Table S1. The 26 variables used to calculate the propensity score in the logistic regression model

Patient characteristics	Age, sex, body weight
Illness severity	SOFA score, APACHE II score, positive blood culture
Source of ICU admission	Emergency department/ward/other hospital
Pre-existing condition	Liver insufficiency, chronic heart failure, chronic respiratory disorder, chronic hemodialysis, immunocompromise
SOFA sub-score	Respiratory, cardiovascular, renal, hepatic, GCS
ICU characteristics	Closed ICU/open ICU/other, volume of ICU
Primary source of infection	Abdomen/lung/urinary tract/bone+soft tissue/central nervous system/other/unknown
Causal microorganisms	Gram-positive bacteria/Gram-negative bacteria/mixed organisms/other/unknown
Therapeutic interventions	Immunoglobulin, low-dose steroid, renal replacement therapy, low-dose heparin for prophylaxis against venous thromboembolism, surgical intervention

Abbreviations: SOFA, Sequential Organ Failure Assessment; APACHE, Acute Physiology and Chronic Health Evaluation; ICU, intensive care unit; GCS, Glasgow Coma Score.

Table S2. Baseline characteristics in patients with and without anticoagulant therapy by each cut-off point of the JAAM DIC scoring system

	JAAM DIC score									Total
	0	1	2	3	4	5	6	7	8	
	n=41	n=193	n=310	n=326	n=275	n=361	n=306	n=127	n=258	n=2197
Patient characteristics										
Age (years)	75 (62-81)	74 (63-81)	71 (61-80)	73 (62-81)	74 (64-81)	72 (63-80)	72 (63-80)	73 (62-81)	71 (60-80)	72 (62-80)
Sex, male	25 (61%)	123 (64%)	211 (68%)	189 (58%)	153 (56%)	211 (58%)	172 (56%)	77 (61%)	133 (52%)	1294 (59%)
Illness severity										
APACHE II score	17 (11-22)	19 (15-24)	20 (15-26)	21 (16-28)	22 (16-27)	23 (17-28)	24 (18-30)	24 (17-31)	26 (20-32)	22 (17-28)
SOFA score	6 (3-8)	7 (4-9)	7 (5-9)	9 (6-11)	8 (6-11)	9 (7-12)	11 (8-13)	11 (9-13)	13 (10-15)	9 (6-12)
Source of ICU admission										
Emergency department	28 (68%)	118 (61%)	144 (46%)	145 (44%)	128 (47%)	160 (44%)	130 (42%)	59 (46%)	124 (48%)	1036 (47%)
Ward	10 (24%)	47 (24%)	95 (31%)	88 (27%)	77 (28%)	109 (30%)	103 (34%)	42 (33%)	72 (28%)	643 (29%)
Other hospital	3 (7%)	28 (15%)	71 (23%)	93 (29%)	70 (25%)	92 (25%)	73 (24%)	26 (20%)	62 (24%)	518 (24%)
Pre-existing comorbidities										
Immunocompromised	3 (7%)	18 (9%)	31 (10%)	39 (12%)	30 (11%)	34 (9%)	33 (11%)	8 (6%)	35 (14%)	231 (11%)
Chronic kidney disease	0 (0%)	13 (7%)	28 (9%)	20 (6%)	23 (8%)	32 (9%)	23 (8%)	12 (9%)	16 (6%)	167 (8%)
Chronic heart failure	4 (10%)	20 (10%)	22 (7%)	13 (4%)	14 (5%)	16 (4%)	10 (3%)	11 (9%)	15 (6%)	125 (6%)
Chronic respiratory disorder	0 (0%)	11 (6%)	21 (7%)	9 (3%)	13 (5%)	17 (5%)	7 (2%)	4 (3%)	7 (3%)	89 (4%)
Liver insufficiency	0 (0%)	0 (0%)	2 (1%)	1 (0%)	4 (1%)	4 (1%)	3 (1%)	1 (1%)	2 (1%)	17 (1%)
Site of infection										
Abdomen	5 (12%)	45 (23%)	84 (27%)	115 (35%)	87 (32%)	132 (37%)	117 (38%)	45 (35%)	75 (29%)	705 (32%)
Lung	18 (44%)	82 (42%)	107 (35%)	95 (29%)	80 (29%)	85 (24%)	49 (16%)	15 (12%)	32 (12%)	563 (26%)
Urinary tract	8 (20%)	31 (16%)	36 (12%)	36 (11%)	48 (17%)	69 (19%)	60 (20%)	20 (16%)	83 (32%)	391 (18%)

