Wrist-worn arrhythmia monitoring devices are well accepted for long-term rhythm assessment by the elderly

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PURPOSE

- To gain user feedback on the use of a wrist-worn arrhythmia monitor from people belonging to the main subject group of the device.
- To evaluate the incidence of previously undiagnosed AF and other arrhythmias in elderly population.

METHOD

- 200 subjects (65+ years, mean 71, range 65–92) with no previous AF diagnosis were recruited through a newspaper advertisement.
- The subjects wore the PulseOn Arrhythmia Monitor wrist device for two weeks and gave feedback on their user experience.

RESULTS

- The subjects assessed their experiences as shown in Table below.
- 3 new AF cases, 11 more subjects with short SVTs.
- One subject stopped using the device prematurely due to skin irritation.

Questions, scale 1–5 (5 = very easy)	Mean	Std
Overall easiness	4.4	0.7
Easiness of takin ECG	4.7	0.6
Easiness of charging	4.8	0.6
Skin irritation (1 = no irritation)	1.6	1.0

CONCLUSION

- The studied device was found easy to use and comfortable in long-term monitoring.
- Wrist-worn devices are suitable for arrhythmia diagnosis also in the elderly.
- Combining continuous PPG rhythm assessment with intermittent ECG enables reliable asymptomatic AF detection.