**Supplement 2**

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| **1 Base and demographic data** |
| Age at admission to the ICU | metric | numeric | y |
| Sex | categorical | m = malef = female |  |
| BMI | metric | numeric | kg/m² |
| Blood type | categorical | ABOAB |  |
| Rh factor | categorical | p = positiven = negative |  |
| Days on external ICU before ICU at UKR | categorical | integer | d |

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| **2 Pre-medication** |
| Antihypertensive drugs | categorical | 0 = no1 = yes |  |
| Diuretics | categorical | 0 = no1 = yes |  |
| Phosphodiesterase-5-inhibitors | categorical | 0 = no1 = yes |  |
| Antidiabetics | categorical | 0 = no1 = yes |  |
| L-Thyroxin | categorical | 0 = no1 = yes |  |
| Thrombocytes-aggregation-inhibitors TAI | categorical | 0 = no1 = yes |  |
| Anticoagulants | categorical | 0 = no1 = yes |  |
| Opioids | categorical | 0 = no1 = yes |  |
| Non-opioid analgesics | categorical | 0 = no1 = yes |  |
| Steroids | categorical | 0 = no1 = yes |  |
| Bronchospasmolytic drugs | categorical | 0 = no1 = yes |  |
| Antidepressants | categorical | 0 = no1 = yes |  |
| Dopamine agonists | categorical | 0 = no1 = yes |  |
| Anticonvulsants | categorical | 0 = no1 = yes |  |
| Lipidreducers | categorical | 0 = no1 = yes |  |
| Proton-pump-inhibitors PPI | categorical | 0 = no1 = yes |  |
| Immunosuppressive drugs | categorical | 0 = no1 = yes |  |
| Supplements | categorical | 0 = no1 = yes |  |
| Ursodeoxycholic acids | categorical | 0 = no1 = yes |  |
| Alpha-5 reductase inhibitors | categorical | 0 = no1 = yes |  |
| Uricostatic drugs | categorical | 0 = no1 = yes |  |
| Other | categorical | 0 = no1 = yes |  |

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| **3 Pre-existing comorbidities** |
| Cardiovascular | categorical | 0 = no1 = yes |  |
| Pneumological | categorical | 0 = no1 = yes |  |
| Autoimmune | categorical | 0 = no1 = yes |  |
| Oncological | categorical | 0 = no1 = yes |  |
| Neurological | categorical | 0 = no1 = yes |  |
| Infectious | categorical | 0 = no1 = yes |  |
| Nephrological | categorical | 0 = no1 = yes |  |
| Degenerative | categorical | 0 = no1 = yes |  |
| Obesity | categorical | 0 = no1 = yes |  |
| Diabetes mellitus | categorical | 0 = no1 = yes |  |
| Other metabolical diseases | categorical | 0 = no1 = yes |  |
| Allergies | categorical | 0 = no1 = yes |  |
| Noxious substances | categorical | 0 = no1 = yes |  |
| Others | categorical | 0 = no1 = yes |  |

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| **4 Vital signs** |
| Fever, daily peak valueA | categorical | 0 = daily peak value < 38°C1 = daily peak value ≥ 38°C |  |
| Heartrate HR, daily averageA | metric | numeric | bpm |
| Mean arterial pressure MAP, daily averageA | metric | numeric | mmHg |
| Oxygen saturation SpO2, daily averageA | metric | numeric | % |

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| **5 Dosage of catecholamines** |
| Norepinephrine, daily averageA | metric | numeric | mg/h |

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| **6 Dosage of analgosedation** |
| Sufentanil, daily averageA | metric | numeric | μg/h |
| Propofol, daily averageA | metric | numeric | mg/h |
| Midazolam, daily averageA | metric | numeric | mg/h |
| Ketamin, daily averageA | metric | numeric | mg/h |

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| **7 Anticoagulation and antithrombotic mediation** |
| Unfractionated heparin or low molecular weight heparin in increased doseAB | categorical | 0 = not received1 = received |  |
| Acetylsalicylic acidA | categorical | 0 = not received1 = received |  |

