Table S1. Anti-Clot Treatment Scale Questionnaire
During the past 4 weeks...

1. How much does the possibility of bleeding as a result of anti-clot treatment limit you from taking part in vigorous physical activities? (e.g. exercise, sports, dancing, etc.)

2. How much does the possibility of bleeding as a result of anti-clot treatment limit you from taking part in your usual activities? (e.g. work, shopping, housework etc.)

3. How bothered are you by the possibility of bruising as a result of anti-clot treatment?

4. How bothered are you by having to avoid other medicines (e.g. aspirin) as a result of anti-clot treatment?

5. How much does anti-clot treatment limit your diet? (e.g. food or drink, including alcohol)

6. How much of a hassle (inconvenience) are the daily aspects of anti-clot treatment? (e.g. remembering to take your medicine at a certain time, taking the correct dose of your medicine, following a diet, limiting alcohol, etc.)

7. How much of a hassle (inconvenience) are the occasional aspects of anti-clot treatment? (e.g. the need for blood tests, going to or contacting the clinic/doctor, making arrangements for treatment while travelling etc.)

Now I want to ask you about daily and occasional aspects of your ACT during the past 4 weeks!.

8. How difficult is it to follow your anti-clot treatment?

9. How time-consuming is your anti-clot treatment?

10. How much do you worry about your anti-clot treatment?

11. How frustrating is your anti-clot treatment?

12. How much of a burden is your anti-clot treatment?

13. Overall, how much of a negative impact has your anti-clot treatment had on your life?

14. How confident are you that your anti-clot treatment will protect your health? (e.g. prevent blood clots, stroke, heart attack, DVT, embolism)

15. How reassured do you feel because of your anti-clot treatment?

16. How satisfied are you with your anti-clot treatment?

17. Overall, how much of a positive impact has your anti-clot treatment had on your life?

ACTS Burdens scale: questions 1-12
ACTS benefits scale: questions 14-16
Questions 13 and 17 are global response question
Patients respond on a 1-5 Likert scale (higher score corresponds to higher satisfaction)

Table S2. Multivariate Model Covariates

1) Demographics
    a. Age: years
    b. Gender: male/female
    c. Level of education: some school/high school graduate/college graduate/post graduate
    d. Payor/Insurance: Medicare or Medicaid/private/other

2) Medical History
    a. Smoking: current/recent or former/non-smoker
    b. Cancer: yes/no
    c. Hypertension: yes/no
    d. Diabetes: yes/no
    e. GI bleed: yes/no
    f. Obstructive sleep apnea: yes/no
    g. Dialysis: yes/no
    h. Hyperlipidemia: yes/no
    i. Anemia: yes/no
    j. Cognitive impairment/dementia: yes/no
    k. Frailty: yes/no
    l. COPD: yes/no

3) Atrial Fibrillation (AF) History
    a. Type of AF: first detected or new onset/paroxysmal/persistent/permanent
    b. AF duration

4) Coronary Artery Disease (CAD) History
    a. History of coronary artery disease: yes/no
    b. Prior MI: yes/no
    c. Prior PCI: yes/no

5) Cardiovascular History (non-AF/CAD)
    a. Peripheral vascular disease: yes/no
    b. Stroke or TIA: yes/no
    c. Congestive heart failure (CHF): no CHF/NYHA class I/NYHA class II/ NYHA class III&IV
    d. Significant valvular disease: yes/no
    e. Prior valve replacement/repair: yes/no

6) Echocardiographic Assessment (TTE or TEE)
    a. LVEF: normal (≥50%)/mild dysfunction (>40%, <50%)/moderate dysfunction (≥30%, ≤40%)/severe dysfunction (<30%)
    b. LAD type: normal/mild enlargement/moderate enlargement/severe enlargement

7) Pharmacotherapy
    a. Current aspirin use: yes/no
    b. Current clopidogrel use: yes/no
    c. Prior antiarrhythmic drug use: yes/no

8) Vital Signs
    a. Height, cm
    b. Diastolic blood pressure, mmHg
    c. Systolic blood pressure, mmHg
    d. Body mass index, kg/m

9) Laboratory Data
    a. eGFR, mg/dL (MDRD)
    b. Hematocrit, %

10) Functional Status
    a. Functional status: living independently/living with assistance, resides in assisted living facility or in skilled nursing home, or bedbound

