

Supplementary Materials

Table S1. Characteristics of healthy volunteers.

	Values in Healthy Patients
Sex (M/F)	4/4
Age (years)	31 ± 6
BMI (kg/m^2)	23.4 ± 2.0
White blood cells ($\times 10^3 \mu\text{L}$)	4.7 ± 1.3
Red blood cells ($\times 10^6 \mu\text{L}$)	4.9 ± 0.2
Hemoglobin (g/dL)	14.6 ± 1.0
Hematocrit (%)	43.0 ± 2.5
Platelet ($\times 10^3 \mu\text{L}$)	238.1 ± 48.8
Creatinine (mg/dL)	0.85 ± 0.15
Total cholesterol (mg/dL)	172.9 ± 35.4
Triglycerides (mg/dL)	71.8 ± 20.6
HDL (mg/dL)	53.7 ± 10.4
LDL (mg/dL)	106.4 ± 32.0
Total bilirubin (mg/dL)	0.82 ± 0.31
ALT (U/L)	28.4 ± 26.2
CRP (mg/L)	1.5 ± 2.6
Blood glucose level (mg/dL)	93.9 ± 5.8
SBP (mmHg)	120.1 ± 4.1
DBP (mmHg)	77.0 ± 7.1

Data are shown as mean \pm S.D. ALT, alanine transaminase; BMI, body mass index; CRP, C-reactive protein; DBP, diastolic blood pressure; HDL, high-density lipoprotein; LDL, low-density lipoprotein; SBP, systolic blood pressure.

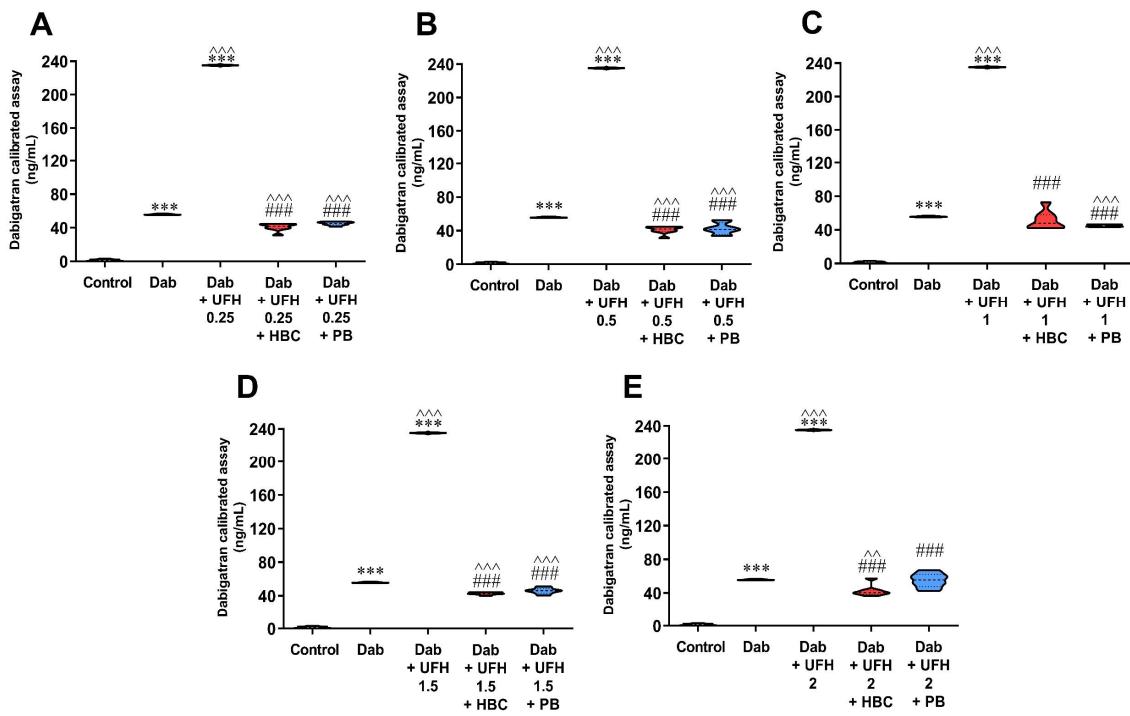


Figure S1. Inhibition of UFH at concentration 0.25 (A), 0.5 (B), 1 (C), 1.5 (D) and 2 U/mL (E) by HBC or polybrene at a concentration of 50 µg/mL during testing of dabigatran (50 ng/mL) anticoagulant activity by TT converted to ng/mL for dabigatran in human plasma. ***p < 0.001 vs control; ^p < 0.01, ^^p < 0.001 vs dabigatran; ###p < 0.001 vs dabigatran with UFH, Mann-Whitney test. Results are shown as violin plots with minimum and maximum values, and analyzed with GraphPad Prism 8 software. Dab, dabigatran; HBC, heparin-binding copolymer; PB, polybrene; UFH; unfractionated heparin.

