GOLDEN BRIDGE II: Effect of an Artificial Intelligence-Based Clinical Decision Support System on Stroke Care Quality and Outcomes in Patients with Acute Ischemic Stroke

RESULTS: In participants with acute ischemic stroke, compared to usual care, AI-CDSS (artificial intelligence-based clinical decision support system) demonstrated significantly fewer vascular events at 3 months and led to improvement in stroke care quality.

PURPOSE: To evaluate the effects of the cerebrovascular disease AI-CDSS on stroke outcomes and quality of care.

TRIAL DESIGN: Multicenter (77 hospitals in China), open-label, cluster-randomized multifaceted intervention study.

	Intervention No./Total (%)	Control No./Total (%)	Adjusted HR (95%CI)	P value
Primary Endpoint	38 hospitals	39 hospitals		
New Composite Vascular Event (ischemic stroke, hemorrhagic stroke, myocardial infarction, or vascular death) within 3 months after stroke onset	323/11049 2.9%	416/10532 3.9%	0.74 (0.59-0.94)	0.013
Secondary Endpoints				
Composite Acute Ischemic Stroke (AIS) quality score	91.4% Bold Heart	89.7%	1.26 (1.19-1.33)	<0.001

Key Takeaways: This trial gives objective data that cerebrovascular disease AI-CDSS improves the quality of care and outcomes in individuals with acute ischemic stroke.