

Supplementary Table 1 Japanese Association for Acute Medicine disseminated intravascular coagulation scoring system

	Score
Systemic inflammatory response syndrome criteria	
≥ 3	1
0-2	0
Platelet counts ($10^9/L$)	
<80 or more than 50% decrease within 24 h	3
≥ 80 <120 or more than 30% decrease within 24 h	1
≥ 120	0
Prothrombin time (value of patient/normal value)	
≥ 1.2	1
<1.2	0
Fibrin/fibrinogen degradation products (mg/L)	
≥ 25	3
≥ 10 <25	1
<10	0
Diagnosis	
Four points or more	DIC

The detailed scoring system is described in reference 16.

Supplementary Table 2 Abbreviated injury scale and Glasgow Coma Scale of the patients

	Non-DIC	DIC	<i>p</i> -Value
Abbreviated injury scale			
Head	3 (0-4)	3 (0-4)	0.138
Face	0 (0 -1)	0 (0-0)	0.391
Neck	0 (0-0)	0 (0-0)	0.597
Thorax	3 (0-4)	3 (0-4)	0.007
Abdomen	0 (0-0)	0 (0-2)	0.005
Spine			
Cervical	0 (0-0)	0 (0-0)	0.421
Thoracic	0 (0-0)	0 (0-0)	0.522
Lumbar	0 (0-0)	0 (0-1)	0.001
Upper extremity	0 (0-1)	0 (0-2)	0.169
Lower extremity	0 (0-2)	2 (0-3)	<0.001
External	0 (0-1)	0 (0-1)	0.053
Glasgow Coma Scale			
0 h	14 (11-15)	12 (6-14)	<0.001
3 h	14 (7-15)	7 (3-14)	<0.001
24 h	15 (10-15)	9 (3-14)	<0.001

DIC, disseminated intravascular coagulation

Supplementary Table 3 Disseminated intravascular coagulation scores, platelet counts, global markers of coagulation and fibrinolysis

	0 h	3 h	24 h
DIC score			
Non-DIC	3(1-3)	3(1-4)	2(1-4)
DIC	4(4-5) ^c	5(4-6) ^{c,y}	4(3-6) ^c
Platelet counts (10 ⁹ /L)			
Non-DIC	220(186-250)	181(130-214)	159(118-194)
DIC	201(161-257) ^a	132(90-177) ^{c,z}	110(79-150) ^{c,z}
Prothrombin time (sec)			
Non-DIC	12.1(11.4-13.0)	12.8(12.0-14.0)	12.8(12.2-13.8)
DIC	13.4(12.2-15.0) ^c	14.5(13.0-15.9) ^{c,y}	13.5(12.7-14.6) ^b
Prothrombin time INR			
Non-DIC	1.02(1.02-1.09)	1.09(1.00-1.15)	1.09(1.03-1.15)
DIC	1.12(1.02-1.23) ^c	1.20(1.07-1.32) ^{c,y}	1.12(1.05-1.22) ^c
APTT (sec)			
Non-DIC	26.8(24.6-29.8)	29.1(26.4-32.3)	31.3(28.8-34.0)
DIC	29.1(25.8-37.0) ^c	33.4(27.5-40.6) ^{c,y}	33.1(29.0-37.1) ^z
Fibrinogen (g/L)			
Non-DIC	2.38(2.11-2.85)	2.05(1.70-2.60)	3.02(2.59-3.85)
DIC	2.07(1.61-2.47) ^c	1.67(1.19-2.08) ^{c,z}	2.78(2.38-3.47) ^{a,z}
FDP (mg/L)			
Non-DIC	31.0(14.5-87.5)	40.0(13.3-103.8)	17.0(7.0-38.4)
DIC	117.0(60.6-258.5) ^c	100.5(55.3-198.4) ^c	32.3(15.3-64.6) ^{c,z}
FDP/D-dimer ratio			
Non-DIC	2.21(1.53-3.13)	2.02(1.52-2.58)	2.19(1.87-2.55)
DIC	2.76(2.08-3.52) ^b	2.31(1.67-3.45) ^a	2.11(1.80-2.37) ^z

APTT, activated partial thromboplastin time; DIC, disseminated intravascular coagulation; FDP, fibrin/fibrinogen degradation products; INR, international normalized ratio. a, $p < 0.05$; b, $p < 0.01$; c, $p < 0.001$ vs. non-DIC. x, $p < 0.05$; y, $p < 0.01$; z, $p < 0.001$ vs. 0h.

Supplementary Table 4 Demographics of the 9 patients who died within 24-h after arrival

Age (year)	60 (35-88)
Male gender n (%)	7 (77.8)
DIC n (%)	9 (100)
DIC score 0h	4 (4-5)
DIC score 3h	7 (4-8)
Injury Severity Score	34 (24-52)
Abbreviated injury scale	
Head	5.0 (2.5-5.0)
Shock n (%)	5 (55.6)
Hemodynamics	
0 h	
Systolic blood pressure (mmHg)	71 (52-113)
Diastolic blood pressure (mmHg)	37 (25-59)
Heart rate (beats/min)	104 (93-129)
Respiratory rate (times/min)	15 (11-30)
3 h	
Systolic blood pressure (mmHg)	86 (51-100)
Diastolic blood pressure (mmHg)	45 (24-64)
Heart rate (beats/min)	96 (72-107)
Respiratory rate (times/min)	19 (24)
Massive transfusion n (%)	3 (33.3)
3-h transfusion	
Packed red blood cell (ml)	1400 (280-2100)
Fresh frozen plasma	1440 (240-1680)
Platelet concentrate (U)	0 (0-20)

DIC, disseminated intravascular coagulation	

Supplementary Table 5 Performance of soluble fibrin, plasmin antiplasmin complex, plasminogen activator inhibitor-1 for detection of massive transfusion and multiple organ dysfunction syndrome within 24 h of and at 24 h after admission

	AUC (SE)	<i>p</i> -Value
Massive transfusion		
Soluble fibrin 0 h	0.627 (0.05)	0.023
Soluble fibrin 3 h	0.530 (0.05)	0.588
Plasmin antiplasmin complex 0 h	0.685 (0.05)	0.001
Plasmin antiplasmin complex 3 h	0.552 (0.05)	0.357
Plasminogen activator inhibitor-1 0 h	0.535 (0.05)	0.530
Plasminogen activator inhibitor-1 3 h	0.638 (0.05)	0.014
Multiple organ dysfunction syndrome		
Soluble fibrin 0 h	0.696 (0.04)	<0.001
Soluble fibrin 3 h	0.600 (0.04)	0.025
Plasmin antiplasmin complex 0 h	0.653 (0.04)	0.001
Plasmin antiplasmin complex 3 h	0.640 (0.05)	0.002
Plasminogen activator inhibitor-1 0 h	0.566 (0.05)	0.139
Plasminogen activator inhibitor-1 3 h	0.622 (0.04)	0.006

AUC, area under receiver operating characteristic curve; SE, standard error.