

Supplemental Online Content

Bernstein RA, Kamel H, Granger CB, et al; for the STROKE AF Investigators. Effect of Long-term Continuous Cardiac Monitoring vs Usual Care on Detection of Atrial Fibrillation in Patients With Stroke Attributed to Large- or Small-Vessel Disease. *JAMA*. Published online June 1, 2021. doi:10.1001/jama.2021.6470

Supplement 3. eTables and eFigure

This supplemental material has been provided by the authors to give readers additional information about their work.

Online Supplement 3

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eTable 1. Modifications made to the Clinical Investigation Plan after study initiation

CIP Version	Change	Rationale
4.0	From 200 patients with small vessel disease (lacunar stroke) to a maximum of 50%	Allow equal characterization of an ischemic stroke population
4.0	Data Collection and Study Procedures were updated to allow either interrogation or remote CareLink transmission during follow-up (patients in ICM arm)	Include either mode of device data collection for patients completing visits in-clinic or remotely
3.0	Addition of AF related hospitalization to Ancillary Endpoint #7 related to describing economic burden of the disease	Business decision for additional analysis
3.0	Removed adjudication of ALL reported arrhythmias	Consistency with adjudication of time to first event
3.0	Removed “in-clinic” for Follow-up Procedure. Data can be collected remotely	Reduce patient burden of attending in-clinic as all data may be captured remotely
3.0	Enrollment timeline updated from 20 to 42 months and study from 4.5 to 6.5 years	Estimate updated per observed enrollment rate
3.0	Removed stopping rule for enrollment based on number of AF events (initially enrollment would be closed once the required number of AF events needed to demonstrate a statistical difference between hazard rates in the 2 arms was achieved)	Robust study with adequate data for analysis of all objectives

eTable 2. Required programming for the Reveal LINQ

Parameter	Required Setting
Reason for Monitoring	Cryptogenic Stroke ^a
AF Detection Sensitivity	Balanced Sensitivity
Ectopy Rejection	Aggressive
AT/AF Recording Threshold	All Episodes
Type of AT/AF Detection	AF Only
Wireless Data Priority	Tachy, Pause, Brady
Tachy Detection	ON
Brady Detection	ON
Pause Detection	ON

^aThis setting defines the sensitivity and specificity of the Reveal LINQ device and reflects the most appropriate programming parameters for stroke patients.

eTable 3. Supporting detail collected for recurrent stroke and transient ischemic attack events

<ul style="list-style-type: none">• Details about the stroke event, such as type, size, and location
<ul style="list-style-type: none">• TOAST stroke classification
<ul style="list-style-type: none">• National Institute of Health (NIH) Stroke Scale
<ul style="list-style-type: none">• Modified Rankin Scale
<ul style="list-style-type: none">• Reveal LINQ Interrogation (if available, subjects with a Reveal LINQ ICM only)
<ul style="list-style-type: none">• AF Assessment
<ul style="list-style-type: none">• Adverse Event e-CRF

eTable 4. Baseline characteristics according to early exit

	Exited before 12 months (n = 58)	Remained in study (n = 434)
Age, y		
Mean (SD)	66.8 (10.8)	67.1 (9.2)
<65	28 (48.3%)	187 (43.1%)
65 - 74	14 (24.1%)	144 (33.2%)
75+	14 (24.1%)	103 (23.7%)
Male, n (%)	41 (70.7%)	264 (60.8%)
Female, n(%)	15 (25.9%)	170 (39.2%)
CHA ₂ DS ₂ -VASc Score, median (IQR)	5.0 (3.0 - 6.0)	5.0 (4.0 - 6.0)
Comorbidities/risk factors		
Congestive Heart Failure n (%)	13 (17.3%)	38 (9.1%)
Hypertension n (%)	60 (80.0%)	337 (80.8%)
Diabetes, n (%)	28 (48.3%)	159 (36.6%)
Stroke, n (%)	58 (100.0%)	434 (100.0%)
Vascular Disease, n (%)	10 (17.2%)	82 (18.9%)
Smoking tobacco, n (%)	28 (48.3%)	235 (54.1%)
TOAST Classification		
Large-artery atherosclerosis	28 (48.3%)	254 (58.5%)
Small-vessel occlusion (lacune)	28 (48.3%)	180 (41.5%)
Score on NIH Stroke Scale, median (IQR)	2.0 (1.0 – 4.0)	2.0 (1.0 – 5.0)

Abbreviation: TIA: Transient ischemic attack.

eTable 5. Baseline characteristics according to TOAST subtype

	Small vessel disease (n = 208)	Large vessel disease (n = 284)
Age, y		
Mean (SD)	67.5 (9.4)	66.7 (9.5)
<65	89 (42.8%)	126 (44.4%)
65 - 74	69 (33.2%)	89 (31.3%)
75+	50 (24.0%)	67 (23.6%)
Male, n (%)	126 (60.6%)	179 (63.0%)
Female, n (%)	82 (39.4%)	103 (36.3%)
CHA ₂ DS ₂ -VASc Score, median (IQR)	5.0 (4.0 - 6.0)	5.0 (4.0 - 5.5)
Comorbidities/risk factors		
Congestive Heart Failure, n (%)	22 (10.6%)	29 (10.2%)
Hypertension, n (%)	170 (81.7%)	227 (79.9%)
Diabetes, n (%)	92 (44.2%)	95 (33.5%)
Stroke, n (%)	208 (100.0%)	284 (100.0%)
Vascular Disease, n (%)	40 (19.2%)	52 (18.3%)
Smoking tobacco, n (%)	96 (46.2%)	167 (58.8%)
Score on NIH Stroke Scale, median (IQR)	2.0 (1.0 – 4.0)	2.0 (1.0 – 5.0)

Abbreviation: TIA: Transient ischemic attack.

eTable 6. Major baseline echocardiographic features associated with cardioembolism

	Insertable cardiac monitor (n=242)^a	Control (n=250)^a
LVEF (%), median (IQR) [N]	62.0 (57.0-65.0) [215]	62.3 (57.0 - 65.0) [232]
Enlarged left atrial diameter (mm), median (IQR) [N]	36.0 (32.0 – 40.0) [166]	36.0 (30.5 – 41.0) [160]
Enlarged left atrial volume (ml), median (IQR) [N]	40.0 (27.3-56.0) [142]	40.1 (29.3-54.4) [144]
Mitral Valvular Regurgitation, n (%)		
None	103 (42.6%)	113 (45.2%)
Mild	114 (47.1%)	115 (46.0%)
Moderate	2 (0.8%)	4 (1.6%)
Severe	0 (0.0%)	0 (0.0%)
Mitral Valvular Stenosis, n (%)		
None	200 (82.6%)	203 (81.2%)
Mild	14 (5.8%)	20 (8.0%)
Moderate	2 (0.8%)	7 (2.8%)
Severe	0 (0.0%)	0 (0.0%)

^a Unless otherwise noted.

eTable 7. Classification of first recurrent ischemic stroke according to TOAST subtype at 12 months

TOAST Classification	Insertable cardiac monitor (n = 16)	Control (n = 23)
Cardioembolism	1 (6.3%)	0 (0.0%)
Large-artery atherosclerosis	6 (37.5%)	13 (56.5%)
Small-vessel occlusion (lacune)	6 (37.5%)	4 (17.4%)
Stroke of other determined etiology	0 (0.0%)	3 (13.0%)
Stroke of undetermined etiology	1 (6.3%)	3 (13.0%)

eFigure 1. Duration of the longest AF episode detected per patient in the ICM group

