Atrial fibrillation (AF) is associated with increased morbidity and mortality, in part due to the risk of thromboembolic disease, particularly stroke. Without preventive treatment, each year approximately 1 in 20 patients (5%) with AF will have a stroke and the risk of stroke is the same regardless of whether patients have paroxysmal or sustained AF. Strokes associated with AF are usually more severe, with increased risk of morbidity, mortality and poor functional outcome. One year mortality in AF relates stroke is about 50%, and half of all strokes associated with AF are major and disabling. Pharmacological primary prevention remains the best approach to reducing the burden of stroke and meta analyses showed that antiplatelet therapy reduces incidence of stroke by about 22%, and warfarin by about 66-68%. The risk of early recurrent stroke (new stroke of embolic origin in the first two weeks) is 0.1%-1.3% per day what is higher than in stroke from other causes. CHADS score in patients with stroke is two or more what means that patients are at high risk, and anticoagulant medication is recommended. However, current data do not support the routine use of anticoagulation early in acute ischemic stroke. Several randomized, controlled trials that used iv. heparinoids, sc. LMWH, or sc. UFH early after ischemic stroke failed to show a significant overall benefit of treatment over controls. It is well known that warfarin anticoagulation is highly efficacious for long-term secondary prevention in AF patients but there is insufficient data regarding the proper timing of warfarin introduction.

IST-International Stroke Trial (19 435 stroke patients, 3 169 with AF), CAST-Chinese Acute Stroke Trial (21 106 stroke patients, 1 411 with AF) and HAEST-The Heparin in Acute Embolic Stroke Trial (449 AF patients with acute ischemic stroke) showed that aspirin offers a safe and effective option for preventing early recurrent stroke in the first week or two after stroke onset.

Cohrane corner tested 24 trials with 23 748 patients treated with unfractionated heparin, LMWH, heparinoids, oral anticoagulants, and thrombin inhibitors within 48 hours of stroke onset and concluded that data do not support the use of any of the currently available anticoagulants in acute ischemic stroke and that Aspirin is an effective antithrombotic alternative to anticoagulation, which is safe in the acute phase of ischemic stroke.