

MEDICALgorithmics

INNOVATIVE SOLUTIONS IN MEDICINE

Through creating technological innovations, we change the face of medicine to improve the lives of patients



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Medicalgorithmics is a global technology company pioneering novel cardiac monitoring and rehabilitation systems to enable telemedicine. We believe in the power of meaningful innovation. Our multidisciplinary team of researchers and developers combines algorithms, software, and product design to develop truly breakthrough technological solutions. Through identifying unique challenges and medical needs, we design products to improve the lives of patients.

Leading the way in remote cardiac monitoring



+150 000 000 hours
of heart monitoring



+15 years
of medical device
expertise



+10 granted
patents



+100 000 patients
monitored yearly

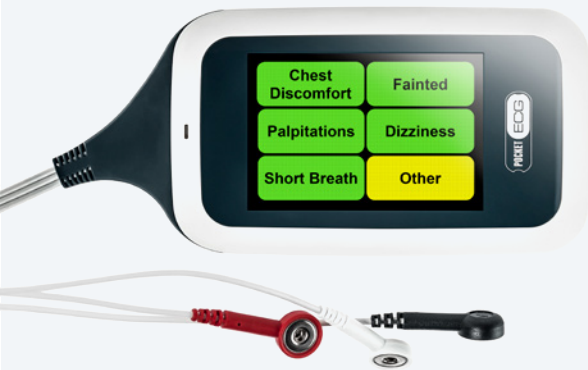


+2 000 physicians
using the technology
worldwide

Driving significant global growth

Turning heartbeats into powerful insights

People worldwide are living longer thanks to advances in modern medicine. However, an aging population means an ever-growing need for more specialized care and technology to manage the increased complexities of health conditions, particularly related to cardiovascular diseases. Medicalgorithmics, a long-time leader in remote cardiac monitoring technology, is meeting that challenge in the global marketplace.



More: www.pocketecg.com

Arrhythmia diagnostics

PocketECG is a system for heart arrhythmia diagnostics with the highest diagnostic yield when compared to other monitoring technologies. This lightweight and easy to maintain device has been successfully used by patients worldwide for over 10 years and has become one of the most popular systems for long-term online heart monitoring.

- Continuous transmission of the full-disclosure ECG signal for 1-30 days
- Detection of the onset and offset of each arrhythmia
- Classification of the morphology of every heartbeat
- 24/7 online viewing of the ECG signal through any web-enabled device



More: www.pocketecgcrs.com

Cardiac rehabilitation

PocketECG CRS is a system for cardiovascular telerehabilitation which can be used in hospitals and clinics, as well as at the patient's home. During rehabilitation sessions, the system sends the complete record of a patient's ECG and physical activity in real-time, allowing a physician or physical therapist to evaluate the patient's condition. Audible and visual messages help the patient control a workout's intensity so that it safely contributes to their rehabilitation.

- 2-in-1 capabilities: cardiac rehabilitation training and continuous ECG monitoring modes
- Continuous transmission and analysis of the full-disclosure ECG signal
- Training intensity control based on heart rate
- Possibility of use in physician offices, hospitals, outpatient settings, and patient homes.
- Requires no specific training equipment

Always-on, continuous arrhythmia detection

Bringing innovations to medicine

Medicalgorithmics is a proven technology leader in remote cardiac monitoring, validated by scientists and clinicians. It works collaboratively with the scientific community on the advancement of medical research and discovery.

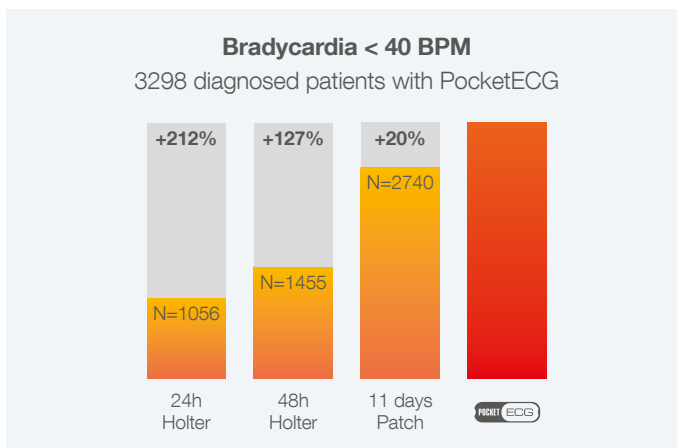
Over the years, we have collected valuable and comprehensive data (full-disclosure ECG signal for up to 30 days with fully annotated heartbeats, synchronized with both continuous physical activity data and symptoms reported by patients) for tens of thousands of patients.

