Supplemental Table

Table S1 The 32 variables used to calculate propensity score in the regression models

Patient characteristics	1) Age, 2) sex
Illness severity	3) SIRS score, 4) SOFA score, 5) APACHE II score, 6) JAAM DIC score, 7) ISTH overt DIC score, 8) positive blood culture
9) Source of ICU admission	Emergency department/ward/other hospital
Pre-existing condition	10) Liver insufficiency, 11) chronic heart failure, 12) chronic respiratory disorder, 13) chronic hemodialysis, 14) immunocompromised
New organ dysfunction	15) Respiratory, 16) cardiovascular, 17) renal, 18) hepatic, 19) coagulation
20) ICU characteristics	Closed ICU/open ICU/other
21) Primary source of infection	Abdomen/lung/urinary tract/bone+soft tissue/central nervous system/other+unknown
22) Causal microorganisms	Gram-positive bacteria/Gram-negative bacteria/mixed organisms/other/unknown
Anticoagulant therapy not for DIC	23) Nafamostat mesilate for renal replacement therapy, 24) heparin for venous thromboembolism prophylaxis, 25) warfarin, 26) anti-platelet drugs, 27) others
Other therapeutic interventions	28) Immunoglobulin, 29) low-dose steroid, 30) renal replacement therapy, 31) PMX-DHP, 32) surgical intervention

SIRS, Systemic Inflammatory Response Syndrome; SOFA, Sequential Organ Failure Assessment; APACHE, Acute Physiology and Chronic Health Evaluation; JAAM, Japanese Association for Acute Medicine; DIC, disseminated intravascular coagulation; ISTH, International Society on Thrombosis and Hemostasis; ICU, intensive care unit; PMX-DHP, polymyxin B direct hemoperfusion.

Table S2. Time-related alteration in coagulation biomarkers in patients with and without anticoagulant therapy

	Anticoagulant group n = 863	Control group n = 565	p Value
Platelet count (10^3/μL)			
Day 1	75 (46-132)	96 (56-164)	<0.001
Day 2	57 (34-95)	78 (45-130)	<0.001
Day 3	46 (27-80)	70 (44-116)	<0.001
Day 4	50 (28-80)	66 (40-115)	<0.001
Day 5	55 (31-90.5)	73 (41-120)	<0.001
Day 6	67 (38-114)	89 (51-152)	<0.001
Day 7	84 (48-147)	114 (62-190)	<0.001
PT (INR)			
Day 1	1.4 (1.2-1.7)	1.3 (1.2-1.6)	<0.001
Day 2	1.4 (1.3-1.7)	1.3 (1.2-1.6)	<0.001
Day 3	1.3 (1.2-1.5)	1.2 (1.1-1.4)	<0.001
Day 4	1.2 (1.1-1.4)	1.2 (1.1-1.3)	0.006
Day 5	1.2 (1.1-1.3)	1.2 (1.0-1.3)	0.026
Day 6	1.2 (1.1-1.3)	1.2 (1.1-1.3)	0.129
Day 7	1.2 (1.1-1.3)	1.2 (1.1-1.3)	0.024
Fibrinogen (mg/dL)			
Day 1	365 (237.5-524)	384.5 (255.5-531)	0.198
Day 2	348 (234-490)	374.5 (273.5-505)	0.033
Day 3	385.5 (270-520)	414 (310-529.5)	0.022
Day 4	385 (261-524)	424 (291-550)	0.015
Day 5	373 (254-502)	401 (293-511)	0.026
Day 6	352.5 (241.5-457.5)	379 (281-512)	0.022
Day 7	338 (237-435)	375 (281-488)	0.004
Fibrin/fibrinogen degradation product (μg/mL)			
Day 1	33.2 (17.0-70.1)	29.1 (16.0-57.2)	0.134
Day 2	27.0 (14.2-56.5)	26.0 (13.3-48.1)	0.129
Day 3	23.2 (12.5-42.0)	24.4 (14.4-46.1)	0.479
Day 4	18.6 (11.1-34.0)	23.0 (13.0-39.2)	0.023
Day 5	16.3 (10.2-30.3)	21.4 (11.7-35.0)	0.003
Day 6	16.5 (10.7-29.1)	22.0 (12.7-36.6)	0.004

Day 7	17.0 (11.0-28.0)	19.5 (12.2-33.7)	0.049
D-dimer (μg/mL)			
Day 1	15.5 (7.1-32.9)	14.9 (7.8-28.5)	0.297
Day 2	13.1 (5.9-28.6)	11.9 (6.1-24.4)	0.451
Day 3	10.2 (5.2-22.0)	11.5 (5.6-21.2)	0.732
Day 4	8.8 (4.5-18.7)	11.0 (5.8-20.5)	0.025
Day 5	8.1 (4.7-14.8)	10.2 (5.6-21.4)	0.006
Day 6	7.9 (4.7-16.1)	10.8 (6.1-23.8)	0.005
Day 7	8.9 (4.8-15.9)	10.1 (5.7-20.5)	0.020

Data are presented as the median (first and third quartiles). Differences between groups were assessed using the Mann-Whitney U test. INR, international normalized ratio.

