

Table 1 Baseline characteristics of the included patients

	MIMIC-IV (n=3117)
Baseline Characteristics	
Age (years)	61.0 (48.0-73.0)
Male (gender)	1819/3117 (58.4)
Weight (kg)	83.0 (69.5-100.0)
Height (cm)	170.0 (163.0-178.0)
BMI (kg/cm <sup>2</sup> )	28.6 (24.4-34.3)
PBW (kg)	52.3 (41.4-59.6)
Admission Type	
Surgical elective	26/3117 (0.8)
Surgical urgency	1129/3117 (36.)
Medical	1962/3117 (62.9)
Source of admission	
Ward or step-down unit	8/3117 (0.3)
Emergency room	1060/3117 (34.0)
Office or operating room	3/3117(0.1)
Transferred from other hospital	1136/3117 (36.4)
Other	910/3117 (29.2)
Ethnicity	
Black	270/3117 (8.7)
Hispanic	105/3117 (3.4)
White	1837/3117 (58.9)
Other	905/3117 (29.0)
Initial diagnosis	
Sepsis (including pneumonia)	-
Cardiovascular disease	-
Other respiratory condition	-
Neurological condition	-
Renal condition	-
Others	-
Comorbidities	
COPD	285/3117 (9.1)
Smoking	-
Elixhauser comorbidity score	0 (0-0)
ARDS at baseline	678/3117 (21.8)
Mild	504/678 (75.2)
Moderate	159/678 (23.5)
Severe	15/678 (2.2)
Need of support in the first 24 h	
Vasopressor	587/3117 (18.8)
Renal replacement therapy	292/3117 (9.4)
Limitation of support	-
Severity of illness	
SAPS II	44.0 (34.0-56.0)
OASIS	42.0 (37.0-49.0)
SOFA	10.0 (6.0-13.0)
Vital signs at the beginning of ventilation	
Heart rate (bpm)	94.0 (83.5-104.0)

MAP (mmHg)	88.5 (76.0-122.0)
SpO <sub>2</sub> (%)	94.0 (90.5-95.5)
Temperature (°C)	36.9 (35.8-37.7)
Laboratory data at the beginning of ventilation	
pH	7.36 (7.31-7.41)
PaO <sub>2</sub> /FiO <sub>2</sub> (mmHg)	255.0 (197.5-3366)
PaCO <sub>2</sub> (mmHg)	42.0 (37-48)

**Table 2: Table 2 Characteristics of mechanical ventilation in included patients**

MIMIC-IV (n=3213)	
First day of ventilation	
Mechanical power (J/min)	16.6 (12.6-21.4)
Tidal volume (ml/kg PBW)	9.3 (7.9-11.0)
PEEP (cmH <sub>2</sub> O)	6.8 (5.1-9.0)
Plateau pressure (cmH <sub>2</sub> O)	20.0 (17.0-23.0)
Driving pressure (cmH <sub>2</sub> O)	11.5 (9.5-13.5)
Total respiratory rate (bpm)	20.0 (16.5-24.0)
Minute ventilation (l/min)	9.6 (8.1-11.4)
FiO <sub>2</sub> (%)	67.5 (55.0-70.0)
Patients receiving NMBA*	621/3117 (19.9)
Second day of ventilation	
Mechanical power (J/min)	15.3 (11.6-20.0)
Tidal volume (ml/kg PBW)	9.1 (7.8-10.7)
PEEP (cmH <sub>2</sub> O)	7.5 (5.2-10.4)
Plateau pressure (cmH <sub>2</sub> O)	20.0 (17.0-23.5)
Driving pressure (cmH <sub>2</sub> O)	11.5 (9.5-13.7)
Total respiratory rate (bpm)	20.0 (16.0-24.5)
Minute ventilation (l/min)	9.2 (7.7-11.1)
FiO <sub>2</sub> (%)	50.0 (40.0-65.0)
Patients receiving NMBA*	438/3117 (14.1)