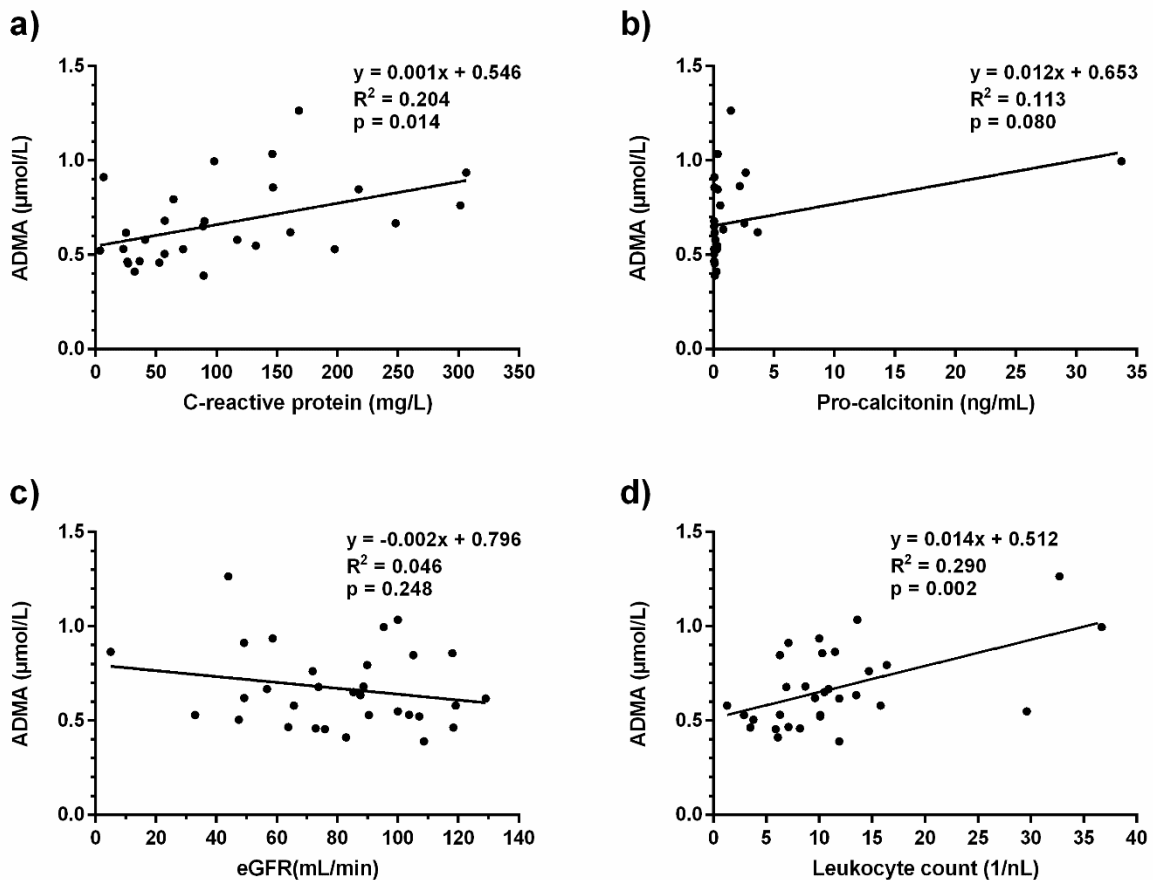


***Elevated serum SDMA and ADMA at hospital admission
predict in-hospital mortality of COVID-19 patients***

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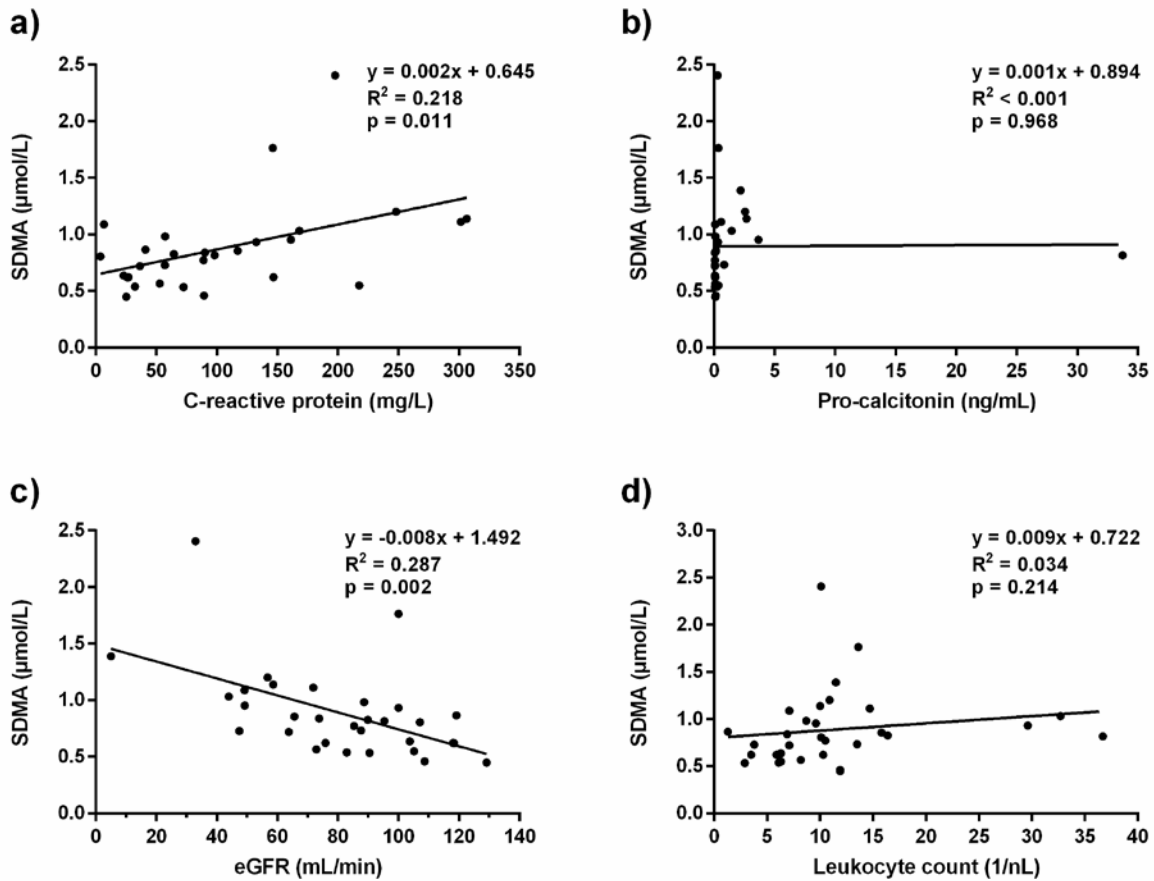
Supplementary Figures

Supplementary Figure S1: Correlations of ADMA.



