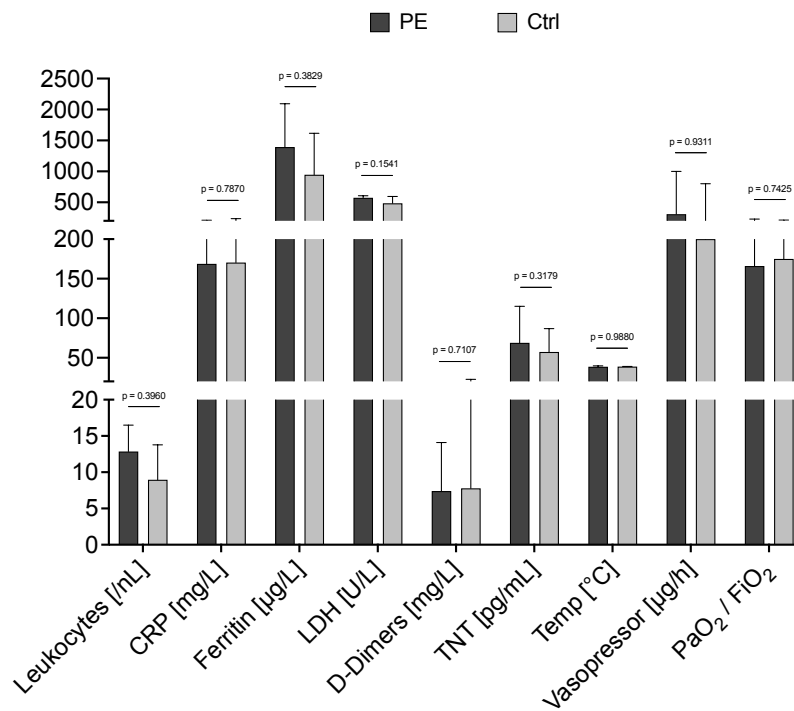
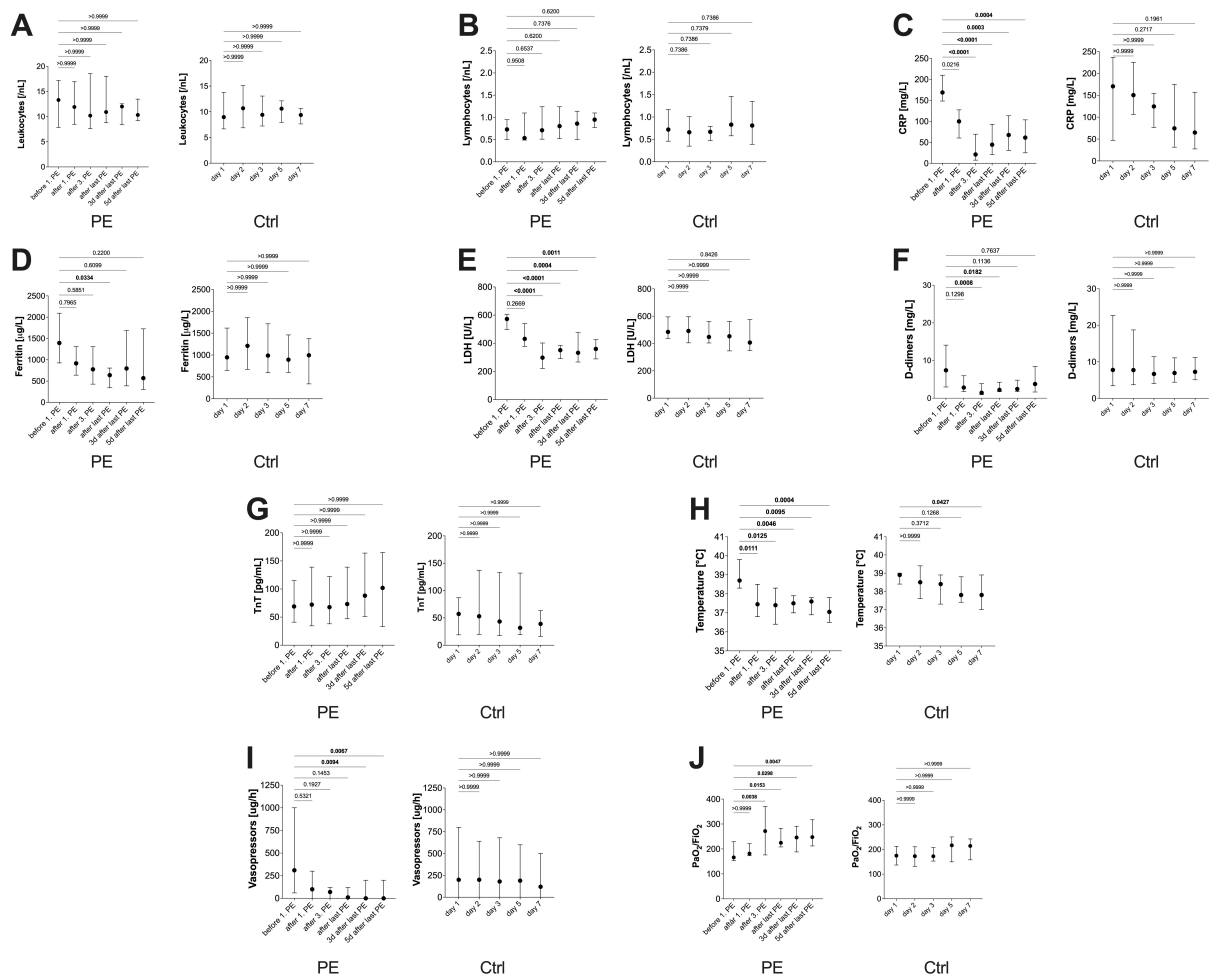


