

Table S1. Demographics and nutrition screening between survivors and non-survivors

|                                           |                                 | Survivor at 28 day after ICU admission (N=371) | Non-survivor at 28 day after ICU admission (N=119) | P value |
|-------------------------------------------|---------------------------------|------------------------------------------------|----------------------------------------------------|---------|
| Age (years)                               |                                 | 67.3± 15.3                                     | 69.6 ± 13.9                                        | 0.152   |
| Sex (N, %)                                |                                 |                                                |                                                    | 0.340   |
|                                           | Male                            | 244 (65.8%)                                    | 73 (61.3%)                                         |         |
|                                           | Female                          | 127 (34.2%)                                    | 46 (38.7%)                                         |         |
| Body mass index (BMI, kg/m <sup>2</sup> ) |                                 | 23.5 ± 5.5                                     | 23.4 ± 5.8                                         | 0.798   |
| Weight at ICU admission (kg)              |                                 | 62.6 ± 16.0                                    | 60.6 ± 12.1                                        | 0.222   |
| Days from hospital to ICU (days)          |                                 | 4.7 ± 10.7                                     | 7.6 ± 13.4                                         | 0.039   |
| Days of ICU admission (days)              |                                 | 12.3 ± 13.0 (8, 5-13)                          | 8.5 ± 6.8 (7, 4-12)                                | 0.002   |
| Comorbidity ≥ 2 (N, %)                    |                                 | 304 (81.9%)                                    | 107 (89.9%)                                        | 0.040   |
| Source of admission to ICU (N, %)         |                                 |                                                |                                                    | 0.134   |
|                                           | Ward                            | 134 (36.1%)                                    | 55 (46.2%)                                         |         |
|                                           | Emergency room                  | 199 (53.6%)                                    | 55 (46.2%)                                         |         |
|                                           | ICU                             | 38 (10.2%)                                     | 9 (7.6%)                                           |         |
| APACHE II                                 | Day 2                           | 27.2 ± 8.5 (27, 21-34)                         | 32.8 ± 8.8 (33, 28-39)                             | <0.001  |
|                                           | Day 7                           | 16.2 ± 7.7 (15, 11-21)                         | 20.3 ± 7.3 (20, 14-25)                             | <0.001  |
| SOFA score                                | Day 2                           | 6.8 ± 3.4 (7, 4-9)                             | 9.5 ± 3.6 (10, 7-12)                               | <0.001  |
|                                           | Day 7                           | 4.3 ± 3.4 (4, 2-7)                             | 9.4 ± 3.7 (9, 7-12)                                | <0.001  |
| Vasopressors                              | Day 2 (N, %)                    | 236 (63.8%)                                    | 99 (83.2%)                                         | <0.001  |
|                                           | Day 7 (N, %)                    | 103 (29.5%)                                    | 41 (65.1%)                                         | <0.001  |
| Renal dialysis                            | Day 2 (N, %)                    | 74 (20.0%)                                     | 46 (38.3%)                                         | <0.001  |
|                                           | Day 7 (N, %)                    | 43 (12.3%)                                     | 19 (30.2%)                                         | <0.001  |
| Diagnosis at ICU admission §              |                                 |                                                |                                                    | <0.001  |
|                                           | Respiratory system              | 97 (26.2%)                                     | 26 (21.9%)                                         |         |
|                                           | Circulatory system              | 85 (22.9%)                                     | 19 (16.0%)                                         |         |
|                                           | Neoplasms                       | 41 (11.1%)                                     | 35 (29.4%)                                         |         |
|                                           | Digestive system                | 29 (7.8%)                                      | 9 (7.6%)                                           |         |
|                                           | Infectious (Including covid-19) | 24 (6.5%)                                      | 9 (7.6%)                                           |         |
|                                           | Others                          | 95 (25.6%)                                     | 21 (17.7%)                                         |         |
| NRS2002 at Day 2                          |                                 |                                                |                                                    | 0.255   |
|                                           | Low risk                        | 4 (1.1%)                                       | 0 (0%)                                             |         |
|                                           | High risk                       | 367 (98.9%)                                    | 119 (100%)                                         |         |
| NRS2002 at Day 7                          |                                 |                                                |                                                    | 0.013   |
|                                           | Low risk                        | 20 (9.7%)                                      | 0 (0%)                                             |         |
|                                           | High risk                       | 187 (90.3%)                                    | 59 (100%)                                          |         |
| MNASF at Day 2                            |                                 |                                                |                                                    | 0.042   |

|                     |           |             |             |        |
|---------------------|-----------|-------------|-------------|--------|
| MNASF at Day 7      | Low risk  | 78 (21.0%)  | 15 (12.6%)  | 0.477  |
|                     | High risk | 293 (79.0%) | 104 (87.4%) |        |
| mNUTRIC at Day 2    | Low risk  | 40 (19.3%)  | 9 (15.3%)   | <0.001 |
|                     | High risk | 167 (80.7%) | 50 (84.8%)  |        |
| mNUTRIC at Day 7 §§ | Low risk  | 94 (25.3%)  | 9 (7.6%)    | <0.001 |
|                     | High risk | 277 (74.7%) | 110 (92.4%) |        |
|                     | Low risk  | 118 (57.0%) | 11 (18.6%)  |        |
|                     | High risk | 89 (43.0%)  | 48 (81.4%)  |        |

The variables are given in number (%) or mean ± standard deviation (median, Q25-Q75).

§ The differences were observed between neoplasm-respiratory, neoplasm-circulatory, and neoplasm-digestive.

§§ Day 7 was analyzed in 266 patients.