

What drugs and other treatments for AF are currently being tested and what changes can we expect in the next few years?

Whilst treatments to protect patients against the risk of AF-related stroke have improved enormously, drugs directed to control the cardiac rhythm have shown little significant advance. In fact, the majority of drugs currently used for the management of AF symptoms have been around for over 30 years.

The main issue is that few companies worldwide have invested in AF drug development. Xention Ltd (Pampisford, Cambridgeshire) is an exception. Their drugs are currently being evaluated in patients with AF (phase II clinical trials) to observe their usefulness. The drugs are designed to interact specifically with the atria avoiding the side effects that might otherwise emerge from electrical interference with the rest of the heart. Although the outcome is uncertain even if efficacy is seen then several more years will be needed before such agents would be generally available. Whether variants of 'multi-channel blockers' such as amiodarone are developed further and find use is currently undecided.

On a wider scale there is a trend to identify the best treatment for individual patients upfront. With AF this might involve understanding what the genetic basis of the condition is or knowing the precise electrophysiological pattern that might predict individual drug or ablation responses in that person. These *personalised medicine* approaches are currently at the forefront of the minds of many researchers. In the future it's likely that a combination of targeted interventional approaches and drug treatments will be of help to many.