**Online Supplemental Digital Content of “Plasma exchange in patients with severe COVID-19: A single center experience”**

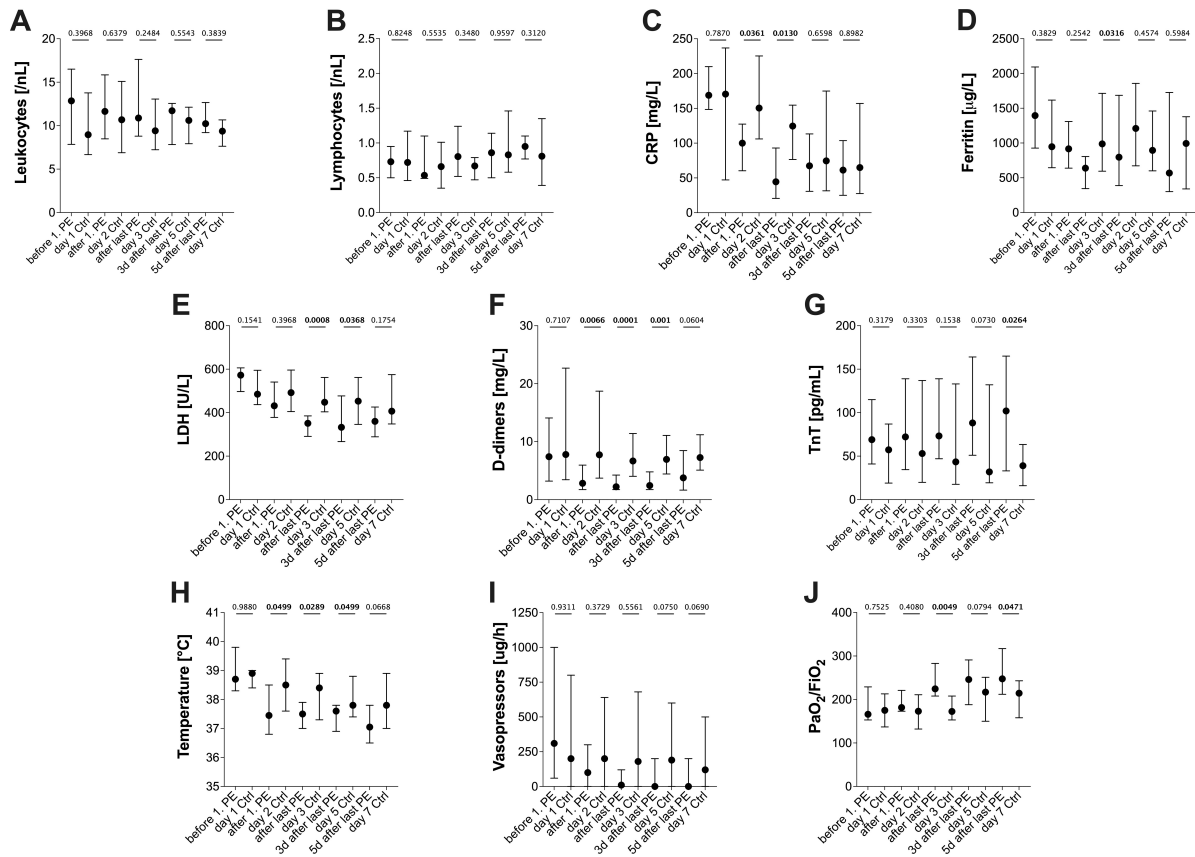


**Figure S1.** Comparison of laboratory and clinical parameters between plasma exchange and control group at the start of plasma exchange or observation.

*CRP* C-reactive protein, *Ctrl* control group, *FiO<sub>2</sub>* fraction of inspired oxygen, *LDH* lactate dehydrogenase, *PaO<sub>2</sub>* partial pressure of arterial oxygen, *PE* plasma exchange group, *TnT* troponin T. Results are given as median and 95% confidence interval. Kruskal-Wallis test was used for statistical analyses. Bold values are statistically significant for  $p \leq 0.05$ .



**Figure S2.** Laboratory (A-G) and clinical (H-J) parameters in relation to plasma exchange procedure (PE) and disease course in a control group on standard care (Ctrl). *CRP* C-reactive protein, *Ctrl* control group, *FiO<sub>2</sub>* fraction of inspired oxygen, *LDH* lactate dehydrogenase, *PaO<sub>2</sub>* partial pressure of arterial oxygen, *PE* plasma exchange group, *TnT* troponin T. Results are given as median and 95% confidence interval. Kruskal-Wallis test was used for statistical analyses. Bold values are statistically significant for  $p \leq 0.05$ .



**Figure S3.** Comparison of time-matched laboratory (A-G) and clinical (H-J) parameters between patients treated with plasma exchange (PE) and controls on standard care (Ctrl). *CRP* C-reactive protein, *Ctrl* control group, *FiO<sub>2</sub>* fraction of inspired oxygen, *LDH* lactate