# New study shows that screening with Zenicor thumb-ECG of stroke patients is both effective and provides longterm cost savings.

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**A new clinical study published in Europace[1], shows that regular screening using a handheld-ECG device on 75-year-old stroke patients for detecting silent atrial fibrillation (AF) is both effective and provides longterm cost savings. The device used was the Zenicor thumb-ECG on which patients record their own ECG twice daily for 30 days. The study also compared intermittent recordings on the Zenicor thumb-ECG device with ambulatory continuous 24 h Holter-ECG recording. The Zencior thumb-ECG method showed both higher sensitivity and lower costs compared to the Holter-ECG method.**

The purpose of the study was to estimate the cost-effectiveness of two screening methods for detection of silent AF in comparison with a no-screening alternative in 75-year-old patients with a recent ischaemic stroke. The base-case analysis compared intermittent ECG screening with no screening of patients with recent stroke. The implementation of the screening programme on 1000 patients resulted over a 20-year period in 11 avoided strokes and the gain of 29 life-years, or 23 quality-adjusted life years, and cost savings of €55,400.

*Lars-Åke Levin, Principal investigator in the study commented: "By using a decision analytic model, we have shown that screening of recent stroke patients by handheld ECG recording is highly cost-effective and after 7 years even leads to cost savings. The explanation for this is a relatively low-cost screening technology in combination with a high-risk target population and effective and cost-effective anti-coagulant treatments."*

The device used in the study, thumb-ECG allows the patient to register ECG data over extended periods – several times daily and when symptoms are experienced – and transfer the data to a central ECG database, where the data is presented to the care provider via the internet. The device is currently used in over 250 clinics in Sweden and the other Nordic countries.

*Mats Palerius, CEO of Zenicor added: "We are very excited about the results of this study since it demonstrates that screening of this patient category not only lowers the risk for another stroke in identified patients, but that it also shows that the screening is cost-effective. The publication provides additional clinical evidence, thereby further strengthening our current clinical documentation. At the same time, the results strengthen our ongoing IPO process on the Stockholm Stock Exchange, which will finance further geographical expansion."*

**Editor's notes**

**About atrial fibrillation and ischemic stroke**

Atrial fibrillation (AF) is a major risk factor for ischaemic stroke. A previous stroke in a patient with AF indicates a high risk for a new stroke. In patients with ischaemic stroke without known cardio embolic source, routine investigations for AF often reveal normal findings. In the presence of AF in combination with previous ischaemic stroke, oral anticoagulation treatment is indicated.

Also otherwise healthy patients with AF have a higher risk of developing stroke. If atrial fibrillation is detected, stroke can be prevented. Every year, 15 million people in the world suffer from stroke. Of these, one third die within 30 days and a third are permanently disabled. The patient's suffering is enormous and involves substantial costs to society. If AF is detected and anticoagulant treatment is given in time, stroke can be prevented in 70% of the cases.

**About Zencior and thumb-ECG by Zenicor**

Zenicor's proprietary diagnostic solution, thumb-ECG, is today available in 250 clinics in Sweden and Scandinavia. The thumb-ECG consists of a hand-held device (thumb ECG) where the patient over a prolonged period, e.g twice daily for 30 days, can register his ECG, which then is automatically sent via the mobile network to a central database. The caregiver can then at any time analyze the patient's ECG on-line and make a diagnosis. The method is easy to use for both healthcare professionals and patients. By using thumb-ECG, up to four times more people with atrial fibrillation are diagnosed compared with other methods. Several extensive studies have shown that thumb-ECG has a superior diagnostic performance compared with traditional methods, combined with cost-effectiveness and ease of use. Zenicor is currently undertaking an IPO in order to raise funds for increasing the pace of its geographic expansion and also to serve new customer needs. The funding will be used to strengthen and build the marketing organization in the Nordic countries, Germany and the UK and prepare for further geographic expansion and to strive for the establishment of national and regional screening programs for atrial fibrillation.

**The publication: A cost-effectiveness analysis of screening for silent atrial fibrillation after ischaemic stroke**

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[1]http://europace.oxfordjournals.org/content/early/2014/10/27/europace.euu213

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