11) Provider or Site
    a. PI/site specialty: cardiology/electrophysiology/family practice or internal medicine
    b. Region: northeast/east/midwest/west

Table S3. Baseline Characteristics of ORBIT-AF Patients on Warfarin By Study Inclusion Status*

Demographics	Total (N=7,215)	Excluded (N=5,701)	Included (N=1,514)	P value†
Age (mean±SD)	74.2±10.2	74.1±10.3	74.5±9.8	0.252
Female (%)	3057 (42.4)	2416 (42.4)	641 (42.3)	0.798
Race				
White (%)	6443 (89.3)	5065 (88.8)	1378 (91.0)	<0.001
CHADS$_2$ Score Group (%)				0.003
0-1	1700 (23.6)	1299 (22.8)	401 (26.5)	
≥2	5515 (76.4)	4402 (77.2)	1113 (73.5)	
CHADS$_2$ Score (mean±SD)	2.4±1.3	2.4±1.3	2.3±1.3	<0.001
CHA$_2$DS$_2$-VASc Score (mean±SD)	4.1±1.7	4.1±1.7	3.9±1.7	<0.001
Non-Paroxysmal AF (%)	3665 (50.8)	2931 (51.4)	734 (48.5)	<0.001

*Inclusion required ACTS questionnaire completion and follow-up available, †Differences between excluded and included patients assessed using the chi-squared test and Wilcoxon rank-sum test for categorical and continuous variables, respectively
ACTS: anti-clot treatment scale, AF: atrial fibrillation

Table S4. Baseline Characteristics by ACTS Benefit Score Quartile

	ACTS Benefit Score (N=1,513)					
	Total (N=1,513)	Quartile 1 (N=310)	Quartile 2 (N=379)	Quartile 3 (N=492)	Quartile 4* (N=332)	P value[†]
ACTS Score (mean±SD)	10.7±3.4	5.2±1.9	9.8±0.8	12.2±0.4	14.8±0.4	<0.001
Demographics						
Age (mean±SD)	74.5±9.8	74.5±9.6	73.0±10.3	75.3±9.7	75.2±9.3	0.004
Female (%)	641 (42.4)	132 (42.6)	169 (44.6)	214 (43.5)	126 (38.0)	0.298
Race						0.306
White (%)	1377 (91.0)	282 (91.6)	346 (91.3)	438 (89.0)	311 (93.7)	
CHADS$_2$ Score Group (%)						0.437
0-1	401 (26.5)	81 (26.1)	104 (27.4)	120 (24.4)	96 (28.9)	
≥2	1112 (73.5)	229 (73.9)	275 (72.6)	372 (75.6)	236 (71.1)	
CHADS$_2$ Score (mean±SD)	2.3±1.3	2.3±1.2	2.3±1.3	2.3±1.3	2.2±1.2	0.764
CHA$_2$DS$_2$-VASc Score (mean±SD)	3.9±1.7	4.0± 1.6	4.0± 1.8	4.0± 1.7	3.8±1.6	0.612
Non-Paroxysmal AF (%)	734 (48.5)	146 (47.1)	184 (48.6)	238 (48.4)	166 (50.0)	0.580
Heart Failure (%)	427 (28.2)	87 (28.1)	116 (30.6)	133 (27.0)	91 (27.4)	0.678
CKD (%)	525 (34.7)	105 (37.2)	130 (36.6)	171 (38.7)	119 (39.3)	0.884
Coronary Artery Disease (%)	478 (31.6)	109 (35.2)	113 (29.8)	162 (32.9)	94 (28.3)	0.218
Myocardial Infarction (%)	212 (14.0)	48 (15.5)	51 (13.5)	63 (12.8)	50 (15.1)	0.670
Stroke/TIA (%)	254 (16.8)	43 (13.9)	74 (19.5)	87 (17.7)	50 (15.1)	0.178
Peripheral Artery Disease (%)	186 (12.3)	36 (11.6)	44 (11.6)	69 (14.0)	37 (11.1)	0.558
Diabetes (%)	416 (27.5)	100 (32.3)	108 (28.5)	129 (26.2)	79 (23.8)	0.094
Hypertension (%)	1268 (83.8)	264 (85.2)	324 (85.5)	411 (83.5)	269 (81.0)	0.372
Anemia (%)	225 (14.9)	48 (15.5)	52 (13.7)	75 (15.2)	50 (15.1)	0.907
GI Bleed (%)	100 (6.6)	25 (8.1)	22 (5.8)	27 (5.5)	26 (7.8)	0.352
Care Model						
Payor/Insurance (%)						0.075
Medicaid/Medicare	1116 (73.8)	236 (76.1)	265 (69.9)	369 (75.0)	246 (74.1)	
Private	319 (21.1)	61 (19.7)	96 (25.3)	89 (18.1)	73 (22.0)	
Other	78 (5.2)	13 (4.2)	18 (4.8)	34 (6.9)	13 (3.9)	
OAC Management (%)						
Home INR Monitoring	46 (3.0)	6 (1.9)	15 (4.0)	12 (2.4)	13 (3.9)	0.280
Anticoagulation Clinic	601 (39.7)	140 (45.2)	142 (37.5)	198 (40.2)	121 (36.5)	0.103
Cardiology Care (%)	1265 (83.6)	254 (81.9)	322 (85.0)	419 (85.2)	270 (81.3)	0.352
Medication Use						
Prior Warfarin Use[‡] (%)	1397 (92.3)	288 (92.9)	341 (90.0)	458 (93.1)	310 (93.4)	0.258
Beta Blockers (%)	1015 (67.1)	195 (62.9)	252 (66.5)	336 (68.3)	232 (69.9)	0.287
Calcium Channel Blockers[§] (%)	250 (16.5)	62 (20.0)	71 (18.7)	65 (13.2)	52 (15.7)	0.041
Digoxin (%)	387 (25.6)	89 (28.7)	95 (25.1)	133 (27.0)	70 (21.1)	0.121
Amiodarone (%)	125 (8.3)	28 (9.0)	22 (5.8)	47 (9.6)	28 (8.4)	0.225
Rhythm Control Agents (%)	384 (25.4)	78 (25.2)	89 (23.5)	130 (26.4)	87 (26.2)	0.770
Anti-Platelet Agents (%)	558 (36.9)	111 (35.8)	139 (36.7)	189 (38.4)	119 (35.8)	0.847
Statins (%)	789 (52.2)	171 (55.2)	184 (48.6)	269 (54.7)	165 (49.7)	0.152

