

## Data Dictionary for the Stacking Model (ICU LOS prediction model)

Table	Features	Description	Type
Admission	UnitLengthStay_trunc	The patient length of stay in the ICU (outcome) (in days truncated in 21 days)	Numerical
Admission	Age	Age (in years and >= 16)	Integer
Admission	Gender	Gender: F = Female; M = Male	Categorical
Admission	LengthHospitalStayPriorUnitAdmission	The hospital length of stay prior to the admission in the ICU (in days)	Numerical
Admission	AdmissionTypeName	Type of ICU admission: “Cirurgia de urgência / emergência” = Urgent Surgery / Operating Room “Cirurgia eletiva” = Elective surgery “Clínica” = Medical	Categorical
Admission	AdmissionSourceName	Source of ICU admission: “Centro Cirúrgico” = Surgical center “Emergência” = Emergency “Enfermaria/Quarto/Semi-intensiva” = Ward/Room/Step down unit “Outra UTI/UCI do seu hospital” = Another ICU from the same hospital “Outros” = Other	Categorical
Comorbidities	ChfNyha	Cardiac Heart Failure: “Class23” = Class II or III of NYHA Classification “Class4” = Class IV or III of NYHA Classification “No” = No	Binary
Comorbidities	IsCrf	Chronic Renal Failure: “Dialysis” = Chronic Renal Failure with dialysis “NoDialysis” = Chronic Renal Failure without dialysis “No” = No	Binary
Comorbidities	IsCirrhosis	Cirrhosis Child-Pugh for Chronic Liver Disease: “ChildAB” = Class "A" or "B" “ChildC” = Class "C" “No” = No	Binary
Comorbidities	IsAids	Aids 0 = No; 1 = Yes	Binary
Comorbidities	IsArterialHypertension	Arterial Hypertension 0 = No; 1 = Yes	Binary
Comorbidities	IsAsthma	Asthma 0 = No; 1 = Yes	Binary
Comorbidities	IsAngina	Angina 0 = No; 1 = Yes	Binary
Comorbidities	IsCardiacArrhythmia	Cardiac Arrhythmia 0 = No; 1 = Yes	Binary
Comorbidities	IsChronicAtrialFibrillation	Chronic Atrial Fibrillation 0 = No; 1 = Yes	Binary
Comorbidities	IsDementia	Dementia 0 = No; 1 = Yes	Binary
Comorbidities	IsAlcoholism	Alcoholm 0 = No; 1 = Yes	Binary
Comorbidities	IsCardiacTransplant	Cardiac Transplant 0 = No; 1 = Yes	Binary
Comorbidities	IsChemotherapy	Chemotherapy 0 = No; 1 = Yes	Binary
Complications	IsRespiratoryFailure	Respiratory Failure at admission (first 24h) 0 = No; 1 = Yes	Binary
Complications	IsMechanicalVentilation	Mechanical Ventilation at admission (first 24h) 0 = No; 1 = Yes	Binary
Complications	IsNonInvasiveVentilation	Non-invasive Ventilation at admission (first 24h) 0 = No; 1 = Yes	Binary
Complications	IsVasopressors	Vasopressors at admission (first 24h) 0 = No; 1 = Yes	Binary
Complications	IsAcuteKidneyInjury	Acute Kidney Injury at admission (first 24h) 0 = No; 1 = Yes	Binary
Complications	IsAsystole	Asystole at admission (first 24h) 0 = No; 1 = Yes	Binary
Complications	IsAcuteAtrialFibrillation	Acute Atrial Fibrillation at admission (first 24h) 0 = No; 1 = Yes	Binary
Laboratory	LowestGlasgowComaScale1h	Lowest Glasgow Coma Scale (first 1 hour of admission)	Integer (3-15)
Laboratory	HighestHeartRate1h	Highest Heart Rate (first 1 hour of admission)	Numerical

Laboratory	HighestRespiratoryRate1h	Highest Respiratory Rate (first 1 hour of admission)	Numerical
Laboratory	HighestTemperature1h	Highest Temperature (first 1 hour of admission) (Celsius)	Numerical
Laboratory	HighestLeukocyteCount1h	Highest LeukocyteCount (first 1 hour of admission)	Numerical
Laboratory	HighestCreatinine1h	Highest Creatinine (first 1 hour of admission)	Numerical
Laboratory	Urea	Urea (first 1 hour of admission)	Numerical