Supplementary Tables

Table S1. Additional baseline characteristics of registered patients.

Variable n (%)	All patients (n = 328)	No OAC (n = 116)	OAC (n = 212)	*p* value
Laboratory parameters				
Platelet count, G/L (IQR)	224 (187–266)	226 (196–263)	222 (181–267)	0.471
Albumin, g/L (IQR)	41.2 (38.7–43.2)	41.3 (37.95–42.90)	41.20 (38.90–43.30)	0.319
Cholinesterase, kU/L (IQR)	6.40 (5.13–8.02)	7.79 (5.83–9.15)	6.21 (5.00–7.44)	**0.030**
ALAT, U/L (IQR)	21 (16–28)	21 (15–25)	22 (16–30)	0.111
ASAT, U/L (IQR)	25 (20–31)	23 (20–28)	25 (21–33)	**0.001**
Gamma–GT, U/L (IQR)	34 (22–66)	26 (17–43)	41 (27–77)	**<0.001**
Serum Creatinine, mg/dL (IQR)	1.06 (0.87–1.31)	0.98 (0.82–1.15)	1.13 (0.91–1.34)	**0.003**
Echocardiographic parameters				
E/e', ratio (IQR)	15 (11–20)	14.5 (10.4–20.4)	15 (11–20)	0.802
Left atrial diameter, mm (IQR)	61 (57–66)	58 (54–62)	64 (60–68)	**<0.001**
Right atrial diameter, mm (IQR)	62 (56–68)	57 (52–62)	64 (58–70)	**<0.001**
RV–performance moderately to severely reduced n (%)	40 (13.6)	5 (4.1)	35 (17.0)	**0.001**
Systolic pulmonary arterial pressure, mmHg (IQR)	56 (44–70)	48 (38–62)	59 (48–74)	**<0.001**
Significant tricuspid regurgitation[‡], n (%)	175 (54.5)	43 (35.2)	132 (64.1)	**<0.001**
Cardiac magnetic resonance imaging parameters				
Left atrial area index, mm/m² (IQR)	30 (25–36)	27 (23–33)	32 (27–37)	**<0.001**
Right atrial area index, mm/m² (IQR)	27 (23–34)	24 (21–28)	30 (25–36)	**<0.001**
Left ventricular ejection fraction, % (IQR)	27 (23–34)	67 (60–74)	61 (53–71)	**0.009**
Left ventricular end-diastolic volume index, mL/m² (IQR)	63 (55–72)	118 (102–136)	120 (101–147)	0.617
Left ventricular mass index, g/m² (IQR)	103 (102–146)	98 (83–135)	106 (89–133)	0.257
Right ventricular ejection fraction, % (IQR)	52 (45–61)	55 (47–63)	50 (44–60)	**0.022**
Right ventricular end-diastolic volume index, mL/m² (IQR)	141 (115–182)	130 (112–166)	146 (119–187)	0.056

OAC, oral anticoagulation; ALAT, alanine aminotransferase; ASAT, aspartate aminotransferase; Gamma-GT, gamma-glutamyltransferase; E/e', ratio of early transmitral blood velocity to early diastolic mitral annular velocity; RV, right ventricular. Values are given as median and interquartile range (IQR), or total numbers (n) and percent (%). Bold indicates p < 0.05. * Estimated glomerular filtration rate <60mL/min/1.73m².

Table S2. Cox proportional hazard model of registered patients with regard to all bleeding events.

Variable	Hazard ratio	95% Confidence nterval	*p* value	Adjusted hazard ratio	95% Confidence interval	*p* value
Clinical parameters						
Systolic blood pressure, mmHg	1.01	(1.00–1.03)	0.101			
Diastolic blood pressure, mmHg	0.99	(0.97–1.02)	0.54			
Antithrombotic therapy with VKA	1.44	(1.03–1.68)	**0.038**	1.80	(1.50–1.92)	**0.001**
Antithrombotic therapy with NOAC	1.54	(1.17–1.75)	**0.010**	7.13	(2.60–19.53)	**<0.001**
Antiplatelet therapy	1.52	(1.07–1.75)	**0.029**	1.36	(0.69–1.35)	0.245
Co-morbidities						
CHA$_2$DS$_2$-VASc score	0.95	(0.79–1.15)	0.615			
HAS-BLED score	2.12	(1.66–2.70	**<0.001**	2.23	(1.72–2.89)	**<0.001**
Invasive hemodynamic parameters						
Mean pulmonary arterial pressure, mmHg	1.00	(0.98–1.03)	0.815			
Right atrial pressure, mmHg	1.04	(0.99–1.09)	0.087			
Pulmonary artery wedge pressure, mmHg	1.05	(1.00–1.11)	0.061			
Left ventricular end diastolic pressure, mmHg	1.05	(0.99–1.12)	0.085			

