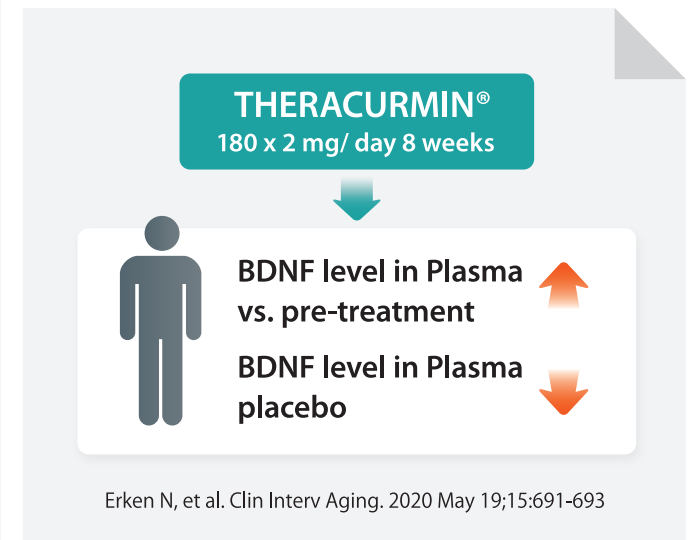
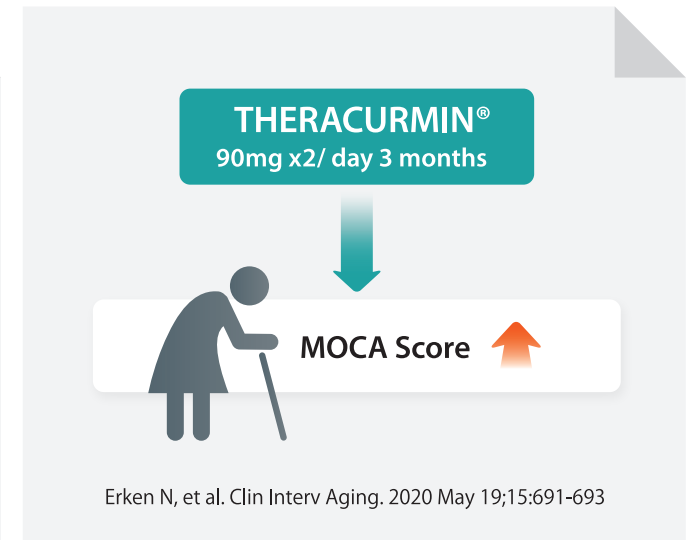
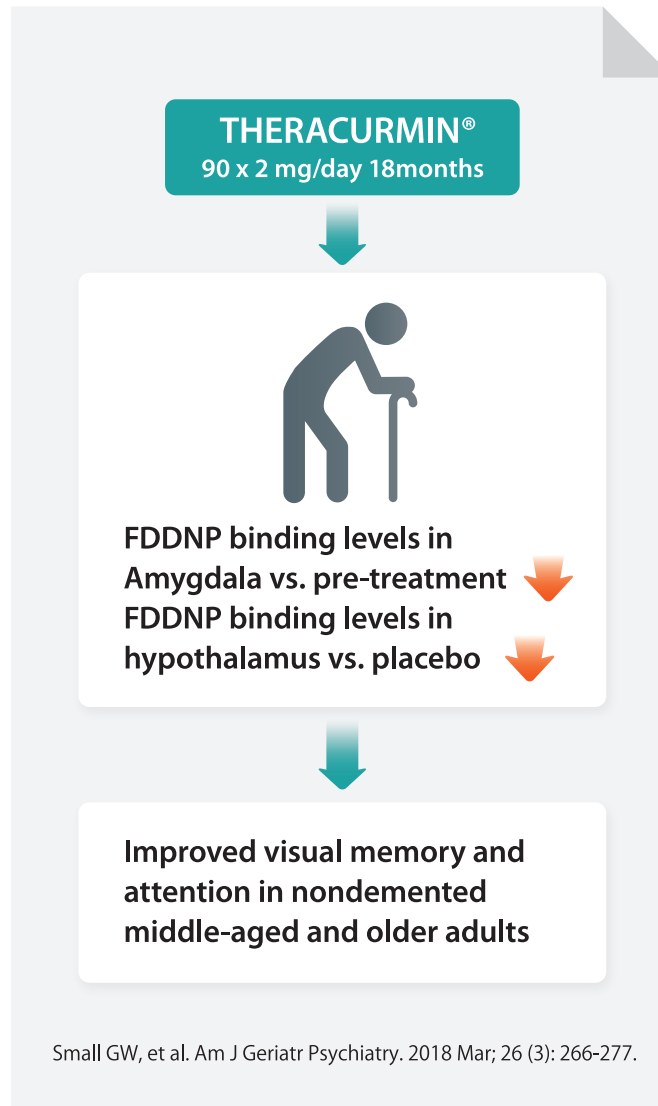
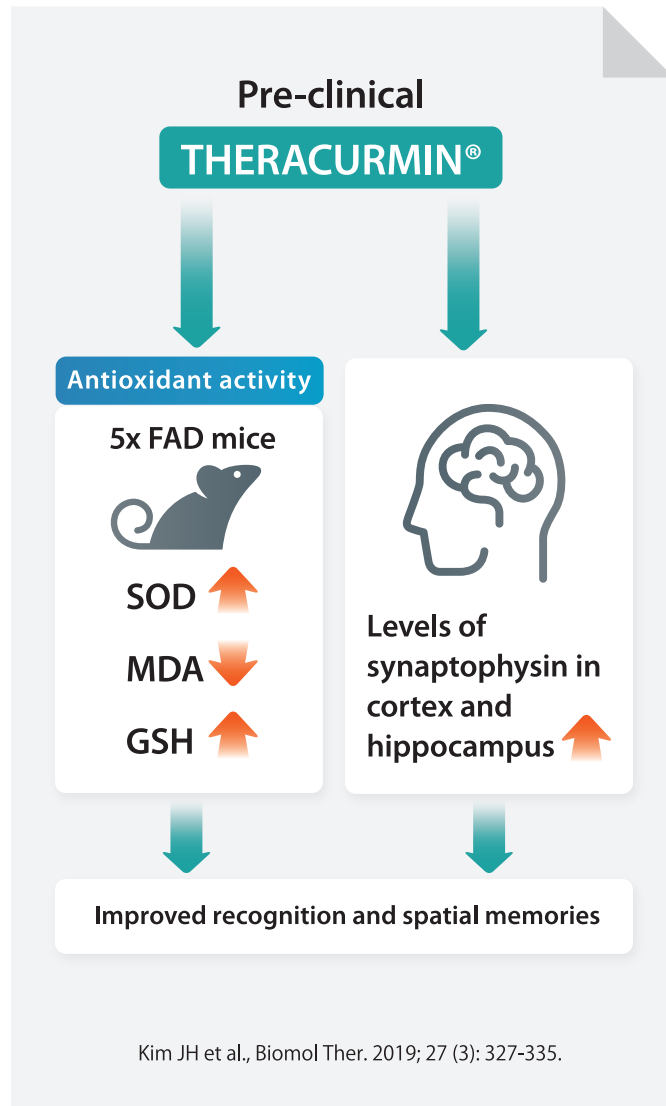


