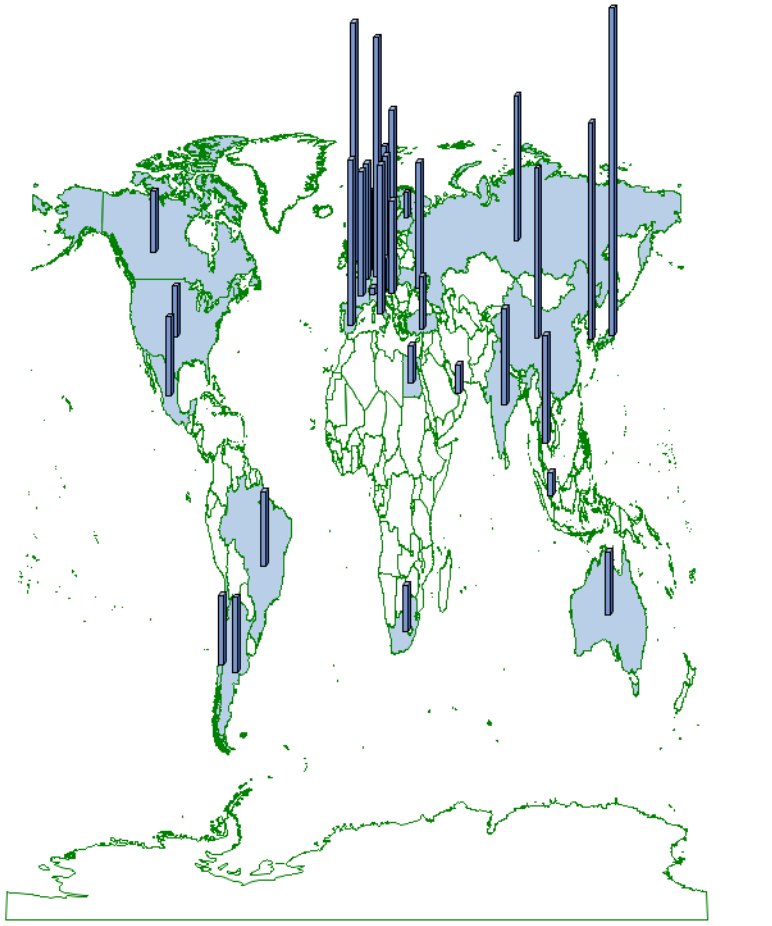
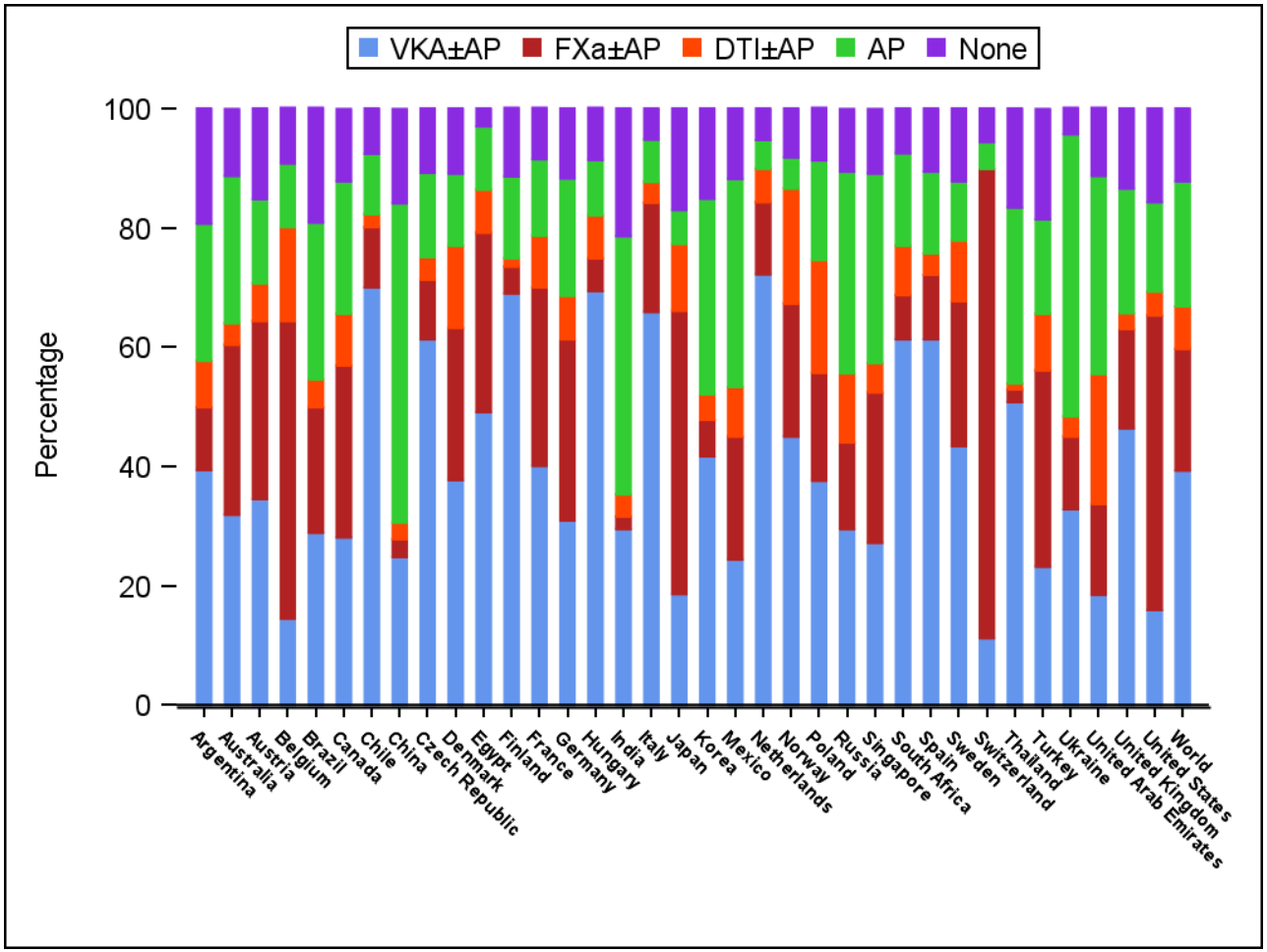
Netherlands