NOAC, non-vitamin K oral anticoagulant; VKA, vitamin K antagonist; CHA$_2$DS$_2$-VASc (Congestive heart failure, Hypertension, Age ≥75 years, Diabetes mellitus, prior Stroke, Vascular disease, Age 65-74 years, Sex category) Score calculates stroke risk for patients with atrial fibrillation; HAS-BLED (Hypertension, Abnormal Renal/Liver Function, Stroke, Bleeding History or Predisposition, Labile INR, Elderly, Drugs/Alcohol Concomitantly) Score estimates risk for major bleeding; ALAT, alanine aminotransferase; ASAT, aspartate aminotransferase; Gamma-GT, gamma-glutamyltransferase; E/e', ratio of early transmitral blood velocity to early diastolic mitral annular velocity; RV, right ventricular Bold indicates p<0.05.

Table 3. Baseline characteristics of orally anticoagulated patients with regard to gastrointestinal bleeding.

Variable N (%)	All patients on OAC (n=212)	No GI bleeding (n=194)	GI bleeding (n=18)	*p* value
Clinical parameters				
Age, years (IQR)	72 (68–77)	72 (68–11)	69 (64–75)	0.326
Female gender, n (%)	144 (67.9)	134 (69.1)	10 (55.6)	0.240
Body mass index, kg/m² (IQR)	30.0 (26.1–33.9)	29.6 (26.0–32.4)	34.1 (33.6–34.9)	**0.018**
6-minute walk distance, m (IQR)	310 (227–390)	317 (247–400)	243 (100–329)	**0.032**
Systolic blood pressure, mmHg (IQR)	138 (122–150)	138 (123–150)	138 (114–160)	0.794
Diastolic blood pressure, mmHg (IQR)	79 (70–85)	79 (70–86)	74 (61–85)	0.930
NYHA functional class ≥ III, n (%)	129 (62.9)	117 (61.9)	12 (75.0)	0.425
NT-proBNP, pg/mL (IQR)	1389 (700–2286)	1066 (420–1979)	1348 (456–2695)	0.789
Antiplatelet therapy, n (%)	29 (14.0)	167 (87.4)	11 (68.8)	**0.039**
Co-morbidities				
Atrial fibrillation, n (%)	179 (84.4)	167 (86.1)	12 (66.7)	**0.030**
CHA$_2$DS$_2$-VASc score, median (IQR)	5.00 (4.00–6.00)	5.00 (4.00–6.00)	4.50 (4.00–6.25)	0.289
HAS-BLED score, median (IQR)	3.00 (2.00–4.00)	3.00 (2.00–4.00)	4.00 (3.00–5.00)	**<0.001**
Arterial hypertension, n (%)	202 (95.7)	184 (95.3)	18 (100)	0.349
Chronic kidney disease*, n (%)	106 (51.2)	92 (48.7)	14 (77.8)	**0.018**
Diabetes mellitus, n (%)	74 (35.4)	69 (36.1)	5 (27.8)	0.479
Anemia, n (%)	124 (59.9)	111 (58.1)	13 (81.3)	0.070
Laboratory parameters				
Platelet count, G/L (IQR)	233.21 (81.00–266.00)	130.02 (181.00–267.00)	267.61 (182.00–246.00)	0.773
Albumin, g/L (IQR)	41.16 (38.70–43.20)	41.04 (38.70–43.20)	42.38 (38.30–43.40)	0.754
Cholinesterase, kU/L (IQR)	6.24 (5.12–7.43)	6.48 (5.16–7.53)	5.57 (4.44–6.35)	0.624
ALAT, U/L (IQR)	25.69 (16.00–31.00)	26.06 (17.00–31.00)	21.72 (14.00–27.00)	0.085
ASAT, U/L (IQR)	27.85 (21.00–33.00)	27.84 (21.00–33.00)	28.00 (23.00–31.00)	0.838
Gamma-GT, U/L (IQR)	76.16 (26.00–78.50)	75.50 (26.00–80.00)	83.22 (28.00–75.00)	0.411
Serum Creatinine, mg/dL (IQR)	1.23 (0.91–1.35)	1.19 (0.90–1.33)	1.73 (1.02–1.70)	0.203
Echocardiographic parameters				
E/e', ratio (IQR)	15.5 (11.0–18.3)	15.5 (11.0–20.0)	16.0 (15.0–18.3)	0.705
Left atrial diameter, mm (IQR)	64 (60–68)	64 (60–68)	62 (56–69)	0.491
Right atrial diameter, mm (IQR)	64 (58–70)	64 (58–70)	65 (58–71)	0.992
RV-performance moderately to severely reduced n (%)	35 (16.5)	30 (15.5)	5 (27.8)	0.178
Systolic pulmonary arterial pressure, mmHg (IQR)	61 (48–74)	61 (48–72)	67 (54–75)	0.070
Significant tricuspid regurgitation, n (%)**	15 (7.7)	11 (6.3)	4 (22.2)	**0.016**