# Effect on Mild Cognitive Impairment and Chemo brain



- SOD (Superoxide dismutase): inhibit ROS.
- GSH (Glutathione) : protect cell from ROS.
- MDA (Malondialdehyde): biomarker of oxidative stress
- MOCA: Montreal Cognitive Assessment
- BDNF :Brain-derived neurotrophic factor

# Improvement of memory and attention

## Study Protocol

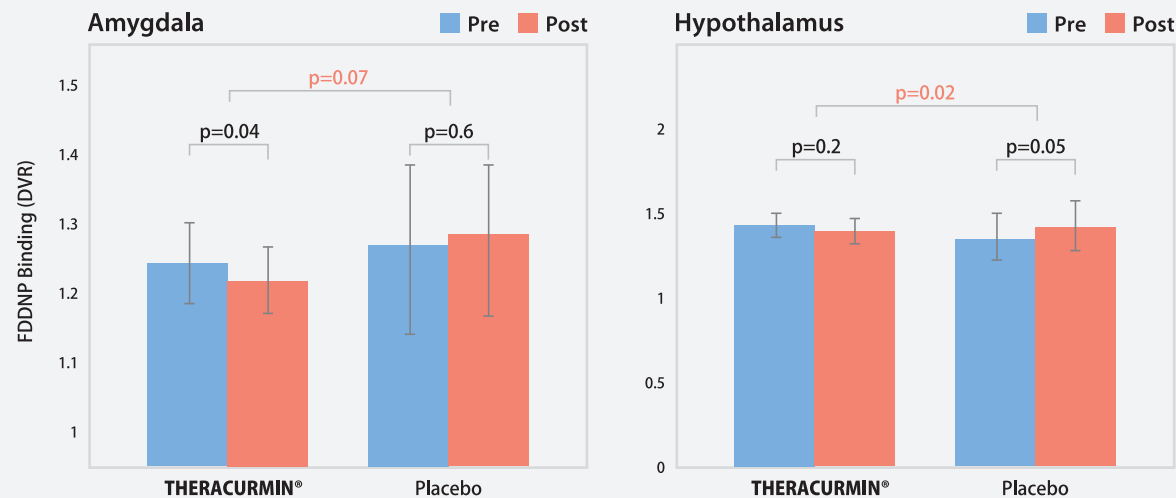
Study design: Two arms, randomized double-blind placebo-controlled trial

