

3rd International Conference on Cardiology and Cardiovascular Innovations July 21-22, 2026 | Vienna, Austria



Kaiden Lin, Masters University, Santa Clarita, USA
Ruth Beltran MS3, California Health Science University,
College of Osteopathic Medicine, Clovis, USA
John Lin MD, UCSF Health, Fresno, USA

Oura ring in cardiopulmonary monitoring and disease detection

Intro

Cardiovascular disease remains the leading cause of death worldwide, claiming 18 millions lives annually. Most of the research is driven by the medical community until recently when the technology sector began to create wearables to provide easy monitoring and early disease detection. Beginning with the Apple watch (Apple Inc), atrial fibrillation can now be monitored 24/7. Oura ring (Oura Inc), a second generation wearable, integrates cardiac and pulmonary metrics to report even more comprehensive health data.

Methods

We reviewed the MEDLINE database in the last two years for medical literature, meta-analysis pertaining to the Oura ring use in a clinically relevant setting. Oura ring based data were compared to clinically based monitoring device and its use in disease detection.

Results

Flores et al 2024 meta-analysis showed the ring provided accurate cardiac measurements, but ambivalent sleep parameters. Singh et al 2024 meta-analysis showed the ring with promising disease prediction (88% Covid-19, 95% atrial fibrillation). Khan et al 2025 meta-analysis, however, showed the ring provided accurate sleep parameters compared to the Flore et al 2024 study.

Conclusion

Most recent MEDLINE meta-analysis showed accurate cardiac measurements as these have longer developmental track (1st generation.). The meta-analysis for the sleep parameters results were more variable and have a shorter developmental track (2nd generation.) Further data validation will be necessary, but we foresee medical practitioners will need to become familiar with newer and newer wearable devices in order to provide optimal personalized care.



3rd International Conference on Cardiology and Cardiovascular Innovations July 21-22, 2026 | Vienna, Austria

Keywords: Oura ring, wearables, Apple Watch, atrial fibrillation, MEDLINE, sleep study

Biography

Kaiden Lin, Masters University.

Student in the Biology Department. Will be applying to medical school in the next month

Current research interests include Oura ring and Applewatch in monitoring cardiopulmonary health as well evolving news standards in trauma surgery

Other interests in global medicine and have participated in primary care/surgery in Haiti, Greece, and Kenya