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CORE

Continuous Core Body Temperature Monitoring

*COVID-19 related symptoms monitoring
Easy to use & Reliable*





“CORE enables 24/7 Elevated Body Temperature monitoring with the highest accuracy on the market and in changing ambient conditions”

Dr. Holger Hendrichs





DISRUPTIVE TECHNOLOGY

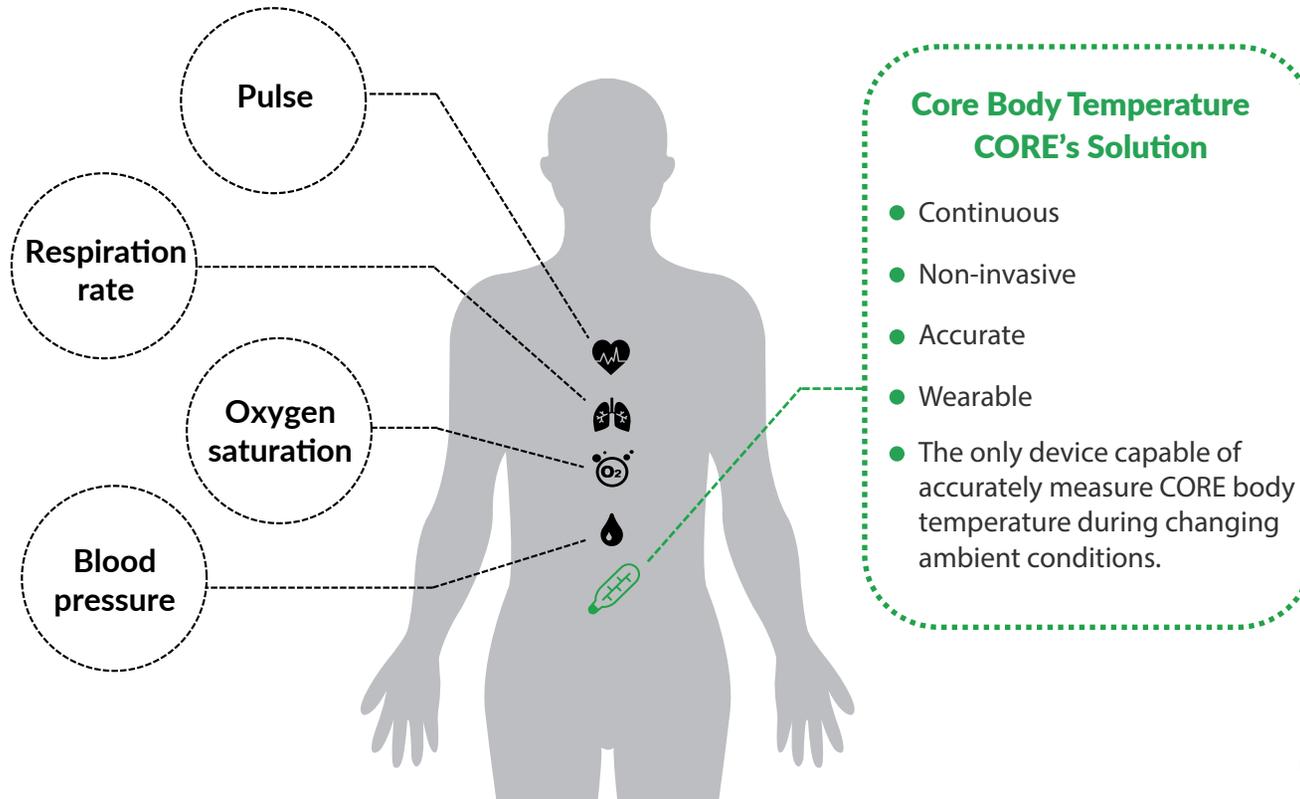
From professional Sports to Covid-19 Response

During this unprecedented Covid-19 crisis, it is clear that priorities have to be shifted to help those in need. One must try to adapt and focus one's abilities and strengths in ways that could help society. By transforming CORE from a sports wearable to a device for work safety and wellbeing, we can help to monitor people, caretakers, and essential personnel, the most valuable resources in the world.



