

GARFIELD-AF

From heart to head: Insights into atrial fibrillation

WHAT IS AF?

In atrial fibrillation (AF) the heart sends rapid, disorganised electrical signals creating an irregular heartbeat. This can cause blood to pool and lead to a blood clot which can travel to the brain and trigger a stroke¹.

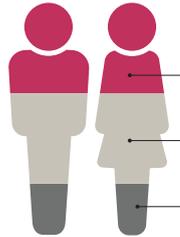


AF is associated with at least a **x 2 higher risk** of ischaemic stroke than patients without AF.



AF numbers will **increase x 2 by 2050** as the global population ages².

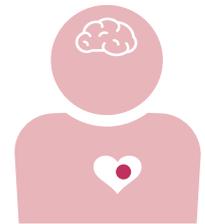
AF is the **most common heart rhythm disturbance**, affecting ~ 2% of the overall population and around 10% of over-75s, usually occurring in patients with other heart or lung conditions:



Approx. **8.8m** EU

8m CHINA

5-6m USA



INVESTIGATING COMORBIDITIES ASSOCIATED WITH AF²

Comorbidities are important risk factors for thrombotic events and GARFIELD-AF is the only global AF registry without exclusions due to comorbidities or treatment.

Obesity³:



Obesity **increases the risk** of AF. **71%** of GARFIELD-AF patients with a new diagnosis of AF were overweight or obese

In patients with newly diagnosed AF, obesity is not associated with a higher rate of mortality compared with patients of normal weight one year after diagnosis of AF.

Increasing BMI* was associated with **younger age at the time of the diagnosis** of AF as well as a higher rates of history of hypertension, hypercholesterolemia, type 2 diabetes, coronary artery disease, and Congestive Heart Failure (CHF).

Obese patients have a **higher risk** of developing permanent or persistent AF.



Cardiomyopathy and CHF⁴:

Both AF and CHF are increasing in prevalence



Patients with AF have a **significantly higher risk of CHF** compared with those without AF

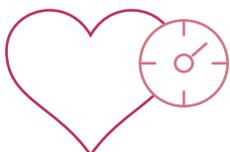
Ischaemic cardiomyopathy is a common clinical presentation in patients with AF.

Patients with AF and CHF:

- have a **worse prognosis** than either condition alone.
- had **higher rates of all-cause mortality, stroke and major bleed** and new or worsened CHF compared to patients with no CHF.



Hypertension⁵:



Both **stroke/systemic embolism and major bleed rates increase** with the severity of uncontrolled hypertension.

In GARFIELD-AF, most patients with newly diagnosed AF have a history of hypertension.

THE BURDEN OF AF: FACTS AND FIGURES FROM GARFIELD-AF^{6,7}

AF imposes a high financial, economic and human burden to societies and this burden is likely to grow in the future.

GARFIELD-AF describes the burden of AF on healthcare resource utilised (HCRU) in **~ 40,000 patients from 35 countries:**



Patients from North America were more likely to experience an **emergency room contact** than the overall cohort.



There are **higher costs per patient** per year in the UK (£2,857.30) and Germany (€2,504.10) than in the other European countries.



North America and Europe showed **higher HCRU** (544 and 432 medical contacts per 100 pys*) than Asia and Latin America (344 and 360 medical contacts per 100 pys).



The amount and type of health service **utilisation** varies around the world, depending on the availability of services and different models of care.



Patients from Europe, North America, and ROW* had more **hospital admissions** than those from Asia and Latin America.

* BMI=body mass index, pys = patient years, ROW = rest of world

References

1 National Heart, Lung, and Blood Institute. What is Atrial Fibrillation? Available at: <http://www.nhlbi.nih.gov/health/health-topics/topics/af/>. Accessed August 2017. 2 About Atrial Fibrillation. GARFIELD-AF website. Available at: <http://af.garfieldregistry.org/about/about-af>. Accessed August 2017. 3 Goldhaber SZ et al. Impact of body mass index in newly diagnosed atrial fibrillation in the GARFIELD-AF registry. European Society of Cardiology 2017 Poster Presentation P87116. 4 Corbalan R et al. One-year clinical outcomes and management of patients with ischaemic vs non-ischaemic cardiomyopathy and newly diagnosed atrial fibrillation: results from GARFIELD-AF European Society of Cardiology 2017 Poster Presentation P85662. 5 Camm JA et al. Which definition of hypertension best defines thromboembolic risk in patients with atrial fibrillation? Data from the GARFIELD-AF registry. European Society of Cardiology 2017 Poster Presentation P86713. 6 Mantovani LG et al. Global healthcare resource use in 39,670 patients with AF: perspectives from GARFIELD-AF European Society of Cardiology 2017 Poster Presentation P85944. 7 Mantovani LG et al. The burden of atrial fibrillation in the more populated European countries: perspectives from the GARFIELD-AF registry. European Society of Cardiology 2017 Poster Presentation P86619.

For more information, visit www.garfieldregistry.org | [@GARFIELD_reg](https://twitter.com/GARFIELD_reg)

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