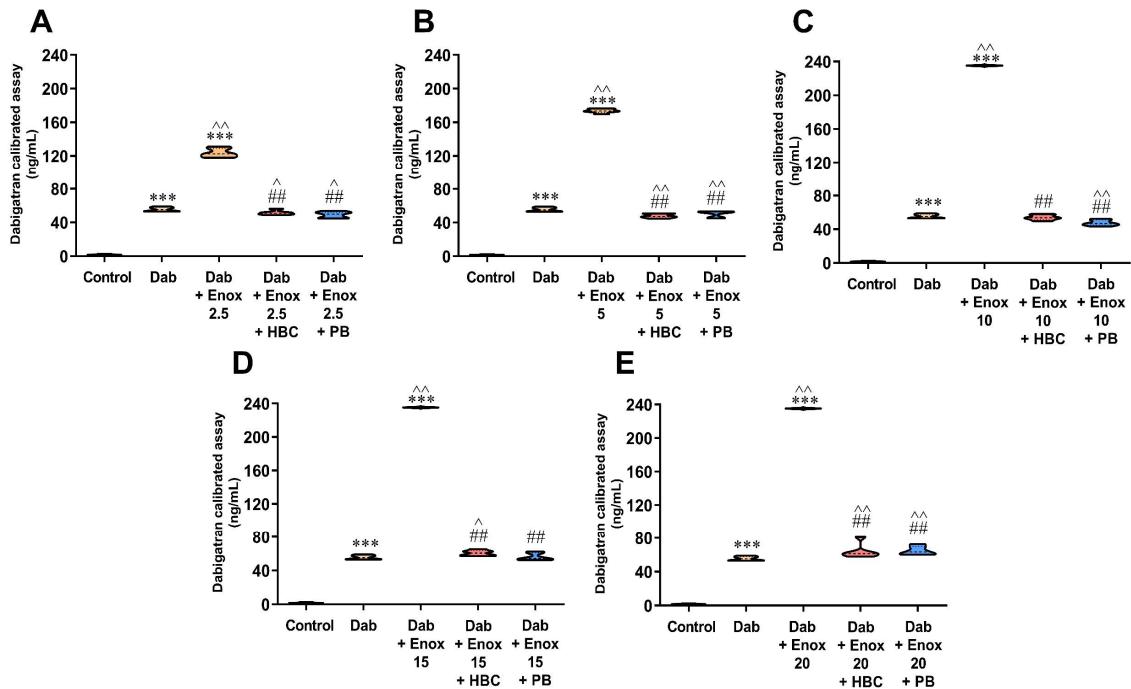


Figure S2. Inhibition of enoxaparin at a concentration of 2.5 (A), 5 (B), 10 (C), 15 (D) and 20 $\mu\text{g}/\text{mL}$ (E) by HBC or polybrene at a concentration of 50 $\mu\text{g}/\text{mL}$ during testing of dabigatran (50 ng/mL) anticoagulant activity by TT converted to ng/mL for dabigatran in human plasma. *** $p < 0.001$ vs control; ^ $p < 0.05$, ^^ $p < 0.01$ vs dabigatran; ## $p < 0.01$ vs dabigatran with enoxaparin, Mann-Whitney test. Results are shown as violin plots with minimum and maximum values, and analyzed with GraphPad Prism 8 software. Dab, dabigatran; Enox, enoxaparin; HBC, heparin-binding copolymer; PB, polybrene.