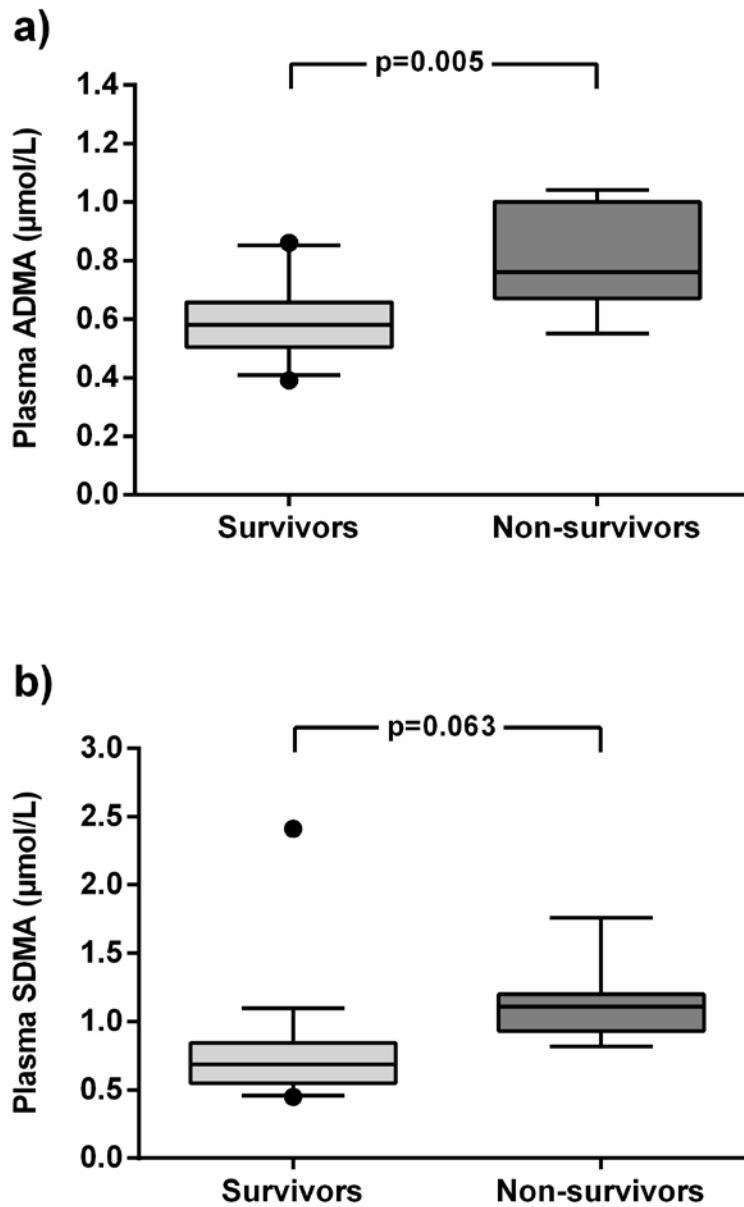
Legend: Data show correlations of ADMA concentration on the day of hospital admission with C-reactive protein (a), pro-calcitonin (b), estimated glomerular filtration rate (eGFR, c), and leukocyte cell count (d), all assessed on the same day.

