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**Online supplemental material to:**

**Riva N, Vella K, Hickey K, Gatt P, Grima C, Zammit D, Ageno W, Kitchen S, Makris M, Gatt A. The effect of DOAC-Stop<sup>®</sup> on several oral and parenteral anticoagulants.**

**Table S1. Protocols for samples preparation (A) and for DOAC-Stop® treatment (B)**

**A. Samples preparation**

- The two pools of normal platelet poor plasma (NPP) were obtained by collecting the remaining plasma from anonymised citrated samples (Vacurette, Greiner Bio-One, Austria, containing sodium citrate 0.109M/3.2%) with normal prothrombin time (PT) and activated partial thromboplastin time (aPTT), received from the outpatient preoperative assessment clinic and analysed in the Coagulation Laboratory at Mater Dei Hospital (Msida, Malta), between August and November 2018. Approximately 355 samples were used to create the first batch of NPP and 490 samples to create the second batch of NPP. All samples underwent double centrifugation (10 minutes at 2500g twice, using the Eppendorf Centrifuge 5810, Eppendorf AG, Germany) to obtain the platelet-poor plasma and they were frozen at -80°C. They were subsequently spiked with the anticoagulants at the planned concentrations. The first batch of NPP was used to spike with apixaban, edoxaban, rivaroxaban, danaparoid, enoxaparin, and bivalirudin. The second batch of NPP was used to spike with argatroban, dabigatran, and fondaparinux. The two batches of NPP were tested before spiking and showed comparable properties:
  - NPP Batch I: platelet count  $3 \times 10^9/L$ , PT 10.5 sec, aPTT 26.8 sec
  - NPP Batch II: platelet count  $1 \times 10^9/L$ , PT 10.2 sec, aPTT 27.0 sec
- The three pools of warfarinised platelet poor plasma (WPP) were obtained by collecting the remaining plasma from anonymised citrated samples from outpatients receiving warfarin treatment. Approximately 60 samples with INR between 2.0 and 3.0 were used to create the WPP with final INR 2.11. Approximately 41 samples with INR between 3.0 and 4.0 were used to create the WPP with final INR 3.18. Approximately 31 samples with INR between 4.0 and 6.0 were used to create the WPP with final INR 4.22. All samples underwent double centrifugation (10 minutes at 2500g twice, using the Eppendorf Centrifuge 5810, Eppendorf AG, Germany) to obtain the platelet-poor plasma and they were frozen at -80°C.

## **B. DOAC-Stop treatment**

1. The frozen aliquots were thawed for 5 minutes in the water bath at 37°C;
2. The test plasma was transferred in a polypropylene centrifuge tube;
3. A mini-tab of DOAC-Stop<sup>®</sup> was added for every  $1 \pm 0.1$  ml of plasma and it was gently mixed until dissolved (this step was skipped for the untreated plasma);
4. The tubes were placed on the roller mixer for 5 minutes for further mixing;
5. The tubes were centrifuged for 5 minutes at 2000g (corresponding to 3150 rpm on the Eppendorf Centrifuge 5810, using the rotor A-4-62 with a radius of 18 cm) in order to centrifuge down the particulate of DOAC-Stop<sup>®</sup>;
6. The supernatant plasma was transferred in another polypropylene tube and used immediately after preparation for the aPTT and PT/INR assays and for the native TEG. Some aliquots of plasma (both untreated and treated) were frozen at -80°C for the other tests (anti-Xa, DTT, LA, factor assays, CAT).