THE MISSING PUZZLE PIECE – CORE

Until now, only four of the five most relevant vital signs could be monitored continuously using solutions compact enough to be used in wearables. **CORE** is the first device that integrated green-TEG's gSKIN® technology to accurately measure core body temperature under all conditions





UNIQUE FEATURES



Unmatched Accuracy



Patch or Belt Application



Comfortable



Easy to Use



Long Battery Life: > 6 days



Apps supported, e.g. Android, iOS, Garmin ConnectIQ, Apple Watch



Bluetooth BLE and ANT+ connectivity

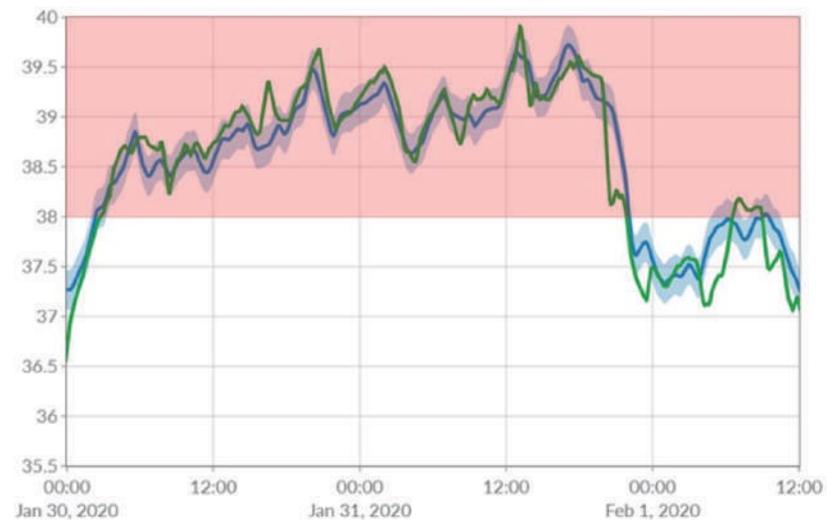


AI Algorithm





COVID-19 MONITORING



Elevated body temperature monitoring. Green = CORE, Blue = ePill (gold standard)

CORE's initial focus was to increase the performance of athletes by continuously monitoring core body temperature. However, CORE's technology has been designed for clinical patient monitoring from the start. CORE accurately measures core body temperature around the clock and is a powerful early detection tool for elevated body temperature. Continuously measuring core body temperature can be used to detect and monitor symptoms of possible Covid-19 infections. CORE can be used, amongst others, for the following use-cases: (see next page)





Monitor: Observe the core body temperature of population and workforce segments

Control 24/7 the core body temperature of your workforce, moving away from time-consuming and once-a-day individual monitoring with infrared cameras or non-contact infrared thermometers. With CORE, you can aggregate data from larger groups to gain greater insights.



Protect: Elevated body temperature monitoring in exposed healthcare workers in hospitals and nursing homes

Protecting the wellbeing of healthcare workers is critical to preserve the capabilities of hospitals and nursing houses. With CORE, you can continuously monitor their health status.



Relieve: Monitor remotely the elevated body temperature of people in your facility

Remote monitoring allows to save resources and relieve staff from monitoring the wellbeing of workers in your facility. Furthermore, you can also continuously monitor individuals outside the facility, improving your capabilities and your data for better insights.

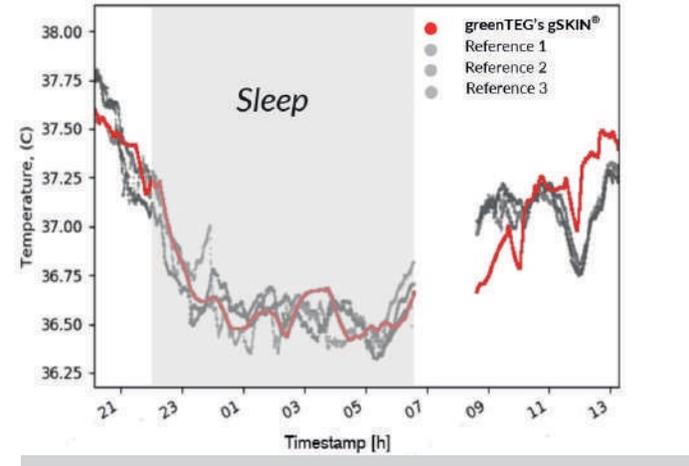


CLINICALLY VALIDATED SOLUTION

The accuracy of CORE's core body temperature monitoring solutions has been validated through an **independent study** and several **internal case studies**.

The accuracy of CORE our solution was determined to be $\pm 0.26^{\circ}\text{C}$, tested under various ambient conditions and physical activities.

Unlike traditional skin temperature measurements, **CORE's** innovative technology is uniquely capable of getting an accurate temperature reading during various ambient conditions. CORE has been tested and validated in the following environments and conditions:



CORE vs. ePill (gold standard)



Hospital



Free-living



Elevated
Temperature



Sleep



Activity

CORE STRENGTHS

The strength of CORE's technology is that it is small enough to be integrated into wearable devices, such as smartwatches, while achieving high accuracy, even in changing environments. It does not matter if you are in the sun, wind or rain, or whether you are physically active or not. CORE works in a wide range of ambient conditions, such as fluctuating temperature and humidity levels.

Technique	Accuracy	Wearable	Continuous	Non-Invasive	Outside Control Environment
Gold standard (ePill)	✓	⊘	✓	⊘	⊘
Tympanic IR	⚠	⚠	⚠	⚠	⊘
Oral	⚠	⊘	⊘	⊘	⊘
Skin Temperature	⚠	✓	⚠	✓	⊘
Indirect Heat Flux	✓	⚠	✓	✓	✓
Zero Heat Flux	✓	⊘	✓	✓	✓
CORE	✓	✓	✓	✓	✓

✓ High accuracy / Feature possible

⚠ Medium accuracy / Limited Feature possibility

⊘ Low accuracy / Feature not possible





CORE's ESTABLISHED USE CASES



ELEVATED BODY TEMPERATURE MONITORING

Continuously tracking your core body temperature will help you to get more information from your body and **track your health trends** over long periods. It can help you to detect **early warning signals** from your body so that you can get advice from medical professionals if needed.



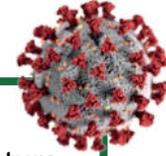
SLEEP TRACKING

Tracking core body temperature can also be used to detect sleeping patterns, such as the **circadian rhythm**. Monitoring and analyzing these patterns can provide new insights and understandings about the way you sleep.



CORE's RESEARCH TOPICS

CORE body temperature monitoring technology is currently being tested in a wide range of research applications, many of them focused on COVID-19 response



Covid-19 Response

Continuous Monitoring and Detection of COVID-19 Symptoms and Elevated Body Temperature.



Patient monitoring
Immediate detection of patient deterioration



Ovulation
Cycle tracking for contraception and pregnancy planning



Pattern recognition
of neurodegenerative diseases, such as Parkinson's & Alzheimer



Sports performance
Prevent overheating and determine ideal performance output of your body





CURRENT TRIALS

In March, 2020 we published a press release explaining how we can support COVID-19 research with the CORE patch prototype. At the time of writing and designing this brochure, the CORE team is in discussion with existing and potential partners such as the University Spital Zürich (USZ), the Inselspital Bern, and many more partners around the world. For up-to-date feedback on these collaborations please feel free to contact us.

RESOURCES

CORE has conducted a number of case studies and measurements to demonstrate the accuracy of our core body temperature sensing solution. Contact us to get access to the full studies.



DISCLAIMER

Warning: CORE is not a medical device
It is not intended to diagnose, treat, cure, or prevent any disease or health condition. It does not have FDA or CE approval.

CORE should be used by healthy adults in a stable environment and is only meant to inform you about your overall wellbeing. No medical advice can be concluded from the measured temperature data, and it cannot replace the services of health care professionals. Deviations from the normal body temperature range should be investigated by a health care professional and no conclusion regarding your health can be drawn from a core temperature that is within the healthy range. Never disregard professional medical advice or delay in seeking it because of the temperature measurements by CORE.

The use-case scenarios that are shown on any printed or digital material from CORE or greenTEG are only used to inform the public about our research topics. It does not prove the current application of the CORE in these fields.