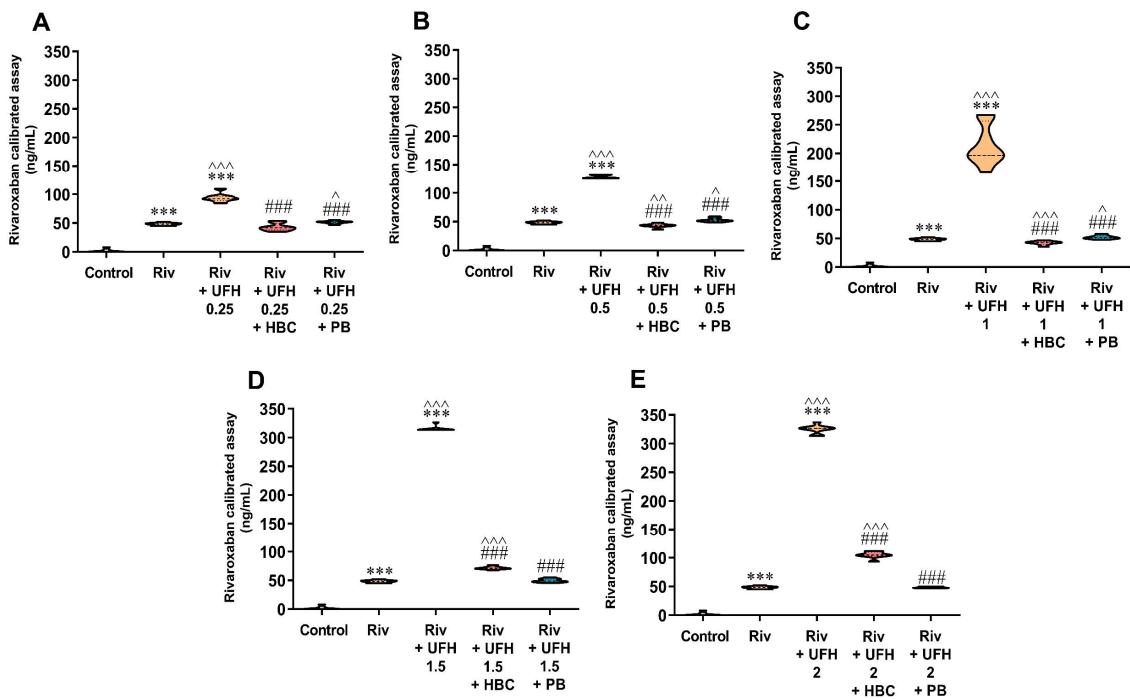


Figure S3. Inhibition of UFH at concentration 0.25 (A), 0.5 (B), 1 (C), 1.5 (D) and 2 U/mL (E) by HBC (10 μ g/mL) and polybrene (50 μ g/mL) during testing of rivaroxaban (50 ng/mL) anticoagulant activity converted to rivaroxaban calibrated anti-factor Xa assay in human plasma. *** $p < 0.001$ vs control; $^p < 0.05$, $^{^p} < 0.01$, $^{^{^p}} < 0.001$ vs rivaroxaban; $^{###}p < 0.001$ vs rivaroxaban with UFH, Mann-Whitney test. Results are shown as violin plots with minimum and maximum values, and analyzed with GraphPad Prism 8 software. HBC, heparin-binding copolymer; PB, polybrene; Riv, rivaroxaban; UFH, unfractionated heparin.

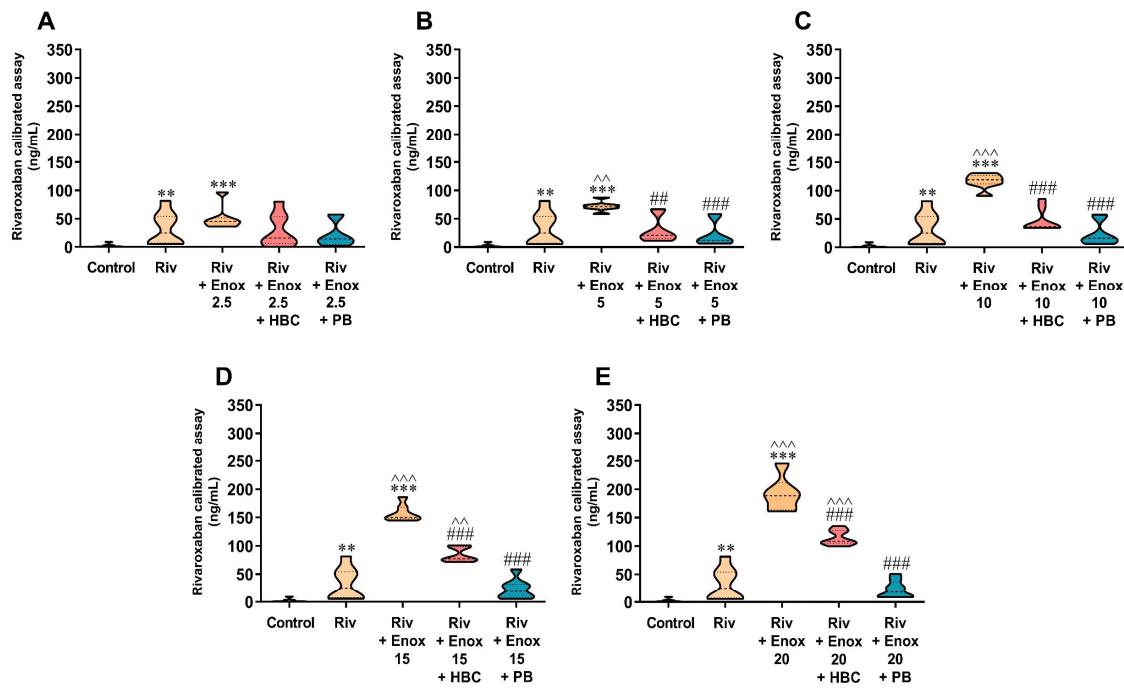


Figure S4. Inhibition of enoxaparin at concentration 2.5 (A), 5 (B), 10 (C), 15 (D) and 20 $\mu\text{g}/\text{mL}$ (E) by HBC (10 $\mu\text{g}/\text{mL}$) and polybrene (50 $\mu\text{g}/\text{mL}$) during testing of rivaroxaban (50 ng/mL) anticoagulant activity converted to rivaroxaban calibrated anti-factor Xa assay in human plasma. ** $p < 0.01$, *** $p < 0.001$ vs control; ^ $p < 0.01$, ^ $p < 0.001$ vs rivaroxaban; # $p < 0.01$, ## $p < 0.001$ vs rivaroxaban with enoxaparin, Mann-Whitney test. Results are shown as violin plots with minimum and maximum values, and analyzed with GraphPad Prism 8 software. Enox, enoxaparin; HBC, heparin-binding copolymer; PB, polybrene; Riv, rivaroxaban.