

Supplementary Table 1 International classification of disease-9 codes

	ICD-9 CM codes
Liver Disease Etiology	
Alcoholic Liver Disease	571.2
Viral hepatitis	070.2, 070.20, 070.21, 070.22, 070.23, 070.3, 070.30, 070.31, 070.32, 070.33, 070.42, 070.52
Comorbidities	
Diabetes Mellitus	250.00-250.33, 250.40-250.93
Hypertension	401.1, 401.9, 642.00-642.04, 401.0, 402.00, 402.10, 402.90, 403.00, 403.10, 403.90, 404.00, 404.10, 404.90, 405.01, 405.09, 405.11, 405.19, 405.91, 405.99, 642.10- 462.24, 642.70-642.94
Lymphoma	200.00-202.38, 202.50-203.01, 203.8-203.81, 238.6, 273.3, V10.71, V10.72, V10.79
Fluid/electrolyte disorders	276.0-276.9
Coagulopathy	2860-2869, 287.1, 287.3-287.5, 289.81-289.82
Anemia	2800, 280.1-281.9, 285.21-285.29, 285.9, 648.20-648.24
Arthritis	701.0, 710.0-710.9, 714.0-714.9, 720.0-720.9, 725
Weight loss	260-263.9
Cancer	140.0-172.9, 174.0-175.9, 179-195.8, 196.0-199.1, V10.00- V10.59, V10.81- V10.9,
Congestive heart failure	398.91, 402.01, 402.11, 402.91, 404.01, 404.11, 404.91, 428.0-428.9
Chronic pulmonary disease	490-492.8, 493.00-493.92, 494-494.1, 495.0-505, 506.4
Obesity	278.0, 278.00, 278.01
Neurological disorders	330.0-331.9, 332.0, 333.4, 333.5, 334.0-335.9, 340, 341.1- 341.9, 342.0-342.12, 342.9-344.9, 345.00-345.11, 345.2- 345.3, 345.40-345.91, 348.1, 348.3-348.39, 438.20-438.53,

	572.4, 780.3, 780.39, 784.3
Pulmonary circulation disorders	416.0-416.9, 417.9
Psychosis	295.00-298.9, 299.10, 299.11
Valvular disease	093.20-093.24, 394.0-397.1, 424.0-424.91, 746.3-746.6, V42.2, V43.3
Peripheral vascular disorders	440.0-440.9, 441.00-441.9, 442.0-442.9, 443.1-443.9, 447.1, 557.1, 557.9, V43.4
Depression	300.4, 301.12, 309.0, 309.1, 311
HIV/ AIDS	042-044.9
Substance Use	
Smoking	305.1, 649.0, 989.84
Alcohol	291.0-291.3, 291.5, 291.8, 291.81, 291.89, 291.9, 303.00- 303.93, 305.00-305.03, V113
Drug use	292.0, 292.82-292.89, 292.9, 304.00-304.93, 305.20- 305.93, 648.30-648.34
Medical Procedures/Interventions	
Renal Replacement Therapy	39.95, v45.1, v56.0, v56.1, 54.98, v56.2, v56.32
Paracentesis	54.91
Mechanical Ventilation	96.70-96.73
TIPS	39.1
Liver Transplantation	50.5, 50.59
SLKT	50.5, 50.59 (Liver Transplantation) + 55.6, 55.69 (Kidney Transplantation)

SLKT: Simultaneous Liver-Kidney Transplantation; TIPS: Transhepatic Intrajugular portosystemic Shunt; ICD: International classification of disease.