Supplementary Figure S2: Correlations of SDMA.



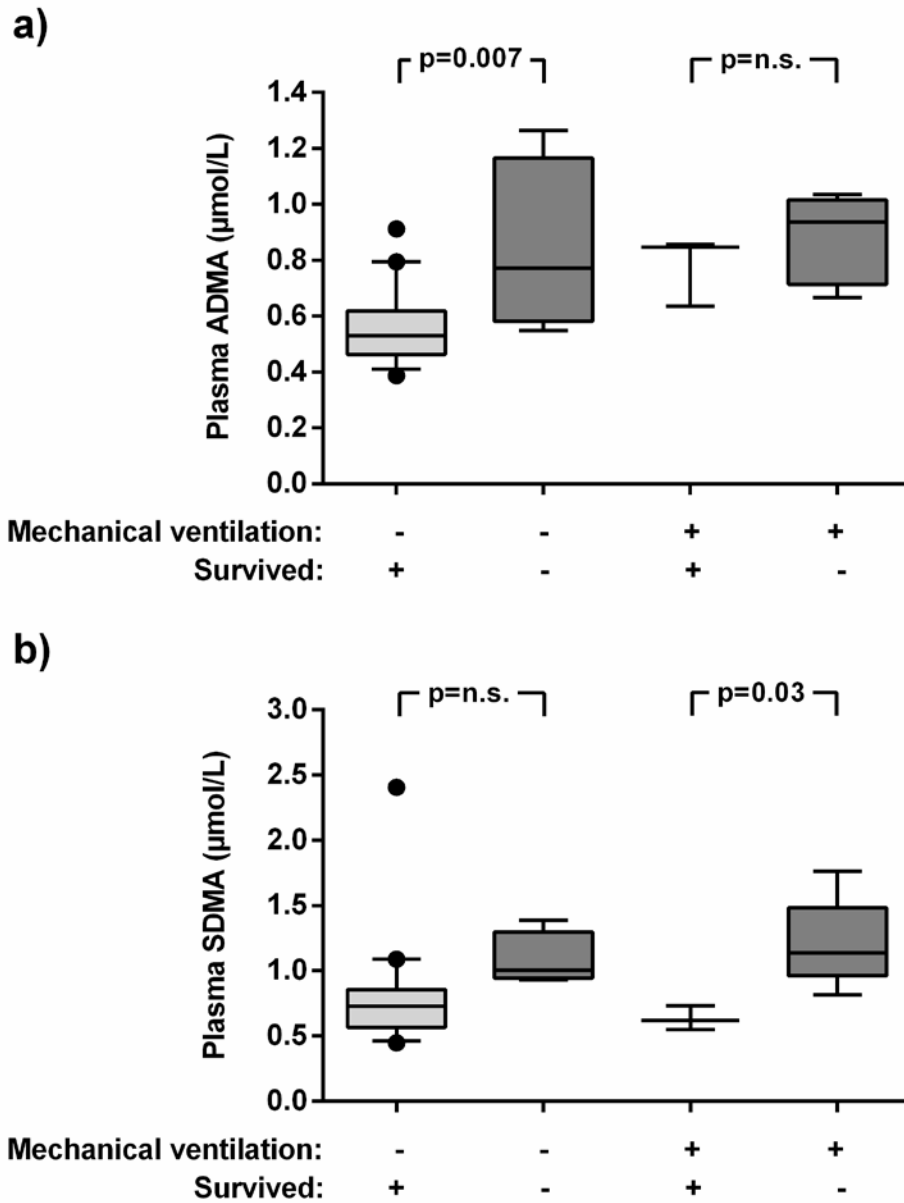
Legend: Data show correlations of SDMA concentration on the day of hospital admission with C-reactive protein (a), pro-calcitonin (b), estimated glomerular filtration rate (eGFR, c), and leukocyte cell count (d), all assessed on the same day.

