guage, included posters and public information leaflets on AF and pulse rhythm. Pharmacists were instructed to take the pulse manually, assess symptoms and risk factors. Whenever an abnormal heart rate or rhythm was detected, the patient was referred to a physician with a letter containing additional information. Where feasible, the manual pulse check was supplemented by use of a mobile single lead ECG.

Results: Ten countries participated, and 3,974 participants were involved in the awareness campaign. For the screening event, a total of 2,573 patients were included in the final analysis. The majority were female (68.9%); mean age approx. 65 years. Risk factors identified: hypertension (48.9%), diabetes (19.8%) and peripheral heart disease (15.4%). The least common was having had a stroke, Transient Ischaemic Attack or Thromboembolism, (1.1%).

Mean heart rate detected was 72.7bpm. Bradycardia detected in 107 people and tachycardia in 14 people. An irregular pulse was detected in 212 patients (8.3%). AF confirmed in 35 people, a detection rate of 1.4%.



Know Your Pulse

Conclusion: Opportunistic screening for AF in people over the age of 65 years is recommended in ESC guidelines on the management of AF. The experience gained from conducting this initiative in various health care settings suggests that community pharmacies may be a good location for identifying undiagnosed people with AF.

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Prevalence of silent vascular brain lesions among patients with atrial fibrillation and no known history of stroke

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Background: Patients with atrial fibrillation (AF) have an increased risk of stroke. However, the total burden of ischemic or hemorrhagic brain lesions in AF patients remains largely unknown. We assessed the prevalence of such lesions on cerebral magnetic resonance imaging (cMRI) in a large and unselected cohort of AF patients.

Methods: Swiss-AF is a prospective multicenter observational AF cohort study in Switzerland (n=2,415; 13 sites). cMRI was performed in all eligible patients based on a standardized protocol. All scans were reviewed in a central core lab according to standardized criteria.

Results: cMRI scans were available in 1,736 patients. 230 (13%) patients had a previous history of stroke (95% ischemic and 5% hemorrhagic) and 159 (9%) a history of a transient ischemic attack (TIA). Among the 1,388 patients without a history of stroke or TIA, 366 (26%) were women and the mean age was 72±9 years. Of these, 1,234 (89%) were on OAC and the mean CHA2DS2-VASC Score was 2.8±1.4. Two hundred and seven (15%) patients had silent ischemic infarctions, 222 (16%) lacunes and 269 (19%) microbleeds. Only 819 (59%) patients had no evidence for silent vascular brain lesions.

Conclusion: In this large population of AF patients with a high prevalence of OAC, patients had a high burden of silent vascular brain lesions on MRI, including a substantial number of silent infarctions and microbleeds. The clinical impact of these findings needs to be addressed in future studies.

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Mass screening for atrial fibrillation using n-terminal pro b-type natriuretic peptide - preliminary results from the strokestop 2 study

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Background: Atrial fibrillation (AF) is common among the elderly and a significant risk-factor for embolic ischemic stroke. AF is often asymptomatic and therefore undiagnosed. We have previously reported a yield of 3% of newly diagnosed AF using intermittent ECG screening in a 75-year-old population. N-terminal pro b-type natriuretic peptide (NT-proBNP) levels are elevated in patients with AF, and prior studies indicate that NT-proBNP levels seem to be in proportion to stroke risk. **Purpose:** We aim at reporting preliminary data on the yield of systematic screening for AF in a 75/76-year-old population using NT-proBNP and handheld ECG recordings in a stepwise screening procedure.

Methods: All individuals born in 1940 and 1941 residing in the Stockholm region (n=28,712) were randomised in a 1:1 fashion to be invited to a screening program for AF or to serve as a control group. Participants free of AF (n=6127) had NT-proBNP analysed. Individuals with NT-proBNP \geq 125 ng/L (n=3636, 59%) were offered extended ECG-screening whereas individuals with NT-proBNP <125 ng/L (n=2491, 41%) had a single one-lead ECG recording. **Results:** In participants with NT-proBNP \geq 125 ng/L (169 (4,6%, 95% CI 4.0–5.4)

Results: In participants with NT-proBNP \geq 125 ng/L 169 (4,6%, 95% Cl 4.0–5.4) were diagnosed with AF, of these 32 (24%) were diagnosed on their first ECG recording. One participant with NT-proBNP < 125ng/L was diagnosed with AF on a single-lead ECG. Oral anticoagulation (OAC) treatment was initiated in 93% of those with new AF. In the population randomized to screening OAC treatment was commenced in 1% (158/13845).

NT-proBNP:	>900ng/L	125-900ng/L	<125ng/L
Index ECG	16%	0,4%	1 (0,04%)
Prolonged screening	8%	3,6%	N/A
Total	24%	4,0%	0,04

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AF detection among all participants: 2,8%

AF detection

Conclusions: NT-proBNP-enriched systematic screening for AF identified a significant proportion of participants with untreated AF. Oral anticoagulation treatment was highly accepted in the group diagnosed with AF. **Funding Acknowledgements:** Roche, Carl Bennet AB

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Incident comorbidities in patients with atrial fibrillation initially with a CHA2DS2-VASc score of 0 (males) or 1 (females): how frequent should we reassess stroke risk in these patients?

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Background: Oral anticoagulants (OACs) are not recommended for low risk patients with atrial fibrillation (AF), that is, a CHA2DS2-VASc score of 0 in males or 1 in females. However, stroke risk is not static, and CHA2DS2-VASc scores would continuously increase in many patients.

Objectives: In the present study, we aimed to investigate the incidence of CHA2DS2-VASc score changes in AF patients initially with a baseline score of 0 (males) or 1 (females). Second, we aimed to propose a reasonable timing interval at which stroke risk should be reassessed for AF patients who were initially deemed to be at "low-risk", such that OACs could be prescribed in a timely manner to prevent ischemic stroke.

Methods: We studied 14,606 AF patients who did not receive anti-platelet agents or OACs with a baseline CHA2DS2-VASc score of 0 (males) or 1 (females). The CHA2DS2-VASc scores of patients were followed up and updated until the occurrence of ischemic stroke or mortality or December 31, 2011. The associations between the prescription of warfarin and risk of adverse events (ischemic stroke, intra-cranial hemorrhage, or mortality) once patients' scores changed were analyzed. The decile values of durations to incident comorbidities and from the acquirement of new comorbidities to ischemic stroke were studied.

Results: The CHA2DS2-VASc scores of patients continuously increased (Figure). During a mean follow up of 4 years, 7,079 (48.5%) patients acquired at least one new stroke risk factor component(s) with an annual risk of increasing CHA2DS2-VASc score of 12.1%/year. Use of warfarin once patients had a CHA2DS2-VASc score of 1 (males) or 2 (females) were associated with a lower risk of adverse events (adjusted hazard ratio 0.530; 95% confidence interval 0.371–0.755). Among 6,188 patients who newly acquired heart failure, hypertension, diabetes mellitus or vascular diseases, 80% would acquire these comorbidities after 4.2 months of AF diagnosis. Among 596 patients who experienced new-onset comorbidities and subsequent ischemic stroke, the duration from the acquirement of incident comorbidities to the occurrence of ischemic stroke was longer than 4.4 months for 90% of patients.