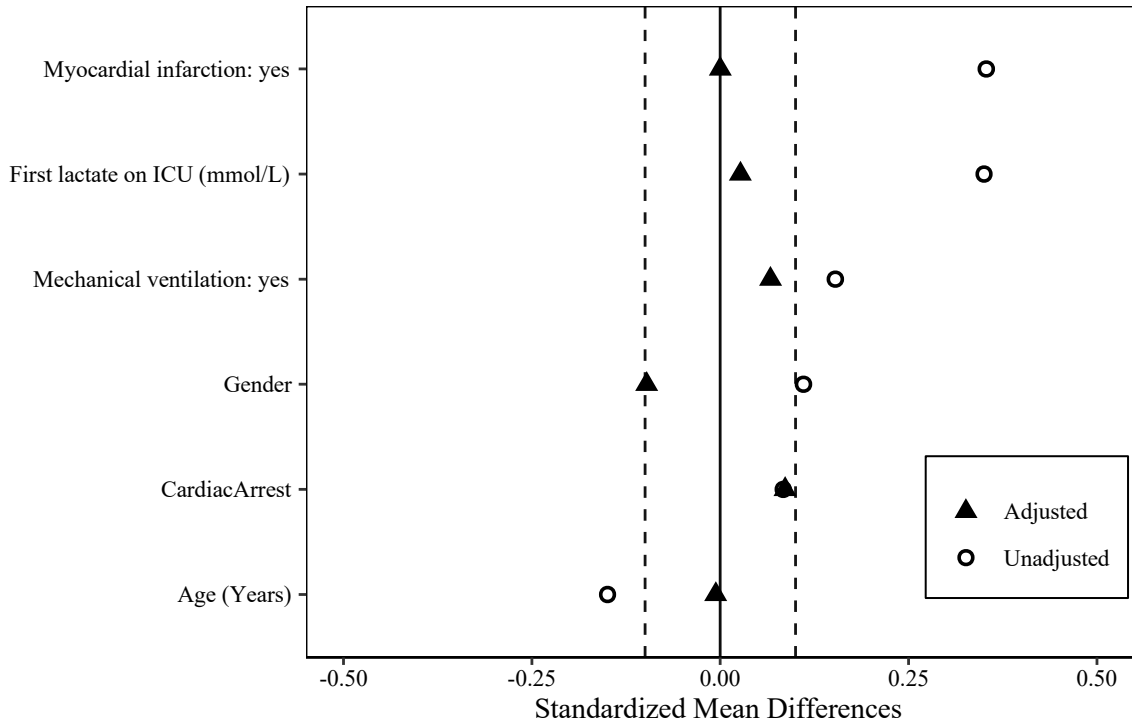
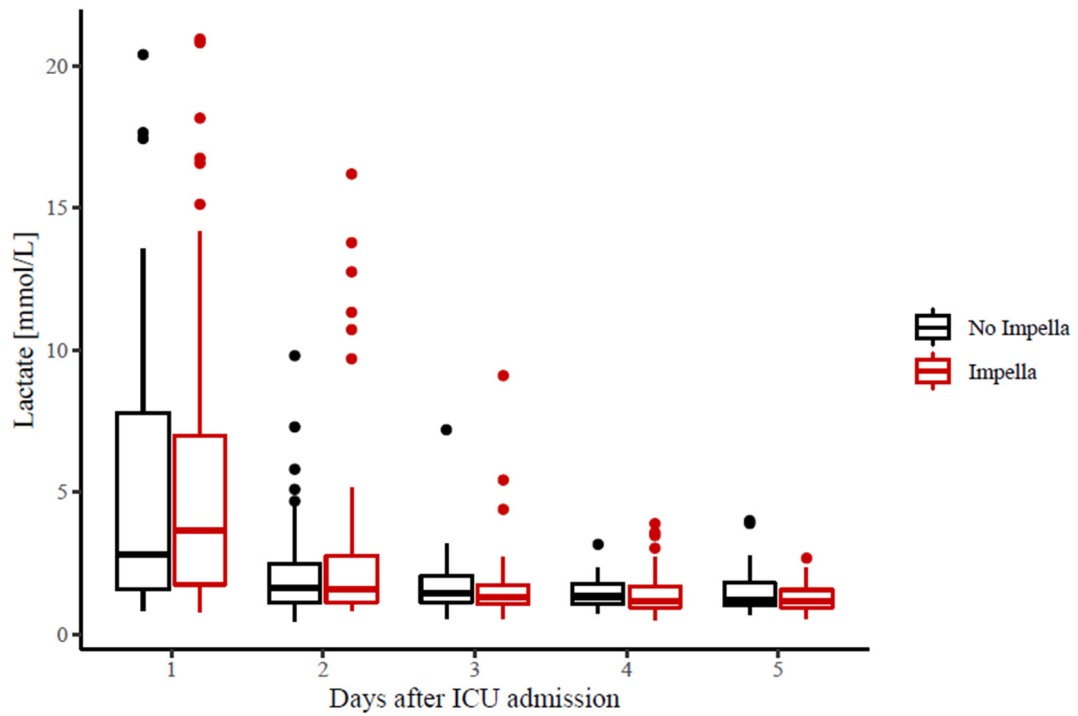