*ACTS score quartile with greatest benefit, [†]Differences between quartiles assessed using the chi-squared test and Kruskal-Wallis test for categorical and continuous variables, respectively, [‡]Prior to enrollment in ORBIT-AF, [§]Non-dihydropyridine calcium channel blockers

ACTS: anti-clot treatment scale, AF: atrial fibrillation, INR: international normalized ratio, CKD: chronic kidney disease, TIA: transient ischemic attack

Table S5. Association of ACTS Scores with Warfarin and AF Outcomes in Patients with CHA$_2$DS$_2$-VASc ≥ 4

ACTS Burden Score

	Univariate*		Multivariate*,†	
	OR/HR‡ (95% CI)	P Value	OR/HR‡ (95% CI)	P Value
TTR ≥ 75%§	1.03 (1.00 - 1.05)	0.022	1.02 (1.00 - 1.05)	0.072
TTR ≥ 60%§	1.02 (1.00 - 1.03)	0.064	1.01 (0.98 - 1.03)	0.586
Warfarin Discontinuation	0.98 (0.95 - 1.00)	0.044	0.98 (0.95 - 1.01)	0.177
Overall Mortality	0.99 (0.96 - 1.01)	0.382	0.99 (0.96 - 1.02)	0.494
Cardioembolic Event‖	1.04 (0.97 - 1.12)	0.261	1.03 (0.96 - 1.11)	0.399
Major Bleed	1.00 (0.96 - 1.04)	0.943	0.99 (0.94 - 1.04)	0.299
All-Cause Hospitalization	0.99 (0.98 - 1.00)	0.192	0.99 (0.98 - 1.00)	0.114

