channel blockers and beta-blockers; IMP manufacture: sourcing and over encapsulation of study drug and matching placebo and independently establishing blindedness and stability testing of the over encapsulated repurposed agent; safety monitoring and pharmacovigilance. **Conclusions:** NILVAD is an example of an investigator driven repurposing program for an antihypertensive in AD. The NILVAD trial provides multiple learnings that can be captured and help inform future efforts in this challenging area of drug discovery.

**P4-026**  
**BIOLOGICAL FACTORS CONTRIBUTING TO THE RESPONSE TO COGNITIVE TRAINING IN MILD COGNITIVE IMPAIRMENT**  
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**Background:** In mild cognitive impairment (MCI), small benefits from cognitive training was observed for memory functions but there appears to be great variability in the response to treatment. Our study aimed to improve the characterization and selection of those participants who might benefit from cognitive intervention. **Methods:** We evaluated the predictive value of MRI- and gene-based biological factors for the outcome after cognitive training in MCI (n=25) and also considered motivation of the participants. We did not include an active control group but compared the results of our study to a local sample of MCI patients (n=20) who did not receive cognitive training. Episodic memory was used as a primary target for the intervention, but transfer effects were examined, too. **Results:** Verbal episodic memory remained stable after cognitive intervention. The effect transferred to other cognitive tasks and maintenance of episodic memory after cognitive intervention and so did higher levels of motivation. Bootstrapping with resampling (n=1000) verified the stability of this key finding. