

A fully autonomous, contactless medical robot designed for precise vital signs monitoring based on core body temperature is offered under investment agreement to medical equipment manufacturers wishing to expand their portfolio

Summary

Profile type

Technology offer

Company's country

Bulgaria

POD reference

TOBG20260123005

Profile status

PUBLISHED

Type of partnership

**Research and development
cooperation agreement****Investment agreement**

Targeted countries

• All countries

Contact Person

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Term of validity

23 Jan 2026**23 Jan 2027**

Last update

23 Jan 2026

General Information

Short summary

A Bulgarian medtech company offering a fully autonomous, contactless device for real-time, contactless, and clinically accurate vital signs monitoring is pursuing partnerships with medical equipment manufacturers under investment and R&D agreement. The technology is designed for hospitals, home care, clinical trials, and even defense applications. It uses many advanced sensors to deliver high accuracy from distance and is technically proven and IP registered.

Full description

A Bulgarian company working in the domain of medical technologies has developed an advanced medical robotics solution to overcome the persistent challenges of manual and invasive body temperature measurement methods. The applicant is a high-tech enterprise specialized in the development of medical devices and robotic systems for hospital and outpatient environments. The addressed problem relates to the reliance of current clinical practice on contact-based, consumable-dependent, and staff-intensive measurement techniques that increase infection risk, operational cost, and workload for healthcare professionals.

The device operates contactlessly from a 50 cm distance using a three-axis rotation system and medical-grade infrared sensors. It boasts an accuracy of $\pm 0.36^{\circ}\text{F}$ (0.2°C), validated in intensive care unit (ICU) settings to be comparable to the gold standard of rectal probes. The solution integrates seamlessly with both Android and iOS devices via a dedicated application, storing and analyzing long-term health data to visualize trends, predict illness, and track basal body temperature. It is fully autonomous, self-operating, and easy to use across diverse healthcare contexts.

The system comes with features like real-time alerts, big data integration, international shipping, and a strong focus on hygiene and user comfort. The offer represents a complete solution for medical-grade temperature tracking—effortless, scalable, and intelligent.

The company is looking for international partners under investment and R&D agreement with the purpose to finalize the development stage by including it in their medical equipment portfolio and begin mass production.

Advantages and innovations

The technology stands out through a combination of technological sophistication and user-centric design:

- **IPR Status: Patented Contactless Measurement:** Avoids human error and ensures patient comfort. The technology is patented in several countries and including in the PCT of WIPO. Detailed information regarding the IP will be provided after an NDA is signed.
- **Stage of development:** Clinically validated prototype ready for market introduction and partnership with manufacturers for large-scale deployment. **Clinical Validation:** Demonstrated effectiveness in ICU settings, with endorsements from 9 University Hospitals, Ministry of Defense in total 30 LOIs from officials, key opinion leaders and NGOs.
- **AI-Driven Data Analysis:** Offers insights into health trends, predictive alerts, and visualized temperature curves.
- **Mobility and Precision:** The robot adapts to patient movement, even during sleep, and continuously monitors changes.
- **Scalable and Dual-Use Design:** Ideal not only for hospitals and homes but also field hospitals and remote surgery support.

The innovation is further recognized by multiple awards, as well as publication in a prestigious U.S. scientific journal.

Technical specification or expertise sought

Stage of development

Available for demonstration

IPR Status

IPR granted

IPR Notes

Sustainable Development goals

- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 3: Good Health and Well-being**

Partner Sought

Expected role of the partner

The company seeks partnerships with medical equipment manufacturers who are ready to invest in R&D finalization,

certification and in the integration of the product into their production portfolio.

The ideal partner would be a medical equipment manufacturing company ready to invest in expanding its production portfolio with a new patented and validated solution covering the additional production and certification costs.

Type of partnership

Research and development cooperation agreement

Investment agreement

Type and size of the partner

- **SME 11-49**
- **Big company**
- **SME 50 - 249**

Dissemination

Technology keywords

- **06005003 - Health information management**
- **06005002 - Sensors & Wireless products**
- **06005004 - Remote diagnostics**
- **06001005 - Diagnostics, Diagnosis**

Targeted countries

- **All countries**

Market keywords

- **05001007 - Other diagnostic**
- **05004005 - Diagnostic equipment**

Sector groups involved

- **Electronics**
- **Digital**
- **Health**