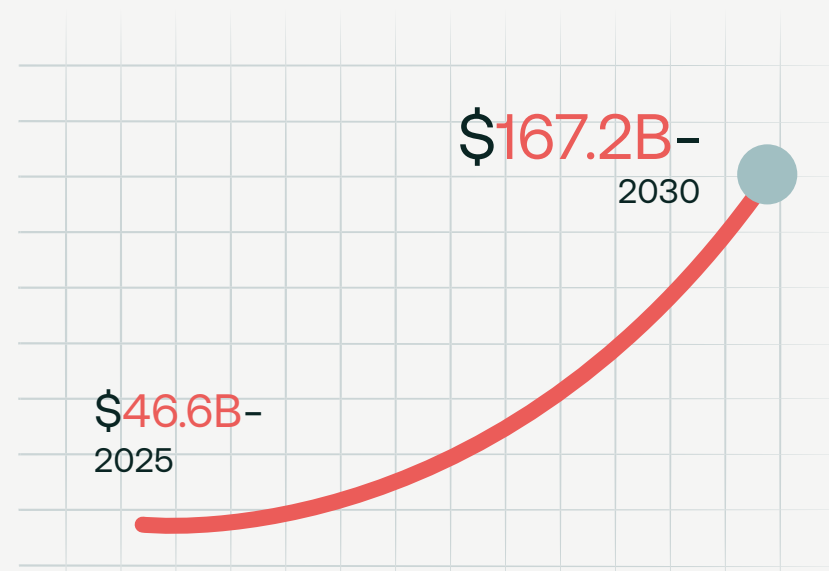




ECG + PPG: The New Gold Standard in Wearables

Wearables enable continuous health insights outside of traditional care settings. When it comes to heart monitoring, two primary technologies are available to device manufacturers: **Electrocardiogram (ECG)** and **Photoplethysmogram (PPG)** — each offering distinct but complementary data.



The global wearable healthcare devices market is projected to grow at a **CAGR of 29.08%** over the next five years, from **\$46.6bn in 2025** to **\$167.2 billion^[1] in 2030**.

The benefit of ECG + PPG:

It's no longer a choice between ECG and PPG. PPG has limited accuracy due to movement artefacts, whereas ECG cannot be used continuously in a watch or ring form factor and is limited in asymptomatic cases.^[2]

Combining both technologies delivers a more accurate ^[3] and better user experience.

Personalised data generated from wearables is empowering medical professionals to make more informed care decisions with new insights that extend beyond patients' physical activity.

ECG

- Gold Standard
- Arrhythmia Detection
- Share with Doctors

PPG

- Continuous Monitoring
- Irregular Pulse Detection Only

Combined ECG + PPG

- Continuous Monitoring with Arrhythmia Detection
- PPG Alerts to Check ECG
- False Positive Reduction^[4]

New Market Opportunities

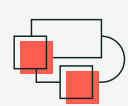
Combining ECG with PPG opens new markets and defends against competitive threats:



Physician recommendations to patients.

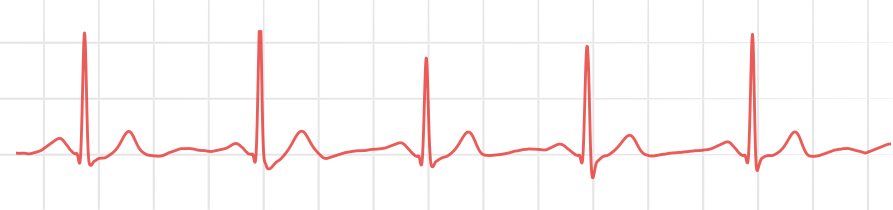


Expand into B2B healthcare markets (e.g., payers, clinical research, employers).