Supplementary Figure S3: ADMA and SDMA in COVID-19 patients without pre-existing chronic kidney disease.



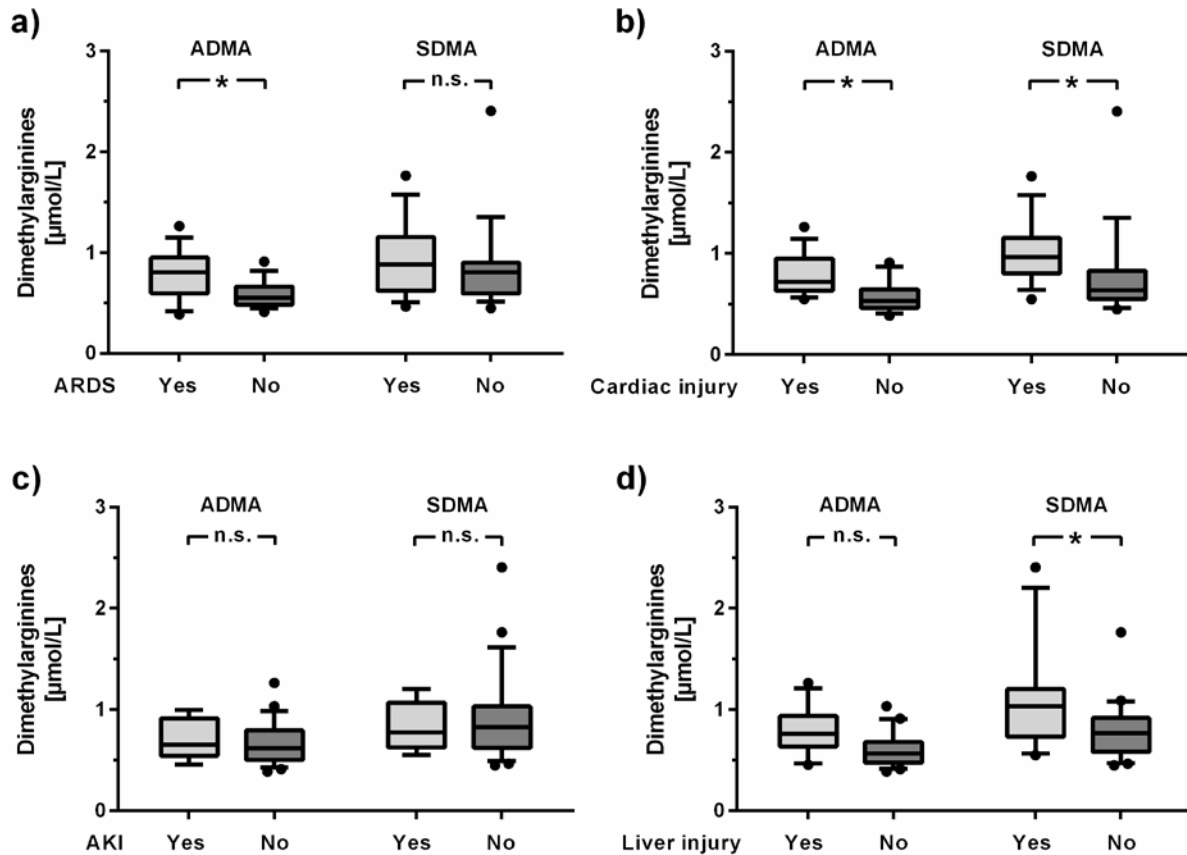
Legend: Box plots show serum concentrations of ADMA (a) and SDMA (b) on the day of hospital admission of COVID-19 patients without pre-existing chronic kidney disease (N = 25). Boxes show median \pm interquartile range, with whiskers representing 10th to 90th percentile; outliers are plotted individually.