**Table S2. Instruments and reagents used for each assay**

<b>Assay</b>	<b>Instruments and reagents</b>
Anti-Xa (enoxaparin)	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Liquid Anti-Xa kit (Instrumentation Laboratory, Italy)
Anti- Xa (fondaparinux)	Sysmex CS-5100 (Siemens Healthcare Diagnostics Products GmbH, Germany) Chromogenix Coamatic® Heparin kit (Instrumentation Laboratory, USA)
Anti-Xa (apixaban, edoxaban, rivaroxaban)	Sysmex CS-5100 (Siemens Healthcare Diagnostics Products GmbH, Germany) Biophen DiXal kit (Hyphen BioMed, France)
Diluted thrombin time	Sysmex CS-5100 (Siemens Healthcare Diagnostics Products GmbH, Germany) Hemoclot Thrombin Inhibitors kit (Hyphen BioMed, France)
Activated partial thromboplastin time (aPTT)	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® SynthASil reagent (Instrumentation Laboratory, Italy).
Prothrombin time (PT) and international normalised ratio (INR)	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® RecombiPlasTin 2G reagent (Instrumentation Laboratory, Italy)
Lupus Anticoagulant (dRVVT)	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® dRVVT Screen and dRVVT Confirm (Instrumentation Laboratory, Italy)
Fibrinogen (Clauss method)	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Q.F.A. Thrombin (Bovine)
Factor II	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Factor II deficient plasma (Instrumentation Laboratory, Italy)
Factor VII	ACL TOP 500 (Instrumentation Laboratory, Italy) Coagulation Factor VII Deficient Plasma (Siemens Healthcare Diagnostics Products GmbH, Germany)
Factor VIII	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Factor VIII deficient plasma (Instrumentation Laboratory, Italy)
Factor IX	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Factor IX deficient plasma (Instrumentation Laboratory, Italy)
Factor X	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Factor X deficient plasma (Instrumentation Laboratory, Italy)
Factor XI	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Factor XI deficient plasma (Instrumentation Laboratory, Italy)
Factor XII	ACL TOP 500 (Instrumentation Laboratory, Italy) HemosIL® Factor XII deficient plasma (Instrumentation Laboratory, Italy)
Fluorogenic Calibrated Automated Thrombin Generation Assay (CAT)	Fluoroskan Ascent fluorimeter (Thermo Electron Corporation, Helsinki, Finland) Thrombinscope BV version 3.4.0.154 (Maastricht, The Netherlands) Lyophilised thrombin calibrator (Thrombinscope BV, The Netherlands) Lyophilised PPP-Reagent (Thrombinscope BV, The Netherlands) FluCa-kit (Thrombinscope BV, The Netherlands) Two calibrator wells and two test wells Thrombin calibrator 20 µl + PPP 80 µl + FluCa solution 20 µl Trigger solution 20 µl + PPP 80 µl + FluCa solution 20 µl
Native thromboelastography (TEG)	TEG®5000 (Thromboelastograph Hemostasis Analyser, Haemonetics Corp, USA) TEG Analytical Software version 4.2.3 (Haemonetics Corp, USA) Plain disposable cups and pins (Haemonetics Corp, USA) Two channels simultaneously Calcium chloride (CaCl <sub>2</sub> 0.2M) 30 µl + citrated PPP 330 µl
Platelet count	Sysmex XN-9000 analyser (Siemens Healthcare Diagnostics Products GmbH, Germany), fluorescence method

