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Table 1. Comparison of demographic and baseline clinical characteristics of patients between survival and death groups

Group	Survival N = 64	Death N = 29	Z or χ^2	P	
Age (years, M(QL, QU))	69.5(58.2,75.0)	70.0(57.0,77.5)	-0.233*	0.816	
Gender (n)	Male	41	18	0.034	0.850
	Female	23	11		
Hypertension (n)	27	15	0.73	0.392	
Diabetes (n)	25	13	0.274	0.600	
Coronary heart disease (n)	25	15	1.305	0.253	
Body mass index (kg/m ² , M(QL, QU))	22 (20.25, 23)	22 (21, 23)	-0.468*	0.640	
SOFA score (M(QL, QU))	9 (8,11)	11 (8,12)	-2.384*	0.017	
Vasopressor use (n)	44	27	6.55	0.010	
Infection sites					
Respiratory infection (n)	34	14	0.188	0.665	
Urinary system infection (n)	10	2	0.688	0.407	
Hepatobiliary infection (n)	7	4	0.002	0.961	
Gastrointestinal infection (n)	11	5	0.00	1.000	
Skin soft tissue (n)	3	1	0.00	1.000	
Central nervous system (n)	1	1	0.337	0.529	
Other sites (n)	1	2	0.087	0.769	

★ Z value.

Table 2. Correlation analysis between plasma histone H4 and various parameters

	cTnI	NT-proBNP	SOFA
Histone H4	r = 0.576 P = 0.000	r = 0.349 P = 0.001	r = 0.469 P = 0.000

Uncorrected proof

Table 3. Comparison of demographic and baseline clinical characteristics between the non-cardiomyopathy and septic cardiomyopathy groups

Parameters	Non-cardiomyopathy N = 45	Cardiomyopathy N = 48	Z or □□	P	
Clinical parameters					
Age (years, M(QL, QU))	69 (63.5, 75.5)	70.5 (60.0, 75.0)	-0.866*	0.386	
Gender (n)	Male	26	33	1.206	0.272
	Female	19	15		
Body mass index (kg/m ²) (M(QL, QU))	22.0 (20.00, 23.00)	22.0 (21.00, 23.00)	-0.031*	0.975	
Hypertension (n)	16 (35.6%)	26	3.248	0.071	
Diabetes (n)	14 (31.1%)	22	2.122	0.145	
Coronary heart disease (n (%))	15 (33.3%)	25	3.331	0.068	
SOFA score (M(QL, QU))	9 (8, 10)	11 (8, 12)	-2.718*	0.007	
Vasopressor use (n)	30	41	4.521	0.033	
Laboratory parameters					
Histones H4 (ug/ml, M(QL, QU))	0.22 (0.13, 0.29)	0.31 (0.23, 0.44)	-3.873*	0.000	
cTnI (ug/L, M(QL, QU))	0.19 (0.13, 0.22)	0.24 (0.17, 0.31)	-2.985*	0.003	
NTpro-BNP (μg/L, M(QL, QU))	2.52 (1.41, 3.62)	2.85 (2.44, 5.21)	-1.834*	0.067	
PCT (ng/ml, M(QL, QU))	1.60 (1.20, 2.40)	1.75 (1.30, 3.05)	-1.393*	0.164	
Lac (mmol/L, M(QL, QU))	1.90 (1.35, 3.13)	1.90 (1.40, 2.69)	-0.131*	0.896	
Death in ICU (n)	9	20	5.081	0.024	

★ Z value.

Table 4. Determination of risk factors for septic cardiomyopathy

	Coefficient	SE	Wald	P	OR	95% CI
SOFA	0.080	0.122	0.433	0.510	1.084	0.853-1.376
Vasopressor use	2.017	0.694	8.456	0.004	7.514	1.930-29.254
Histone H4	5.667	2.352	5.804	0.016	21.5	2.9-290.6
cTnI	3.848	3.343	1.324	0.250	23.2	0.067-328.5
Constant	-4.689	1.362	11.847	0.001	0.009	

SE: standard error, OR: odds ratio, CI: confidence interval

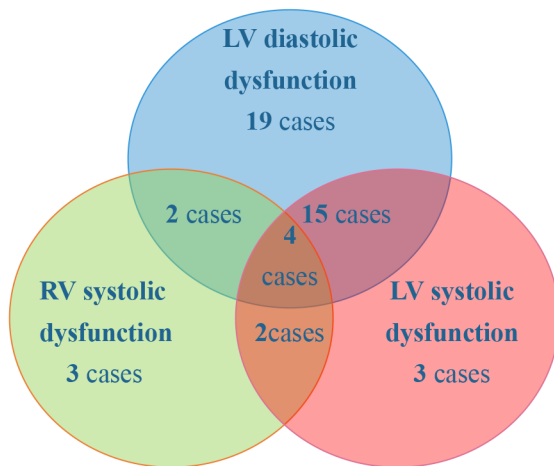


Figure 1. Distribution of different types of septic cardiomyopathy

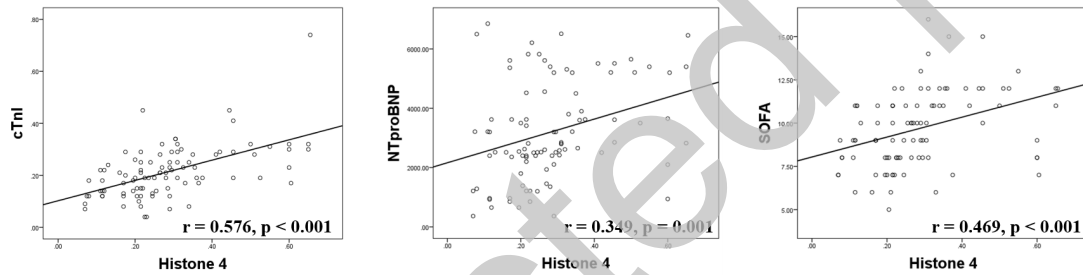


Figure 2. Correlation between plasma histone H4 and other parameters

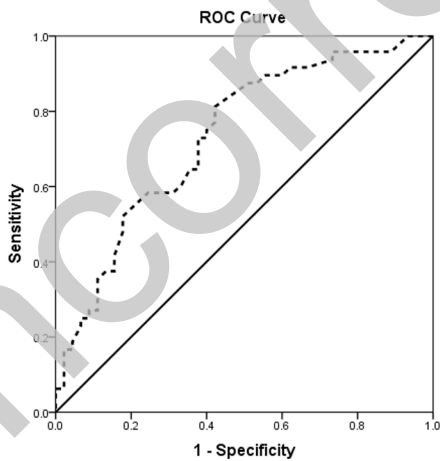


Figure 3. ROC curve analysis of plasma histone H4 for predicting the development of cardiomyopathy in patients with sepsis. At the cutoff point, the sensitivity and specificity for plasma histone H4 were significant.