Supplementary Figure S4: ADMA and SDMA in COVID-19 patients with or without ongoing mechanical ventilation at hospital admission.



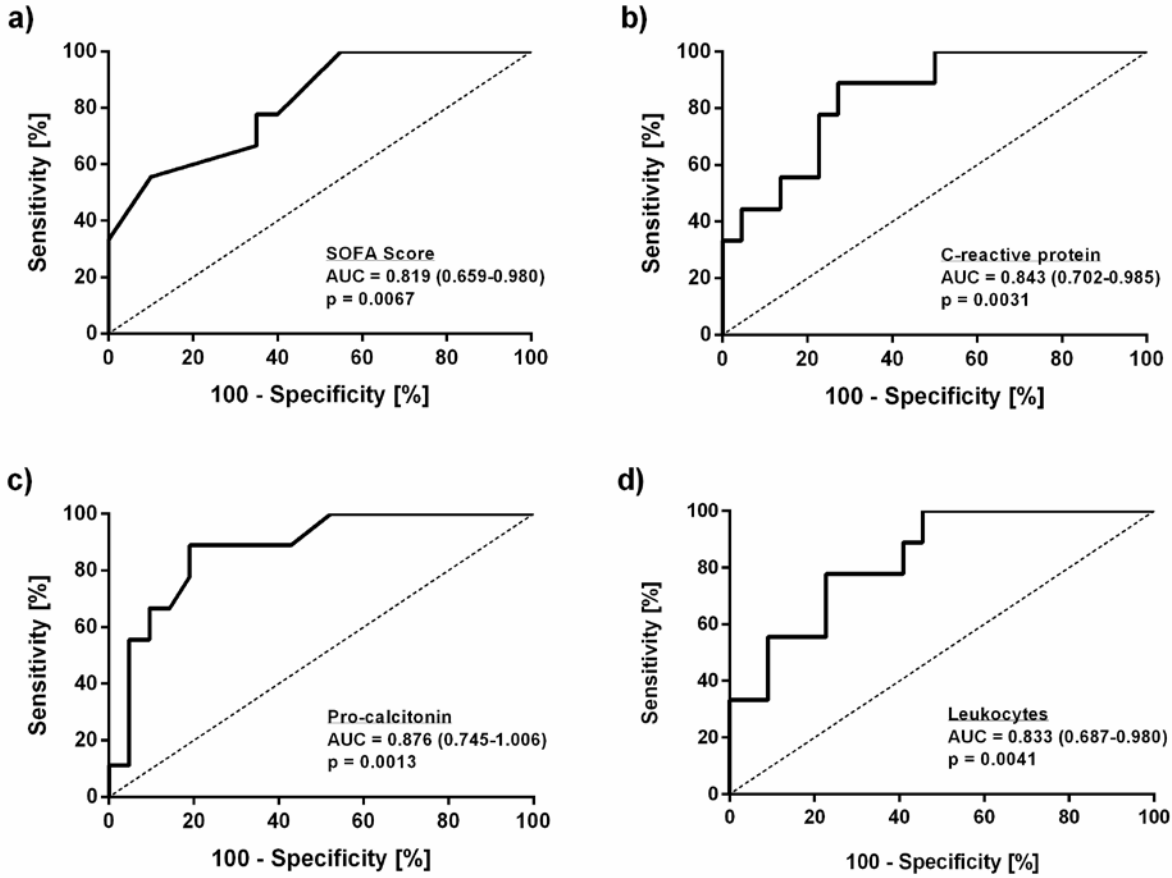
Legend: Box plots show serum concentrations of ADMA (a) and SDMA (b) on the day of hospital admission of COVID-19 patients who were admitted with ongoing mechanical ventilation (N = 8) or not (N = 23). Boxes show median \pm interquartile range, with whiskers representing 10th to 90th percentile; outliers are plotted individually.

