**Real E-Skin**

**What’s the product?**

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| A much-improved e-skin |
| health monitoring wireless, battery-less and chip-less system to measure cardiac dysrhythmia. |
| Skin sensor to predict heart diseases |
| Next-generation electronic sensor that is worn on the skin to detect ECG or other biometrics in a less invasive way than current technology |
| Continuous tele- health monitoring - smaller app |
| Continuous health monitoring utilizing a skin patch (v, for example, Holter type monitoring and associated ECG leads)  |
| Continuous monitoring of heartbeat |
| E-Skin bio monitoring |
| An e-skin to measure several patient variables without the need of a battery or a chip |
| Sensors attached to the skin. |
| A monitor wearable likes to adapt to the skin. |
| A novel electrode including all the measurement and communication capabilities in an imperceptible system. |
| A flexible thin physiologic monitoring device applied to the skin capable of transmitting data in real time |
| A flexible printed circuit board with power and sensors that can monitor electrical activity. |

**What’s the problem they are trying to solve?**

Current devices are less comfortable and may not span as many physiologic parameters.

adherence to halter based monitoring (I'm not sure this is a good idea)

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| Timely treatment, more flexible than current e-skin, more transpirable,  |
| easy monitoring of patients |
| To have a small and reliable sensor to predict heart diseases |
| Current wearable health monitors are large, bulky, and/or require batteries or energy supply |
| Health monitoring is currently bulky - halter monitor and other wireless systems have limited usability. And limited access to monitoring systems  |
| Eliminating complex wiring of traditional connected devices. Miniaturizing devices, battery, and connectivity of monitoring equipment.  |
| Unclear exactly what clinical problem is being solved - they should work on this. Seems like a cool tech, but right now it seems like a hammer without a nail. |
| Better bio monitoring remotely, without battery or connection |
| The measurement of patient variables in a simple and robust way, compared to standars solutions such as wearables. |
| It is a technology in the lookout for an application |
| The lack of access to medical monitoring. And the problem with the smartwatch. |
| Overcome most of the limitations from current equivalent systems, from several points of view, and ease their use. |

**Comments/Questions**

What targeting specific physiologic parameters are you targeting?

(1) consumer or physician application?
(2) what are the major adoption issues of competitive technique?
(3) which medical applications are most affected by appearance of tachycardia, atrial fibrillation or QTx prolongation.
(4) innovators appear to have high S. Korean presence, have you investigated KOTEC money grants?

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| How are you going to deal with patients relactancy to be monitored? |
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| Great technology! |
| Can you share some actual metrics on the performance of your device? Real data (including length of monitoring, monitoring sleep vs. awake) would be very useful. Also clear identification of a killer application / use case is necessary and a commercialization path and business plan. |
| Very interesting.Where is the power coming from? Pizioelectric will not work at night when youre asleep. What are the different health monitoring/application are being monitored? - needs to be more specificHow long can you keep this onIt seems that the product is very early stage; how much usability and accuracy testing has occurred.  |
| \* What are the specific monitoring solutions you are focusing on?\* What is the length of time someone can wear your device?\* Can the device be worn while washing/bathing?\* What is the cost? |
| Think carefully about the problem you’re solving. I’m not convinced that Apple Watch burns is a real issue. Is the Apple Watch accurate and usable enough for most applications but cost is an issue? You can’t answer that type of question without clearly articulating the clinical need, the patient population, and the use scenario. |
| Have you (will you) file for patent protection? What stage are you at in the process?Is the process piezoelectric, what skin surface and range of movement is required to be effective? Different clinical needs may require different levels and rates of monitoring, which means the sensor would need to be placed in different parts of the body? |
| 1. You should define a clear need and patient segment that will need your solution with respect to others.2. It would be great in your presentation to give details on patient compliance, robustness of the e-skin, way to connect it (complementary technology needed)... |
| Where is the power coming from?How long does the "e-skin" last attached to the skin?Is there anything you can measure with the e-skin that you can not measure with current wearable devices?How resistant is it to bumps - water, etc ...I believe this is a great technology, but will only become a hit if ou find an application were you have a strong competitive advantage. Preventing laser burns is not enough. You should find a "killer application" that, ideally, is not solvable with other wearable technologies and that has a strong need associated with it. |
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| What is on the other side? Smartphone app? Something else?How robust are measurements in terms of noise, skin impedance changes, motion artifacts, etc? |

**From the chat question burst:**

How frequent is laser burn a problem with a smartwatch? I would speculate that it’s extremely rare.

 I recall more issues with skin sensitivity to the metals and the watch band materials; I've never heard of laser burn from a smartwatch.

What is the level of maturity of your technical solution?

Where is the power coming from?

Do you have evidence that your e-skin works?

What is it actually measuring?

Is there a market opportunity for athletes to monitor their vitals with your product, assuming that you have proof of concept for metrics of interest?

Have you (will you) file for patent protection? What stage are you at in the process?

How compatible is yor e-skin with daily life activities of patients? Is there a specific segment of patients that you will be trageting?

How long does the "e-skin" last attached to the skin?

What type of sensors are present in the e-skin? How can you measure ecg, for example, with a single patch - or are they linked?

Is there anything you can measure with the e-skin that you can not measure with current wearable devices?

What about metal allergies?