Supplemental Information

Validation of Predictors of Disease Severity and Outcomes in COVID-19 Patients: A Descriptive and Retrospective Study

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Supplemental Figures 0.8 Sensitivity 9.0 0.4 0.2 AUC of LYM at 30 days: 0.810 0.0 AUC of IL6 at 30 days: 0.822 0.4 0.0 0.2 0.6 8.0 1.0 Specificity LYM% HR: 0.89, 95% CI: 0.83-0.95, P < 0.001 HR: 1.02, 95% CI: 1.01-1.02, P < 0.001 IL-6

Fig. S1 Validation of LYM% and IL-6 as predictors of prognosis in COVID-19 patients. **Related to Fig. 1**

Information of LYM% and IL-6 levels in survivors (n=117) or non-survivors (n=15) with COVID-19 were collected. The Cox proportional hazard ratio regression model was performed. The AUC values and other statistic parameters were displayed as indicated.

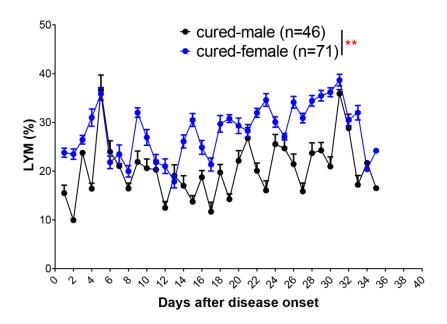


Fig. S2 The female had higher levels of LYM% than the male patients with COVID-19. Related to Fig. 1

The discharged patients including male (n=46) and female (n=71) were enrolled. Information on blood LYM% from admission to discharge was collected. Data showed means \pm s.e.ms. (**P<0.01; a mixed model with repeated measure)

Supplemental Tables

Table S1 Gender and age information of survivors or non-survivors with COVID-19. **Related to Fig. 1**

Items	Total (N=132)	Survivor (n=117)	Non-survivor (n=15)	P values	
Age(mean±std), years					
Female	51±15	52±14	45±26	0.879	
Male	60±18	54±15	79±16	<0.001	
Age group, year					
~30	8(6%)	8(7%)	0(0)	<0.001	
30∼60	75(57%)	73(62%)	2(13%)		
60~90	45(34%)	36(31%)	9(60%)		
90 ~	4(3%)	0(0)	4(27%)		
Number (%)					
Female	73(55%)	71(61%)	2(13%)	0.001	
Male	59(45%)	46(39%)	13(87%)	0.001	

Table S2 Comorbidities of survivors or non-survivors with COVID-19. **Related to Fig. 1**

Comorbidity	Total (N=132)	Survivor (n=117)	Non-survivor (n=15)	P values
Cardiovascula r disease	44(33%)	35(30%)	9(60%)	0.020
Stroke	5(4%)	3(3%)	2(13%)	0.099
Diabetes	16(12%)	9(8%)	7(47%)	<0.001
Fatty liver	7(5%)	5(4%)	2(13%)	0.181
Liver cirrhosis	2(2%)	1(1%)	1(7%)	0.215
Pulmonary Tuberculosis	3(2%)	2(2%)	1(7%)	0.306
Anemia	4(3%)	4(3%)	0(0)	1.000
Hyperlipemia	9(7%)	8(7%)	1(7%)	1.000

Table S3 Complications of survivors or non-survivors with COVID-19. **Related to Fig. 1**

Complications	Total (N=132)	Survivor (n=117)	Non-survivor (n=15)	P values
Acute respiratory distress syndrome	11(8%)	2(2%)	9(60%)	<0.001
Myocarditis Septic shock	2(2%) 3(2%)	1(1%) 0(0)	1(7%) 3(20%)	0.215 0.001
Hemorrhagic shock	2(2%)	0(0)	2(13%)	0.012
Gastrointestinal bleeding	2(2%)	0(0)	2(13%)	0.012
Organ dysfunction	6(5%)	0(0)	6(40%)	<0.001
Multiple organ failure	25(19%)	16(14%)	9(60%)	<0.001

Table S4 Gender and age information of the COVID-19 patients with different disease classification. **Related to Fig. 2~Fig. 7**

Items	Total (N=142)	Critically ill (n=25)	Severe (n=21)	Moderate (n=96)	P values
Age(mean±std), years					
Female	52±15	61±8	53±15	51±14	0.246
Male	61±18	76±16	49±15	56±16	<0.001
Age group					
~30	8(6%)	0(0)	1(5%)	7(7%)	
30∼60	79(55%)	6(24%)	16(76%)	57(60%)	<0.001
60~90	49(35%)	13(52%)	4(19%)	32(33%)	<0.001
90 ~	6(4%)	6(24%)	0(0)	0(0)	
Number (%)					
Female	77(54%)	6(24%)	10(48%)	61(64%)	0.002
Male	65(46%)	19(76%)	11(52%)	35(36%)	0.002