

TREATING ATRIAL FIBRILLATION (AF)

Millions of Europeans suffering from 'new millennium epidemic' may be missing out on life-saving procedure

WHAT IS AF?

Atrial fibrillation (AF) is characterized by an irregular and often fast heart rhythm that results in uncoordinated contraction of the top 2 chambers of the heart (the atria)¹



11 million people

affected across Europe²



AF increases the risk of other **potentially fatal conditions**³



5x

Increase heart failure



2.4x

Increase stroke



2x

Increase cardiovascular mortality

The seriousness of AF is critically misunderstood:

45% OF PATIENTS

mistakenly believe it is not a life-threatening condition⁴

The latest guidelines recommend an integrated management strategy to:^{5,6}



↓
Reduce mortality



Tailor management to patient preferences



↓
Reduce hospitalizations

TREATMENT

Treatment focuses on managing irregular heart rhythm, improving symptoms and reducing complications, with the aim of improving life expectancy and quality of life⁵

Patients should have a principal role in making decisions regarding their care, informed by a multidisciplinary team of:⁵



Cardiologists



Electrophysiologists



Non-specialist healthcare professionals: primary care physicians, registered nurses, etc



Allied health professionals: dietitians, medical technologists, etc

TREATMENT PATHWAY⁵



Management of **underlying cardiovascular risk factors** and **reducing stroke risk** to improve life expectancy and quality of life



Medical procedures (e.g. electrical or pharmaceutical cardioversion) that restore a normal heart rhythm when the patient is experiencing an AF episode



Rate control therapies to control the heart rate



Rhythm control therapies, including antiarrhythmic drugs (AADs) and catheter ablation, to maintain normal sinus rhythm for the long-term

SPOTLIGHT:

Rhythm control therapies – management of AF over the long-term



DRUG THERAPY TREATMENT (AADS)

AADs act to suppress the firing of, or depress the transmission of abnormal electrical signals which cause arrhythmia⁵

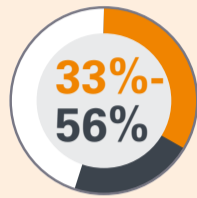
Examples: Sodium channel blockers (disopyramide, quinidine, flecainide, propafenone) and potassium channel blockers (amiodarone, dronedarone, dofetilide, sotalol)⁵



CATHETER ABLATION

Interventional procedure to create small scars on targeted parts of heart tissue that block the abnormal electrical signals causing the arrhythmia⁵⁻⁶

EFFICACY



of patients **ARE IN NORMAL SINUS RHYTHM AT 1 YEAR**⁷



UP TO 94% of patients are **FREE FROM ARRHYTHMIA RECURRENCE AT 1 YEAR**⁸⁻¹⁷



MAY NORMALIZE RATES of mortality, stroke and dementia **TO THAT OF PATIENTS WITHOUT AF**¹⁸

QUALITY OF LIFE



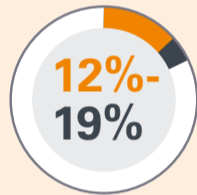
of patients **IMPROVEMENT IN QUALITY OF LIFE**¹⁹



of patients **IMPROVEMENT IN QUALITY OF LIFE**²⁰



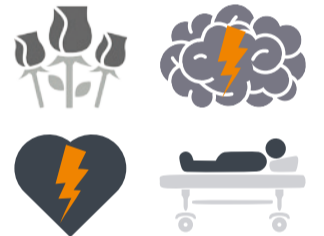
ADVERSE EVENTS/COMPLICATIONS



of patients **WITHDRAW FROM TREATMENT DUE TO ADVERSE EVENTS**⁷



lower chance of **DEATH, STROKE, CARDIAC ARREST AND CARDIOVASCULAR HOSPITALIZATION OVER 7 YEARS**^{21,22}



COSTS

LOW INITIAL COSTS

however **CUMULATIVE COSTS** can rise over time

with costs increasing to **UP TO 28% ANNUALLY** over 9 years²³⁻²⁶

PROJECTING COSTS TO 10 YEARS AFTER ABLATION

CATHETER ABLATION was associated with a

35% SAVINGS²⁶

Patients with **paroxysmal (intermittent) AF ARE ALMOST 10X LESS LIKELY TO PROGRESS TO PERSISTENT AF**, if treated with catheter ablation, than those treated with AADs (HR 0.11; 95% CI 0.025-0.483; p=0.0034²⁷)