Treatment at diagnosis by country

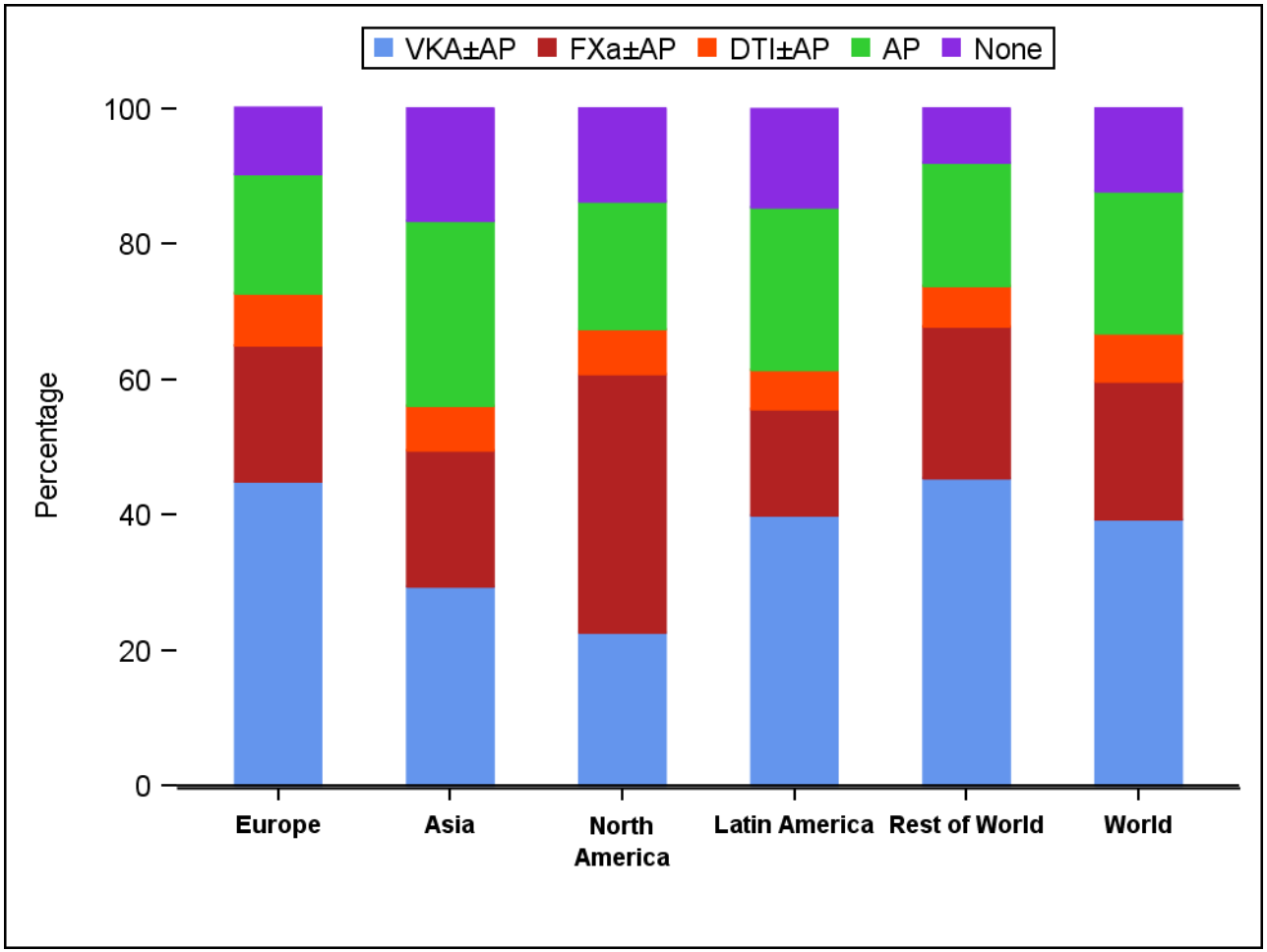
Global enrolment of Prospective patients		
Region	**n**	**%**
Europe	29167	56
Asia	14988	28.8
North America	1618	3.1
Latin America	4247	8.2
Rest of World	2061	4
Total	52081	100



