

New Data Presented at HRS 2026 Show Short-Term Holter Monitoring Misses a Large Proportion of AF Recurrence Post-Ablation and Clinically Significant Arrhythmias in Pregnancy

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- Real-world data presented at HRS 2026 add to the body of evidence supporting a shift away from short-duration Holter monitoring toward up to 14 days of continuous, uninterrupted monitoring with Zio[®] ambulatory ECG devices to reduce missed arrhythmias and provide a more complete assessment of arrhythmia burden, including in post-ablation and pregnancy populations.¹⁻²
- Findings raise important considerations for post-ablation anticoagulation decisions based on prior studies such as the OCEAN trial that relied on short-duration (24–48-hour) monitoring, as these data show this approach would miss AF recurrence in 26% of patients.¹

SAN FRANCISCO, April 27, 2026 (GLOBE NEWSWIRE) -- **iRhythm Holdings, Inc.** (NASDAQ:IRTC) today announced results from two real-world retrospective analyses in post-ablation and pregnancy patient populations presented at the Heart Rhythm Society's annual meeting, HRS 2026, held April 23–26 in Chicago. Across both studies, arrhythmias were detected beyond 48 hours and within 14 days in a large proportion of patients (30% of recurrent AF and 60% of arrhythmias in pregnancy), with important implications for clinical assessment and decision-making.¹⁻² The findings add to the body of evidence on the limitations of commonly used short-duration 24–48-hour Holter monitoring and further reinforce the clinical value of continuous, uninterrupted monitoring up to 14 days with Zio ambulatory ECG devices across diverse patient populations.¹⁻⁴

The findings presented at HRS 2026 reflect the growing clinical importance of atrial fibrillation (AF)—the most common arrhythmia⁵ and one associated with a fivefold increased risk of stroke⁶—where accurate detection is central to management, alongside increasing use of catheter ablation, where post-procedure rhythm assessment is critical to guide risk stratification and downstream clinical decisions.

They also highlight the importance of arrhythmia detection in pregnancy, where rising maternal cardiovascular risk

and the 2023 HRS Expert Consensus Statement on the Management of Arrhythmias During Pregnancy⁷ have advanced pregnancy-specific management guidance, while approaches to arrhythmia detection and monitoring remain less well defined.

Detection of Post-Ablation AF Recurrence and Monitoring Duration Study: Short-Term Holter May Miss Arrhythmias¹

Arrhythmia monitoring after catheter ablation of atrial fibrillation (AF) is used to identify recurrence and inform treatment. The optimal duration is not well defined. In a nationwide retrospective analysis of 11,051 patients who monitored with a Zio ambulatory ECG device in the year following AF ablation, the overall recurrence rate of AF was 21% and a substantial proportion of AF recurrence was detected beyond 48 hours and within 14 days. Notable findings include:

- AF recurrence would often be missed with 24-48-hour monitoring: With up to 14 days of continuous, uninterrupted monitoring using Zio ambulatory ECG, 26% of patients overall—and 29.8% of patients with paroxysmal AF—had their first detected AF recurrence beyond 48 hours, indicating that reliance on short-duration Holter monitoring would miss AF recurrence in a considerable proportion of post-ablation patients.
- Up to 1 in 4 Misclassified: These data suggest that up to 1 in 4 patients with true AF recurrence could be misclassified as a false negative with short-duration Holter monitoring compared up to 14 days with Zio ambulatory ECG.

These data provide new real-world evidence in a patient population where the clinical value of continuous, uninterrupted monitoring up to 14 days with Zio for post-ablation monitoring has previously not been well quantified. Reliance on short-term monitoring in clinical practice may result in missed AF recurrence, which has clinical implications for anticoagulation discontinuation based on recent studies such as the OCEAN (Optimal Anticoagulation for Enhanced Risk Patients Post-Catheter Ablation for Atrial Fibrillation) trial, which used a strategy of sequential cardiac monitoring of only 24-48 hours.⁸

“These data reinforce that monitoring approach and duration directly impact what is detected—and what is missed,” said Mintu Turakhia, MD, MS, Chief Medical and Scientific Officer and EVP, Advanced Technologies at iRhythm. Monitoring of 48 hours or less leads to false negatives of AF recurrence in 30% of those monitored in the year following-PVI. As AF burden and recurrence increase the risk of stroke and are directly actionable for clinical decisions regarding anticoagulation, antiarrhythmic, repeat ablation, and risk of heart failure — the data are clear that 14 days should be the minimum threshold for post-ablation monitoring.”