Supplementary Figure S5: ADMA and SDMA concentrations in COVID-19 patients who developed organ injury during in-hospital treatment as compared to those who did not.



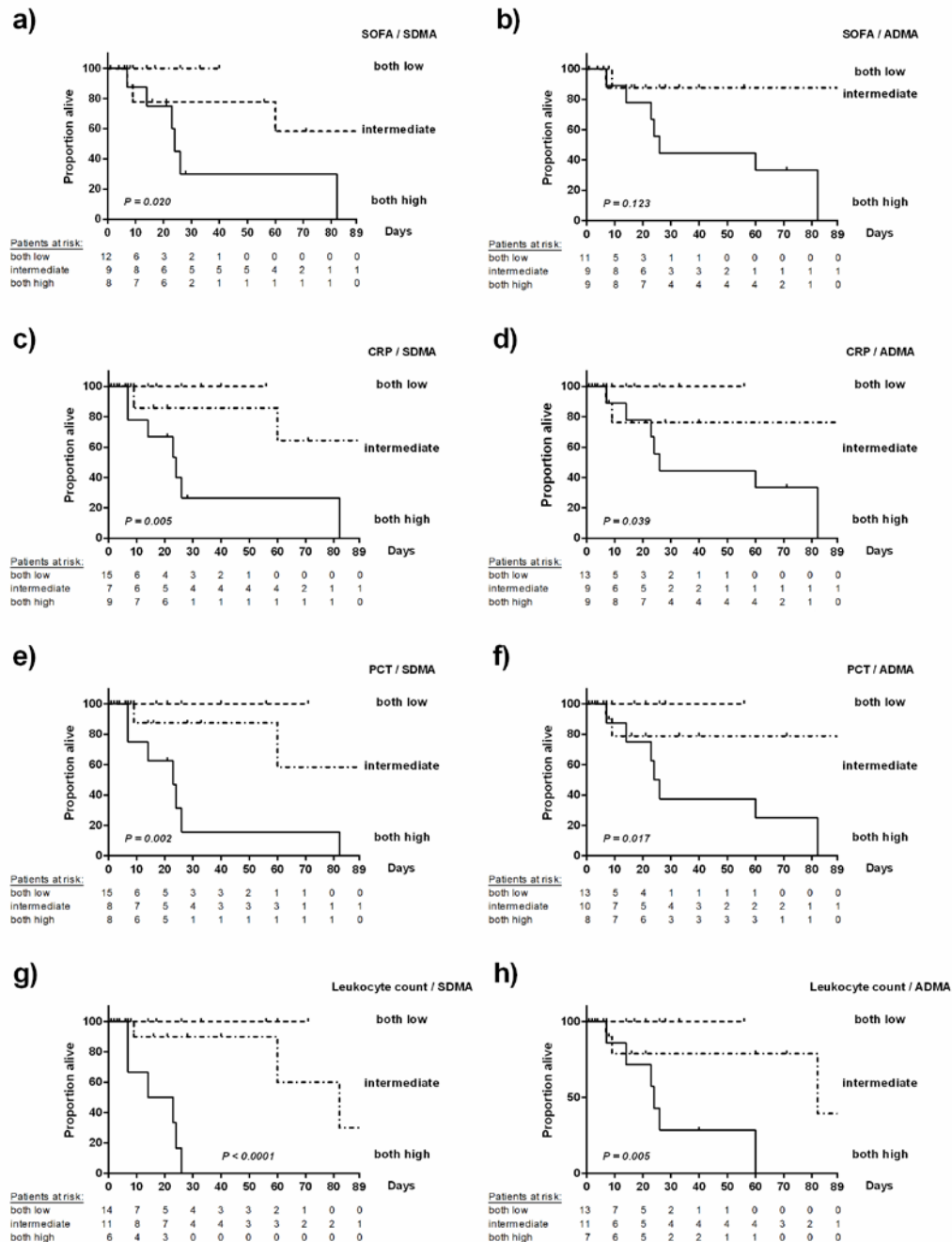
Legend: Box plots show serum concentrations of ADMA and SDMA on the day of hospital admission of COVID-19 patients who developed COVID-19-associated organ injury during the course of in-patient treatment: a) acute respiratory distress syndrome (ARDS), b) cardiac injury, c) acute kidney injury (AKI), d) liver injury. Organ injuries were defined as described in the Methods section. Boxes show median \pm interquartile range, with whiskers representing 10th to 90th percentile; outliers are plotted individually.