Big data and comprehensive ECG reporting is highly valuable for clinical research, attracting top global Key Opinion Leaders in cardiology and electrophysiology to collaborate on efficacy studies, generating new diagnostic concepts such as arrhythmia prediction and other AI applications.

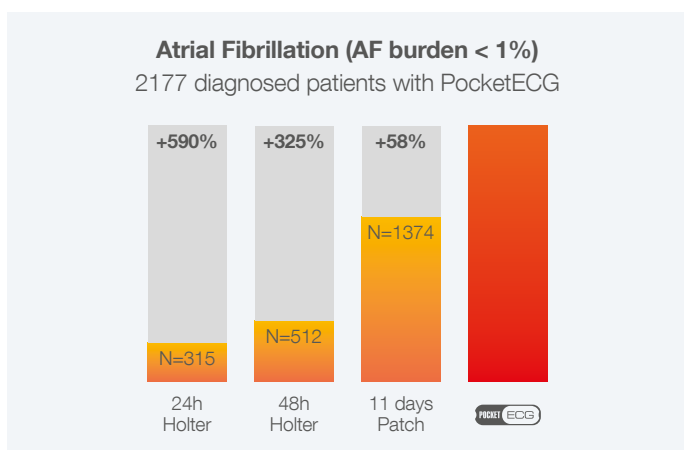


How does the monitoring duration impact the Diagnostic Yield for Bradyarrhythmias?

Research presented at the American College of Cardiology's 68th Annual Scientific Session shows that continuous, full-disclosure ECG monitoring for longer durations is more effective than shorter duration Holter monitors and patches in identifying patients with bradyarrhythmia (bradycardia, atrioventricular block, and conduction disorders). Short-term monitoring methods may fail to diagnose some patients, whereas combining flexible monitoring duration with continuous, full-disclosure ECG data resulted in higher diagnostic yield for bradyarrhythmia.



Is online monitoring better than offline?



Also, a large study presented at the Heart Rhythm 2018 Scientific Sessions evaluated online vs. offline ECG monitoring methods to detect paroxysmal atrial fibrillation (PAF), examining the relationship between monitoring duration and diagnostic yield. The study showed diagnostic yield was significantly higher with the PocketECG online monitoring system than with fixed 24- and 48-hour Holter, as well as multi-day patch methods.

More information:

www.medicalgorithmics.com/research

Simple process. Quality data. Patient comfort.



Nurse

- Easiest enrollment process in the industry
- Automated downloading and printing of reports
- Easy to use one-piece device
- Skin friendly: if skin is irritated, electrodes can be moved to a slightly different place



Physician

- Clinical efficacy and the highest diagnostic yield
- Continuous full-disclosure ECG streaming available online in near-real time
- Data quality: Holter-standard one-beat resolution
- Statistical analysis of patient's symptoms, physical activity and arrhythmia
- Immediacy and accessibility of patient data during monitoring
- Activity monitoring – correlation of activity and symptoms, heart rate and rhythm



Patient

- Faster diagnosis and start of treatment: the end of study report is available right after the monitoring session is completed.
- No more paper diaries – symptoms reported by the patient through the touch screen.
- Easy to use: easy every day operation and exchange of a battery



Every heartbeat.
Every insight.
Every second of the day.

3-in-1 device design for greater flexibility

Medicalgorithmics' PocketECG can seamlessly switch between Holter testing, event-based monitoring, and multi-week mobile cardiac telemetry without a patient's return visit to the doctor's office. This allows physicians to choose the optimal method to diagnose the patient as soon as possible.



Enable intra-study intervention

The constant transmission of beat-to-beat data enables clinicians to take action before the predetermined study time has elapsed, whether it's switching testing modalities, changing pharmacological treatments, or taking a more direct treatment approach.

A no-compromise approach to data quality

Engineered to provide clinicians with a high-quality ECG signal, PocketECG is lightweight and easy to use. Three leads connect the device to the patient's chest and provide a constant stream of ECG data with a single-device configuration. It transmits and discloses every labeled heartbeat directly from the monitor to the mobile network. 24/7 monitoring by our highly-trained ECG technicians helps ensure patient compliance for a successful study.

Discover how a higher diagnostic yield can deliver powerful insights.
Contact Medicalgorithmics today world@pocketecg.com

www.medicalgorithmics.com