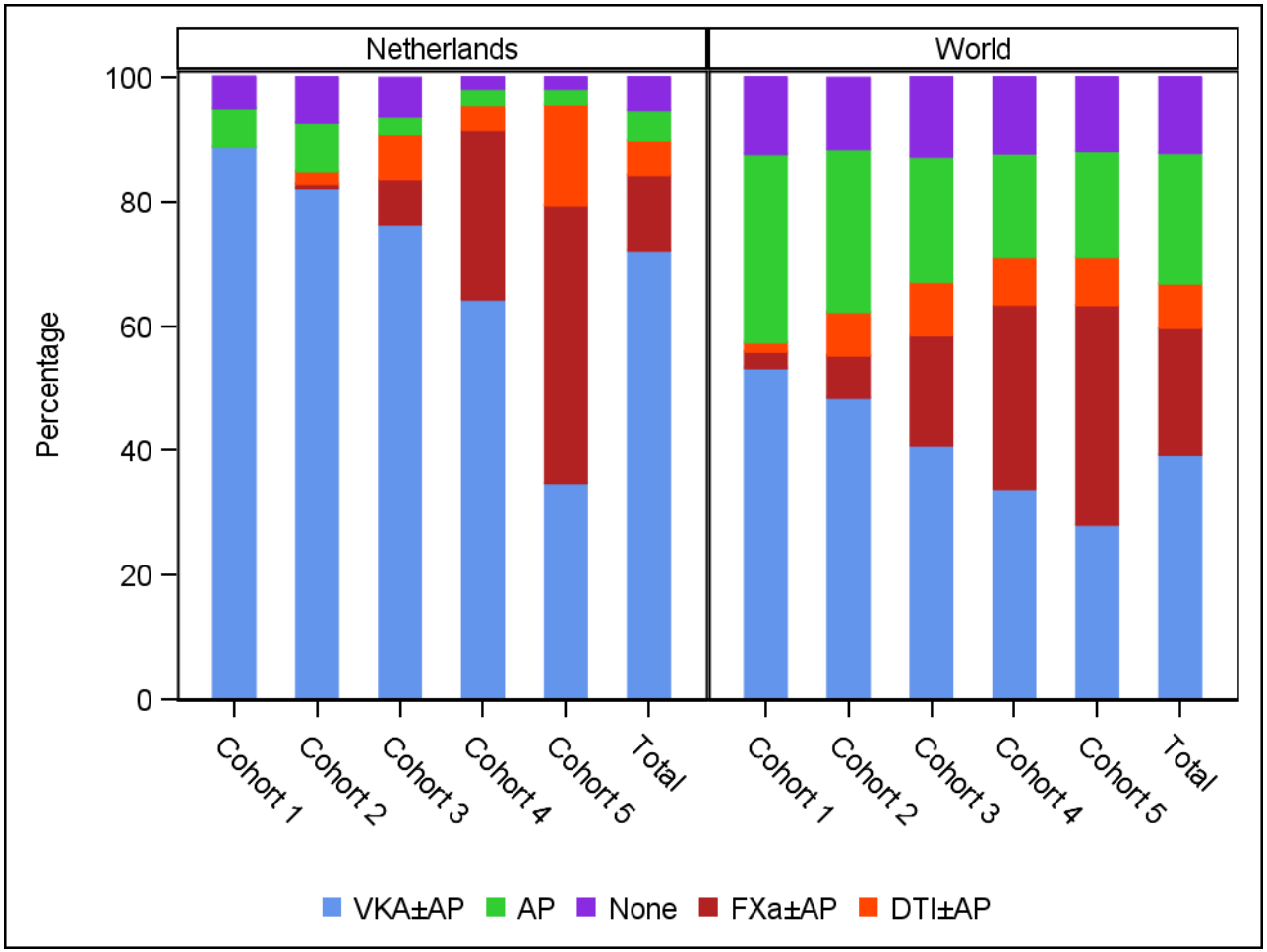
Treatment at diagnosis by country



Treatment at diagnosis by region



Treatment at diagnosis by cohort



Baseline characteristics

		Netherlands N=(1189)	World N=(52081)
Sex	Female, n (%)	504 (42.4)	23015 (44.2)
Age at Diagnosis (Years)	mean (sd)	70.7 (9.9)	69.7 (11.5)
Age Group	<65, n (%)	311 (26.2)	15716 (30.2)
	65-74, n (%)	426 (35.8)	16956 (32.6)
	>=75, n (%)	452 (38.0)	19409 (37.3)
BMI (kg/m²)	mean (sd)	28.5 (5.3)	27.8 (5.7)
Pulse (bpm)	mean (sd)	104.3 (31.8)	90.4 (26.7)
Systolic BP (mm Hg)	mean (sd)	141.2 (22.0)	133.5 (19.8)
Diastolic BP (mm Hg)	mean (sd)	84.3 (15.0)	79.7 (12.9)
Congestive heart failure	n (%)	82 (6.9)	10405 (20.0)
Coronary artery disease	n (%)	222 (18.7)	11251 (21.6)
Acute coronary syndrome	n (%)	166 (14.0)	4914 (9.5)
Carotid Occlusive Disease	n (%)	15 (1.3)	1546 (3.0)
Cirrhosis	n (%)	1 (0.1)	296 (0.6)

Baseline characteristics

		Netherlands N=(1189)	World N=(52081)
Diabetes	n (%)	238 (20.0)	11550 (22.2)
History of Bleeding	n (%)	25 (2.1)	1320 (2.5)
Hypercholesterolaemia	n (%)	422 (36.0)	20975 (41.6)
PE or DVT	n (%)	22 (1.9)	1356 (2.6)
Stroke/TIA	n (%)	137 (11.5)	5961 (11.4)
Treatment Sector	In the private sector, n (%)	4 (0.4)	12547 (28.5)
	In the public sector, n (%)	983 (99.6)	31431 (71.5)

Baseline characteristics

		Netherlands N=(1189)	World N=(52081)
CHADS2 Score	mean (sd)	1.7 (1.1)	1.9 (1.1)
CHA2DS2-VASc Score	mean (sd)	3.1 (1.5)	3.2 (1.6)
HAS BLED Score	mean (sd)	1.4 (0.9)	1.4 (0.9)

Baseline characteristics

		Netherlands N=(1189)	World N=(52081)
Systemic Embolization	n (%)	2 (0.2)	336 (0.6)
Type of AF Diagnosed	New, n (%)	933 (78.5)	23366 (44.9)
	Paroxysmal, n (%)	164 (13.8)	14313 (27.5)
	Permanent, n (%)	33 (2.8)	6639 (12.7)
	Persistent, n (%)	59 (5.0)	7761 (14.9)
Care Setting Speciality at Diagnosis	Cardiology, n (%)	1097 (92.3)	34219 (65.7)
	Geriatrics, n (%)	0 (0.0)	202 (0.4)
	Internal Medicine, n (%)	16 (1.3)	9372 (18.0)
	Neurology, n (%)	14 (1.2)	876 (1.7)
	Primary Care/General Practice, n (%)	62 (5.2)	7410 (14.2)

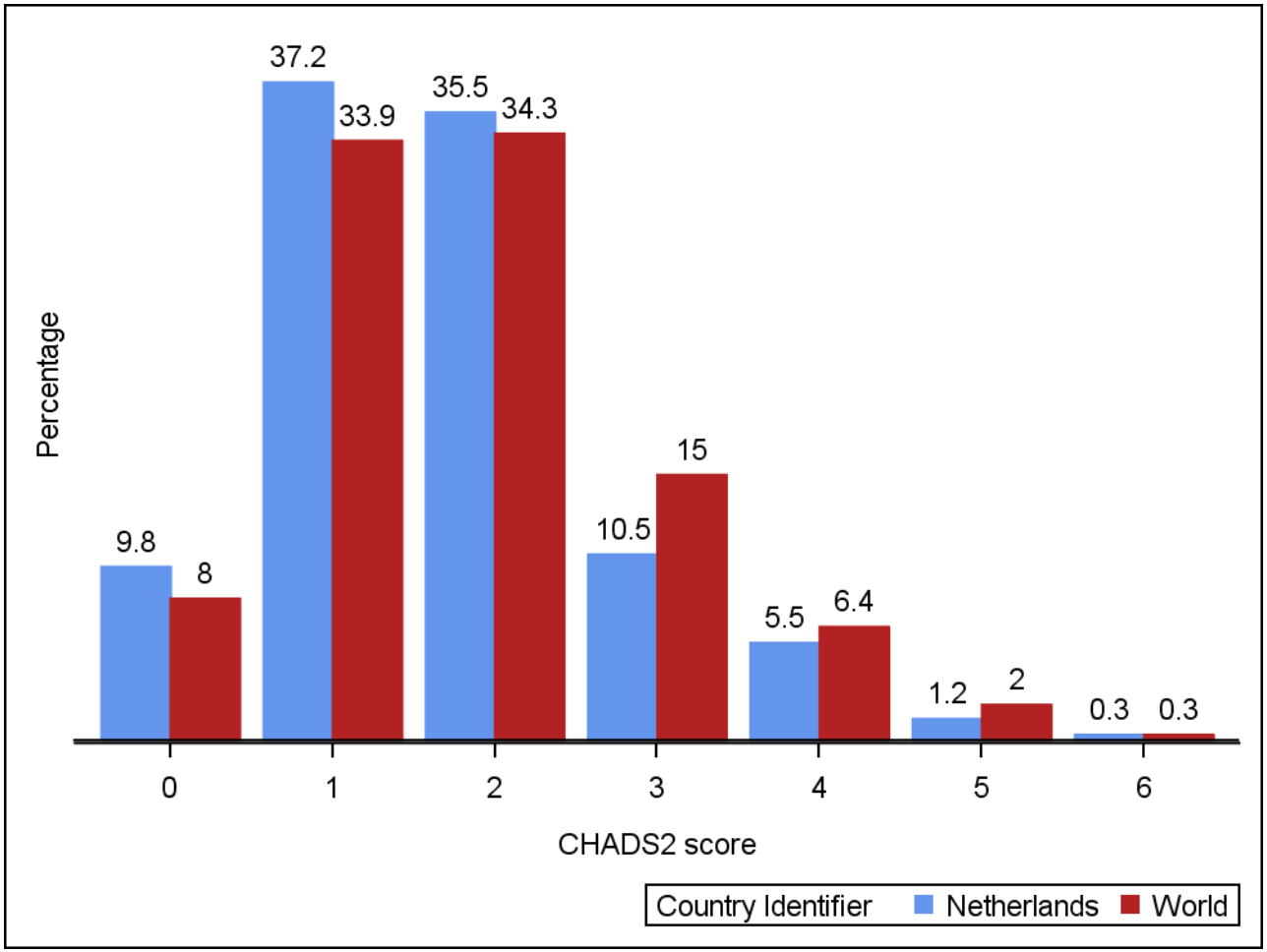
Main reason anticoagulant not used for patients with CHA_2DS_2-VASc >=2 .