**Table S3. Changes in anticoagulant concentrations, PT/INR and aPTT results after DOAC-Stop® treatment**

		Untreated					Treated with DOAC-Stop®				
Assay		Concentration*	PT (sec)	INR	aPTT (sec)	aPTT (ratio)	Concentration*	PT (sec)	INR	aPTT (sec)	aPTT (ratio)
Normal ranges			9.2-11.8	0.84-1.04	24.8-35.0	0.89-1.16		9.2-11.8	0.84-1.04	24.8-35.0	0.89-1.16
Normal plasma	Batch I	NA	10.4	1.00	28.3	0.95	NA	10.6	1.02	28.1	0.94
	Batch II	NA	10.7	1.03	27.3	0.92	NA	10.6	1.02	27.5	0.92
Warfarinised plasma	INR 4	NA	43.3	4.22	42.0	1.41	NA	43.1	4.20	42.6	1.43
	INR 3	NA	32.7	3.18	42.3	1.42	NA	33.7	3.28	42.8	1.44
	INR 2	NA	21.8	2.11	35.1	1.18	NA	23.0	2.23	36.5	1.22
Direct factor Xa inhibitors	Apixaban	265 ng/ml	14.3	1.38	33.2	1.11	0 ng/ml	10.8	1.04	29.4	0.99
	Apixaban	182 ng/ml	12.9	1.24	33.1	1.11	0 ng/ml	10.7	1.03	29.8	1.00
	Edoxaban	220 ng/ml	14.4	1.39	36.1	1.21	4 ng/ml	10.8	1.04	28.9	0.97
	Edoxaban	151 ng/ml	13.2	1.27	33.6	1.13	4 ng/ml	10.8	1.04	28.7	0.96
	Rivaroxaban	339 ng/ml	20.0	1.94	36.3	1.22	0 ng/ml	10.9	1.05	28.7	0.96
	Rivaroxaban	241 ng/ml	17.0	1.64	35.0	1.17	0 ng/ml	10.9	1.05	29.5	0.99
Direct thrombin inhibitors	Argatroban	6.16 µg/ml	52.6	5.14	138.4	4.64	0.03 µg/ml	11.0	1.06	37.5	1.26
	Argatroban	3.06 µg/ml	29.4	2.86	100.8	3.38	0.01 µg/ml	10.8	1.04	34.8	1.17
	Bivalirudin	26.4 µg/ml	121.8	12.00	210.3	7.05	0 µg/ml	11.8	1.14	46.8	1.57
	Bivalirudin	13.3 µg/ml	70.7	6.93	158.2	5.31	0 µg/ml	11.1	1.07	40.2	1.35
	Dabigatran	318 ng/ml	14.2	1.37	63.2	2.12	0 ng/ml	11.1	1.07	33.1	1.11
	Dabigatran	203 ng/ml	13.2	1.27	56.1	1.88	0 ng/ml	11.1	1.07	32.1	1.08
Indirect factor Xa inhibitors	Enoxaparin	1.68 U/ml	12.6	1.21	70.5	2.37	1.66 U/ml	12.9	1.24	74.6	2.50
	Enoxaparin	0.93 U/ml	11.4	1.10	50.8	1.70	0.92 U/ml	11.7	1.13	51.3	1.72
	Fondaparinux	2.16 µg/ml	11.8	1.14	34.3	1.15	2.14 µg/ml	11.9	1.15	34.1	1.14
	Fondaparinux	1.62 µg/ml	11.1	1.07	35.0	1.17	1.56 µg/ml	11.5	1.11	35.9	1.20

Out-of-range values are reported in red.

\* Anticoagulant concentration was measured with the Anti-Xa assays for apixaban, edoxaban, rivaroxaban, enoxaparin, fondaparinux, and with the diluted thrombin time assays for argatroban, bivalirudin, dabigatran. The lower limit of detection for apixaban, dabigatran, edoxaban and rivaroxaban was 30 ng/ml; for argatroban 0.03 µg/ml.

Legend: aPTT = activated partial thromboplastin time, INR = international normalised ratio, NA = not applicable, PT = prothrombin time

**Table S4. Changes in lupus anticoagulant results after DOAC-Stop® treatment**

		Untreated			Treated with DOAC-Stop®		
Assay		dRVVT Screen	dRVVT Confirm	NR	dRVVT Screen	dRVVT Confirm	NR
Normal value				≤ 1.2			≤ 1.2
Normal plasma	Batch I	0.94	0.93	1.01	0.95	0.94	1.01
	Batch II	0.96	0.92	1.03	0.95	0.92	1.03
Warfarinised plasma	INR 4.22	1.61	1.54	1.05	1.62	1.60	1.01
	INR 3.18	1.69	1.44	1.17	1.69	1.45	1.16
	INR 2.11	1.38	1.27	1.09	1.40	1.28	1.09
Direct factor Xa inhibitors	Apixaban 265 ng/ml	1.44	1.58	0.91	0.96	0.96	1.00
	Apixaban 182 ng/ml	1.26	1.46	0.86	0.98	0.95	1.03
	Edoxaban 220 ng/ml	2.25	2.24	1.01	0.98	0.97	1.01
	Edoxaban 151 ng/ml	1.93	1.91	1.01	0.97	0.95	1.02
	Rivaroxaban 339 ng/ml	2.45	1.83	1.34	0.99	0.96	1.03
	Rivaroxaban 241 ng/ml	2.12	1.58	1.34	0.98	0.95	1.03
Direct thrombin inhibitors*	Argatroban 6.16 µg/ml	4.84	failed	failed	1.26	1.31	0.96
	Bivalirudin 26.4 µg/ml	failed	failed	failed	1.87	1.60	1.16
	Dabigatran 318 ng/ml	2.84	2.81	1.01	1.06	1.07	0.99
	Dabigatran 203 ng/ml	2.45	2.41	1.02	1.04	1.03	1.01
Indirect factor Xa inhibitors	Enoxaparin 1.68 U/ml	1.50	1.45	1.03	1.55	1.48	1.05
	Enoxaparin 0.93 U/ml	1.06	1.04	1.02	1.07	1.07	1.00
	Fondaparinux 2.16 µg/ml	1.19	1.20	0.99	1.21	1.18	1.03
	Fondaparinux 1.62 µg/ml	1.13	1.12	1.01	1.13	1.11	1.02

