

AFNET press release

Atrial Fibrillation: Flec-SL trial proves efficacy of short-term antiarrhythmic drug treatment

Short-term antiarrhythmic drug treatment after cardioversion is nearly as effective in preventing recurrences of atrial fibrillation as long-term treatment. This is the result of Flec-SL, a controlled clinical trial conducted by the German Competence Network on Atrial Fibrillation (AFNET). The scientific paper has just been published in the Lancet*.

****EMBARGO: 00.01am (UK time) Monday 18 June 2012****

Atrial fibrillation (AF) is the most frequently sustained arrhythmia of the heart. It affects several million people in Europe. AF causes a loss of contraction in the atria and gives rise to heart failure. Moreover, it is associated with a high risk of stroke. One in five strokes is due to AF.

In most cases, AF can be treated successfully by an electrical cardioversion. Unfortunately, in the majority of patients, AF recurs during the first days or weeks after cardioversion. This is due to electrical reorganisation processes in the atria which contribute to recurrent AF in patients. Antiarrhythmic drug treatment can reverse parts of the electrical remodeling process and prevent recurrences of AF.

It is well-known that the atria recover from electrical remodeling within four weeks after cardioversion. Beyond this period, AF relapses occur much less frequently, suggesting that antiarrhythmic drug treatment might be needed only in the first four weeks after cardioversion. However, a long-term treatment is usually applied. A shorter duration of drug treatment (therapeutic de-escalation) would make therapy safer, cheaper, and applicable for more patients.

AFNET, the German Competence Network on Atrial Fibrillation, therefore performed a randomized clinical trial to investigate whether a short-term antiarrhythmic drug treatment for the duration of four weeks after cardioversion could prevent recurrences of AF as effectively as the usual long-term treatment ("non inferiority trial"). This was assessed using the approved drug flecainide. The Flec-SL (flecainide short – long) trial was conducted by AFNET under the direction of principal investigators Prof. Paulus Kirchhof, Birmingham UK and Muenster, Germany, and Prof. Guenter Breithardt, Muenster, Germany, both prominent members of EHRA, the European Heart Rhythm Association of the European Society of Cardiology (ESC).

Between May 2007 and March 2010, more than 600 patients were enrolled in the study at 44 centres in Germany. Patients were randomised to different groups where they were treated with flecainide for either four weeks or six months. Additionally, there was a control group without antiarrhythmic drug treatment. In all study patients, recurrences of AF were assessed by daily trans-telephonic ECGs within the observation period of six months.

Analysis of the study data reveals: antiarrhythmic long-term treatment is superior to short-term treatment, but also the four-week short-term treatment was able to prevent recurrences of AF: AF relapses occurred in 120 of 261 patients receiving short-term treatment and only in 103 of 263 patients receiving long-term treatment. At the end of the study, short-term therapy reached about 80 percent of the effect of long-term therapy.

Principal investigator Prof. Kirchhof, is sure that these findings have implications for clinical routine: "Although antiarrhythmic short-term treatment is inferior to long-term treatment, it will be useful in selected patients. Short-term treatment should be considered for AF patients who are at increased risk for complications or adverse effects. We hope that the new results find their way into guidelines for the management of AF."

Note to Editors

About AFNET:

The [German Competence Network on Atrial Fibrillation](#) (AFNET) is an interdisciplinary research network located in Germany. AFNET aims at improving care of patients with atrial fibrillation by promoting research, medical services and information in emerging diagnostic and therapeutic fields. The network has been funded by the German Federal Ministry of Research and Education since 2003.

The Flec-SL trial was funded by the German Federal Ministry of Research and Education in the context of the German AFNET and partially by MEDA Pharma. The trial is registered at [ISRCTN62728742](#).

About EHRA:

The mission of the European Heart Rhythm Association (EHRA) is to improve the quality of life of the European population by reducing the impact of cardiac arrhythmias and reduce sudden cardiac death.

References

* Kirchhof P et al: Short-term versus long-term antiarrhythmic drug treatment after cardioversion of atrial fibrillation (Flec-SL): a prospective, randomised, open-label, blinded endpoint assessment trial. *Lancet* 18.06.2012

Scientific contact:

Prof. Paulus Kirchhof, MD
Centre for Cardiovascular Sciences, University of Birmingham, UK
and
Department for Cardiology and Angiology, University Hospital Muenster, Germany
p.kirchhof@bham.ac.uk
Phone: 0044 121 4147042

Press contact:

Angelika Leute, PhD
angelika.leute@ukmuenster.de
Phone: 0049 [202 2623395](tel:2022623395)

Daisy Barton
Media Relations Manager
The Lancet journals
Mobile: [+44 \(0\) 7920 592635](tel:+4407920592635)
Email: daisy.barton@lancet.com