

**Table S1.** Thirty-day outcome according to the Impella device used (Impella CP® versus Impella 5.0®).

	<b>Impella CP (n= 49, 79%)</b>	<b>Impella 5.0 (n= 13, 21%)</b>	<b>p-value</b>
<i>Outcome at one month</i>			
Death - no. (%)	15 (31)	7 (54)	0.12
LVAD - no. (%)	9 (18)	3 (23)	0.70
Heart transplant - no. (%)	3 (6)	0 (0)	0.36

**Table S2.** Results of the univariate and multivariate Cox regression analysis on admission parameters to predict the occurrence of mortality, LVAD or heart transplant at 30 days.

	Univariate analysis		Multivariate analysis (n=61)	
	OR (95% CI)	P-value	OR (95% CI)	P-value
LVEF (for each additional %)	0.96 [0.91 - 1.02]	0.24	0.95 [0.89 - 1.02]	0.20
MBP (for each additional mmHg)	0.96 [0.92 - 0.99]	<b>0.04</b>	0.96 [0.92 - 1.01]	0.09
Dobutamine	3.12 [1.08 - 8.97]	<b>0.03</b>	3.25 [1.04 - 10.1]	<b>0.04</b>

P-value corresponds to the results of the Wald test. In bold, p-value<0.05; CI: confidence interval; LVEF: left ventricular ejection fraction; MBP: mean blood pressure; OR: odds ratio.

**Table S3.** Comparison with other Impella registries.

	<b>Toulouse (n=62)</b>	<b>CARDSHOCK (n= 219)</b>	<b>cVAD (n= 287)</b>	<b>IMP-IT (n= 229)</b>
Age – yrs.	58 ± 11	67 ± 12	66	64 ± 13
Male Gender - no. (%)	55 (89)	162 (74)	219 (76)	167 (73)
Body Mass Index - kg/m <sup>2</sup>	25.9 ± 4.0	26.5 (24.2–29.0)		
History of coronary artery disease - no. (%)	11 (18)	76 (35)	199 (69)	152 (66)
Acute coronary syndrome - no. (%)	57 (92)	177 (81)	287 (100)	172 (75)
SBP at placement, mmHg	101 ± 21	78 ± 14	96 ± 28	
DBP at placement, mmHg	67 ± 13	47 ± 10	58 ± 21	
MBP at placement, mmHg	78 ± 15	57 ± 11	72 ± 22	64 ± 20
Heart rate at placement, bpm	107 ± 20	90 ± 28	93 ± 33	94 ± 24
Sinus rhythm at placement - no. (%)	56 (90)	170 (78)		
Cardiac arrest prior to Impella support	6 (10)	62 (28)	58 (40)	51 (24)
Mechanical ventilation	43 (69)		218 (77)	165 (76)
RRT	15 (24)			62 (27)
LVEF	22 ± 9.0	33 ± 14	25 ± 13	25 ± 12
Cardiac index	1.9 ± 0.6	2.1 ± 0.8		
Moderate to severe MR	17 (27)	73 (35)		
pH	7.37 ± 0.14	7.30 (7.20–7.40)		
Arterial lactates - mmol/l	3.1 ± 2.1	2.8 [1.7–5.8]	4.3 ± 1.1	6.1 ± 4.8
Serum creatinine - μmol/l	117 ± 53	104 (78–140)	150 ± 114	
Total bilirubin - μmol/l	11.2 [7.2–17.7]		20.4 ± 57.8	
Inotrope or vasopressor prior to Impella – no. (%)	50 (81)		230 (80)	
Dobutamine prior to Impella	37 (60)			155 (75)

ECMO	16 (26)	16 (26)	66 (29)
IABP	9 (15)		114 (40) 79 (36)
Pre-PCI Impella	12 (22)		46% 77 (36)
2.5	0 (0)		57% 134 (59)
3.5	49 (79)		42% 84 (37)
5.0	13 (21)		1% 2 (0.8)
Access-site bleeding	31 (50)		25 (11)
Severe bleeding	9 (11)		36 (16)
Limb ischemia	8 (13)		29 (13)
Sepsis	30 (48)		70 (35)

\*CARDSHOCK is a global cardiogenic shock registry, does not focus on Impella. DBP: diastolic blood pressure; IABP : intra-aortic balloon pump; oxygenation; LVEF: left ventricle ejection fraction ; MR: mitral regurgitation; MBP: mean blood pressure; PCI: percutaneous coronary intervention; RRT: renal replacement therapy ; SBP: systolic blood pressure; VA-ECMO: veno-arterial extracorporeal membrane oxygenation.