Out-of-range values are reported in red.

\* A result could not be issued for argatroban 6.16 µg/ml and bivalirudin 26.4 µg/ml because they were outside the upper limit of the test range for the dRVVT Screen (range 16-240 sec) and the dRVVT Confirm (range 6-121 sec). Argatroban 3.06 µg/ml and bivalirudin 13.3 µg/ml could not be tested for lupus anticoagulant due to insufficient plasma.

Legend: dRVVT = dilute Russell's Viper Venom time, NR = Normalised dRVVT ratio

**Table S5. Changes in thrombin generation results after DOAC-Stop® treatment**

<i>Parameters</i>		Untreated				Treated with DOAC-Stop®			
		Lag time (min)	ETP (nM*min)	Peak (nM)	Time to peak (min)	Lag time (min)	ETP (nM*min)	Peak (nM)	Time to peak (min)
<i>Unspiked and unprocessed plasma ranges</i>		<i>3.54-4.34</i>	<i>1852.7-2225.4</i>	<i>243.45-349.02</i>	<i>6.86-8.53</i>	<i>3.54-4.34</i>	<i>1852.7-2225.4</i>	<i>243.45-349.02</i>	<i>6.86-8.53</i>
<b>Normal plasma</b>	Batch I	4.17 (0.23)	1911.0 (52.3)	270.33 (5.48)	8.00 (0)	3.84 (0.23)	2013.0 (12.7)	301.69 (4.96)	7.33 (0)
	Batch II	3.84 (0.23)	1802.5 (64.3)	249.95 (9.58)	8.00 (0)	3.84 (0.23)	1841.5 (156.3)	284.96 (18.87)	7.33 (0)
<b>Warfarinised plasma</b>	INR 4.22	11.67 (0)	275.0 (12.7)	46.67 (1.62)	15.00 (0)	10.84 (0.23)	296.5 (19.1)	51.17 (3.17)	14.00 (0)
	INR 3.18	9.00 (0)	374.0 (19.8)	63.82 (2.19)	12.33 (0)	8.33 (0)	381.5 (16.3)	66.57 (2.34)	11.33 (0)
	INR 2.11	6.50 (0.24)	641.0 (4.2)	121.74 (1.68)	9.17 (0.23)	6.00 (0)	678.5 (44.5)	129.20 (6.39)	8.50 (0.24)
<b>Direct factor Xa inhibitors</b>	Apixaban 265 ng/ml	8.92 (0.47)	643.0 (0)	27.57 (2.54)	14.43 (1.65)	3.91 (0)	1855.5 (23.3)	262.72 (3.20)	7.58 (0)
	Apixaban 182 ng/ml	8.08 (0.24)	830.5 (10.6)	42.94 (0.13)	12.09 (0.23)	3.91 (0)	1857.0 (41.0)	272.97 (5.35)	7.58 (0)
	Edoxaban 220 ng/ml	11.59 (0)	643.0 (5.7)	31.25 (0.64)	24.78 (0.24)	3.74 (0.24)	1945.5 (132.2)	282.46 (11.67)	7.42 (0.23)
	Edoxaban 151 ng/ml	9.92 (0.47)	808.0 (22.6)	40.86 (0.81)	22.95 (0.47)	3.57 (0)	1887.5 (37.5)	275.30 (4.14)	7.42 (0.23)
