Increased leisure-time physical activity (LTPA) is known to reduce the risk of stroke.

However, it is unclear how changes in LTPA patterns over time, especially after retirement, affect the risk of stroke.

Is there an association between change in LTPA during the post-retirement period and risk of stroke?

Prospective cohort study of 12,644 retired workers in China

Participants who developed stroke

N = 549

Ischemic stroke n = 434

Hemorrhagic stroke n = 115

In participants who became inactive*

Risk of incident stroke

Low

Hazard ratio: 1.30
95% CI: 1.03–1.65

High

Risk of hemorrhagic stroke

Low

Hazard ratio: 2.34
95% CI: 1.51–3.63

High

In overweight participants who became inactive*

Risk of incident stroke

Low

Hazard ratio: 1.65
95% CI: 1.20–2.27

High

Per 150 minutes/week increase of LTPA

Reduced risk of incident stroke

Hazard ratio: 0.97
95% CI: 0.94–1.00

*Compared to participants who remained active

Among Chinese older adults, increasing LTPA levels during the post-retirement period was associated with a lower risk of incident stroke.