Catheter ablation is more clinically effective and cost effective compared to drug therapy for the treatment of patients with AF^{7,19,28-31}

REFERENCES
 1. Iazzo PA (2015). Handbook of Cardiac Anatomy, Physiology and Devices. Springer Science and Business Media. Switzerland; 2. Global Burden of Disease Collaborative Network (2016) Global Burden of Disease Study 2016 (GBD 2016) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2017. Accessed October 2019. Available from <https://gbd2016.healthdata.org/gbd-search/>; 3. Odutayo A et al. (2016). *BMJ* 354:i4482; 4. Aliot E, et al. (2010). *Europace* 12 (5):626-633; 5. Kirchhof P, et al. (2016) *Eur Heart J* 37 (38):2893-2962; 6. Calkins H, et al. (2017). *Heart Rhythm* 14 (10):e275-e444; 7. Lafuente-Lafuente C, et al. (2015) *Cochrane Database Syst Rev* (3): Cd005049; 8. Hussein A, et al. (2017). *J Cardiovasc Electrophysiol* 28 (9):1037-1047; 9. Taghji P, et al. (2018). *JACC Clin Electrophysiol* 4 (1): 99-108; 10. Philips T, et al. (2018) *Europace* 20 (Fl_3): f419-f427; 11. Solimene F, et al. (2019). *J Interv Card Electrophysiol* 54 (1):9-15; 12. Di Giovanni G, et al. (2014). *J Cardiovasc Electrophysiol* 25 (8):834-839; 13. Jourda F, et al. (2015). *Europace* 17 (2):225-231; 14. Lemes C, et al. (2016). *Europace* 18 (2):201-205; 15. Guhl EN, et al. (2016). *J Cardiovasc Electrophysiol* 27 (4):423-427; 16. Irfan G, et al. (2016). *Europace* 18 (7):987-993; 17. Boveda S, et al. (2018). *JACC Clin Electrophysiol* 4 (11):1440-1447; 18. Bunch TJ, et al. (2011). *Journal of Cardiovascular Electrophysiology* 22 (8):839-845; 19. Jais P, et al. (2008). *Circulation* 118 (24):2498-2505; 20. Mark DB, et al. (2019). *JAMA*. Apr 2;321(13):1275-1285; 21. Packer DL, et al. (2019). *JAMA*. Apr 2;321(13):1261-1274; 22. Noseworthy PA, et al. (2019). *Eur Heart J* 40 (16):1257-1264; 23. Bruggenjurgen B, et al. (2013). *Pharmacoeconomics* 31 (3):195-213; 24. Nilsson J, et al. (2013). *Eur J Health Econ* 14 (3):481-493; 25. Akerborg O, et al. (2012). *Clin Ther* 34 (8):1788-1802; 26. Weerasooriya R, et al. (2003). *Pacing Clin Electrophysiol* 26 (1 Pt 2):292-294; 27. Kuck KH, et al. (2019) Catheter ablation delays progression of atrial fibrillation from paroxysmal to persistent atrial fibrillation. ESC Late-breaking Science 2019. Paris, France. August 31, 2019; 28. Takigawa M, et al. (2014). *Circ Arrhythm Electrophysiol* 7 (2):267-273; 29. Cotte FE, et al. (2016). *Europace* 18 (4):501-507; 30. Freedman B, et al. (2017). *Circulation* 135 (19): 1851-1867; 31. Jais P, et al. (2008). *Circulation* 118 (24): 2498-2505.

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