




Correction to: Clinical risk factors of stroke and major bleeding in patients with non-valvular atrial fibrillation under rivaroxaban: the EXPAND Study sub-analysis

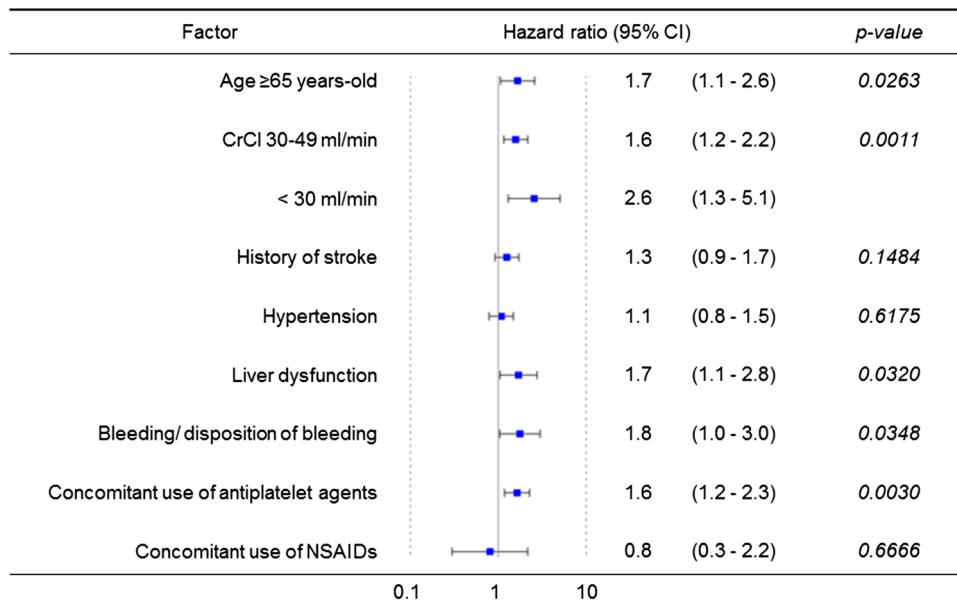
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Correction to: Heart and Vessels
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In the original publication of the article, the Figure 2b and the Tables 2 and 3 were published incorrectly.

The corrected Figure 2b and Tables 2 and 3 are provided below.



Likelihood-ratio, $p < .0001$; Wald test, $p < .0001$; Akaike's Information Criterion, 3536.1
CI, confidence interval; CrCl, creatinine clearance; NSAIDs, nonsteroidal anti-inflammatory drugs

The original article can be found online at <https://doi.org/10.1007/s00380-019-01425-x>.

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Table 2 Incidence rate and univariate analysis by Cox proportional hazards analysis of stroke/systemic embolism

	No. of event (%/year)	HR	95% CI	<i>p</i> value
Overall	176 (1.0)			
Sex				
Male	115 (1.0)	Reference		0.5283
Female	61 (1.1)	1.1	0.8, 1.5	
Age class 1 (years-old)				
<65	23 (0.7)	Reference		0.0176
≥65	153 (1.1)	1.7	1.1, 2.6	
Age class 2 (years-old)				
<65	23 (0.7)	Reference		0.0022
65–74	60 (0.9)	1.3	0.8, 2.2	
≥75	93 (1.3)	2.0	1.3, 3.2	
Body weight (kg)				
≥60	84 (0.8)	Reference		0.0250
50–59	50 (1.1)	1.3	0.9, 1.9	
<50	33 (1.4)	1.7	1.1, 2.6	
Systolic blood pressure (mmHg)				
<160	156 (1.0)	Reference		0.0928
≥160	12 (1.6)	1.6	0.9, 3.0	
CrCl (mL/min)				
≥50	112 (0.9)	Reference		0.0026
30–49	49 (1.5)	1.8	1.3, 2.5	
<30	3 (1.0)	1.2	0.4, 3.7	
Comorbidity ^a				
Congestive heart failure				
–	129 (1.0)	Reference		0.8550
+	47 (1.0)	1.0	0.7, 1.4	
Hypertension				
–	44 (0.9)	Reference		0.2768
+	132 (1.1)	1.2	0.9, 1.7	
Angina pectoris				
–	157 (1.0)	Reference		0.7193
+	19 (0.9)	0.9	0.6, 1.5	
Diabetes mellitus				
–	121 (0.9)	Reference		0.0227
+	55 (1.3)	1.4	1.1, 2.0	
Aortic aneurysm				
–	174 (1.0)	Reference		0.7916
+	2 (0.8)	0.8	0.2, 3.3	
Deep vein thrombosis				
–	175 (1.0)	Reference		0.9718
+	1 (1.0)	1.0	0.2, 7.4	
Pulmonary embolism				
–	175 (1.0)	Reference		0.4012
+	1 (2.2)	2.3	0.3, 16.2	
Dyslipidemia				
–	105 (1.0)	Reference		0.6278
+	71 (1.0)	0.9	0.7, 1.3	
Liver dysfunction				
–	167 (1.0)	Reference		0.6999
+	9 (0.9)	0.9	0.5, 1.7	
Renal dysfunction				
–	176 (1.0)	Reference		0.6995
+	0 (0.0)	<0.001	<0.001	

