



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

Mail Stop 3030

March 8, 2016

Via E-mail

Kevin M. King  
Chief Executive Officer  
iRhythm Technologies, Inc.  
650 Townsend Street, Suite 380  
San Francisco, CA 94103

**Re: iRhythm Technologies, Inc.  
Draft Registration Statement on Form S-1  
Submitted February 10, 2016  
CIK No. 0001388658**

Dear Mr. King:

We have reviewed your draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Prospectus Cover Page

1. Refer to the qualitative claims in the center of your graphic under "Addressing Prevalent Healthcare Challenges." Since these non-graphical statements require significant additional text to qualify and/or explain their meaning, they appear to be inappropriate for a cover-page or gatefold graphic. In addition, since you are likewise unable to provide a balanced and meaningful summary of the studies, tests and publications about your products here, please remove textual references to "proven" results.

Prospectus Summary, page 1

2. Refer to the first full paragraph on page 2. With respect to the peer-reviewed articles you reference, please tell us (1) whether they relate exclusively to the studies you discuss later in your disclosure starting on page 79, and if not, what other data they address, (2) whether they are based upon data you provided or that was provided by unrelated third parties and (3) whether there are other peer-reviewed articles or other information available about your product, especially those that address any negative findings relating to your product.
3. Please revise here and throughout to explain why having the “world’s largest repository of ambulatory ECG patient data” would provide you with an advantage, especially in light of the protections provided to individual healthcare data by various state and federal laws.
4. Refer to the first full paragraph on page 2. Where you cite numerical or percentage improvements resulting from use of your product, please indicate the baseline data against which you are measuring such improvements.
5. Further, when you discuss your clinical studies here and starting on page 79, provide a balanced view by summarizing the studies’ limitations. As examples only, certain studies included a small sample size, and it appears you only compared your product to the Holter monitor, though you indicate it has advantages over event monitors as well.
6. Please provide objective support for your statement on page 1 that you believe there to be an existing \$1.4 billion market opportunity for your ZIO Service.

Emerging Growth Company Status, page 5

7. You indicate on page 5 that you are an emerging growth company as defined in the JOBS Act. Please supplementally provide us with copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not they retain copies of the communications.

Risk Factors, page 10

8. Refer to your statement in the first paragraph on page 19 and the last paragraph on page 81 that LifeWatch AG “claim[s] to have [a] patch-based monitor” in its pipeline. It appears that LifeWatch may have recently received FDA approval for a patch-based monitor. Please revise as appropriate.

Use of Proceeds, page 44

9. Please disclose the approximate amount of proceeds that you currently intend to use for each purpose stated in the first sentence of the second paragraph on page 44, consistent with Item 504 of Regulation S-K. You mention that you may use proceeds to sponsor clinical trials and studies. Please provide additional details about any trials or studies needed at this time to support continued commercialization of your product or that you view as necessary to your business on a going forward basis.

Management's Discussion and Analysis, page 52

10. Refer to the final paragraph on page 53. Please revise as appropriate to discuss whether you have been able to increase contract pricing in the past and to discuss the basis for your belief that you will be able to increase contract pricing in the future, particularly given the entrance of more competitors to the market.

Revenue, page 55

11. We assume by "covered lives" you mean users of your product. It is unclear how the term relates to your business, since your product does not appear to be an on-going monitoring device. Please revise to clarify.

Revenue Recognition, page 61

12. We reference the disclosure that when you cannot reasonably estimate reimbursement, you recognize revenue upon the earlier of notification of payment or when payment is received. Please revise to disclose how you assess whether you can reasonably estimate reimbursement when revenue is recognized on an accrual basis.
13. We see that material costs of your product include amortization of the re-usable printed circuit board assemblies, or PCBAs, over the anticipated number of uses of the board. We also note the discussion about PCBA estimates on page F-11. Please tell us why you do not include a discussion of the estimates involved in determining the usage of the PCBAs within Critical Accounting Policies and Estimates.

Stock-Based Compensation, page 62

14. Please tell us the estimated IPO price range once you have that information. To the extent there is a significant difference between the estimated grant-date fair value of your common shares during the past twelve months and the estimated IPO price range, please discuss for us each significant factor contributing to the difference.

Business, page 66

15. Please balance your discussion in the last paragraph on page 66 with a discussion of other comparable technologies on the market that, like the ZIO Service, also do not have the limitations of traditional ambulatory cardiac monitors.
16. Please balance your discussion of the limitations of traditional ambulatory cardiac monitors on page 70 and the discussion of the key benefits of your product beginning on page 71 with a discussion of any limitations of your product.
17. Please provide a source for the data depicted in the graph on page 73.

Clinical Results and Studies, page 79

18. We note that you only discuss a “few” of the clinical studies related to your product. Explain why you chose the ones you discuss and tell us why you think it is appropriate to omit others. Also explain any negative findings in connection with the ones you do not describe.
19. Refer to the first full paragraph after the chart on page 79. Explain what you mean by “diagnostic yield” and how the number of events cited relates to the benefits of such yield.
20. Explain why it is appropriate to indicate a percentage advantage of your product over Holter monitor with a 74 person sample size.

Competition, page 81

21. We note your list of principal competitive factors on pages 81 and 82 and your statement on page 82 that you compete favorably based on these factors. Please balance this discussion by describing for which of these factors you compete less favorably.
22. Please disclose in your discussion of intellectual property on page 82 the duration of each individual patent, as required by Item 101(h)(4)(vii) of Regulation S-K.

Management, page 91

23. Please indicate which of your directors is currently serving as chair.

Principal Stockholders, page 115

24. Please identify the natural person or persons who exercise the sole or shared voting and/or dispositive powers.

Kevin M. King  
iRhythm Technologies, Inc.  
March 8, 2016  
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You may contact Kristin Lochhead at (202) 551- 3664 or Gary Todd, Senior Accountant at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Laurie Abbott at (202) 551-8071 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz  
Assistant Director  
Office of Electronics and Machinery

cc: Philip H. Oettinger