Supplementary Figure S6: Receiver-operated curve (ROC) analyses of SOFA score and inflammatory markers for in-hospital mortality.



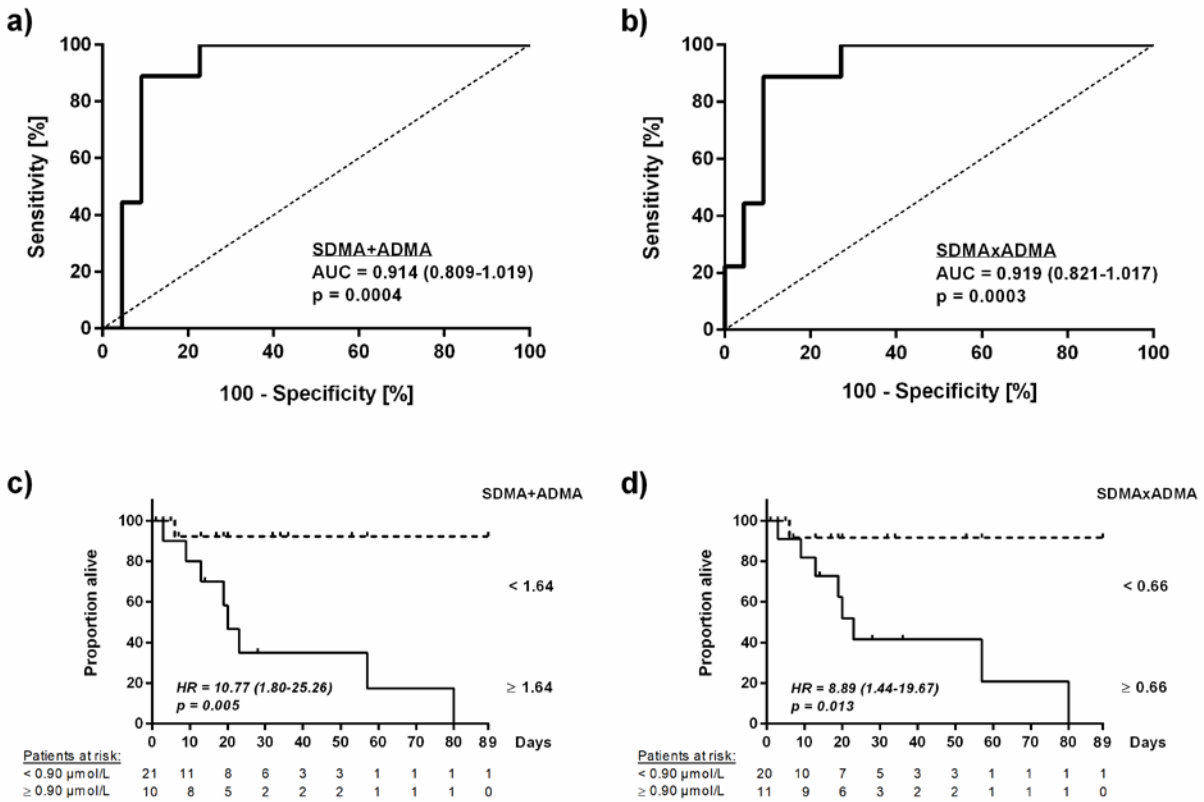
Legend: Receiver-operated curve (ROC) analyses of SOFA score (a), C-reactive protein (CRP) levels (b), pro-calcitonin (PCT) levels (c), and leukocyte cell count (d) for in-hospital mortality of COVID-19 patients. AUC, area under the curve.

Supplementary Figure S7: Kaplan-Meier curves for in-hospital mortality of hospitalized COVID-19 patients stratified for SOFA score and inflammatory markers combined with SDMA and ADMA.



