



A 2-in-1 home blood pressure monitor with a 1-lead ECG function





OMRON Complete: an accurate and easy blood pressure monitor with ECG recording



Early detection by routine recording electrocardiogram (ECG) measurements



Instant and clear ECG results



OMRON Academy offers courses and content, including webinars, to support you in discovering more about AFib and hypertension.

> The platform is free, collated by leading medical societies and professionals, and provides the following benefits:

- Interactive courses, requiring approximately 10 or 15 minutes to complete
- Created by key medical experts
- Endorsed by leading medical societies
- A wide range of topics, including cardiovascular and respiratory



considering the risks and guidelines www.omron-healthcare.com/professionals

Atrial Fibrillation (AFib):

OMRON

GOING ZERO

### Register today, to learn more about AFib detection at OMRON Academy

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## Some numbers about AFib

AFib is the most common heart rhythm disorder<sup>1</sup>, accounting in Europe alone for 0.28% to 2.6% of all spending on healthcare. This disease presents patients with a risk of stroke 5 times higher than those without AFib; it's also a cause of 20% to 30% of all strokes.

Plus, strokes caused by AFib are often more disabling or fatal than strokes due to other causes. A recent study estimated that in the EU 7.6m people over 65 years old had AFib in 2016 and this figure would rise by 89% to 14.4m by  $2060.^2$ 

#### Risk factors and comorbidities associated with AFib 5



### Stroke risk and symptoms of AFib

One of the biggest risks of AFib is debilitating, or fatal, stroke. This is why early detection and treatment are critical for patients, many of whom may not even be aware that they have AFib. Effective treatment could reduce the risk of stroke by 68%.

The risk of AFib increases with age, and patients may have symptoms that they wouldn't initially associate with AFib. Such as:



**Palpitations** 









Shortness of breath General Chest pain weakness

Dizziness

However, 50-87% of patients with AFib are initially asymptomatic.<sup>4</sup>

# Stroke due to AFib can have dire consequences

Patients with AFib strokes are associated with increased morbidity and mortality. A study comparing stroke patients with and without AFib found the following:<sup>5</sup>

- Patients with AFib had higher in-hospital death rates (OR, 1.7; 95% CI, 1.2-2.5)
- Longer hospital stays, 50 days for AFib stroke patients vs 40 days for stroke patients without AFib
- Lower home discharge rates for AFib stroke patients (vs care facility, OR, 0.60; 95% CI, 0.44-0.85)

Furthermore, patients with AFib had a lower 1-year survival rate following a stroke with an increased risk of stroke recurrence in comparison to stroke patients who did not have AFib.<sup>5</sup>

### AFib and hypertension

Hypertension and AFib often coexist. In fact, patients with hypertension have a 1.7-fold higher risk of developing AFib compared with normotensives, and 1 in 6 cases of AFib has been attributed to hypertension. In those with diagnosed AFib, hypertension was present in approximately 60% to 80% of patients.

The presence of hypertension in AFib patients increases the risk of stroke even by 1.8-to 2-fold. Early diagnosis of these diseases is crucial to help improve outcomes for patients.



# The European Society of Cardiology (ESC) Guidelines

Some highlights of the recommendations from the 2020 ESC Guidelines<sup>1</sup>:

#### Diagnosing:

- ECG documentation is required to establish the diagnosis of AFib: a standard 12-lead ECG recording or a single-lead ECG tracing of ≥30s showing heart rhythm with no discernible repeating P waves and irregular RR intervals is diagnostic of clinical AFib
- Definite diagnosis of AFib in screen-positive cases is established only after physician reviews the single-lead ECG recording of >30s or 12-lead ECG and confirms that it shows AFib

#### Screening:

- Opportunistic screening for AFib is recommended by patients > 65 years of age, hypertensive patients, and patients with OSA
- Systematic ECG screening should be considered to detect AFib in individuals aged ≥75 years, or those at high risk of stroke



#### Take home messages

It was found that repeated heart rhythm monitoring was associated with significantly better effectiveness compared with single assessment.<sup>1</sup>

Consistent monitoring to build data over time naturally lends itself to ECG home monitoring and sharing of data between patient and doctor.

In addition, as there is an established link between hypertension and AFib, regular home-based blood pressure monitoring could provide additional data to better understand risk factors in individual patients

- 1. Hindricks G., et al. 2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association of Cardio-Thoracic.
- <sup>2</sup> European Society of Cardiology. The ESC. ESC Press Office. Press releases. Available at: https://www.escardio.org/The-ESC/Press-Office/Press-releases/Atrial-fibrillation-set-to-affect-more-than-14-million-over-65s-in-the-EU by2060#:~:text=Atrial%20fibrillation%20is%20the%20most,are%20caused%20by%20 atrial%20fibrillation. Accessed May 2023.
- <sup>2.</sup> Howard, Patricia A. "Guidelines for stroke prevention in patients with atrial fibrillation." Drugs 58.6 (1999): 997-1009.
- 4 Brandes, Axel et al. "Risk Factor Management in Atrial Fibrillation." Arrhythmia & electrophysiology review vol. 7,2 (2018): 118-127. doi:10.15420/aer.2018.18.2
- 5. Staerk, L., et al. (2017). Atrial Fibrillation: Epidemiology, Pathophysiology, and Clinical Outcomes. Circulation research, [online] 120(9), pp.1501–1517.
- 6 Dzeshka, Mikhail S., et al. "Atrial fibrillation and hypertension." Hypertension 70.5 (2017): 854-861.
- 7. Kim, Daehoon, et al. "Ideal blood pressure in patients with atrial fibrillation." Journal of the American College of Cardiology 72.11 (2018): 1233-1245.