	Cohort 1&2	
	Netherlands (N=51) n %	World (N=4137) n %
Patients with CHA_2DS_2-VASc >=2 and no AC treatment at diagnosis		
Alcohol abuse		20 (0.5)
Already taking anti-platelet drugs for other medical condition	4 (7.8)	228 (5.5)
Patient refusal		336 (8.1)
Previous bleeding event	1 (2.0)	63 (1.5)
Taking medication contraindicated or cautioned for use with VKA or AC		19 (0.5)
Other	8 (15.7)	505 (12.2)
Unknown	10 (19.6)	889 (21.5)
Physician's choice	28 (54.9)	2077 (50.2)
Physician's choice - Bleeding risk	4 (7.8)	263 (6.4)
Physician's choice - Concern over patient compliance		182 (4.4)
Physician's choice - Guideline recommendation	2 (3.9)	105 (2.5)
Physician's choice - Fall risk		197 (4.8)
Physician's choice - Low risk of stroke	4 (7.8)	326 (7.9)
Physician's choice - Other	18 (35.3)	1004 (24.3)
Total	51 (100.0)	4137 (100.0)

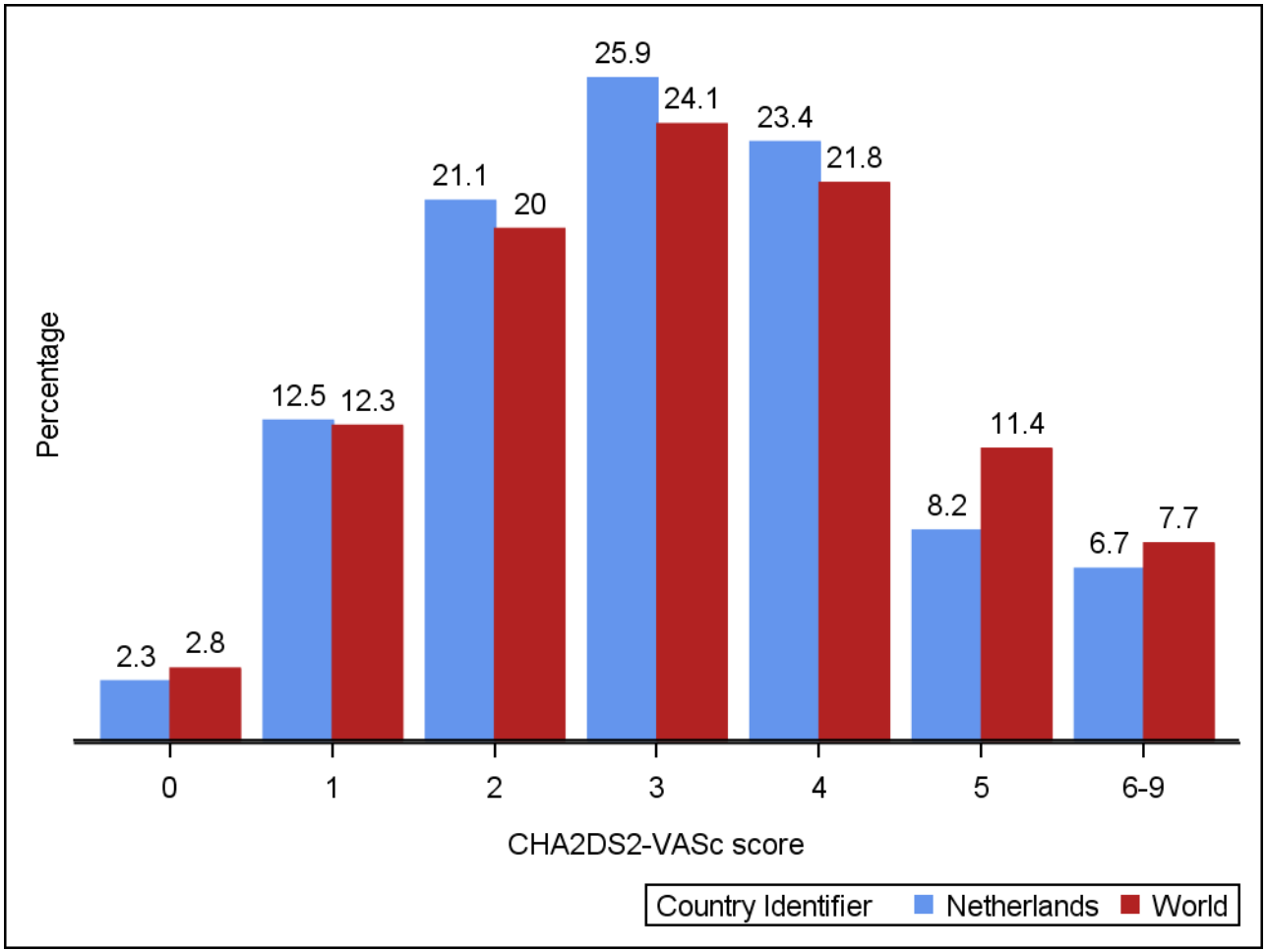
Main reason anticoagulant not used for patients with CHA_2DS_2-VASc >=2.