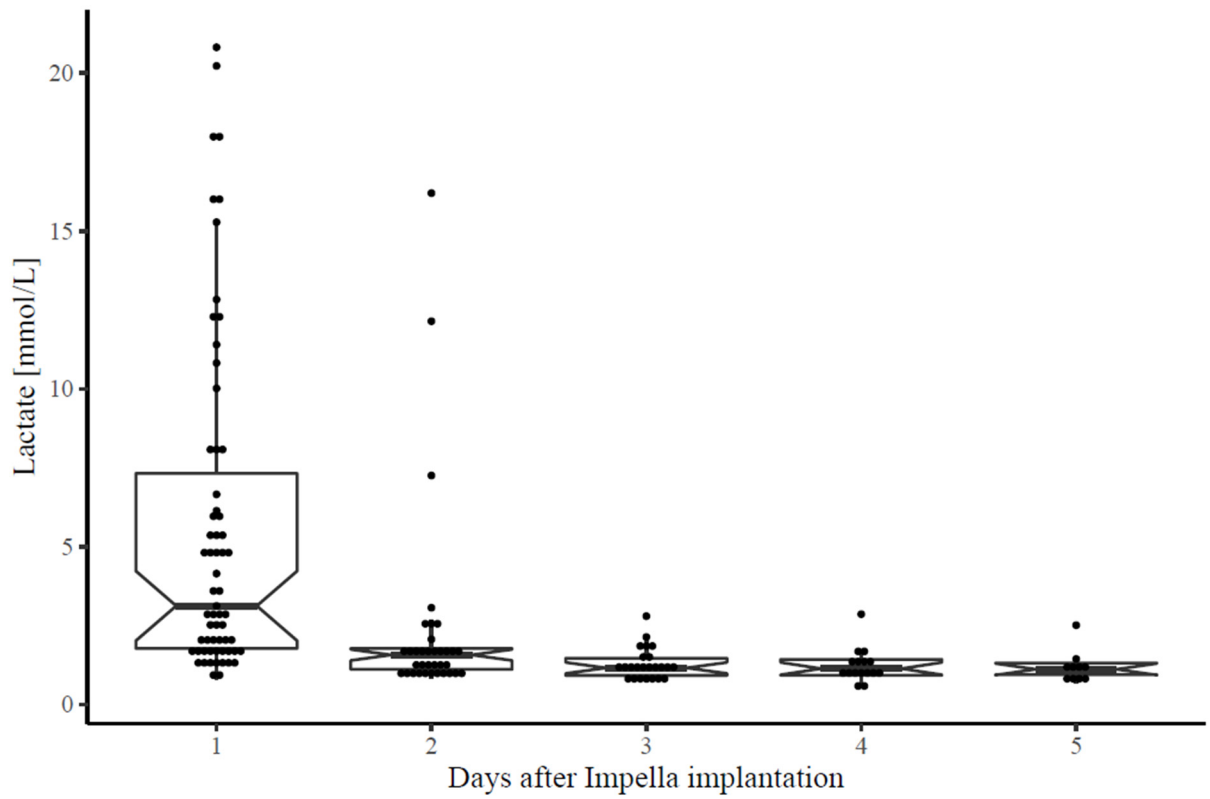
Supplementary Materials



Supplementary Figure S1. Love plot. Love plot showing standardized mean differences of unadjusted parameters before and adjusted parameters after matching.



