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Xention Initiates Human Clinical Testing of New Atrial Fibrillation Drug

XEN-D0103, a potent and selective Kv1.5 antagonist, commences single and multiple ascending dose study

New mechanism of action may represent breakthrough in cardiac medicine

CAMBRIDGE, UK – XENTION LTD, the Cambridge-based biopharmaceutical company specialising in the discovery and development of ion channel-modulating drugs, announced today that it has initiated phase 1 clinical development of XEN-D0103, an innovative new drug for the treatment and prevention of atrial fibrillation, the most common form of heart arrhythmia. Xention's new agent blocks the atrial specific Kv1.5 potassium channel in the heart and is one of the first such selective drugs to reach the clinic.

The clinical trial is a combined single- and multiple-ascending oral dose study of XEN-D0103 in healthy volunteer subjects being conducted in the UK. The study will evaluate the safety and pharmacokinetics of various dosages of the new medicine prior to phase 2a efficacy studies, expected to commence in 2012.

'Initiating the clinical development of XEN-D0103 represents a significant advance commented Tim Brears, Xention's Chief Executive. 'Kv1.5 has emerged over the last few years as an important new drug target for the prevention of atrial fibrillation and XEN-D0103 is one of the most advanced drugs in this class. The compound was synthesised as the result of a substantial research programme combining medicinal chemistry and advanced electrophysiology to ensure appropriate selectivity and functional properties. XEN-D0103 has excellent activity in *in vivo* and *ex vivo* models and demonstrated a remarkably clean profile in GLP toxicology studies. We are excited by the potential of XEN-D0103 to improve the medical management of atrial fibrillation and look forward to reporting the results of this initial phase 1 study early in 2012.'

Xention is developing a portfolio of atrial fibrillation drugs. In addition to targeting Kv1.5, the company is also conducting research on inhibition of the acetylcholine-activated

potassium channel IKACH (Kir3.1/3.4) and highly potent and selective IKACH antagonists are currently under evaluation in preclinical models. The ion channels Kv1.5 and IKACH represent two of the most exciting targets for novel atrial fibrillation therapies, and Xention is at the forefront in developing effective drug modulators of these channels.

Atrial fibrillation is a commonly encountered but potentially serious cardiac arrhythmia in which the atria of the heart contract in an irregular and accelerated manner, resulting in reduced cardiac output and increased risk of stroke. Approximately 12 million people in the major pharmaceutical economies show symptoms of this condition and many more are believed to be asymptomatic, but at similar risk.

About Atrial Fibrillation:

Atrial Fibrillation (AF) is the most common sustained cardiac rhythm disturbance, occurring in between 1 and 2% of the general population but increasing rapidly with age. It is estimated that over six million Europeans suffer from this arrhythmia and its prevalence is calculated to increase by at least 2.5 fold in the next 50 years as the population ages. AF confers a five-fold increased risk of stroke and one in five of all strokes are attributable to AF. The ischemic strokes seen in association with the arrhythmia are often fatal, and those that survive are often left crippled by their stroke and likely to suffer recurrent strokes. Around one percent of the healthcare budget of Western European and North American countries is spent on the management of AF. Thus this disease presents a rapidly growing social, medical and public health problem in need of urgent solution.

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Notes to Editors

About Xention:

Xention Ltd is a leader in the discovery and development of ion channel-modulating drugs. The Company focuses on the development of selective ion channel medicines for the treatment of atrial fibrillation. Its programmes target ion channels that are widely recognised as key atrial fibrillation targets. In addition, Xention has research collaborations with Ono Pharmaceutical Co Ltd and the Grünenthal Group in other therapeutic areas. The Company uses proprietary ion channel expertise and technologies to accelerate the discovery of potent and selective ion channel drugs. In particular, Xention is a leader in the use of true electrophysiological data, ion channel chemoinformatics and medicinal chemistry to identify potent new small molecule drugs in this rapidly evolving field of medicine. For further information, please see <http://www.xention.com>.