

# Improvement of difference in carotid artery compliance

## Study Protocol

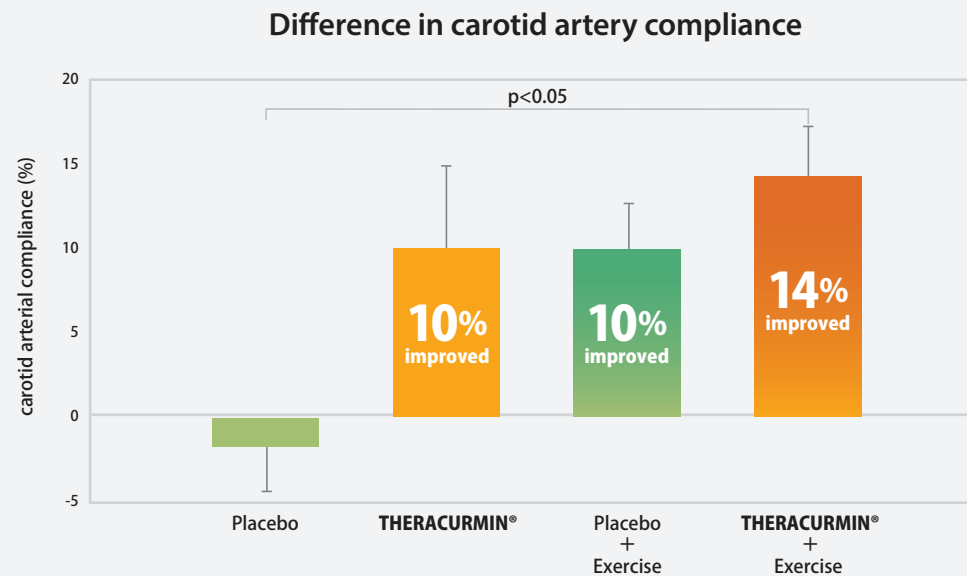
Study design: Four arms, placebo-controlled trial

Subjects: 51 postmenopausal women (age: 57- 62 years old)

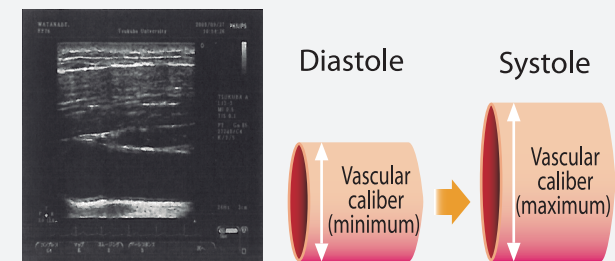
Exercise: cycling and walking 30 min/ day, over 3 days/ week at a relatively low intensity

Intake: THERACURMIN® 150mg/day, 8 weeks

The combination of THERACURMIN® ingestion and aerobic exercise training was more efficacious in increasing central arterial compliance than either of these treatments alone in postmenopausal women.



## Measurement of arteriosclerosis: Echography



Carotid artery compliance  
$$\frac{(\text{systole caliber} - \text{diastole caliber})}{\text{diastole caliber} / 2(\text{pulse pressure} \times \text{diastole caliber})}$$

# Improvement of a left ventricular afterload

## Study Protocol

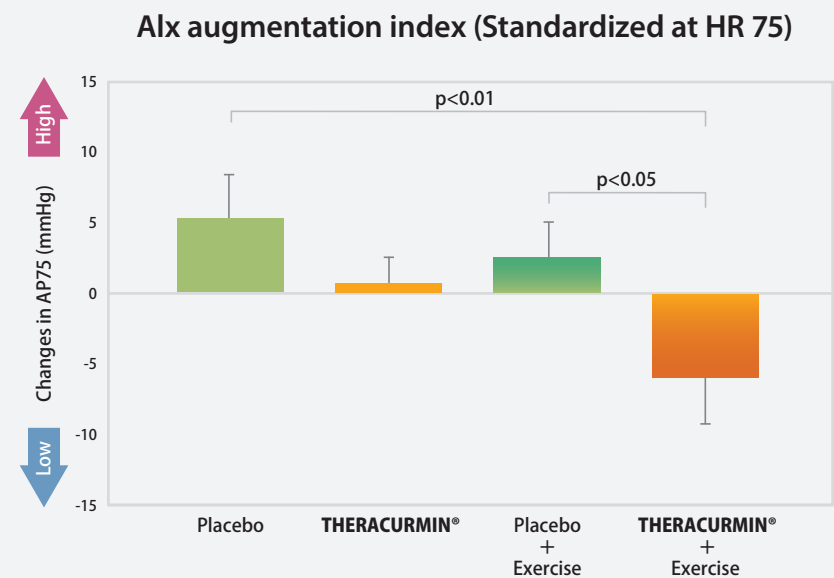
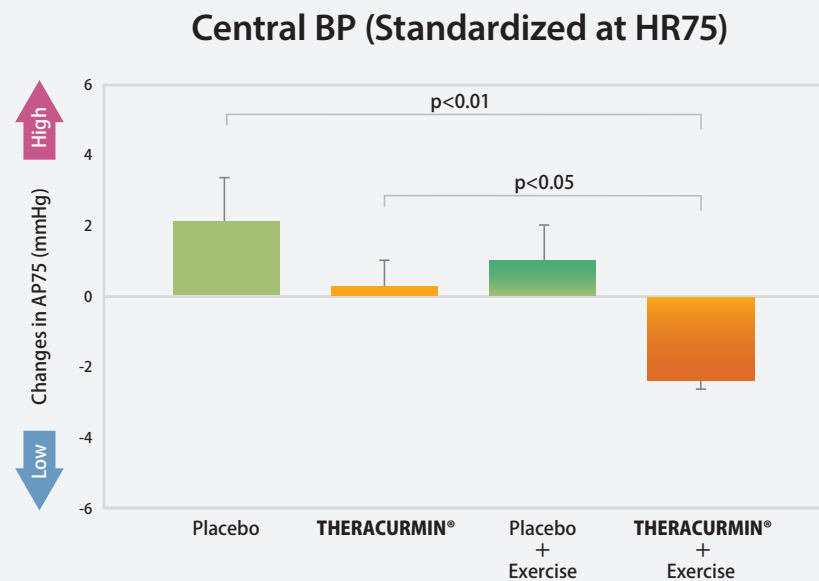
Study design: Four arms, placebo-controlled trial

Subjects: 51 postmenopausal women (age: 57- 62 years old)

Exercise: cycling and walking 30 min/ day, over 3 days/ week at a relatively low intensity

Intake: THERACURMIN® 150mg/day, 8 weeks

Regular endurance exercise combined with daily THERACURMIN® ingestion reduced the left ventricular afterload to a greater extent than monotherapy with either intervention alone in postmenopausal



Alx: augmentation index  
Alx75: Alx normalized by HR at 75 bpm

Sunagawa J, et al. Am J Hypertens. 2012 Jun;25(6):651-656.Citation

# Improvement of Vascular endothelial function

## Study Protocol

Study design: Two arms trial

Subjects: 14 healthy men (age: 21-29 years old)

Exercise: 50 maximal isokinetic (120°/s) eccentric contractions of the elbow flexors of one arm on an isokinetic dynamometer.

Intake: THERACURMIN® 150mg, 1h before eccentric exercise

THERACURMIN® ingestion significantly attenuated the decrease in endothelial function, as measured by brachial artery Flow Mediated Dilation (FMD), following eccentric exercise more than placebo.