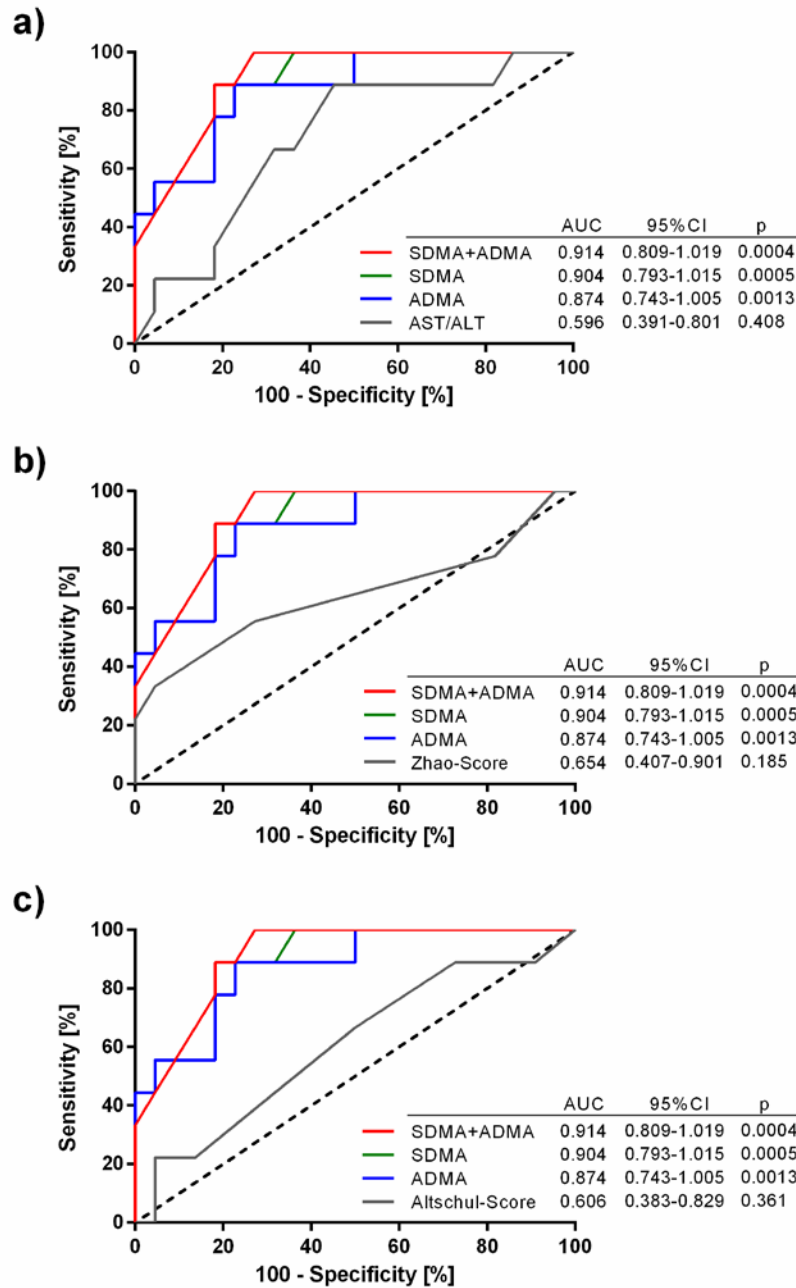
Legend: Kaplan-Meier curves for in-hospital mortality of COVID-19 patients stratified for SOFA score + SDMA (a), SOFA score + ADMA (b), C-reactive protein (CRP) levels + SDMA (c), CRP + ADMA (d), procalcitonin (PCT) levels + SDMA (e), PCT + ADMA (f), leukocyte cell count + SDMA (g), and leukocytes + ADMA (h). AUC, area under the curve.

Supplementary Figure S8: Receiver-operated curve (ROC) analyses and Kaplan-Meier curves for in-hospital mortality of hospitalized COVID-19 patients stratified for (SDMA+ADMA) and (SDMAxADMA).



Legend: Receiver-operated curve (ROC) analyses of the combined biomarkers (SDMA+ADMA; a) and (SDMAxADMA; b), and Kaplan-Meier curves for in-hospital mortality of COVID-19 patients stratified for (SDMA+ADMA; c) and (SDMAxADMA; d).

Supplementary Figure S9: Receiver-operated curve (ROC) analyses for previously published COVID-19 mortality risk scores as compared to SDMA and ADMA.



Legend: Receiver-operated curve (ROC) analyses of AST/ALT ratio (a), COVID-19 mortality score published by Zhao and co-workers [8] (b), and COVID-19 mortality score published by Altschul and co-workers [5] (c), each compared to SDMA, ADMA, and (SDMA+ADMA). AUC, area under the curve.