ACTS Benefit Score

	Univariate*		Multivariate*,†	
	OR/HR‡ (95% CI)	P Value	OR/HR‡ (95% CI)	P Value
TTR ≥ 75%§	1.02 (0.97 - 1.07)	0.499	1.00 (0.94 - 1.07)	0.930
TTR ≥ 60%§	1.01 (0.96 - 1.07)	0.661	1.01 (0.95 - 1.08)	0.743
Warfarin Discontinuation	1.03 (0.96 - 1.10)	0.408	1.03 (0.94 - 1.12)	0.530
Overall Mortality	0.98 (0.93 - 1.03)	0.397	0.95 (0.91 - 1.00)	0.047
Cardioembolic Event‖	1.09 (0.96 - 1.24)	0.179	1.15 (0.98 - 1.35)	0.082
Major Bleed	0.98 (0.90 - 1.07)	0.648	1.01 (0.92 - 1.11)	0.865
All-Cause Hospitalization	0.99 (0.96 - 1.01)	0.353	0.99 (0.96 - 1.02)	0.612

*Logistic regression: TTR; Cox proportional hazard regression: Warfarin discontinuation, Overall mortality, Cardioembolic event, Major bleed, All-cause hospitalization, †Covariates: patient demographics, medical history, AF history, medications, functional status, care model, and region (see Supplemental Table 2 for full covariate list), ‡OR/HR per 1-point increase in ACTS scores; §Over 1 year, ‖Stroke/transient ischemic attack or systemic embolism
ACTS: anti-clot treatment scale, AF: atrial fibrillation, OAC: oral anticoagulation, TTR: time in therapeutic range

Table S6. Association of ACTS Scores with Warfarin and AF Outcomes in Patients with CHA$_2$DS$_2$-VASc < 4

ACTS Burden Score

	Univariate*		Multivariate*,†	
	OR/HR‡ (95% CI)	P Value	OR/HR‡ (95% CI)	P Value
TTR ≥ 75%§	1.01 (0.98 - 1.04)	0.686	1.00 (0.97 - 1.03)	0.878
TTR ≥ 60%§	1.01 (0.99 - 1.04)	0.312	1.00 (0.97 - 1.04)	0.814
Warfarin Discontinuation	0.98 (0.96 - 1.00)	0.092	1.00 (0.97 - 1.03)	0.999
Overall Mortality	1.03 (0.94 - 1.12)	0.575	1.08 (0.94 - 1.25)	0.290
Cardioembolic Event‖	1.03 (0.94 - 1.14)	0.509	-	-
Major Bleed	0.97 (0.93 - 1.01)	0.123	0.95 (0.88 - 1.02)	0.164
All-Cause Hospitalization	0.99 (0.97 - 1.00)	0.057	0.99 (0.98 - 1.01)	0.589

ACTS Benefit Score

	Univariate*		Multivariate*,†	
	OR/HR‡ (95% CI)	P Value	OR/HR‡ (95% CI)	P Value
TTR ≥ 75%§	1.03 (0.97 - 1.09)	0.310	1.03 (0.97 - 1.10)	0.347
TTR ≥ 60%§	1.04 (0.98 - 1.09)	0.167	1.04 (0.97 - 1.11)	0.266
Warfarin Discontinuation	0.99 (0.94 - 1.05)	0.745	0.99 (0.92 - 1.06)	0.695
Overall Mortality	1.06 (0.94 - 1.20)	0.351	1.14 (0.84 - 1.54)	0.406
Cardioembolic Event‖	0.94 (0.82 - 1.09)	0.441	-	-
Major Bleed	0.91 (0.83 - 1.00)	0.042	0.89 (0.79 - 1.01)	0.071
All-Cause Hospitalization	0.99 (.095 - 1.02)	0.494	1.00 (0.97 - 1.04)	0.969

*Logistic regression: TTR; Cox proportional hazard regression: Warfarin discontinuation, Overall mortality, Cardioembolic event, Major bleed, All-cause hospitalization, †Covariates: patient demographics, medical history, AF history, medications, functional status, care model, and region (see Supplemental Table 2 for full covariate list), ‡OR/HR per 1-point increase in ACTS scores; §Over 1 year, ‖Stroke/transient ischemic attack or systemic embolism
ACTS: anti-clot treatment scale, AF: atrial fibrillation, OAC: oral anticoagulation, TTR: time in therapeutic range