Table 2 (continued)

	No. of event (%/year)	HR	95% CI	<i>p</i> value
Medical history ^a				
Stroke (ischemic/hemorrhagic)				
–	91 (0.7)	Reference		<0.0001
+	85 (2.3)	3.6	2.7, 4.8	
Transient ischemic attack				
–	169 (0.9)	Reference		0.4721
+	7 (1.3)	1.3	0.6, 2.8	
Systemic embolism				
–	174 (1.0)	Reference		0.6643
+	2 (1.4)	1.4	0.3, 5.5	
Vascular disease (MI/PAD)				
–	158 (1.0)	Reference		0.0352
+	18 (1.6)	1.7	1.0, 2.7	
Malignant tumor				
–	159 (1.0)	Reference		0.7657
+	17 (1.1)	1.1	0.7, 1.8	
Bleeding/disposition of bleeding				
–	169 (1.0)	Reference		0.9900
+	7 (1.0)	1.0	0.5, 2.1	
Rivaroxaban dosage				
15 mg/day	87 (0.9)	Reference		0.0658
10 mg/day	89 (1.2)	1.3	1.0, 1.8	
Amount of drinking (unit/week)				
No	105 (1.1)	Reference		0.1202
<8	47 (0.8)	0.7	0.5, 1.0	
≥8	24 (1.0)	0.9	0.6, 1.4	
History of smoking				
No	99 (0.9)	Reference		0.2940
In the past	54 (1.1)	1.1	0.8, 1.6	
Current	23 (1.3)	1.4	0.9, 2.2	
Type of AF				
PAF	67 (0.9)	Reference		0.0799
Non-PAF ^b	109 (1.1)	1.3	1.0, 1.8	
Using concomitant anti-platelets ^a				
–	138 (0.9)	Reference		0.0046
+	38 (1.5)	1.7	1.2, 2.4	
Using concomitant NSAIDs ^a				
–	172 (1.0)	Reference		0.9525
+	4 (1.0)	1.0	0.4, 2.8	
CHADS ₂ score				
<3	76 (0.7)	Reference		<0.0001
≥3	100 (1.7)	2.7	2.0, 3.6	
CHA ₂ DS ₂ -VASc score				
<4	58 (0.6)	Reference		<0.0001
≥4	118 (1.5)	2.5	1.9, 3.5	
HAS-BLED score				
<2	60 (0.6)	Reference		<0.0001
≥2	106 (1.7)	2.8	2.0, 3.8	

HR hazard ratio, CI confidence interval, CrCl creatinine clearance, MI myocardial infarction, PAD peripheral arterial disease, AF atrial fibrillation, PAF paroxysmal atrial fibrillation, NSAIDs non-steroidal anti-inflammatory drugs

^aReference; without factor

^bPersistent and permanent atrial fibrillation

Table 3 Incidence rate and univariate analysis by Cox proportional hazards analysis of ISTH major bleeding