Supplementary Figure S2. Lactate levels. Lactate levels after ICU admission in patients treated without cardiocirculatory support versus patients treated with Impella CP (day 1: $p = 0.57$, day 2: $p = 0.91$, day 3: $p = 0.26$, day 4: $p = 0.36$, day 5: $p = 0.47$).



Supplementary Figure 3. Lactate levels. Lactate levels in patients treated with Impella CP after implantation.

Supplementary Table S1. Patients' characteristics before matching

Variables	Conventional ($n = 319$)	Impella ($n = 76$)	p value
Age in years, mean (SD)	69.4 (14.2)	67.3 (14.2)	0.24
Male gender, n (%)	228 (71.5)	58 (76.3)	0.48
Body mass index, mean (SD)	27.3 (7.2)	27.3 (4.4)	0.94
Coronary artery disease, n (%)	200 (62.7)	52 (68.4)	0.42
Previous myocardial infarction, n (%)	91 (28.5)	19 (25.0)	0.64
Previous PCI, n (%)	97 (30.4)	27 (35.5)	0.47
Previous CABG, n (%)	16 (5.0)	2 (2.6)	0.56
Atrial fibrillation, n (%)	129 (40.4)	22 (28.9)	0.09
Previous stroke, n (%)	35 (11.0)	10 (13.2)	0.74
Peripheral artery disease, n (%)	66 (20.7)	13 (17.1)	0.59

Smoker, <i>n</i> (%)			
Active smoker	55 (17.2)	20 (26.3)	0.13
Former smoker	65 (20.4)	17 (22.4)	
Never smoked	199 (62.4)	39 (51.3)	
Hypertension, <i>n</i> (%)	232 (72.7)	52 (68.4)	0.54
High cholesterol, <i>n</i> (%)	154 (48.3)	35 (46.1)	0.83
Diabetes, <i>n</i> (%)	108 (33.9)	23 (30.3)	0.64
Positive cardiovascular family history, <i>n</i> (%)	43 (13.5)	12 (15.8)	0.74
Simplified acute Physiology Score II-score, median [IQR]	68.9 [60.0, 78.0]	68.9 [62.8, 77.5]	0.59
Cardiac arrest, <i>n</i> (%)	163 (51.1)	42 (55.3)	0.60
Out of hospital cardiac arrest, <i>n</i> (%)	90 (28.2)	16 (21.1)	0.26
Duration of cardio-pulmonary resuscitation if applicable in minutes, median [IQR]	15.0 [5.0, 31.0]	20.0 [2.0, 28.0]	0.96
Cause of cardiogenic shock, <i>n</i> (%)			
STEMI	86 (27.0)	30 (39.5)	0.01
NSTEMI	97 (30.4)	29 (38.2)	
Cardiomyopathy	56 (17.6)	13 (17.1)	
Myocarditis	6 (1.9)	2 (2.6)	
Arrhythmia	34 (10.7)	0 (0.0)	
Valvular	18 (5.6)	0 (0.0)	
Other	21 (6.6)	2 (2.6)	

Supplementary Table S2. Medication at ICU discharge

Medication name	Conventional (<i>n</i> = 46)	Impella (<i>n</i> = 34)	<i>p</i> value
ASS, <i>n</i> (%)	35 (76.1)	24 (70.6)	0.77
Clopidogrel, <i>n</i> (%)	18 (39.1)	17 (50.0)	0.46
Prasugrel, <i>n</i> (%)	11 (23.9)	7 (20.6)	0.94
Ticagrelor, <i>n</i> (%)	1 (2.2)	2 (5.9)	0.79
Betablocker, <i>n</i> (%)	21 (45.7)	22 (64.7)	0.14
Statin, <i>n</i> (%)	30 (65.2)	18 (52.9)	0.38