

Table S1 ICD-10 codes of comorbidities

Comorbidities	ICD-10 codes
COVID-19 pneumonia	U07.1, J12.89
Influenza pneumonia	J09.X1, J10.00, J10.01, J10.08, J11.00, J11.08
Trauma	S20.x–S39.x, S77.x–S79, T07.x
Anticoagulant	Z79.01
Antiplatelet	Z79.02, Z79.82
Estrogen use	Z79.3, Z79.890, Z79.81
Nicotine abuse	F17, Z57.31, Z72.0, Z77.22, T65.2
Thrombophilia	D68.5, D68.6
Prior VTE	Z86.71
CKD	N18
CHF	I50.x
Congenital heart disease	Q20.x–Q24.x
Leukemia or lymphoma	C81.x–C86.x, C88.x, C90–C90.x
Solid cancer non-metastatic	C00.x–C26.x, C30.x–C34.x, C37.x–C41.x, C43.x, C45.x–C58.x, C60.x–C76.x, C97.x
Metastatic cancer	C77.x–C80.x
Paralysis	G04.1, G11.4, G80.1, G80.2, G81.x, G82.x, G83.0–G83.4, G83.9
Chronic neurological disorders	G10.x–G13.x, G20.x–G22.x, G25.4, G25.5, G31.2, G31.8, G31.9, G32.x, G35.x–G37.x, G40.x, G41.x, G93.1, G93.4, R47.0, R56.x
Connective tissue disease	L94.0, L94.1, L94.3, M05.x, M06.x, M08.x, M12.0, M12.3, M30.x, M31.0–M31.3, M32.x–M35.x, M45.x, M46.1, M46.8, M46.9
Malnutrition	E43, E44, E46, D64
Overweight and obesity	E66
Diabetes mellitus	E10.0, E10.1, E10.9, E11.0, E11.1, E11.9, E12.0, E12.1, E12.9, E13.0, E13.1, E13.9, E14.0, E14.1, E14.9, E10.2–E10.8, E11.2–E11.8, E12.2–E12.8, E13.2–E13.8, E14.2–E14.8

ICD-10, International Classification of Diseases, 10th Revision; COVID-19, coronavirus disease of 2019; VTE, venous thromboembolism; CKD, chronic kidney disease; CHF, congestive heart failure.

Table S2 ICD codes of complications

Complications	ICD codes
Severe sepsis	R65.20
Septic shock	R65.21
Urinary filtration	5A1D
RBC transfusion	30233N, 30243N, 30243P, 30233P
Vasopressor need	3E030XZ, 3E033XZ, 3E040XZ, 3E043XZ, 3E053XZ, 3E060XZ, 3E063XZ, 3E050XZ
BiPAP/CPAP and HFNC	5A09357, 5A09358, 5A0935A, 5A09457, 5A09458, 5A0945A, 5A09557, 5A09558, 5A0955A
Mechanical ventilation	0BH17EZ, 0BH18EZ, 0BH13EZ
Acute liver failure	K72.9, K72.0
Cardiac arrest	I46
Acute MI	I22.0, I22.1, I22.8, I22.9, I21.4, I21.2, I21.9, I21.A1, I21.A9, I24.x
Acute stroke	I67.81, I67.82, I63.x, G46, I69.x
Blood loss anemia	D50.0

ICD, International Classification of Diseases; RBC, red blood cell; BiPAP, bilevel positive airway pressure; CPAP, continuous positive airway pressure; HFNC, high flow nasal cannula; MI, myocardial infarction.