DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

DISTRICT ADDRESS AND PHONE NUMBER	DATE(S) OF INSPECTION
19701 Fairchild Irvine, CA 92612-2445 (949)608-2900 Fax:(949)608-4417	7/15/2024-7/31/2024* FEI NUMBER 3021769057

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
Mark W. Hughes, Vice President of Manufacturing

FIRM NAME	STREET ADDRESS
iRhythm Technologies, Inc.	6550 Katella Ave Ste 200
CITY, STATE, ZIP CODE, COUNTRY	TYPE ESTABLISHMENT INSPECTED
Cypress, CA 90630-5102	Medical Device Manufacturer

This document lists observations made by the FDA representative(s) during the inspection of your facility. They are inspectional observations, and do not represent a final Agency determination regarding your compliance. If you have an objection regarding an observation, or have implemented, or plan to implement, corrective action in response to an observation, you may discuss the objection or action with the FDA representative(s) during the inspection or submit this information to FDA at the address above. If you have any questions, please contact FDA at the phone number and address above.

The observations noted in this Form FDA-483 are not an exhaustive listing of objectionable conditions. Under the law, your firm is responsible for conducting internal self-audits to identify and correct any and all violations of the quality system requirements.

DURING AN INSPECTION OF YOUR FIRM WE OBSERVED:

OBSERVATION 1

Procedures for receiving, reviewing, and evaluating complaints by a formally designated unit have not been adequately established.

Specifically,

A) Your firm failed to establish and maintain written procedures/protocols for the complaint handling of complaints related to skin irritation and abrasions, and/or the application process of the patch.

During a review of 12 complaints related to various skin irritations, such as blisters, swelling, redness, itchiness, and/or infection, 10/12 (86%) of the complaints were documented as having "breached" the firm's established control limit of (b) (4) over (b) (4) or more months consecutively, with 12/12 complaints (100%) categorized as the highest complaint risk; Category (b) (4)

According to your Director of Quality Systems, physical site-specific trending/tracking is only conducted for skin irritation complaints and iRhythm Territory Managers (TMs) are responsible for communication with the physical sites related to these complaints and potential corrections.

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However, despite the continued breach of the control limit, no CAPA or impact assessment has been initiated to further investigate the breach.

No written protocol has been established to detail the proper handling and monitoring of these complaints by Territory Managers and/or potential escalation requirements for initiating a CAPA, MDR report, and/or Product Recall.

For example,

- COMP-2022-8950 was created on 12/15/2022 in response to a pediatric patient experiencing symptoms such as "dark redness, burning, and skin hot to the touch" during use of the Zio XT device. The device, when removed, was described by the patient's parent as being "hot enough to burn their fingertips and compared it to a hot cup of coffee". A Pediatrician recommend OTC ointment to treat the irritation. The attached trending data revealed that (b) (6), (b) (7)(C) breached the control limit of (b) (4) for (b) (4), from (b) (4), and again in (b) (4).

- COMP-2023-1737 was created on 02/11/2023 in response to a patient experiencing symptoms of blisters, broken skin, and itching.

- COMP-2023-1776 was opened on 02/12/2023 in response to a patient experiencing a severe allergic reaction in relation to the abrader disc. The patient complaint of "skin burning", blisters, swelling, and bloody lumps. The patient had no history of sensitive skin and/or reaction to medical adhesives. She sought medical attention and was instructed to use OTC ointment to treat the area. No MDR was reported for this issue. The attached trending data also revealed that (b) (6), (b) (7)(C) breached the control limit of (b) (4) for (b) (4) from (b) (4) and again in (b) (4).

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- COMP-2023-3090 was created on 03/20/2023 in response to a patient experiencing a developing blister and "red streaks" during use of the Zio XT device. The patient sought medical intervention and was prescribed ointment to treat the skin irritation. The attached trending data revealed that (b) (6), (b) (7)(C) breached the control limit of (b) (4) (b) (4) from (b) (4) and again in (b) (4), and (b) (4).

- COMP-2023-7030 was created on 04/06/2024 in response to a pediatric patient's mother stating that the skin preparation for the patch with the abrader caused a skin irritation. The patient's mother noted bleeding, itchiness, broken skin, slime, burning and redness. She also stated that "children should not have their skin abraded like that". The patient did not seek medical intervention and no MDR was reported. The attached trending data revealed that (b) (6), (b) (7)(C) breached the control limit of (b) (4) for (b) (4) from (b) (4). No corrections or updates to the skin preparation instructions were made by your firm.

- COMP-2024-0206 was created on 01/05/2024 in response to a patient having a skin reaction during use of the Zio XT device. The patient experienced symptoms of "itching, dark redness of skin, and blisters". The patient sought medical attention but was not prescribed anything. The attached trending data revealed that (b) (6), (b) (7)(C) breached the control limit of (b) (4) for (b) (4) out of the year, with a spike of 2.075% in (b) (4).

For all complaints above, no CAPA or impact assessment was completed by your firm. Your firm also has no criteria for submitting MDRs in non-severe cases that no not require medical intervention in your Adverse Event Reporting procedure, SOP0023, Rev. 14, effective 10/31/2023.