	Rivaroxaban 339 ng/ml	12.09 (0.23)	467.5 (20.5)	15.66 (0.33)	28.28 (0.47)	3.91 (0)	1956.0 (123.0)	259.95 (11.79)	7.91 (0)
	Rivaroxaban 241 ng/ml	10.42 (0.23)	606.0 (11.3)	23.09 (0.67)	25.45 (0.71)	3.91 (0)	1793.5 (9.2)	243.70 (1.99)	7.91 (0)
<b>Direct thrombin inhibitors</b>	Argatroban 6.16 µg/ml	26.17 (0.23)	No tail found*	3.25 (0)	68.67 (18.86)	4.84 (0.23)	1396.0 (127.3)	183.82 (19.2)	8.84 (0.23)
	Argatroban 3.06 µg/ml	18.50 (0.24)	No tail found*	6.50 (0.12)	36.50 (3.07)	4.33 (0)	1799.5 (7.8)	246.47 (4.82)	8.00 (0)
	Bivalirudin 26.4 µg/ml	46.34 (1.89)	1795.0 (36.8)	286.51 (5.74)	49.83 (2.12)	6.00 (0)	2091.0 (113.1)	348.55 (18.49)	9.17 (0.23)
	Bivalirudin 13.3 µg/ml	30.67 (2.35)	1763.5 (16.3)	312.43 (7.36)	33.67 (2.35)	5.00 (0)	2155.0 (79.2)	336.71 (11.09)	8.33 (0)
	Dabigatran 318 ng/ml	18.50 (0.71)	748.0 (2.8)	148.06 (3.37)	20.83 (0.71)	3.84 (0.23)	1652.5 (23.3)	224.60 (2.05)	7.84 (0.23)
	Dabigatran 203 ng/ml	14.67 (0)	980.0 (2.8)	186.41 (2.50)	17.33 (0)	3.84 (0.23)	1753.5 (139.3)	238.16 (17.67)	8.00 (0)
<b>Indirect factor Xa inhibitors</b>	Enoxaparin 1.68 U/ml	Flat CAT traces**				Flat CAT traces**			
	Enoxaparin 0.93 U/ml	5.84 (0.23)	137.0 (0)	5.61 (0.18)	17.50 (0.71)	4.50 (1.65)	118.0 (2.82)	5.23 (0.18)	18.34 (0.47)
	Fondaparinux 2.16 µg/ml	18.17 (0.71)	151.0 (9.90)	6.90 (0.32)	31.17 (0.23)	15.67 (0)	171.0 (9.90)	8.89 (0.95)	26.34 (0.94)
	Fondaparinux 1.62 µg/ml	14.00 (0)	242.5 (0.71)	12.90 (0.20)	24.84 (0.23)	11.50 (0.24)	274.5 (3.54)	16.56 (0.11)	20.33 (0)

Results are reported as mean (SD) of two measurements. Out-of-range values are reported in red.

\* ETP could not be calculated for the two concentrations of argatroban, because no tail could be identified in the curves obtained from the untreated plasma after 180 min.

\*\* Enoxaparin 1.68 U/ml gave flat curves both before- and after-DOAC Stop®, suggesting no effect of treatment.

Legend: CAT = calibrated automated thrombogram, ETP = endogenous thrombin potential, INR = international normalised ratio