	Cohort 3&4&5	
	Netherlands (N=24) n %	World (N=6117) n %
Patients with CHA_2DS_2-VASc >=2 and no AC treatment at diagnosis		
Alcohol abuse		32 (0.5)
Already taking anti-platelet drugs for other medical condition		422 (6.9)
Patient refusal	2 (8.3)	645 (10.5)
Previous bleeding event	1 (4.2)	151 (2.5)
Taking medication contraindicated or cautioned for use with VKA or AC	1 (4.2)	63 (1.0)
Other	5 (20.8)	1326 (21.7)
Unknown	4 (16.7)	1597 (26.1)
Physician's choice	11 (45.8)	1881 (30.8)
Physician's choice - Bleeding risk	1 (4.2)	611 (10.0)
Physician's choice - Concern over patient compliance		248 (4.1)
Physician's choice - Guideline recommendation		189 (3.1)
Physician's choice - Fall risk		205 (3.4)
Physician's choice - Low risk of stroke	10 (41.7)	628 (10.3)
Total	24 (100.0)	6117 (100.0)

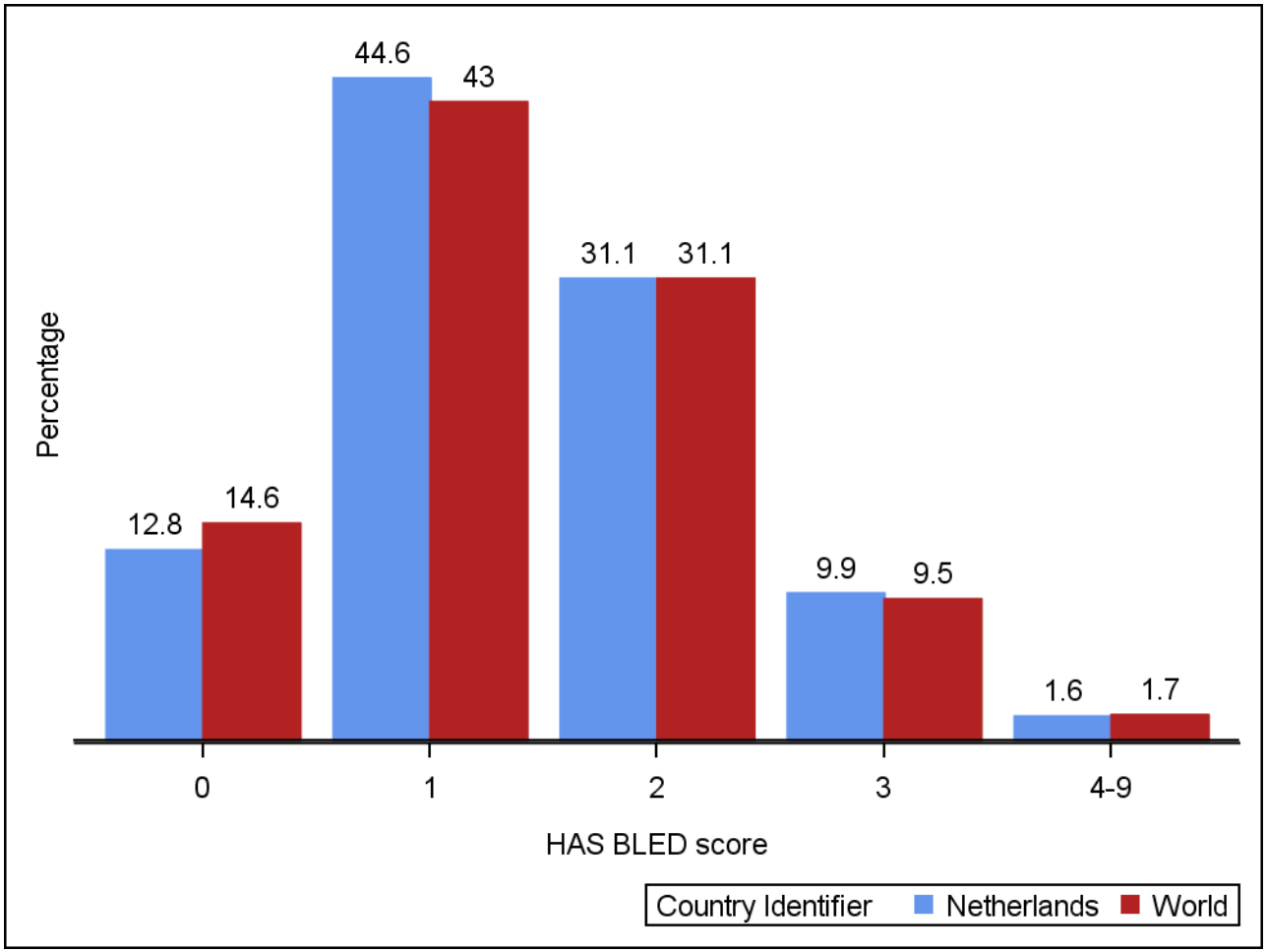
Stroke risk profile: CHADS2



Stroke risk profile: CHA2DS2 VASc



Stroke risk profile: HAS BLED



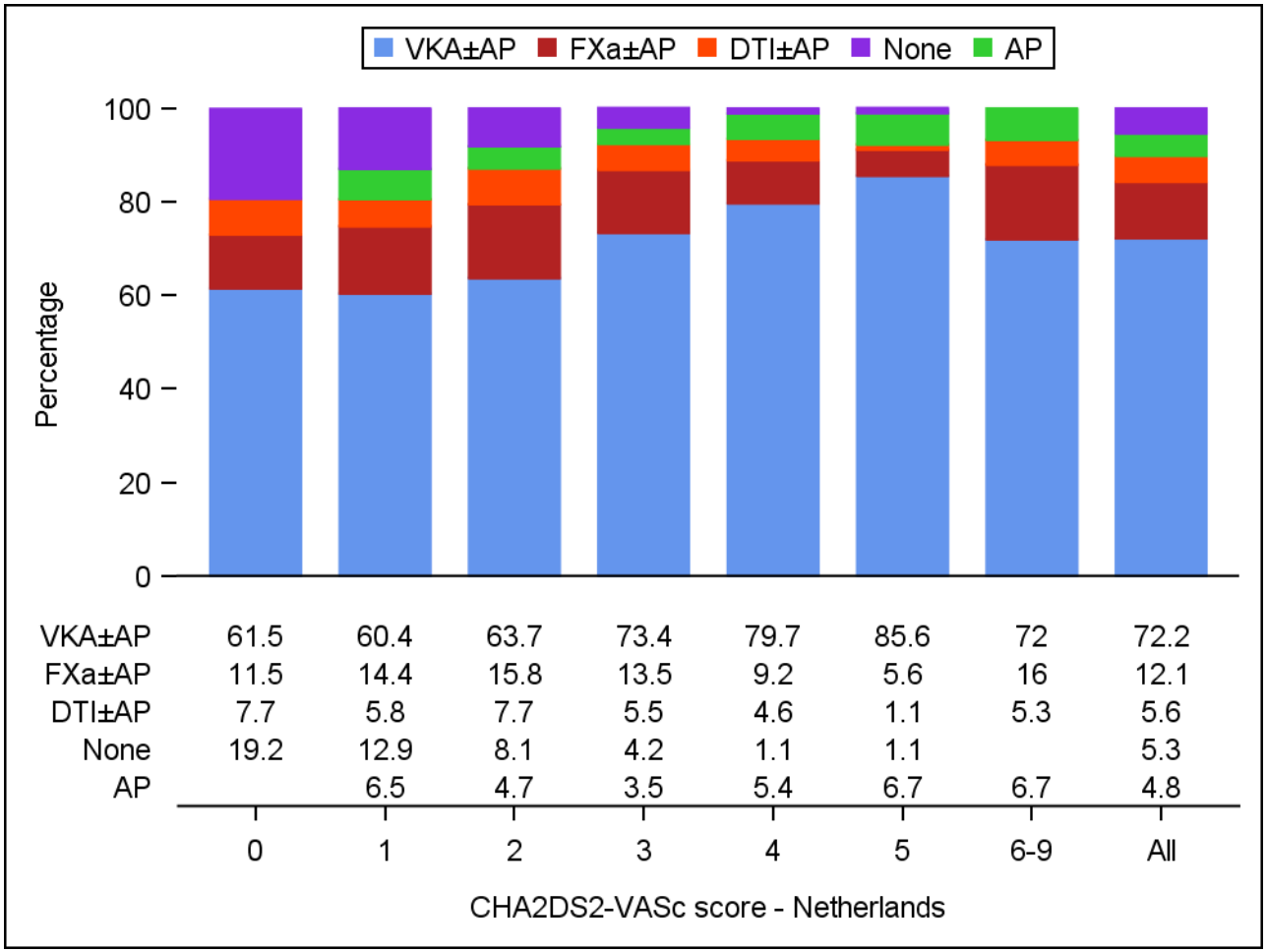
Treatment at diagnosis by CHA2DS2-VASc score - Netherlands

	CHA2DS2-VASc	VKA±AP	FXa±AP	DTI±AP	AP	None	Unknown	Total
		n	n	n	n	n	n	n
Netherlands	Unknown	50	3	5	1	5	0	64
	0	16	3	2	0	5	0	26
	1	84	20	8	9	18	2	141
	2	149	37	18	11	19	3	237
	3	212	39	16	10	12	2	291
	4	208	24	12	14	3	2	263
	5	77	5	1	6	1	2	92
	6-9	54	12	4	5	0	0	75

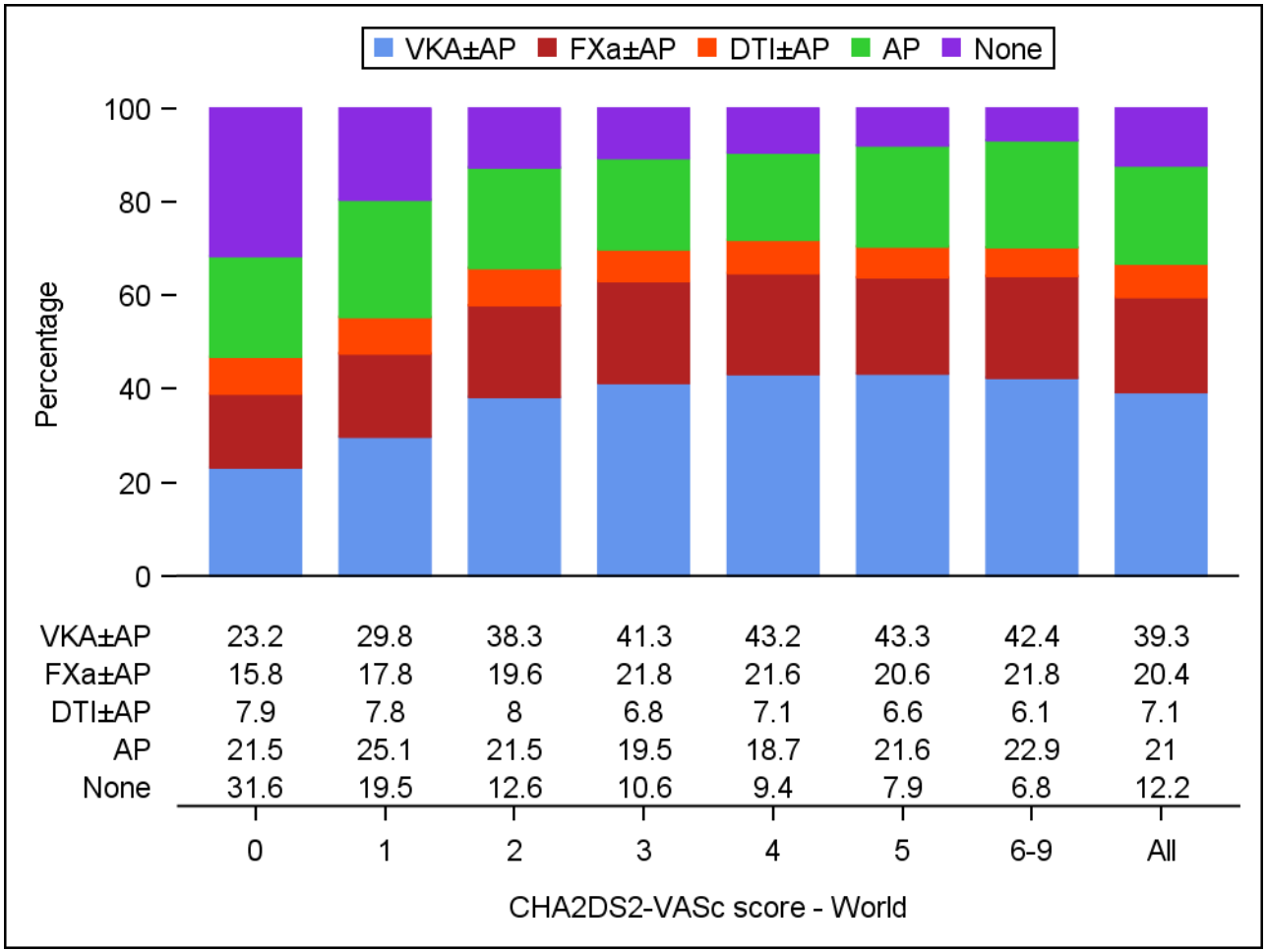
Treatment at diagnosis by CHA2DS2-VASc score - World