Cardiac magnetic resonance imaging parameters				
Left atrial area index, mm/m² (IQR)	34 (27–37)	34 (27–37)	32 (27–36)	0.732
Right atrial area index, mm/m² (IQR)	32 (25–36)	32 (25–36)	29 (24–35)	0.930
Left ventricular ejection fraction, %	62 (53–71)	62 (53–71)	65 (57–76)	0.664
Left ventricular end-diastolic volume index, mL/m² (IQR)	128 (100–147)	126 (99–142)	157 (114–197)	0.698
Left ventricular mass index, g/m² (IQR)	111 (89–133)	11 (89–133)	118 (92–151)	0.374
Right ventricular ejection fraction, %	51 (44–60)	51 (44–60)	54 (43–63)	0.664
Right ventricular end-diastolic volume index, mL/m² (IQR)	165 (117–187)	164 (117–186)	187 (124–195)	0.732
Invasive hemodynamic parameters				
Mean pulmonary arterial pressure, mmHg (IQR)	35 (28–39)	34 (27–38)	41 (34–48)	**0.040**
Right atrial pressure, mmHg (IQR)	12 (8–16)	12 (7–15)	19 (16–21)	**<0.001**
Pulmonary artery wedge pressure, mmHg (IQR)	20 (17–24)	19 (16–23)	26 (22–31)	**0.005**
Left ventricular end diastolic pressure, mmHg (IQR)	19 (16–23)	19 (15–22)	23 (19–28)	0.119
Stroke volume index, mL/m² (IQR)	38.99 (30.83–46.12)	38.51 (30.80–45.48)	43.37 (34.27– 47.62)	1.000
Cardiac index, L/min/m² (IQR)	2.70 (2.20–3.00)	2.68 (2.18–2.97)	2.88 (2.54–3.43)	0.587
Pulmonary vascular resistance, dyn·s·cm⁻⁵ (IQR)	235.14 (140.63–290.91)	231.22 (141.23–286.91)	271.67 (126.32-425.53)	0.979

OAC, oral anticoagulation; NYHA, New York Heart Association; NT-proBNP, N-terminal prohormone of brain natriuretic peptide; NOAC, non-vitamin K oral anticoagulant; VKA, vitamin K antagonist; CHA$_2$DS$_2$-VASc (Congestive heart failure, Hypertension, Age ≥75 years, Diabetes mellitus, prior Stroke, Vascular disease, Age 65-74 years, Sex category) Score calculates stroke risk for patients with atrial fibrillation; HAS-BLED (Hypertension, Abnormal Renal/Liver Function, Stroke, Bleeding History or Predisposition, Labile INR, Elderly, Drugs/Alcohol Concomitantly) Score estimates risk for major bleeding; ALAT, alanine aminotransferase; ASAT, aspartate aminotransferase; Gamma-GT, gamma-glutamyltransferase; E/e', ratio of early transmitral blood velocity to early diastolic mitral annular velocity; RV, right ventricular. Values are given as median and interquartile range (IQR), or total numbers (n) and percent (%). Bold indicates p<0.05. * Estimated glomerular filtration rate <60mL/min/1.73m².