Supplementary Online Content

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Frequency Distribution of Left Ventricular Ejection Fraction in Patients With Sepsis-3 and Septic Shock

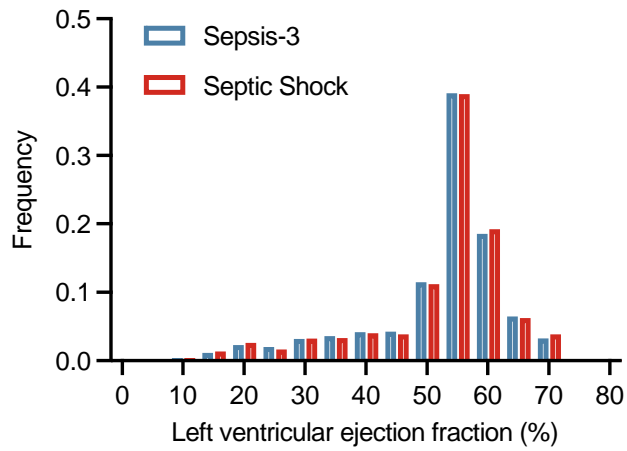Frequency distribution of left ventricular ejection fraction among patients with Sepsis-3 (blue) and septic shock (red).

eTable 1. Crude Outcomes

Outcomes	Septic Shock		Sepsis-3	
	Normal EF **(N = 1,911)**	**HFrEF** **(N = 380)**	**Normal EF** **(N = 4,394)**	**HFrEF** **(N=884)**
In-hospital mortality – no. (%)	244 (12.8)	47 (12.4)	371 (8.4)	78 (8.8)
Mechanical ventilation – no. (%) [a]	549 (28.7)	96 (25.3)	883 (20.1)	143 (16.2)
Total days – median (IQR)	5 (3, 10)	4 (3, 10)	5 (2, 9)	4 (2, 9.5)
Vasopressors – no. (%) [b]	591 (30.9)	121 (31.8)	591 (13.5)	121 (13.7)
Total days – median (IQR)	3 (2, 4)	3 (2, 5)	3 (2, 4)	3 (2, 6)
ICU admission – no. (%)	1495 (78.2)	304 (80.0)	2565 (58.4)	514 (58.1)
Hospital length of stay – median (IQR), days	7.1 (4.5, 11.5)	6.9 (4.5, 11.5)	6.2 (3.9, 10.1)	6.2 (3.9, 9.9)
Intravenous fluid volume given in 6 hours – median (IQR), mL/kg [c]	20.5 (7.7, 39.4)	15.6 (5.3, 30.2)	10.1 (1.6, 24.6)	6.1 (0.9, 18.9)
30 cc/kg given in 6 hours – no. (%)	699 (36.6)	96 (25.3)	885 (20.1)	113 (12.8)

[a] Includes invasive mechanical ventilation delivered at any time during the hospitalization, either via endotracheal tube or tracheostomy, excluding noninvasive ventilation strategies
[b] Vasopressors include norepinephrine, epinephrine, phenylephrine, vasopressin, and dopamine
[c] Intravenous fluid volume is calculated based on ideal body weight, and represents all crystalloid solution given within the first 6 hours of sepsis onset.
Abbreviations: EF: ejection fraction; HFrEF: heart failure with reduced ejection fraction; IQR: interquartile range; ICU: intensive care unit

eTable 2. Multivariable Model of In-Hospital Mortality Among Patients With Septic Shock (N=2,287)

Variable [a]	aOR	aOR 95% CI	*P*-value
HFrEF	0.92	0.69 – 1.24	0.590
Age [b]	1.03	1.02 – 1.04	<0.001
Race			
Black	REF	-	-
White	0.67	0.51 – 0.90	0.007
Other [c]	1.52	0.76 – 3.05	0.241
Sex			
Female	REF	-	-
Male	1.03	0.76 – 1.37	0.890
Elixhauser [d]	0.99	0.92 – 1.06	0.722
SOFA in 6 hours [e]	1.26	1.20 – 1.32	<0.001

[a] Hospital of admission included as a random effect

[b] Adjusted OR corresponds to a 1 year increase in age.

[c] Other race corresponds to Chinese, Filipino, Hawaiian, American Indian/Alaskan, Asian, Hawaiian/Other Pacific Islander, Middle Eastern, Native American, or Pacific Islander

[d] Elixhauser is a method of categorizing comorbidities of patients based on the International Classification of Diseases (ICD) diagnosis codes found in administrative data, ranging from 0 to 31. Adjusted OR corresponds to a 1 point change in Elixhauser.

[e] SOFA score corresponds to the severity of organ dysfunction, reflecting six organ systems each with a score range of 0 to 4 points (cardiovascular, hepatic, hematologic, respiratory, neurological, renal), with a total score range of 0 to 24 points. Adjusted OR corresponds to a 1 point change in SOFA score.

Abbreviations: aOR: adjusted odds ratio; CI: confidence interval; HFrEF: heart failure with reduced ejection fraction; SOFA: sequential organ failure assessment score

eTable 3. Sensitivity Analyses – 30 mL/kg Intravenous Fluid Administration			
Feature [a]	**aOR - HFrEF**	**aOR 95% CI**	**P-value**
Primary Model	0.63	0.47 – 0.85	0.002
Including all patients with Sepsis-3	0.64	0.48 – 0.87	0.004
Excluding TTEs obtained within 1 month of sepsis	0.68	0.51 – 0.90	0.008
Including RV dysfunction as a covariate	0.69	0.50 – 0.96	0.028

[a] Hospital of admission included as random effect

Abbreviations: aOR: adjusted odds ratio; CI: confidence interval; HFrEF: heart failure with reduced ejection fraction; TTE: transthoracic echocardiogram; RV: right ventricular

eTable 4. Sensitivity Analyses – In-Hospital Mortality			
Feature [a]	aOR - HFrEF	aOR 95% CI	P-value
Primary Model			
Including all patients with Sepsis-3	1.00	0.82 – 1.22	0.993
Excluding TTEs obtained within 1 month of sepsis	1.08	0.83 – 1.41	0.561
Including RV dysfunction as a covariate	0.87	0.60 – 1.26	0.449

[a] Hospital of admission included as random effect

Abbreviations: aOR: adjusted odds ratio; CI: confidence interval; HFrEF: heart failure with reduced ejection fraction; TTE: transthoracic echocardiogram; RV: right ventricular