	CHA2DS2-VASc	VKA±AP	FXa±AP	DTI±AP	AP	None	Unknown	Total
		n	n	n	n	n	n	n
World	Unknown	461	227	62	286	330	14	1380
	0	325	221	111	302	443	16	1418
	1	1830	1097	479	1545	1196	66	6213
	2	3835	1960	806	2154	1261	125	10141
	3	4969	2625	817	2345	1275	164	12195
	4	4711	2352	772	2043	1028	168	11074
	5	2458	1169	375	1224	449	98	5773
	6-9	1616	831	234	872	261	73	3887

Treatment at diagnosis



Treatment at diagnosis



	0	1	2	3	4	5	6-9	All
VKA±AP	23.2	29.8	38.3	41.3	43.2	43.3	42.4	39.3
FXa±AP	15.8	17.8	19.6	21.8	21.6	20.6	21.8	20.4
DTI±AP	7.9	7.8	8	6.8	7.1	6.6	6.1	7.1
AP	21.5	25.1	21.5	19.5	18.7	21.6	22.9	21
None	31.6	19.5	12.6	10.6	9.4	7.9	6.8	12.2

CHA2DS2-VASc score - World

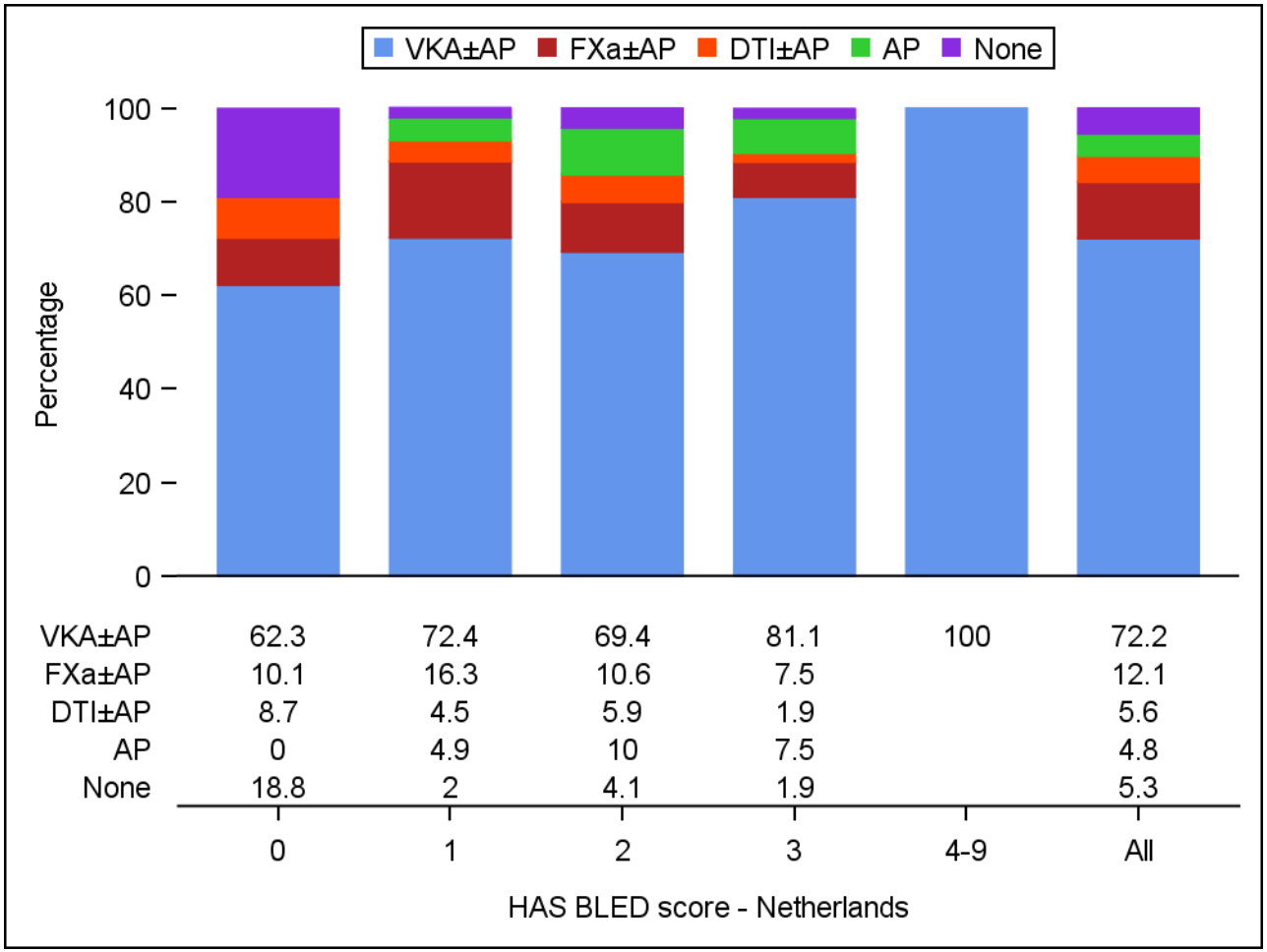
Treatment at diagnosis by HAS BLED score - Netherlands

HASBLED		VKA±AP	FXa±AP	DTI±AP	AP	None	Unknown	Total	
		n	n	n	n	n	n	N	n
Netherlands	Unknown	459	74	38	23	37	2	633	633
	0	43	7	6	0	13	2	71	71
	1	178	40	11	12	5	2	248	248
	2	118	18	10	17	7	3	173	173
	3	43	4	1	4	1	2	55	55
	4-9	9	0	0	0	0	0	9	9

