New study demonstrates high burden of AFib is associated with lower cognitive function
17 November 2014

iRhythm Technologies, Inc. announced today that study results presented during the American Heart Association (AHA) Scientific Sessions showed an association between a high burden of atrial fibrillation (AFib) and lower cognitive function, specifically executive and verbal function. Previous studies have shown a relationship between AFib, cognitive decline and increased risk of dementia. However, this study, which was led by researchers at the University of Minnesota, demonstrates for the first time a correlation between high AFib burden - the percent of time a person has AFib - and cognition.

The study, "Higher Burden of Atrial Fibrillation is Independently Associated with Lower Cognitive Function: The Atherosclerosis Risk in Communities (ARIC) Study (Abstract # 12946)", analyzed 325 participants using iRhythm Technologies' ZIO® Patch, a non-invasive, leadless, cardiac monitor that can record and store up to two weeks of ECG data. The study found that compared with participants who did not have AFib, participants with AFib burden of 100%, had lower Animal Naming (AN) and Digit Span Backwards (DSB) scores. The ARIC study is funded by the National Institutes of Health.

"Continuous long-term cardiac monitoring is essential to detect AFib, which may occur infrequently and often has no symptoms," said lead author Dr. Lin Yee Chen, M.D., M.S., Assistant Professor, Cardiovascular Division, Department of Medicine, University of Minnesota. "In order to determine AFib burden, and not just the presence or absence of AFib, continuous monitoring and analysis of all of the data is required. We used the ZIO Service, which analyzes the beat-to-beat data in its entirety, which enabled us to identify a subpopulation of patients with lower AFib burden who otherwise would not have been detected."

The ZIO® Service is the first long-term continuous monitoring service that is supported by extensive clinical data with peer-reviewed publications, and enables diagnosis earlier in the clinical pathway to improve patient outcomes.

"Advances in continuous heart monitoring solutions have enabled a greater clinical understanding of AFib and other arrhythmias compared to standard ambulatory electrocardiographic monitoring," said Judy Lenane, RN, MHA, executive vice president and chief clinical officer of iRhythm Technologies, Inc. "This new data is significant as it shows for the first time that a patient with persistent atrial fibrillation, as detected through long-term continuous ECG monitoring with a device such as the ZIO® Patch, is more likely to have lower cognitive function."

iRhythm Technologies, Inc. was also included in two other poster presentations, including the study, "Non-sustained Ventricular Tachycardia (NSVT) is Independently Associated with Lower Cognitive Executive Function: ARIC Study (Poster #12962)" (presented on November 17 morning) and "Incidence and Timing of High-Risk Arrhythmias with Long-Term Continuous Ambulatory Electrocardiographic Monitoring (Poster #16305)," which will be presented on November 18.

Provided by iRhythm Technologies