

Table S1. The basic information of inpatients with different severity

	ROI ^a				NIV ^b and MV ^c	
	7 days in hospital (n = 77)		14 days in hospital (n = 24)		Death (n = 39)	
	Number	n%	Number	n%	Number	n%
Age						
< 60	12	48	3	12	0	0
60-69	18	75.0	4	16.7	5	41.7
70-79	17	68.0	3	12.0	10	43.5
> 80	30	71.4	14	33.3	24	77.4
Sex						
Female	30	61.2	9	18.4	13	59.1
Male	47	70.1	15	22.4	26	54.2
BDRSs[#]						
None	61	68.5	19	21.3	29	54.7
COPD [#]	9	81.8	4	36.4	7	53.8
Others	7	43.8	1	6.3	3	75.0
BDCSs[#]						
None	45	60.0	14	18.7	21	46.7
CAD [#]	20	83.3	8	33.3	11	84.6
Others	12	70.6	2	11.8	7	58.3
Diabetes	20	60.7	5	16.7	10	52.6
Hypertension	40	75.5	14	26.4	24	63.2
Other basic disease	14	66.7	2	9.5	11	68.8
Smoking history	14	66.7	3	14.3	6	46.2
Thrombosis	7	77.8	5	55.6	7	58.3
Pleural effusion	21	91.3	6	26.1	10	52.6
Glucocorticoid	57	80.3	21	29.6	37	57.8
Immunosuppressants	2	100	1	50.0	5	71.4
Paxlovid	40	80.8	9	17.3	18	50.0
Azvodine	5	71.4	2	28.6	0	0

Immunoglobulins	18	94.7	6	31.6	11	37.9
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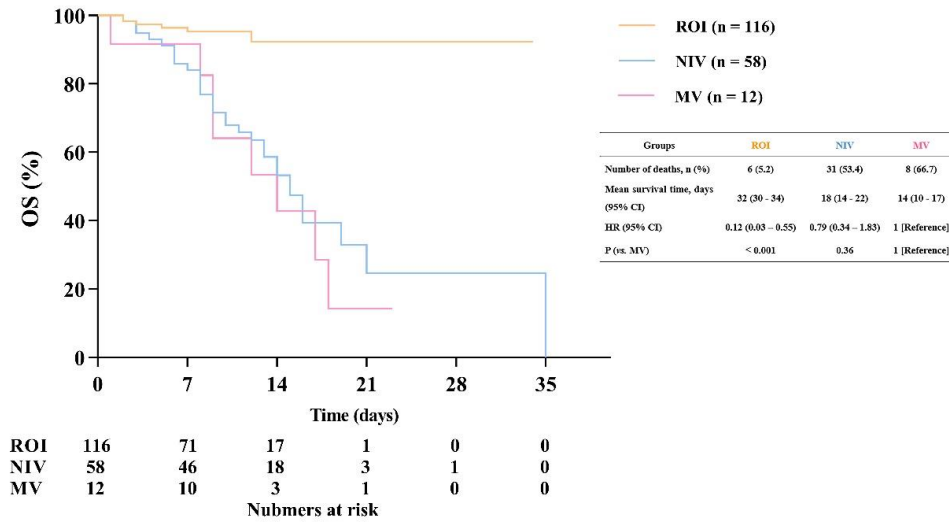
^a Routine oxygen inhalation

^b Non-invasive ventilation

^c Mechanical ventilation

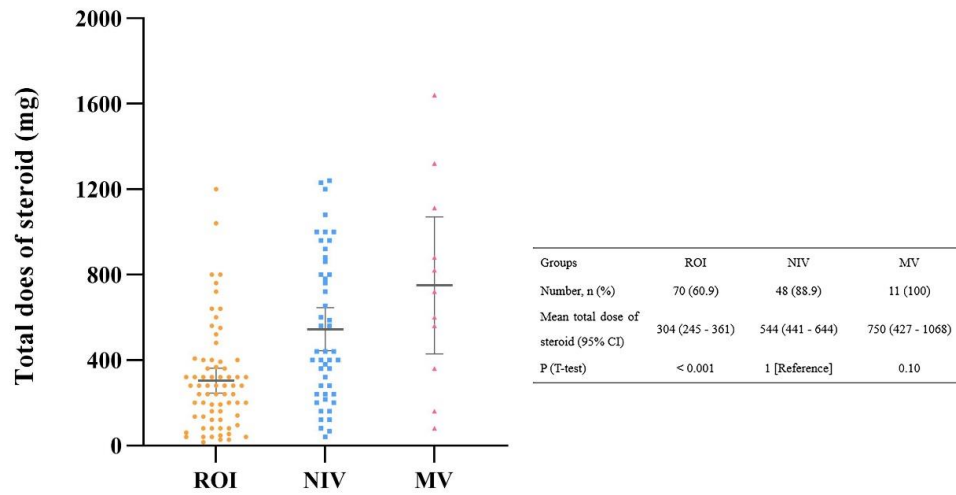
[#] BDRSs: basic disease of the respiratory system; COPD: chronic obstructive pulmonary disease;

