

Implantable Loop Recorder Detection Of Atrial Fibrillation To Prevent Stroke (The LOOP Study)

Purpose:

To determine if continuous monitoring to detect atrial fibrillation (AF) via an implantable loop recorder (ILR) and subsequent use of anticoagulants can prevent stroke or Systemic Arterial Embolism (SAE) in high-risk individuals.

Trial Design: RCT in four centers in Denmark. (n = 6,004)

Primary Outcome: Time to first stroke or systemic arterial embolism

Secondary outcome: All cause death

Results	ILR Group n = 1,501	Control Group n = 4,503	HR / p value
Primary Outcome			
Stroke or SAE (n = 318; 315 stroke and 3 SAE)	67 (4.5%)	251 (5.6%)	HR 0.80; p = 0.11
Secondary Outcome			
All-cause death (n = 675)	n = 168 (11.2%)	n = 507 (11.3%)	HR 1.00; p = 1.00
Other Outcomes and Adverse Events			
Major bleeding	65 (4.3%)	156 (3.5%)	HR 1.26; p = 0.11
Oral anticoagulation	445 (29.7%)	591 (13.1%)	HR 2.72; p = <0.0001
Interpretation: Continuous monitoring to detect atrial fibrillation via an implantable loop recorder and subsequent timely use of anticoagulants did not prevent stroke or systemic arterial embolism in high-risk individuals over 70 years old.			