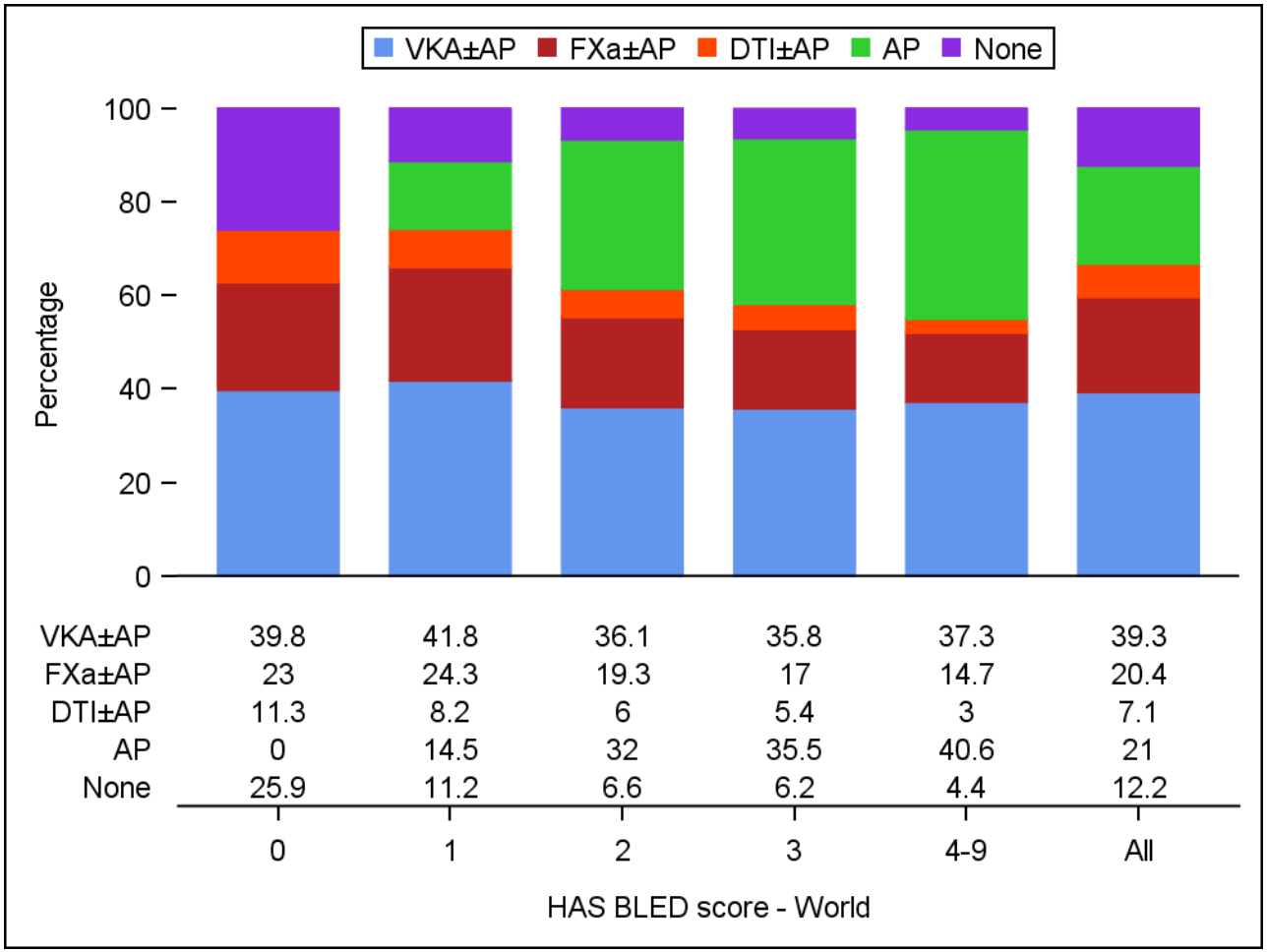
Treatment at diagnosis by HAS BLED score - World

	HASBLED	VKA±AP	FXa±AP	DTI±AP	AP	None	Unknown	Total
		n	n	n	n	n	n	n
World	Unknown	5750	2456	843	3271	2060	147	14527
	0	2144	1242	611	0	1394	96	5487
	1	6650	3866	1303	2302	1779	254	16154
	2	4165	2225	689	3689	763	163	11694
	3	1258	599	191	1250	219	53	3570
	4-9	238	94	19	259	28	11	649

Treatment at diagnosis



Treatment at diagnosis



INR values and time in therapeutic range

Variable	Statistics	Netherlands (N = 850) n %	World (N = 20205) n %
INR value, n(%)	n (missing)	13518 (144)	157134 (8319)
	<2	2008 (14.9)	50514 (32.1)
	2-3	6974 (51.6)	81056 (51.6)
	>3	4536 (33.6)	25564 (16.3)
INR value	n (missing)	13518 (144)	157134 (8319)
	Mean (SD)	2.8 (1.0)	2.4 (0.9)
	Median (IQR)	2.7 (2.2 to 3.3)	2.3 (1.8 to 2.8)
	Min to Max	0.9 to 20.0	0.8 to 20.0
TTR, n(%)	n (missing)	702 (148)	11485 (8720)
	<65	466 (66.4)	6734 (58.6)
	>=65	236 (33.6)	4751 (41.4)
TTR	n (missing)	702 (148)	11485 (8720)
	Mean (SD)	55.3 (19.9)	55.2 (27.3)
	Median (IQR)	56.4 (41.3 to 69.8)	59.0 (37.0 to 76.1)
	Min to Max	0.0 to 100.0	0.0 to 100.0

Event rates during the first year of follow-up (rates per 100 person-years)

	Netherlands		World	
	Events	Rate (95% CI)	Events	Rate (95% CI)
Death	48	4.21 (3.17 to 5.59)	2103	4.38 (4.20 to 4.57)
Cardiovascular Death	18	1.58 (1.00 to 2.51)	789	1.64 (1.53 to 1.76)
Non-cardiovascular death	19	1.67 (1.06 to 2.61)	771	1.61 (1.50 to 1.72)
Undetermined Cause	11	0.97 (0.53 to 1.74)	543	1.13 (1.04 to 1.23)
Stroke/SE	12	1.06 (0.60 to 1.86)	650	1.36 (1.26 to 1.47)
Major Bleeding	31	2.75 (1.93 to 3.91)	407	0.85 (0.77 to 0.94)
Acute coronary syndrome	14	1.23 (0.73 to 2.08)	378	0.79 (0.71 to 0.87)
Congestive hearth failure	18	1.59 (1.00 to 2.53)	1052	2.22 (2.09 to 2.35)

Cause of death during the first year of follow-up

	Netherlands		World	
	n	%	n	%
Cardiovascular causes				
Congestive heart failure	4	22.2	262	33.2
Sudden or unwitnessed death	2	11.1	127	16.1
Myocardial infarction	1	5.6	89	11.3
Non-haemorrhagic stroke (Ischemic Stroke)	1	5.6	86	10.9
Non Cardiovascular causes				
Malignancy	11	57.9	233	30.2
Respiratory failure	3	15.8	142	18.4
Infection	1	5.3	81	10.5
Sepsis	2	10.5	74	9.6

Type of stroke during the first year of follow-up

	Netherlands		World	
	n	%	n	%
Stroke (not including systemic embolism)	12	1.01	585	1.12
Primary Ischemic	5	0.42	406	0.78
of which secondary hemorrhagic ischemic			22	0.04
Primary intracerebral hemorrhage	3	0.25	71	0.14
Intracerebral	3	0.25	44	0.08
Intraventricular			9	0.02
Subarachnoid			13	0.02
Undetermined	4	0.34	108	0.21

Severity of bleeding during the first year of follow-up

Oucome	Netherlands		World	
	n	%	n	%
Major Bleed	31	0.06	407	0.78
Non-Major Clinically Relevant	28	0.05	645	1.24
Minor	77	0.15	1167	2.24
Unknown	10	0.02	136	0.26