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| **8 Laboratory blood diagnostics and microbiological diagnostics** |
| pH, daily averageA | metric | numeric |  |
| Bicarbonate ion HCO3-, daily averageA | metric | numeric | mMol/L |
| Base excess BE, daily averageA | metric | numeric | mMol/L |
| Cloride Cl-, daily averageA | metric | numeric | mMol/L |
| Partial pressure of oxygen paO2, daily averageA | metric | numeric | mmHg |
| Partial pressure of carbon dioxide paCO2, daily averageA | metric | numeric | mmHg |
| Hemoglobin Hb, daily averageA | metric | numeric | g/dL |
| Lactate, daily averageA | metric | numeric | mg/mL |
| TroponinA | metric | numeric | ng/L |
| Glomerular filtration rate GFRA | metric | numeric | mL/min/KOF |
| CreatinineA | metric | numeric | mg/dL |
| UreaA | metric | numeric | mg/dL |
| Aspartate transaminase ASTA | metric | numeric | U/L |
| Alanine transaminase ALTA | metric | numeric | U/L |
| International Normalized Ratio INRA | metric | numeric |  |
| Lactate dehydrogenase LDHA | metric | numeric | U/L |
| C-reactive protein CRPA | metric | numeric | mg/L |
| Procalcitonin PCTA | metric | numeric | ng/mL |
| White blood cells WBCA | metric | numeric | n/nL |
| FerritinA | metric | numeric | ng/mL |
| D-dimersA | metric | numeric | mg/L |
| PlateletsA | metric | numeric | n/nL |
| Lymphocytes (absolute value) A | metric | numeric | x10ᶾ/μL |
| Interleukin 6A | metric | numeric | pg/mL |
| Viral load SARS-CoV-2D | categorical | h = highl = low | copies/mL |
| Microbiological diagnostics (bacterial infection) A | categorical | 0 = positive result not received1 = positive result received |  |
| Microbiological diagnostics (fungal infection) A | categorical | 0 = positive result not received1 = positive result received |  |
| Microbiological diagnostics (viral infection)A | categorical | 0 = positive result not received1 = positive result received |  |

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| **9 Treatment with extracorporeal membrane oxygenation, prone position, and ICU scores** |
| Extracorporeal membrane oxygenation ECMOA | categorical | 0 = no ECMO1 = ECMO |  |
| Prone positionA | metric | numeric | h/d |
| Therapeutic intervention scoring system TISSA | categorical | integer |  |
| Simplified Acute Physiology Score SAPSA | categorical | integer |  |

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| **10 Airway, respiratory therapy, and pulmonary gas exchange** |
| Airway managementA | categorical | 0 = not made1 = made |  |
| Attempted extubationA | categorical | 0 = not made1 = made |  |
| TracheotomyA | categorical | 0 = not made1 = made |  |
| Fraction of inspired oxygen FiO2A | metric | numeric | % |
| Positive endexpiratory pressure PEEP, daily averageA | metric | numeric | mmHg |
| Driving Pressure, daily averageA | metric | numeric | mmHg |
| Tidal volume VT, daily averageA | metric | numeric | mL |
| Oxygenation ratio (Horovitz), daily averageA | metric | numeric |  |

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| **11 Complications during ICU treatment and renal replacement therapy (RRT)** |
| Pulmonary embolism PEA | categorical | 0 = PE not diagnosed1 = PE diagnosed |  |
| Acute kidney injury AKIA | categorical | 0 = AKI not diagnosed1 = AKI diagnosed |  |
| Intracerebral hemorrhage ICHA | categorical | 0 = ICH not diagnosed1 = ICH diagnosed |  |
| Rhythm disturbancesA | categorical | 0 = Rhythm disturbances not diagnosed1 = Rhythm disturbances diagnosed |  |
| Cardiac arrestA | categorical | 0 = Cardiac arrest not diagnosed1 = Cardiac arrest diagnosed |  |
| Cerebral ischemiaA | categorical | 0 = Cerebral ischemia not diagnosed1 = Cerebral ischemia diagnosed |  |
| Bleeding complicationsA | categorical | 0 = Bleeding complications not diagnosed1 = Bleeding complications diagnosed |  |
| PneumothoraxA | categorical | 0 = Pneumothorax not diagnosed1 = Pneumothorax diagnosed |  |
| Pleural effusionA | categorical | 0 = Pleural effusion not diagnosed1 = Pleural effusion diagnosed |  |
| Renal replacement therapy RRTA | categorical | 0 = no RRT1 = RRT |  |

A determined for day 1 to 14 individually

B not received, if less than 400 IE heparin and less than 40 mg enoxaparin were given on the day under consideration; received, else

C given at least once in the two weeks under consideration

D high, if the virus load is higher than 1x106 at least once in the two weeks under consideration; low, else

***Table 1*** *List of all observed parameters divided into categories*