Bone/soft tissue	8 (20%)	25 (13%)	46 (15%)	43 (13%)	32 (12%)	37 (10%)	39 (13%)	19 (15%)	18 (7%)	267 (12%)
Central nervous system	2 (5%)	4 (2%)	3 (1%)	5 (2%)	5 (2%)	5 (1%)	6 (2%)	7 (6%)	14 (5%)	51 (2%)
Other/unknown	0 (0%)	6 (3%)	34 (11%)	32 (10%)	23 (8%)	33 (9%)	35 (11%)	21 (17%)	36 (14%)	220 (10%)
Therapeutic interventions										
Immunoglobulin	6 (15%)	35 (18%)	76 (25%)	111 (34%)	91 (33%)	115 (32%)	107 (35%)	54 (43%)	102 (40%)	697 (32%)
Low-dose steroid	6 (15%)	32 (17%)	58 (19%)	79 (24%)	63 (23%)	82 (23%)	88 (29%)	37 (29%)	99 (38%)	544 (25%)
Renal replacement therapy	3 (7%)	29 (15%)	58 (19%)	81 (25%)	66 (24%)	99 (27%)	104 (34%)	58 (46%)	103 (40%)	601 (27%)
Surgical intervention	14 (34%)	56 (29%)	135 (44%)	154 (47%)	113 (41%)	144 (40%)	146 (48%)	56 (44%)	109 (42%)	927 (42%)
Antithrombin	3 (7%)	21 (11%)	56 (18%)	95 (29%)	93 (34%)	129 (36%)	132 (43%)	62 (49%)	138 (53%)	729 (33%)
Recombinant thrombomodulin	0 (0%)	15 (8%)	46 (15%)	76 (23%)	71 (26%)	127 (35%)	121 (40%)	60 (47%)	128 (50%)	644 (29%)
Heparin/Heparinoid	2 (5%)	8 (4%)	9 (3%)	18 (6%)	24 (9%)	14 (4%)	13 (4%)	13 (10%)	20 (8%)	121 (6%)
Outcomes										
In-hospital mortality	6 (15%)	38 (20%)	60 (19%)	78 (24%)	78 (28%)	124 (34%)	106 (35%)	47 (37%)	102 (40%)	639 (29%)
With anticoagulant	0 (0%)	12 (30%)	19 (22%)	34 (22%)	42 (29%)	69 (35%)	66 (34%)	30 (33%)	71 (37%)	343 (31%)
Without anticoagulant	6 (16%)	26 (17%)	41 (18%)	44 (25%)	36 (27%)	55 (34%)	40 (35%)	17 (49%)	31 (46%)	296 (27%)
Bleeding complications	3 (7%)	16 (8%)	25 (8%)	31 (10%)	31 (11%)	50 (14%)	47 (15%)	17 (13%)	33 (13%)	253 (12%)
With anticoagulant	0 (0%)	6 (15%)	6 (7%)	17 (11%)	22 (15%)	38 (19%)	35 (18%)	11 (12%)	30 (16%)	165 (15%)
Without anticoagulant	3 (8%)	10 (7%)	19 (9%)	14 (8%)	9 (7%)	12 (7%)	12 (11%)	6 (17%)	3 (4%)	88 (8%)

Abbreviations: JAAM, Japanese Association for Acute Medicine; DIC, disseminated intravascular coagulation; APACHE, Acute Physiology and Chronic Health Evaluation; SOFA, Sequential Organ Failure Assessment; ICU, intensive care unit.

Table S3. Actual sample size and estimated mortality in the anticoagulant and control groups according to each cut-off point of the ISTH overt DIC scoring system

Cut-off	Criteria negative (ISTH overt DIC score < cut-off point)					Criteria positive (ISTH overt DIC score ≥ cut-off point)				
	Sample size	Anticoagulant		Control		Sample size	Anticoagulant		Control	
		Mortality	95% CI	Mortality	95% CI		Mortality	95% CI	Mortality	95% CI
1	161	9.5	1.1-48.5	19.9	9.6-36.9	1732	27.3	18-39.2	37.2	31.6-43.1
2	293	14	3.7-40.5	19.2	11.9-29.6	1600	27.9	18.1-40.5	39	33.1-45.4
3	536	20.8	7.4-46.3	24.8	16.2-35.9	1357	27.9	17.7-41	40.7	34.4-47.4
4	906	20.5	10.1-36.9	26.9	20.4-34.7	987	30.4	17.7-47	44.7	36.7-52.9
5	1339	22.9	13.4-36.4	30.3	24.4-36.9	554	33.7	16.7-56.2	49.9	39.2-60.6
6	1630	24.4	15.3-36.5	32.4	26.9-38.3	263	37.5	13.7-69.3	54.4	38.9-69.1
7	1804	25.8	16.8-37.4	34	28.6-39.7	89	40.1	6.7-86.1	59.9	34.4-81
8	1877	26.1	17.3-37.4	34.9	29.6-40.5	16	65.4	32-88.4	65.4	32-88.4
Total	1893	26.5	17.6-37.7	35.2	30-40.8					

Abbreviations: ISTH, International Society of Thrombosis and Hemostasis; DIC, disseminated intravascular coagulation; CI, confidence interval.

Table S4. Actual sample size and estimated mortality in the anticoagulant and control groups according to each cut-off point of the JAAM DIC scoring system

Cut-off	Criteria negative (JAAM DIC score < cut-off point)					Criteria positive (JAAM DIC score ≥ cut-off point)				
	Sample size	Anticoagulant		Control		Sample size	Anticoagulant		Control	
		Mortality	95% CI	Mortality	95% CI		Mortality	95% CI	Mortality	95% CI
1	41	13.5	5.6-28.9	13.5	5.6-28.9	2156	28.0	19.4-38.4	35.4	30.6-40.5
2	234	18.1	6.1-43.1	14.4	10.1-20.1	1963	28.4	19.4-39.5	37.9	32.7-43.3
3	544	22.1	9.6-43.0	17.6	12.8-23.7	1653	28.8	19.1-41.1	42.1	36.2-48.3
4	870	21.2	10.0-39.6	24.5	18.0-32.3	1327	30.7	19.9-44.2	43.7	37.3-50.3
5	1145	22.1	11.7-37.6	27.4	21.2-34.6	1052	32.5	20.3-47.6	44.8	37.7-52.1
6	1506	25.4	15.6-38.4	29.9	24.5-35.8	691	32.1	17.2-51.8	46.9	37.6-56.5
7	1812	26.6	17.5-38.1	31.3	26.5-36.7	385	32.6	13.6-59.8	52.8	39.7-65.5
8	1939	26.8	18.0-37.9	32.9	28.0-38.1	258	34.4	12.0-67.0	51.5	35.9-66.8
Total	2197	27.8	19.4-38.2	34.8	30.2-39.8					

Abbreviations: JAAM, Japanese Association for Acute Medicine; DIC, disseminated intravascular coagulation; CI, confidence interval.