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In addition, your firm's Complaint Trending Process Guidelines, DOP00333, Rev. 01, effective 06/18/2024, and Complaint Handling Process Guidelines, DOP0081, Rev. 17, effective 09/07/2023, document that complaints are categorized into one of (b) (4) categories, however, neither guideline established criteria for how your firm determines a complaint's category.

B) Section ten of your Complaint Handling procedure (SOP0021, Rev. 11, Effective 11/21/2023; and Rev. 08, Effective 08/26/2022) requires a "ZTicket Search", specifically stating "On a (b) (4) basis a keyword search of (b) (4) customer care tickets shall be performed to ensure service calls that are not classified as complaints, were not misclassified and all potentially reportable events (Death, Serious Injury, or Malfunction reportable events) are assessed and documented". Your Director of Post Market Quality stated there is no documentation of the review of ZTickets for potentially missed complaints. This was confirmed by your Director of Quality Systems who stated your firm has not performed this search of ZTickets since December of 2022.

C) Section 3.2 of your Complaint Handling procedure (SOP0021, Rev. 09, Effective 10/28/2022) defines a complaint as "Any written, electronic, or verbal communication indicating an alleged deficiency in the identity, quality, durability, reliability, safety, effectiveness, or performance of any product manufactured or provided by iRhythm". The footnote on page (b) (4) of the (b) (4) Complaints (b) (4) Meeting record regarding the Zio Monitor (b) (4) complaint rate states "(b) (4) adjusted for "defective" devices received from August 2022- February 2023 but complaints were created in (b) (4) The footnote on page (b) (4) of the (b) (4) Complaints (b) (4) Meeting record regarding Zio Monitor complaints states "(b) (4) - increase due to (b) (4) UTA devices that an alleged complaint on the box was not cased as a complaint, but found and cased in (b) (4) Your Staff Product Development Quality Engineer stated this is in reference to (b) (4) Zio Monitor devices which were returned with handwritten notes on the box concerning the device being defective in some way but were put to the side until (b) (4) . The handwritten complaints were not recorded in a timely manner as required by section 6.1 of your firm's Complaint Handling procedure (SOP0021, Rev. 09, Effective 10/28/2022) which

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states "Once an employee becomes aware of an alleged complaint, they must report it within (b) (4) to Customer Care."

OBSERVATION 2

Process control procedures that describe any process controls necessary to ensure conformance to specifications have not been adequately established.

Specifically,

Your firm has not established procedures to explain how to calculate the algorithm sensitivity levels. Your Director of Quality Systems stated your firm's algorithm sensitivity procedure is established in the Medical Device Reporting Decision Guidance sheet (QCD0285, Rev. 03, Effective 07/02/2024) within the section titled "Guidance associated with arrythmias that are not detected and transmitted during wear and arrythmia misclassifications". This document is intended "to provide Complaint Investigators additional guidance in assessing potentially reportable cases." It states, "To ensure that the algorithm continues to perform within the 510(k)-cleared performance (sensitivity) specifications, a (b) (4) review of the postmarket data is performed by the Director of Post Market Quality." This algorithm sensitivity is a measurement of the functionality of the algorithm, indicating how often it can accurately identify the different types of arrhythmias. Your Director of Quality Systems provided the Updated Zio AT Detection Criteria record (QCD0037, Rev. 01, Dated 05/01/2019) which establishes the minimum sensitivity levels for each rhythm type (i.e. Complete Heart Block at (b) (4) sensitivity and Atrial Fibrillation, Pause, Supraventricular Tachycardia, Ventricular Tachycardia, and Bradycardia/Tachycardia at (b) (4) sensitivity). These documents do not include instructions for calculating the algorithm sensitivity levels to ensure consistent and accurate calculations.

In addition, your Director of Quality Systems stated that minimum sensitivity levels were established as part of the device clearance with the FDA for the ZEUS Performance Metrics device (SaMD) in 2019, but your firm had not established a procedure for algorithm sensitivity monitoring prior to revision three

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of QCD0285 in July of 2024. Also, your Director of Quality Systems stated there was no documentation of an evaluation of the 2023 sensitivity levels.

OBSERVATION 3

Procedures for identifying valid statistical techniques required for establishing, controlling, and verifying the acceptability of process capability and product characteristics have not been established.

Specifically,

The sample size used in the receiving inspection of the abrader disc component is not based on a valid statistical technique.

According to section 8.2.3 of your firm's Receiving Inspection for First Article and Incoming Raw Material procedure (DOP0181, Rev. 03, effective 07/11/2022), "Incoming receiving inspection will be performed per the corresponding sample size outlined in the component specification." During review of receiving inspection records, rather than sampling the component based on an AQL Level, a sample size of "(b) (4) was designated for the Abrader Disc component despite the lot quantity. This was further confirmed on page 2, section 8.3 of the Abrader Disc Component Specification (DMC0005.05, Rev. 05, effective 09/28/2022).

When statistical rationale and/or written justification for this sample size was requested, no records were provided.

*DATES OF INSPECTION

7/15/2024(Mon), 7/16/2024(Tue), 7/17/2024(Wed), 7/18/2024(Thu), 7/19/2024(Fri), 7/22/2024(Mon), 7/23/2024(Tue), 7/24/2024(Wed), 7/25/2024(Thu), 7/26/2024(Fri), 7/31/2024(Wed)

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Annotations to Observations

Observation 1:

Observation 2:

Observation 3:

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