Pregnancy Study: Majority of Clinically Significant Arrhythmias Detected After 48 Hours^{2,9}

In a retrospective analysis of pregnant patients undergoing extended monitoring using Zio ambulatory ECG devices, arrhythmias were present in 1 in 7 patients, but with 60% first detected after 48 hours—events that would be missed with commonly used short-duration 24–48-hour Holter monitoring.

- Arrhythmias Detected in Pregnancy: Arrhythmias were detected in 37.7% of pregnant patients, the majority evaluated for symptoms such as palpitations (62.8%), showing that rhythm abnormalities can occur even in patients without structural or other forms of heart disease.
- 1 in 7 Clinically Significant Arrhythmias⁹: Clinically significant arrhythmias were detected in 13.6% of patients, including AF ≥ 30 seconds, SVT ≥ 90 bpm and ≥ 30 seconds, VT ≥ 100 bpm and ≥ 4 beats, pause ≥ 3 seconds, and AV block (2nd deg. Mobitz II, high grade AVB, or complete heart block).
- Majority of Clinically Significant Arrhythmias⁹ Detected After 48 Hours: Most arrhythmias were detected after 48 hours (66.7% clinically significant; 59.6% overall). These data suggest that short-duration 24-48-hour Holter monitoring would fail to detect a substantial portion of clinically significant arrhythmias compared to up to 14 days of continuous, uninterrupted monitoring with Zio ambulatory ECG devices.
- 99.2% Analyzable Time: Median analyzable time was 99.2%, indicating that nearly all recorded monitoring time produced usable heart rhythm data, demonstrating that high-quality ECG data can be obtained with continuous, uninterrupted monitoring up to 14 days with Zio ambulatory ECG devices in pregnant patients.

These data provide new real-world evidence in a population where physiologic changes are associated with increased susceptibility to arrhythmias⁷ and cardiovascular disease remains the leading cause of pregnancy related death in the United States,¹⁰ underscoring the importance of accurate and timely detection where evidence on extended monitoring has been limited.

"Physiologic changes during pregnancy increase arrhythmia risk,⁷ with implications for both maternal and fetal health," said Ridhima Kapoor, MD, Clinical Assistant Professor of Cardiovascular Medicine at Stanford University, and an investigator on the study and its presenting author. "This analysis demonstrates that arrhythmias occur in more than one-third of pregnant patients, with clinically significant events in nearly 1 in 7. Notably, the majority were identified after 48 hours of monitoring. This underscores the importance of extended cardiac monitoring to accurately capture arrhythmia burden and guide management."

Implications for Clinical Practice and Research

A growing body of large-scale real-world evidence has demonstrated the clinical value of continuous, uninterrupted monitoring up to 14 days with Zio ambulatory ECG devices, including higher diagnostic yield and lower repeat testing compared with short-duration 24–48-hour Holter and other ambulatory cardiac monitoring modalities.^{11,12}

Additional real-world evidence from a large-scale analysis of more than 1 million patients, published in February this year in **Heart Rhythm**, the journal of the Heart Rhythm Society, demonstrates that 24–48-hour monitoring can miss actionable arrhythmias even in patients with frequent (i.e., daily) symptoms.¹³

Taken together, the totality of evidence—including new data in post-ablation and pregnancy populations strongly supports the progressive shift away from reliance on short-duration monitoring and toward 14-day continuous, uninterrupted, patch-based cardiac monitoring to better align clinical practice and the evidence base informing standards of care with a more complete assessment of arrhythmia burden.

iRhythm Differentiation

The clinical value of iRhythm is delivered through its integrated Zio platform combining patch-based ECG monitoring, AI-powered analysis, and data curation and validation by qualified cardiac technicians to deliver actionable insights that help clinicians make the right diagnosis the first time.

Data presented at HRS 2026 add to iRhythm’s comprehensive clinical evidence program, encompassing more than 140 original research manuscripts, insights derived from over 3 billion hours of curated heartbeat data, and over 12 million patient reports since the company’s inception¹⁴—underscoring an ongoing commitment to expanding evidence that supports improved patient outcomes.

