

Features	Description	Type	Predictor
UnitCode	An unique identifier for each ICU, used for analyzing model efficiency.	Categorical	No
UnitLengthStay_trunc	The patient length of stay in the ICU (outcome) (truncated in 21 days for comparing to the predictive model)	Numerical	No
IsMechanicalVentilation	Mechanical Ventilation at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
LowestGlasgowComaScale1h	Lowest Glasgow Coma Scale (first 1 hour of admission)	Integer (3-15)	Yes
Urea	Urea (first 1 hour of admission)	Numerical	Yes
Age	Age (in years and $\geq 16$ )	Integer	Yes
IsVasopressors	Vasopressors at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
AdmissionSourceName	Source of ICU admission: "Cardiovascular intervention room", "Emergency room", "Operating room", "Other", "Other unit at your hospital", "Ward/Floor"	Categorical	Yes
LengthHospitalStayPriorUnitAdmission	The hospital length of stay prior to the admission in the ICU (in days)	Integer	Yes
HighestCreatinine1h	Highest Creatinine (first 1 hour of admission)	Numerical	Yes
AdmissionTypeName	Type of ICU admission: "Medical", "Surgery", "Emergency Surgery", "Scheduled Surgery"	Categorical	Yes
IsNonInvasiveVentilation	Non-invasive Ventilation at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
IsRespiratoryFailure	Respiratory Failure at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
IsDementia	Dementia: 0 = No, 1 = Yes	Binary	Yes
HighestHeartRate1h	Highest Heart Rate (first 1 hour of admission)	Numerical	Yes
HighestTemperature1h	Highest Temperature (first 1 hour of admission) (Celsius)	Numerical	Yes
ChfNyha	Cardiac Heart Failure: "Class23" = Class II or III of NYHA Classification, "Class4" = Class IV of NYHA Classification, "No" = No	Categorical	Yes
Gender	Patient's gender: F = Female; M = Male	Categorical	Yes
HighestLeukocyteCount1h	Highest Leukocyte Count (first 1 hour of admission)	Numerical	Yes

HighestRespiratoryRate1h	Highest Respiratory Rate (first 1 hour of admission)	Numerical	Yes
IsAcuteAtrialFibrillation	Acute Atrial Fibrillation at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
IsAcuteKidneyInjury	Acute Kidney Injury at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
IsAids	Aids: 0 = No, 1 = Yes	Binary	Yes
IsAlcoholism	Alcoholism: 0 = No, 1 = Yes	Binary	Yes
IsAngina	Angina: 0 = No, 1 = Yes	Binary	Yes
IsArterialHypertension	Arterial Hypertension: 0 = No, 1 = Yes	Binary	Yes
IsAsthma	Asthma: 0 = No, 1 = Yes	Binary	Yes
IsAsystole	Asystole at admission (first 24h): 0 = No, 1 = Yes	Binary	Yes
IsCardiacArrhythmia	Cardiac Arrhythmia: 0 = No, 1 = Yes	Binary	Yes
IsCardiacTransplant	Cardiac Transplant: 0 = No, 1 = Yes	Binary	Yes
IsChemotherapy	Chemotherapy: 0 = No, 1 = Yes	Binary	Yes
IsChronicAtrialFibrillation	Chronic Atrial Fibrillation: 0 = No, 1 = Yes	Binary	Yes
IsCirrhosis	Cirrhosis Child-Pugh for Chronic Liver Disease: "ChildAB" = Class A or B, "ChildC" = Class C, "No" = No	Categorical	Yes
IsCrf	Chronic Renal Failure: "Dialysis" = Chronic Renal Failure with dialysis, "NoDialysis" = Chronic Renal Failure without dialysis, "No" = No	Binary	Yes