitus | 1.04 (0.66-1.62) | 0.877 |
| Cardiovascular disease | 1.63 (0.70-3.68) | 0.246 |
| Pretransplant MELD | 1.09 (1.06-1.12) | 0.001 |
| Pretransplant stay (out-patient day) | | |
| Ward | 2.15 (1.38-3.36) | 0.001 |
| Intensive care unit | 10.97 (1.59-216.69) | 0.034 |
| Refractory ascites | 0.78 (0.35-1.64) | 0.532 |
| Severe encephalopathy | 2.16 (1.20-3.90) | 0.010 |
| ABO incompatibility | 1.83 (1.14-2.92) | 0.012 |
| Donor age | 1.01 (0.99-1.03) | 0.470 |
| Donor sex, female | 0.84 (0.54-1.31) | 0.453 |
| Donor BMI | 1.01 (0.92-1.10) | 0.875 |
| Macrovesicular steatosis ($\geq 10\%$) | 1.70 (1.00-2.90) | 0.050 |
| Operation time, min | 1.00 (1.00-1.00) | 0.535 |
| Transfusion of RBC, pack | 1.03 (1.00-1.07) | 0.043 |
| History of re-operation after LT | 2.14 (1.03-4.47) | 0.040 |
| Creatinine, mg/dL | 1.71 (1.16-2.78) | 0.017 |
| Albumin, g/dL | 0.86 (0.59-1.26) | 0.448 |
| Glucose, mg/dL | 1.00 (1.00-1.01) | 0.077 |
| Hemoglobin, g/dL | 0.92 (0.83-1.01) | 0.093 |
| Platelet, $10^3/\mu\text{L}$ | 1.00 (1.00-1.00) | 0.936 |
| White blood cell, $10^3/\mu\text{L}$ | 1.18 (1.09-1.29) | 0.001 |
| Neutrophil, $10^3/\mu\text{L}$ | 1.24 (1.13-1.38) | 0.001 |
| Lymphocyte, $10^3/\mu\text{L}$ | 0.76 (0.48-1.16) | 0.212 |
| Mean TAC trough level, ng/dL | 1.01 (0.94-1.08) | 0.817 |
| Maximum TAC trough level, ng/dL | 1.01 (0.98-1.05) | 0.397 |
| Use of immunosuppressants | | |

| | | |
|--------------------------|-------------------|-------|
| TAC | 2.02 (0.29-39.65) | 0.533 |
| Mycophenolate mofetil | 0.98 (0.63-1.54) | 0.940 |
| mTOR inhibitor | 0.78 (0.35-1.64) | 0.532 |
| Steroid | 1.00 (0.38-2.93) | 1.000 |
| Acute cellular rejection | 1.02 (0.63-1.64) | 0.935 |