BDCSs: basic disease of the cardiovascular system; CAD: coronary heart disease

Fig S1. Kaplan-Meier curve showing patients' survival with different severity in whole inpatients

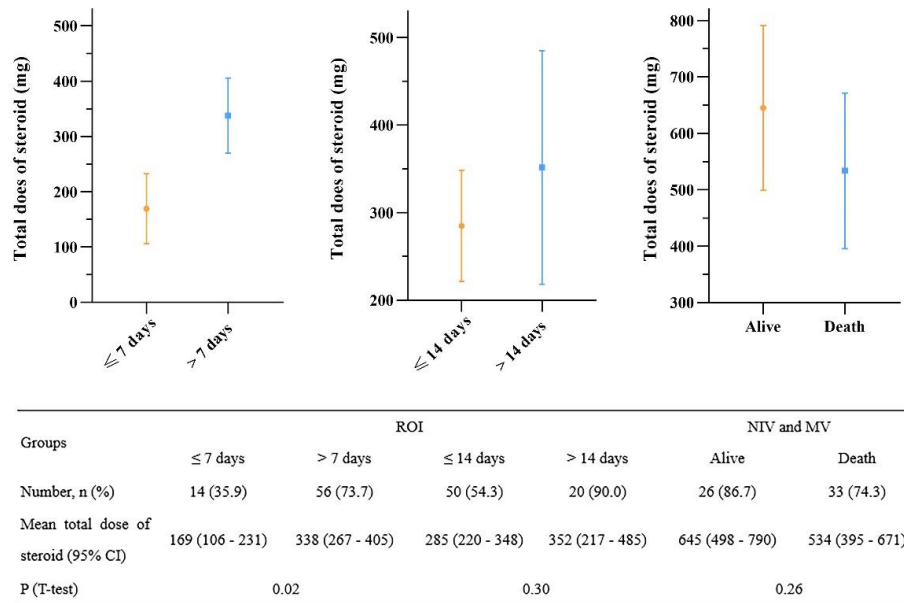
ROI: Routine oxygen inhalation; NIV: Non-invasive ventilation; MV: Mechanical ventilation; OS:

Overall survival

Fig S2. Total dose of steroid in patients with different severity

ROI: Routine oxygen inhalation; NIV: Non-invasive ventilation; MV: Mechanical ventilation

* Steroid dose is based on methylprednisolone; Five patients with unclear dose were excluded

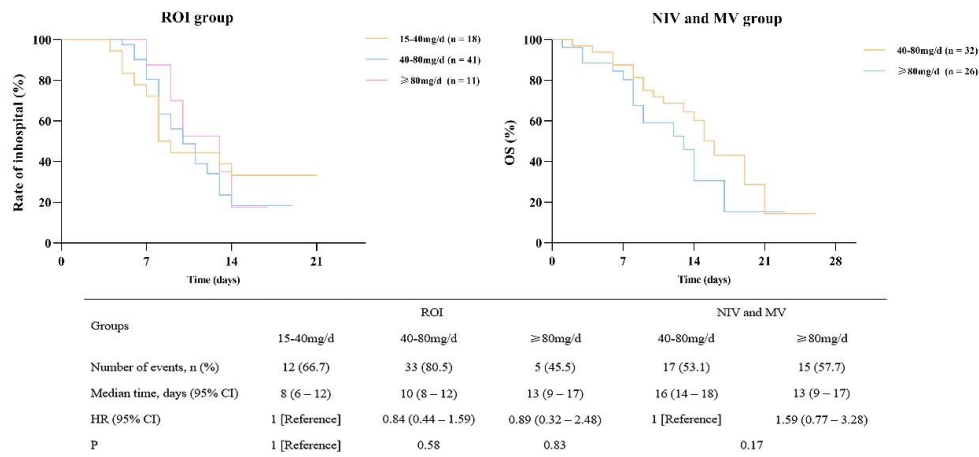
Fig S3. Total dose of steroid in patients with different prognosis

ROI: Routine oxygen inhalation; NIV: Non-invasive ventilation; MV: Mechanical ventilation

* Steroid dose is based on methylprednisolone; Five patients with unclear dose were excluded

^ A 7- and 14-day hospital stay or not was used to classify subgroups in ROI group

Fig S4. Kaplan-Meier curves showing patients' prognosis according to the mean dose of steroids in patients with different severity



ROI: Routine oxygen inhalation; NIV: Non-invasive ventilation; MV: Mechanical ventilation; OS:

Overall survival

* Steroid dose is based on methylprednisolone (15-40mg/d, 40-80mg/d, ≥80mg/d); Five patients with unclear dose were excluded

* The event, hospitalization time ≤ 14 days, was used to evaluate the effects of steroid in ROI group;

OS was used in NIV and MV group

^ Median time: The median time from starting hospitalization to events happened