**Table S6. Changes in thromboelastography results after DOAC-Stop® treatment**

<i>Parameters</i>		Untreated				Treated with DOAC-Stop®			
		R time (min)	K time (min)	Angle (deg)	MA (mm)	R time (min)	K time (min)	Angle (deg)	MA (mm)
<i>Unspiked and unprocessed plasma ranges</i>		<i>9.23-15.01</i>	<i>1.56-4.12</i>	<i>40.27-63.44</i>	<i>28.83-36.57</i>	<i>9.23-15.01</i>	<i>1.56-4.12</i>	<i>40.27-63.44</i>	<i>28.83-36.57</i>
<b>Normal plasma</b>	Batch I	10.05 (0.64)	3.05 (0.21)	51.45 (2.05)	30.80 (0.42)	12.55 (0.49)	3.15 (1.06)	47.30 (9.48)	32.15 (2.19)
	Batch II	12.20 (1.41)	2.80 (0.14)	49.75 (2.76)	32.40 (3.68)	16.80 (0.14)	4.10 (2.12)	44.20 (8.63)	32.20 (3.11)
<b>Warfarinised plasma</b>	INR 4.22	18.15 (0.21)	6.60 (0.57)	26.80 (3.25)	32.35 (0.49)	23.80 (1.41)	5.90 (0.28)	35.50 (2.69)	33.65 (0.35)
	INR 3.18	14.25 (0.07)	4.10 (0.14)	44.50 (5.94)	32.35 (2.47)	21.25 (4.31)	5.00 (0.71)	38.30 (7.07)	32.45 (0.64)
	INR 2.11	11.70 (0.42)	3.20 (0.57)	46.50 (6.08)	32.65 (0.07)	15.20 (1.56)	5.00 (3.96)	42.60 (21.92)	34.40 (0.28)
<b>Direct factor Xa inhibitors</b>	Apixaban 265 ng/ml	17.70 (0.14)	8.55 (0.21)	28.25 (2.47)	23.45 (0.64)	16.55 (1.91)	4.50 (1.84)	37.90 (14.42)	29.05 (1.77)
	Apixaban 182 ng/ml	13.80 (1.98)	4.70 (0.14)	40.55 (1.06)	28.75 (0.49)	14.95 (1.91)	3.40 (0)	48.25 (2.05)	29.00 (1.13)
	Edoxaban 220 ng/ml	25.35 (3.18)	8.90 (0.14)	25.05 (3.89)	25.95 (1.63)	16.50 (0.42)	3.65 (0.49)	40.15 (5.59)	30.55 (2.05)
	Edoxaban 151 ng/ml	20.60 (1.41)	9.35 (2.19)	23.35 (4.60)	26.05 (1.63)	13.95 (3.04)	3.10 (0.14)	45.15 (0.35)	29.50 (1.56)
	Rivaroxaban 339 ng/ml	29.80 (2.40)	13.25 (0.49)	17.40 (0.71)	23.30 (1.84)	16.30 (0.14)	3.70 (0.42)	43.75 (0.21)	31.00 (1.27)
	Rivaroxaban 241 ng/ml	19.95 (1.06)	8.10 (0.85)	26.40 (0.57)	25.45 (1.06)	12.00 (2.41)	2.75 (0.78)	54.60 (7.07)	29.80 (0.71)
<b>Direct thrombin inhibitors</b>	Argatroban 6.16 µg/ml	66.85 (4.17)	17.85 (13.65)	14.90 (13.15)	30.10 (3.25)	24.60 (3.68)	6.35 (2.19)	27.95 (4.45)	37.25 (0.07)
	Argatroban 3.06 µg/ml	36.60 (19.66)	7.10 (1.84)	27.15 (8.39)	32.75 (7.42)	17.45 (0.07)	3.25 (0.78)	50.45 (2.76)	34.85 (0.07)
	Bivalirudin 26.4 µg/ml	68.50 (4.81)	22.65 (3.04)	11.40 (3.54)	24.95 (1.06)	21.65 (4.03)	3.00 (0)	51.20 (4.95)	26.75 (0.64)
	Bivalirudin 13.3 µg/ml	33.40 (2.69)	7.65 (3.04)	27.70 (7.21)	27.30 (2.40)	15.75 (2.05)	3.45 (0.49)	47.20 (1.84)	30.35 (0.92)
	Dabigatran 318 ng/ml	47.75 (1.34)	10.20 (7.35)	25.60 (15.27)	33.55 (2.62)	17.80 (1.27)	4.15 (0.92)	41.05 (6.01)	35.35 (0.49)
	Dabigatran 203 ng/ml	33.85 (4.60)	11.80 (11.60)	28.05 (23.55)	31.75 (0.07)	18.55 (4.03)	2.85 (0.07)	54.25 (2.90)	34.15 (1.63)
<b>Indirect factor Xa inhibitors</b>	Enoxaparin 1.68 U/ml	Flat TEG traces*				Flat TEG traces*			
	Enoxaparin 0.93 U/ml	Flat TEG traces*				Flat TEG traces*			
	Fondaparinux 2.16 µg/ml	Flat TEG traces*				Flat TEG traces*			
	Fondaparinux 1.62 µg/ml	Flat TEG traces*				Flat TEG traces*			

Results are reported as mean (SD) of two measurements. Out-of-range values are reported in red.