dehydrogenase, *PaO<sub>2</sub>* partial pressure of arterial oxygen, *PE* plasma exchange group, *TnT* troponin T. Results are given as median and 95% confidence interval. Kruskal-Wallis test was used for statistical analyses. Bold values are statistically significant for  $p \leq 0.05$ .

**Table S1.** Correlation analysis of parameters after last plasma exchange and future clinical improvement in patients treated with plasma exchange.

Parameters	PaO <sub>2</sub> / FiO <sub>2</sub> after last PE [mmHg]			PaO <sub>2</sub> / FiO <sub>2</sub> 3d after last PE [mmHg]			PaO <sub>2</sub> / FiO <sub>2</sub> 5d after last PE [mmHg]		
	r	95% CI	p-value	r	95% CI	p-value	r	95% CI	p-value
<b>CRP after last PE [mg/L]</b>	-0.66	-0.82 to -0.42	<b>&lt; 0.0001</b>	-0.72	-0.85 to -0.51	<b>&lt; 0.0001</b>	-0.54	-0.74 to -0.24	<b>0.001</b>
<b>LDH after last PE [U/l]</b>	-0.71	-0.85 to -0.49	<b>&lt; 0.0001</b>	-0.74	-0.86 to -0.54	<b>&lt; 0.0001</b>	-0.83	-0.91 to -0.68	<b>&lt; 0.0001</b>
<b>D-Dimers after last PE [mg/L]</b>	-0.76	-0.87 to -0.57	<b>&lt; 0.0001</b>	-0.60	-0.78 to -0.33	<b>&lt; 0.0001</b>	-0.26	-0.55 to 0.09	0.131
<b>Vasopressors after last PE [µg/h]</b>	-0.49	-0.71 to -0.19	<b>0.002</b>	-0.51	-0.72 to -0.21	<b>0.001</b>	-0.70	-0.84 to -0.47	<b>&lt; 0.0001</b>

*CRP* C-reactive protein, *FiO<sub>2</sub>* fraction of inspired oxygen, *LDH* lactate dehydrogenase, *PaO<sub>2</sub>* partial pressure of arterial oxygen, *PE* plasma exchange. Spearman's correlation analysis was used for statistical analyses. Bold values are statistically significant for  $p \leq 0.05$ .