	ISTH major bleeding			
	No. of event (%/year)	HR	95% CI	<i>p</i> value
Overall	215 (1.2)			
Sex				
Male	147 (1.2)	Reference		0.8223
Female	68 (1.2)	1.0	0.7, 1.3	
Age class 1 (years-old)				
< 65	26 (0.7)	Reference		0.0027
≥ 65	189 (1.4)	1.9	1.2, 2.8	
Age class 2 (years-old)				
< 65	26 (0.7)	Reference		< 0.0001
65–74	66 (1.0)	1.3	0.8, 2.1	
≥ 75	123 (1.7)	2.4	1.6, 3.6	
Body weight (kg)				
≥ 60	125 (1.3)	Reference		0.7249
50–59	52 (1.1)	0.9	0.7, 1.3	
< 50	31 (1.3)	1.1	0.7, 1.6	
Systolic blood pressure (mmHg)				
< 160	199 (1.3)	Reference		0.2772
≥ 160	6 (0.8)	0.6	0.3, 1.4	
CrCl (mL/min)				
≥ 50	138 (1.1)	Reference		< 0.0001
30–49	59 (1.8)	1.8	1.3, 2.4	
< 30	9 (2.9)	2.9	1.5, 5.6	
Comorbidity ^a				
CHF				
–	149 (1.2)	Reference		0.1140
+	66 (1.4)	1.3	1.0, 1.7	
Hypertension				
–	53 (1.1)	Reference		0.1770
+	162 (1.3)	1.2	0.9, 1.7	
Angina pectoris				
–	181 (1.2)	Reference		0.0543
+	34 (1.7)	1.4	0.9, 2.1	
Diabetes mellitus				
–	159 (1.2)	Reference		0.4925
+	56 (1.3)	1.1	0.8, 1.5	
Aortic aneurysm				
–	210 (1.2)	Reference		0.2144
+	5 (2.1)	1.7	0.7, 4.2	
DVT				
–	212 (1.2)	Reference		0.0823
+	3 (3.1)	2.6	0.9, 8.3	
PE				
–	214 (1.2)	Reference		0.5833
+	1 (2.2)	1.7	0.2, 12.3	
Dyslipidemia				
–	125 (1.2)	Reference		0.9155
+	90 (1.2)	1.0	0.8, 1.3	
Liver dysfunction				
–	195 (1.2)	Reference		0.0252
+	20 (2.0)	1.7	1.1, 2.7	

Table 3 (continued)

	ISTH major bleeding			
	No. of event (%/year)	HR	95% CI	<i>p</i> value
Renal dysfunction				
–	215 (1.2)	Reference		0.6682
+	0 (0.0)	<0.001	<0.001, >999.9	
Medical history				
Stroke (ischemic/hemorrhagic)				
–	154 (1.1)	Reference		0.0065
+	61 (1.7)	1.5	1.1, 2.0	
Transient ischemic attack				
–	208 (1.2)	Reference		0.8415
+	7 (1.3)	1.1	0.5, 2.3	
Systemic embolism				
–	215 (1.2)	Reference		0.1736
+	0 (0.0)	<0.001	<0.001, >999.9	
Vascular disease (MI/PAD)				
–	196 (1.2)	Reference		0.1345
+	19 (1.7)	1.4	0.9, 2.3	
Malignant tumor				
–	189 (1.2)	Reference		0.1145
+	26 (1.7)	1.4	0.9, 2.1	
Bleeding/disposition of bleeding				
–	200 (1.2)	Reference		0.0240
+	15 (2.1)	1.8	1.1, 3.1	
Rivaroxaban dosage				
15 mg/day	108 (1.1)	Reference		0.0635
10 mg/day	107 (1.4)	1.3	1.0, 1.7	
Amount of drinking (unit/week)				
No	128 (1.4)	Reference		0.0649
<8	57 (1.0)	0.7	0.5, 1.0	
≥8	30 (1.3)	0.9	0.6, 1.4	
History of smoking				
No	126 (1.2)	Reference		0.4144
In the past	71 (1.4)	1.2	0.9, 1.6	
Current	18 (1.0)	0.9	0.5, 1.4	
Type of AF				
PAF	89 (1.1)	Reference		0.3453
Non-PAF ^b	126 (1.3)	1.1	0.9, 1.5	
Using concomitant anti-platelets ^a				
–	166 (1.1)	Reference		0.0003
+	49 (2.0)	1.8	1.3, 2.5	
Using concomitant NSAIDs ^a				
–	211 (1.2)	Reference		0.7265
+	4 (1.0)	0.8	0.3, 2.3	
CHADS ₂ score				
<3	121 (1.0)	Reference		0.0009
≥3	94 (1.6)	1.6	1.2, 2.1	
CHA ₂ DS ₂ -VASc score				
<4	92 (1.0)	Reference		0.0001
≥4	123 (1.6)	1.7	1.3, 2.2	

Table 3 (continued)

	ISTH major bleeding			
	No. of event (%/year)	HR	95% CI	<i>p</i> value
HAS-BLED score				
<2	92 (0.9)	Reference		<0.0001
≥2	111 (1.7)	1.9	1.4, 2.5	

HR hazard ratio, *CI* confidence interval, *ISTH* International Society on Thrombosis and Haemostasis, *CrCl* creatinine clearance, *MI* myocardial infarction, *PAD* peripheral arterial disease, *AF* atrial fibrillation, *PAF* paroxysmal atrial fibrillation, *NSAIDs* non-steroidal anti-inflammatory drugs


^aReference; without factor

^bPersistent and permanent atrial fibrillation

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