# Supplemental Figure legends

**Supplemental Figure 1. Assessment of body composition**

The total skeletal muscle area as well as the MMA were segmented at the center plane of the 3rd lumbar vertebra on axial CT-scans using a semi-automatically segmentation tool (3D slicer, (8)). The L3SMI is defined as the total skeletal muscle area normalized for the patients’ height. Two exemplary CT-scans of patients with a high (A) or low (B) L3SMI are shown.

**Supplemental Figure 2. The ICU patients’ body composition does not predict short-term outcome**

(A) Patients who survive the ICU stay have similar L3SMI values compared to ICU non-survivors. (B) The L3SMI is unalters between patients who did or did not survive beyond 30 days. (C) There is no significant difference of the MMA between ICU survivors and non-survivors. (D) There is no association between the MMA and the 30-days mortality.

**Supplemental Figure 3. The L3SMI and patient characteristics**

(A) Patients with diabetes mellitus have significantly higher L3SMI levels compared to non-diabetic patients. The L3SMI is unaltered between patients with or without arterial hypertension (B), chronic alcohol intake (C), chronic obstructive pulmonary disease (COPD, D), liver cirrhosis (E) and malignant disease (F). (G) The L3SMI does not differ between different clinical conditions that led to ICU admission.

**Supplemental Figure 4. The MMA and patient characteristics**

Patients with diabetes mellitus (A) or arterial hypertension (B) have significantly lower MMA compared to non-diabetic or non-hypertensive patients. The MMA is unaltered between patients with or without, chronic alcohol intake (C), chronic obstructive pulmonary disease (COPD, D), liver cirrhosis (E) and malignant disease (F). (G) The MMA does not differ between different clinical conditions that led to ICU admission.

**Supplemental Figure 5.** Correlation between the L3SMI and the MMA

The L3SMI and the MMA show a significant positive correlation in our cohort of ICU patients.