About the iRhythm Studies Presented at HRS 2026

Detection of Atrial Fibrillation Recurrence and Monitoring Duration on Ambulatory Cardiac Monitoring: Implications for OCEAN Trial-Guided Anticoagulation Discontinuation¹

Retrospective analysis of U.S. patients receiving Zio LTCM between 2018 and 2022 who had undergone catheter ablation for AF within the prior year. Of 709,083 patients with linked data, 11,051 met the inclusion criteria and were included in the study. AF types included paroxysmal AF (53%), persistent AF (36%), and unspecified AF (11%). The mean time to monitoring was 113 days post-ablation.

Frequency of Cardiac Arrhythmia Detection on Extended Ambulatory Cardiac ECG Monitoring During Pregnancy: Results from a Large National Sample²

Retrospective cohort study of 486 pregnant women aged 18-45 years undergoing extended ambulatory ECG monitoring. The study population had low baseline cardiovascular comorbidity. Of the 486 women in the study, 63% were monitored for palpitations, 25% had advanced maternal age (aged ≥ 35 years), and 24.9% had hypertensive disorders of pregnancy.

About iRhythm Holdings

iRhythm is a leading digital health care company that creates trusted solutions that detect, predict, and prevent disease. Combining wearable biosensors and cloud-based data analytics with powerful proprietary algorithms, iRhythm distills data from millions of heartbeats into clinically actionable information. Through a relentless focus on patient care, iRhythm's vision is to deliver better data, better insights, and better health for all.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. These statements can be identified by words such as "anticipate," "estimate," "expect," "intend," "will," "may," "project," "plan," "believe," "target," and similar expressions that relate to future events or outcomes.

Forward-looking statements in this press release include, but are not limited to, statements regarding the significance and potential impact of the data presented; the clinical utility and performance of iRhythm's Zio[®] ambulatory ECG monitoring devices and service; the potential to improve detection and assessment of arrhythmias, including in post-ablation and pregnancy populations; the potential to inform clinical decision-making, including anticoagulation management and risk stratification; and the potential for extended continuous monitoring to provide a more complete assessment of arrhythmia burden.

These statements are based on current assumptions and expectations and are subject to risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties include, among others, the timing, interpretation, and acceptance of clinical data; the ability to translate findings into clinical practice; regulatory and reimbursement developments; market adoption of iRhythm's products and services; and the risks described in the section entitled "Risk Factors" in iRhythm's most recent filings with the Securities and Exchange Commission, including its Forms 10-K and 10-Q.

These forward-looking statements speak only as of the date of this press release, and iRhythm undertakes no obligation to update them, except as required by law.

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Turakhia MP et al. "Detection of Atrial Fibrillation Recurrence and Monitoring Duration on Ambulatory Cardiac

Monitoring: Implications for OCEAN Trial-Guided Anticoagulation Discontinuation.” Heart Rhythm Society’s Annual Meeting, 2026. Chicago, Illinois.

Kapoor R et al. “Frequency of Cardiac Arrhythmia Detection on Extended Ambulatory Cardiac ECG Monitoring During Pregnancy: Results from a Large National Sample.” Heart Rhythm Society’s Annual Meeting, 2026. Chicago, Illinois.

The Zio AT device is not intended for use in critical care patients because the reporting timeliness is not consistent with life-threatening arrhythmias such as ventricular fibrillation. Refer to Zio AT Clinical Reference Manual for additional information.

Do not use Zio AT for patients with symptomatic episodes where variations in cardiac performance could result in immediate danger to the patient or when real-time or in-patient monitoring should be prescribed.

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Clinically significant arrhythmias were defined as AF \geq 30 seconds; SVT \geq 90 bpm and \geq 30 seconds; VT \geq 100 bpm and \geq 4 beats; ventricular fibrillation; pause \geq 3 seconds; or AV block (any second-degree or complete heart block). Definitions reflect study-specific criteria; determinations of clinical significance are not made by the Zio ambulatory ECG device or service.

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Data on file. iRhythm Technologies, 2026; based on patient reports posted since company inception through December 31, 2025 and hours of curated ECG data since company inception through March 2026.

Source: iRhythm