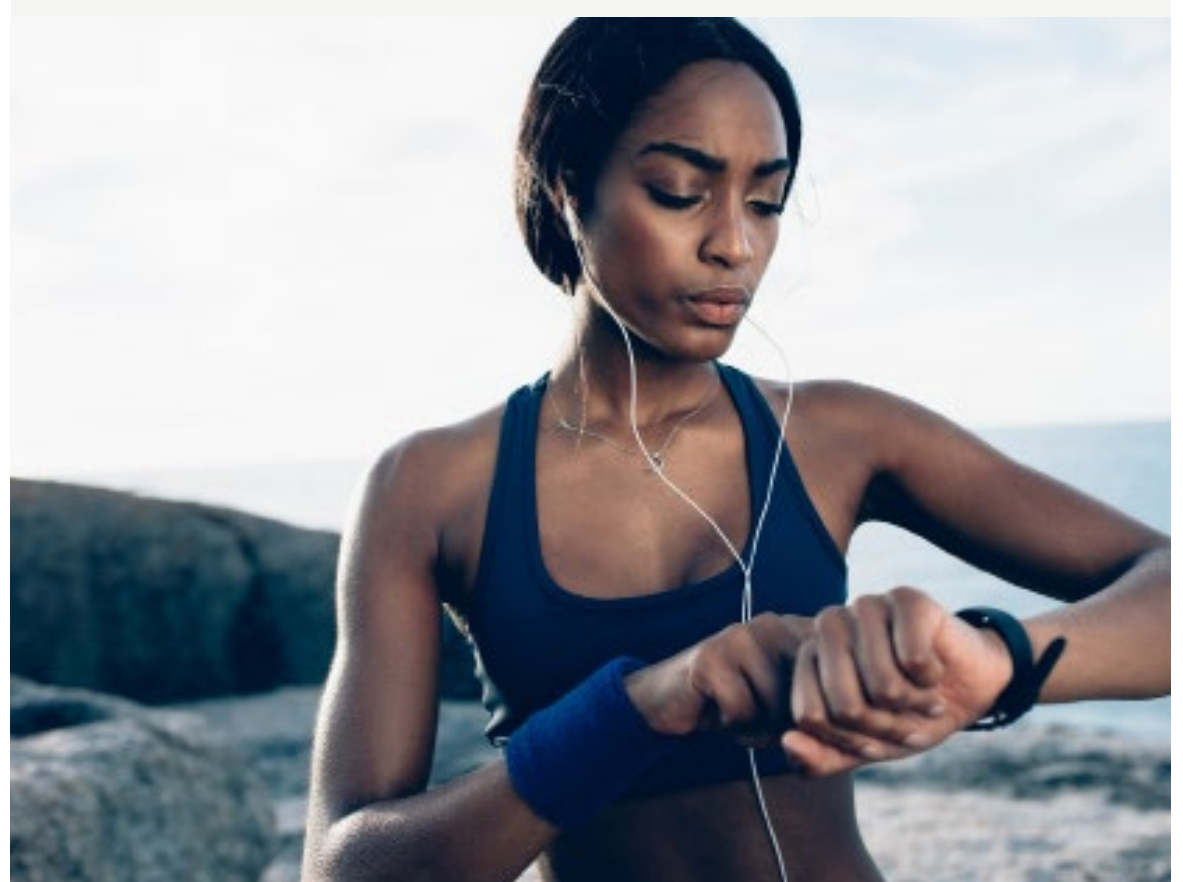
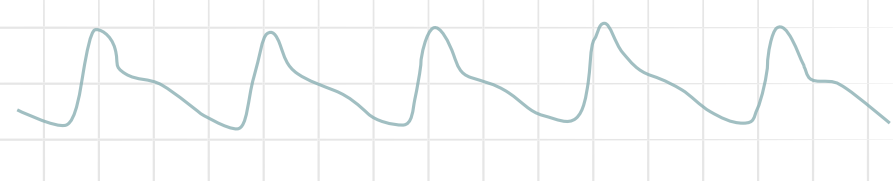


Access reimbursed programmes (e.g., Remote Patient Monitoring, Chronic Care).

ECG



PPG



¹ <https://www.grandviewresearch.com/industry-analysis/wearable-medical-devices-market>

² <https://www.frontiersin.org/journals/cardiovascular-medicine/articles/10.3389/fcvm.2022.869730/full>

³ <https://www.frontiersin.org/journals/cardiovascular-medicine/articles/10.3389/fcvm.2022.869730/full>

⁴ www.health.harvard.edu/mens-health/threetimes-as-many-people-have-atrial-fibrillationthan-previously-known



Contact us at info@b-secur.com to learn how we can support your ECG development—we'd love to connect!