\* Enoxaparin and fondaparinux gave flat curves both before- and after-DOAC Stop®, suggesting no effect of treatment.

Legend: INR = international normalised ratio, MA = maximum amplitude, TEG = thromboelastography

**Table S7. Changes in factor assays results after DOAC-Stop® treatment**

<i>Factors</i>		Untreated							
		<b>I (g/l)</b>	<b>II (%)</b>	<b>VII (%)</b>	<b>VIII (%)</b>	<b>IX (%)</b>	<b>X (%)</b>	<b>XI (%)</b>	<b>XII (%)</b>
<i>Normal ranges</i>		<b>2-3.93</b>	<b>79-131</b>	<b>70-120</b>	<b>50-150</b>	<b>65-150</b>	<b>77-131</b>	<b>65-150</b>	<b>50-150</b>
<b>Normal plasma</b>	Batch I	4.08	109.0	111.3	148.7	149.5	98.7	117.2	162.5
	Batch II	3.93	103.2	119.8	139.2	145.8	98.7	113.9	148.2
<b>Warfarinised plasma</b>	INR 4.22	4.57	15.3	7.5	165.0	36.6	8.6	115.0	127.0
	INR 3.18	4.00	18.0	11.0	140.6	40.9	10.2	116.1	135.3
	INR 2.11	3.74	29.6	21.4	137.9	59.2	15.6	98.3	123.6
<b>Direct factor Xa inhibitors</b>	Apixaban 265 ng/ml	3.80	81.7	NA	88.8	79.2	75.5	68.9	102.6
	Edoxaban 220 ng/ml	4.08	83.7	NA	90.4	88.2	77.4	74.7	113.1
	Rivaroxaban 339 ng/ml	4.15	63.1	NA	71.6	60.6	57.7	57.6	84.7
<b>Direct thrombin inhibitors</b>	Dabigatran 318 ng/ml	3.51	53.2	NA	34.5	33.9	73.6	32.5	57.4

  

<i>Factors</i>		Treated with DOAC-Stop®							
		<b>I (g/l)</b>	<b>II (%)</b>	<b>VII (%)</b>	<b>VIII (%)</b>	<b>IX (%)</b>	<b>X (%)</b>	<b>XI (%)</b>	<b>XII (%)</b>
<i>Normal ranges</i>		<b>2-3.93</b>	<b>79-131</b>	<b>70-120</b>	<b>50-150</b>	<b>65-150</b>	<b>77-131</b>	<b>65-150</b>	<b>50-150</b>
<b>Normal plasma</b>	Batch I	3.51	100.5	103.6	144.6	135.3	89.5	102.9	145.5
	Batch II	3.62	103.2	109.7	131.7	138.7	88.3	111.8	142.9
<b>Warfarinised plasma</b>	INR 4.22	4.48	15.5	6.9	158.9	34.3	7.2	106.8	123.6
	INR 3.18	3.41	18.2	10.9	132.9	40.0	8.6	109.8	125.9
	INR 2.11	3.93	27.5	21.4	132.9	55.9	12.6	88.0	115.1
<b>Direct factor Xa inhibitors</b>	Apixaban 265 ng/ml	3.41	95.2	NA	122.2	122.5	80.4	101.9	129.3
	Edoxaban 220 ng/ml	3.87	95.2	NA	136.7	130.3	85.9	109.8	137.8
	Rivaroxaban 339 ng/ml	3.93	103.2	NA	129.2	137.0	81.5	104.8	136.5
<b>Direct thrombin inhibitors</b>	Dabigatran 318 ng/ml	3.36	90.4	NA	106.5	115.2	76.4	100.1	125.9

The other samples could not be tested due to insufficient plasma. Out-of-range values are reported in red.

Legend: DOACs = direct oral anticoagulants, INR = international normalised ratio, NA = not available