Supplemental FIGURE

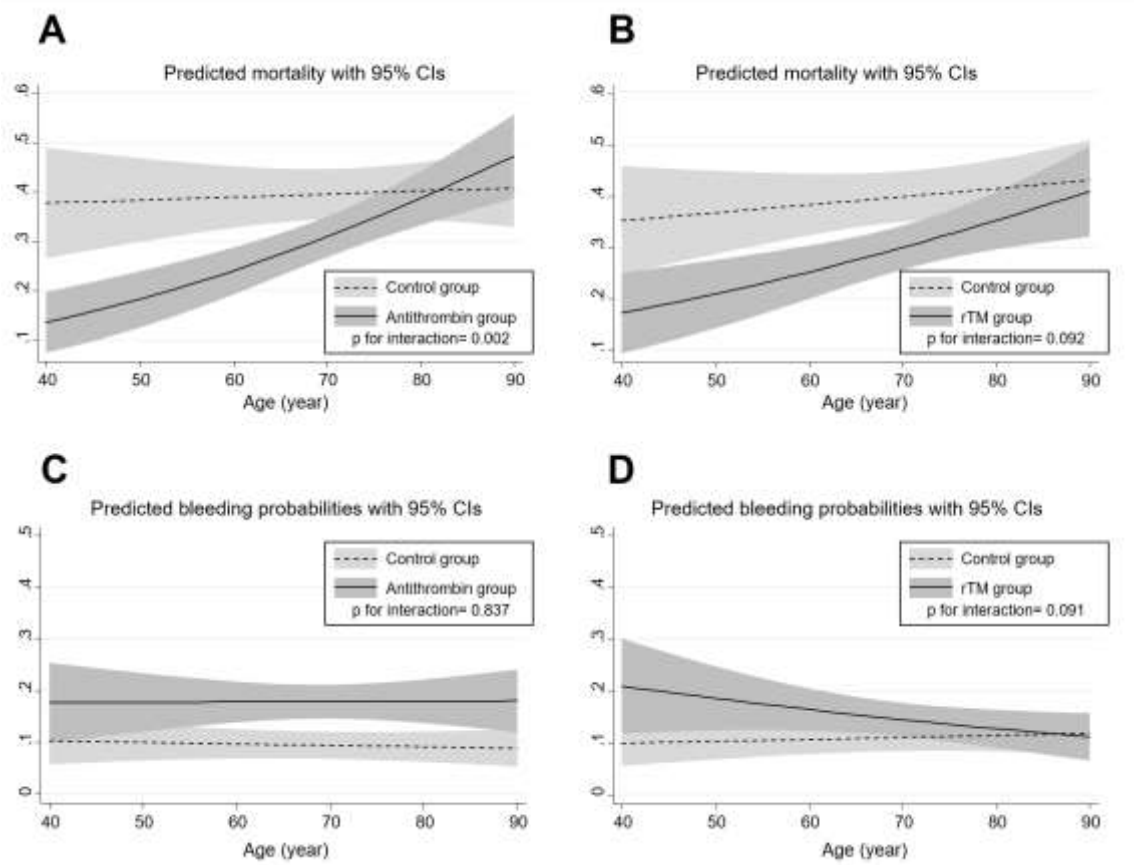

Fig. S1 Regression line for age-related change in predicted mortality and the risk of severe bleeding complication in each treatment group estimated by logistic regression model with a two-way interaction term by comparing each anticoagulant thrapy. A, C. Antithrombin group B, D. rTM group CI, confidence interval. A.

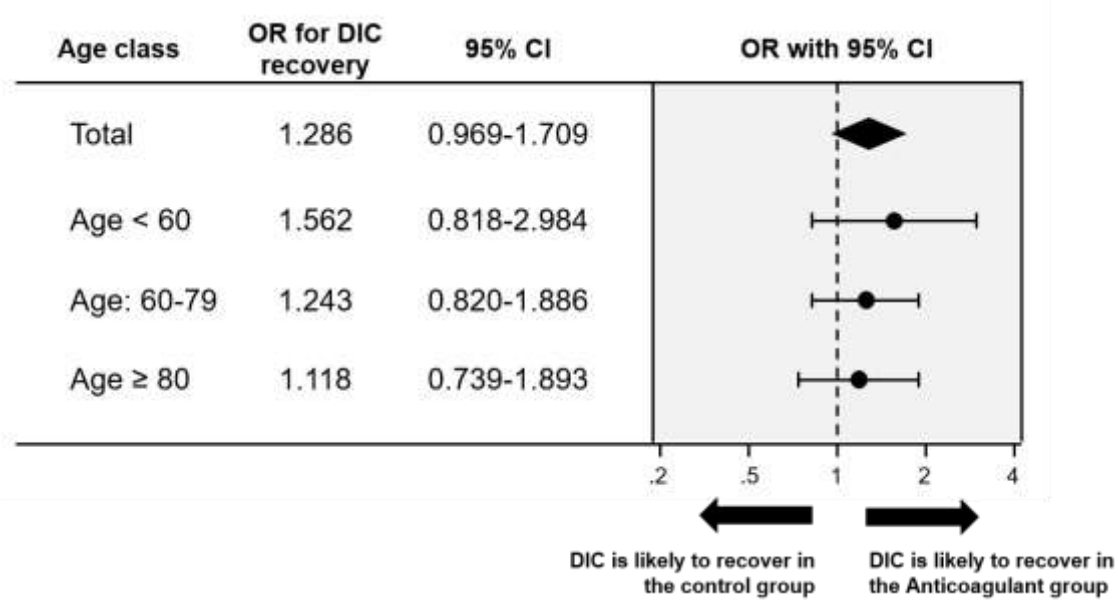

Fig. S2 Logistic regression analysis adjusted by propensity score for the association of anticoagulant therapy and DIC recovery rate in the three age classes. Anticoagulant therapy was tended to be associated with the increased rate of DIC recovery in all age classes.