Subjects: 40 subjects (age: 51-84 years old)

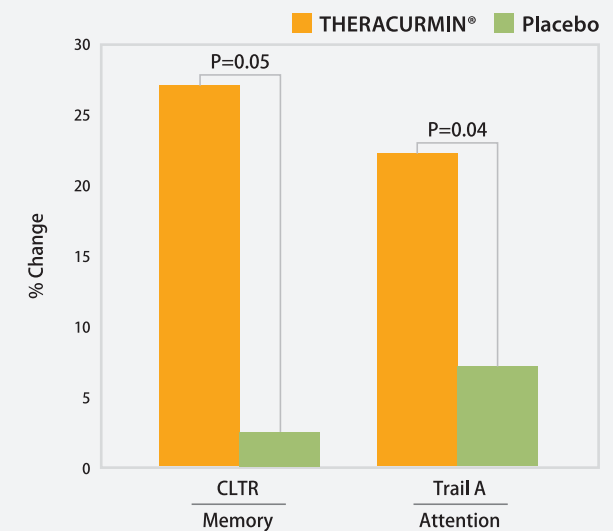
Intake: THERACURMIN® 90mg x 2 /day, 18 months

THERACURMIN® ingestion may lead to improved memory and attention in nondemented adults.

### FDDNP binding levels in amygdala and hypothalamus (18 months)



### Cognitive Changes at 18 Months



- Histograms indicate means, vertical lines indicate standard deviations
- FDDNP binding levels are based on relative distribution volume (DVR) parametric images generated using a multilinear formulation of Logan analysis (motor cortex as reference region): Logan J, et al. J Cereb Blood Flow Metab. 1996;16: 834-840.

Small GW, et al. Am J Geriatr Psychiatry. 2018 Mar; 26 (3): 266-277, Citation

# Improvement of memory reduction by chemo brain

## Study Protocol

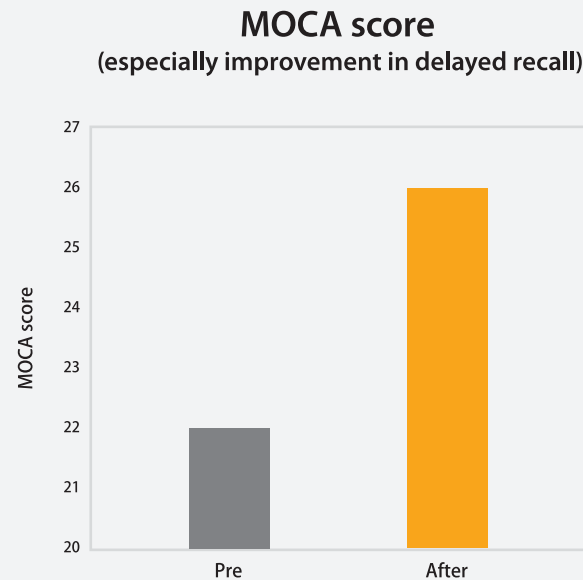
Case report

76-year-old female chemo brain patient

Breast cancer was diagnosed in 2013 and she has been receiving anastrozole treatment for 6 years after local mass excision surgery and radiotherapy.

Intake: THERACURMIN® 90mg x 2/ day, 3months

THERACURMIN® ingestion improved MOCA score (especially improvement in delayed recall).



# Increasing serum BDNF of schizophrenia

## Study Protocol

Study design: Two arms, randomized double-blind placebo-controlled trial

Subjects: 36 Schizophrenia patients

Intake: THERACURMIN® 360mg/ day, 8 weeks

THERACURMIN® ingestion resulted in increased BDNF at 4- and 8-weeks of treatment whereas the placebo group showed decreased BDNF over time.

