

EMBARGOED UNTIL THURSDAY, APRIL 28 AT 5:00 PM ET

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CONTINUOUS MONITORING DETECTS FOUR TIMES MORE ATRIAL FIBRILLATION INCIDENCE FOLLOWING STROKE THAN INTERMITTENT MONITORING

Findings help identify patients who may not be optimally managed for recurrent stroke prevention

SAN FRANCISCO, CA, April 28, 2022 – Continuous monitoring with an insertable cardiac monitor (ICM) is shown to be more successful in detecting atrial fibrillation (AF) than conventional intermittent monitoring in patients with strokes attributed to large artery atherosclerosis (LAA) or small vessel occlusion (SVO). Findings from the STROKE-AF study compared incidence rates of AF between various intermittent monitoring strategies and continuous monitoring with an ICM. The study will be presented at Heart Rhythm 2022 on Sunday, May 1.

Despite progress in stroke prevention, stroke remains the fifth most common cause of death in the United States.¹ AF, a common heart rhythm disorder that can often go undetected, is known to increase the risk of stroke by five-fold and is a common risk factor, particularly in older adults. Prior studies show that AF can be an underlying cause in patients who have stroke of undetermined cause, known as cryptogenic stroke.² Identifying the cause of a stroke is a critical step in preventing future or recurrent stroke in patients, so many patients with stroke of undetermined cause often undergo intensified heart rhythm monitoring in order to diagnose and treat AF as the potential cause.

Authors of the STROKE-AF study enrolled patients with a recent ischemic stroke attributed to LAA or SVO. Patients were 60 years of age or older (or 50-59 with heart failure, hypertension, diabetes prior stroke or vascular disease) and had no history of AF. The one-time monitoring strategies were simulated by computing the AF incidence using 1, 2, 7, 14 and 30-day recording periods, while the repeated monitoring strategies (quarterly 24 h, 48 h, 7d, or monthly 24 h) were simulated over a 1-year period. The initial day for all simulations was randomly selected 1-14 days after ICM placement to ensure a uniform distribution, and repeated monitoring strategies were simulated 10,000 times with mean values and ranges reported.

As part of the study, data was obtained from 242 patients (age 66.6±9.3, 60% male, CHA2DS2-VASc 5.0 [IQR4.0- 5.0]). In these stroke patients whose stroke did not appear to be due to an abnormal heart rhythm, the study found that continuous monitoring with ICM detected AF in 1 in 8 patients by 12 months. The AF incidence rate through ICM was 11.57%, exceeding the estimated rates from all forms of modeled intermittent monitoring (range 0.22-2.55%, p<0.001)

“Traditionally, we have focused our efforts with AF screening in patients who had no clear cause

¹ Taso CW, Aday AW et. al., “Health disease and stroke statistics – 2022 update: a report from the American Heart Association”. *Circulation*. 2022;145:e153–e639. DOI: 10.1161/CIR.0000000000001052

² Gladstone, David J., Spring, Melanie, et al., “Atrial Fibrillation in Patients with Cryptogenic Stroke.” *N Engl J Med* 2014; 370:2467-2477 DOI: 10.1056/NEJMoa1311376

of their stroke. STROKE AF highlights the importance of diagnosing atrial fibrillation even in patients whose stroke appeared to be due to LLA or SVO,” said Jonathan Piccini, MD, MHS, FACC, FAHA, FHRS, associate professor of medicine and director of cardiac electrophysiology at Duke University. “These findings add to the growing evidence that highlight the importance of continuous cardiac monitoring inpatients who are at-risk for atrial fibrillation, regardless of what may have caused their first stroke.”

Individuals who have AF and a history of stroke receive a Class I recommendation for oral anticoagulation to prevent future stroke. The authors believe that even with the most aggressive forms of intermittent monitoring, a large proportion of patients with AF would not be diagnosed or could go untreated, and that their findings emphasize the importance of avoiding another episode of stroke, no matter the cause.

Session Details:

“The Early the Better: Afib Detection and Stroke: *4-Fold Higher Rate of Atrial Fibrillation Detection after Stroke of Presumed Known Etiology with Continuous versus Intermittent Monitoring: Results from the STROKE AF Study*” [Sunday, May 1, 2022 at 10:30 am PT]

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About the Heart Rhythm Society

The Heart Rhythm Society is the international leader in science, education, and advocacy for cardiac arrhythmia professionals and patients and is the primary information resource on heart rhythm disorders. Its mission is to improve the care of patients by promoting research, education, and optimal health care policies and standards. Incorporated in 1979 and based in Washington, D.C., it has a membership of more than 7,000 heart rhythm professionals in more than 90 countries around the world. For more information, visit www.HRSonline.org.

About Heart Rhythm 2022

The Heart Rhythm Society's annual Heart Rhythm meeting convenes 5,500+ of the world's finest clinicians, scientists, researchers, and innovators in the field of cardiac pacing and electrophysiology. More than 600 international experts in the field will serve as faculty for the 250+ educational sessions, forums, symposia, and ceremonies, while 100+ exhibitors will showcase innovative products and services.