THALES-Ticagrelor Added to Aspirin in Acute Non-severe Ischemic Stroke or TIA Of Atherosclerotic Origin

Purpose: evaluate the efficacy and safety of ticagrelor added to aspirin or aspirin alone in ischemic stroke or TIA with ipsilateral atherosclerotic stenosis.

Trial Design: N=11,016 cohort with non-cardioembolic, acute non-severe ischemic stroke (NIHSS<u><</u>5) or high-risk TIA randomized to ticagrelor and aspirin or placebo and aspirin. N=8665 patients without ipsilateral stenosis N=2351 patients with ipsilateral stenosis Ticagrelor dose: 180 mg loading dose day 1, then 90 mg BID day 2-30.

Aspirin dose: 300-325 mg day 1, then

75-100 mg day 2-30.

Primary Endpoint: time to the first occurrence of any event in the composite of stroke (ischemic or hemorrhagic) or death within 30 days

Secondary Endpoint: time to the first occurrence of any ischemic stroke

Endpoints	Ticagrelor + Aspirin N=5523		Placebo + aspirin N=5493		Hazard Ratio 95% CI	P value	P value interaction
Primary endpoint: Stroke or Death	# patients	Event rate	#patients	Event rate			
With ipsilateral extra- or intracranial stenosis >30%	92 (8.1%)	7.9%	132 (10.9%)	10.9%	0.73 (0.56,0.96)	0.023	0.245
No ipsilateral stenosis	211 (4.8%)	4.8%	230 (5.4%)	5.3%	0.89 (0.74, 1.08)	0.230	
Secondary endpoint: ischemic stroke							
With ipsilateral extra or intracranial stenosis	87 (7.7%)	7.6%	127 (10.5%)	10.5%	0.72 (0.55, 0.95)	0.020	0.373
No ipsilateral stenosis	189 (4.3%)	4.3%	218 (5.1%)	5.0%	0.84 (0.69, 1.02)	0.085	

Results: In patients with ipsilateral atherosclerotic stenosis, 30-day absolute event rate of stroke or death was higher and absolute risk reduction was greater on ticagrelor added to aspirin than in patients with no ipsilateral stenosis.

