

Supplementary Table S1 Anticoagulant treatment by country

Country	Total	VKA (N = 3,043)		DOAC (N = 4,991)	
	N	n	%	n	%
Argentina	139	85	61.2%	54	38.8%
Australia	286	33	11.5%	253	88.5%
Belgium	259	33	12.7%	226	87.3%
Brazil	75	49	65.3%	26	34.7%
Canada	446	118	26.5%	328	73.5%
China	216	68	31.5%	148	68.5%
Czech Republic	600	208	34.7%	392	65.3%
Denmark	200	68	34.0%	132	66.0%
Egypt	546	272	49.8%	274	50.2%
France	466	111	23.8%	355	76.2%
Germany	441	22	5.0%	419	95.0%
Hong Kong	68	17	25.0%	51	75.0%
Italy	473	110	23.3%	363	76.7%
Japan	116	11	9.5%	105	90.5%
Malaysia	109	62	56.9%	47	43.1%
Mexico	26	14	53.8%	12	46.2%
Netherlands	186	123	66.1%	63	33.9%
Russia	558	144	25.8%	414	74.2%
South Africa	366	319	87.2%	47	12.8%
South Korea	255	19	7.5%	236	92.5%
Spain	170	152	89.4%	18	10.6%
Switzerland	149	17	11.4%	132	88.6%
Taiwan	198	42	21.2%	156	78.8%
Thailand	170	159	93.5%	11	6.5%
Turkey	369	254	68.8%	115	31.2%
United Arab Emirates	11	3	27.3%	8	72.7%
United Kingdom	757	367	48.5%	390	51.5%
United States	379	163	43.0%	216	57.0%

Abbreviations: DOAC, direct oral anticoagulants; VKA, vitamin K antagonists; VTE, venous thromboembolism.

Supplementary Table S2 Cause of death

Cause of death, n (%)	VKA (N = 122)	DOAC (N = 90)
VTE	6 (4.9)	2 (2.2)
Stroke	2 (1.6)	1 (1.1)
Cardiac	10 (8.2)	11 (12.2)
Cancer-related	42 (34.4)	41 (45.6)
Bleed	6 (4.9)	0 (0.0)
Other	31 (25.4)	14 (15.6)
Unknown	25 (20.5)	21 (23.3)

Abbreviations: DOAC, direct oral anticoagulants; VKA, vitamin K antagonists; venous thromboembolism.

Supplementary Table S3 Site of VTE recurrence

Site of VTE recurrence, <i>n</i> (%)	VKA (<i>N</i> = 91)	DOAC (<i>N</i> = 101)
Site of DVT		
Upper limb	6 (9.2%)	6 (8.3%)
Lower limb	56 (86.2%)	63 (87.5%)
Caval vein (inferior)	3 (4.6%)	1 (1.4%)
Caval vein (superior)	0 (0.0%)	1 (1.4%)
Unusual site DVT	0 (0.0%)	1 (1.4%)
Missing	26	29
Pulmonary branch involved		
Main	10 (32.3%)	4 (13.3%)
Lobar	13 (41.9%)	9 (30.0%)
Segmental	6 (19.4%)	12 (40.0%)
Sub-segmental	2 (6.5%)	5 (16.7%)
Missing	60	71

Abbreviations: DOAC, direct oral anticoagulants; VKA, vitamin K antagonists; VTE, venous thromboembolism.

Supplementary Table S4 Site of major* bleeding

Site of bleed, <i>n</i> (%)	VKA (<i>N</i> = 50)	DOAC (<i>N</i> = 58)
GI lower	11 (22.0)	11 (19.0)
Uterine	6 (12.0)	10 (17.2)
GI upper	5 (10.0)	9 (15.5)
Intramuscular (no compartment syndrome)	4 (8.0)	0 (0.0)
Gingival	3 (6.0)	0 (0.0)
Epistaxis	2 (4.0)	1 (1.7)
Hemoptysis	2 (4.0)	0 (0.0)
Intraocular/Retinal	1 (2.0)	3 (5.2)
Macroscopic hematuria	1 (2.0)	5 (8.6)
Intramuscular (with compartment syndrome)	1 (2.0)	1 (1.7)
Skin (ecchymosis other than instrument site)	1 (2.0)	0 (0.0)
Hemothorax	1 (2.0)	0 (0.0)
Hemorrhagic stroke	1 (2.0)	3 (5.2)
Intra-spinal	0 (0.0)	0 (0.0)
Subconjunctival	0 (0.0)	0 (0.0)
Intra-articular	0 (0.0)	3 (5.2)
Intra-peritoneal	0 (0.0)	1 (1.7)
Retro-peritoneal	0 (0.0)	0 (0.0)
Puncture site	0 (0.0)	0 (0.0)
Hemopericardium	0 (0.0)	2 (3.4)
Other	7 (14.0)	4 (6.9)
Unknown	4 (8.0)	5 (8.6)

Abbreviations: DOAC, direct oral anticoagulants; VKA, vitamin K antagonists; VTE, venous thromboembolism.

*Major bleeding is defined as clinically overt bleeding that is associated with a fall in haemoglobin of 2g/dl or more or a transfusion of 2 or more units of unpacked red blood cells or whole blood or a critical site (intracranial, intraspinal, intraocular, pericardial, intra-articular, intramuscular with compartment syndrome, retroperitoneal), or a fatal outcome.

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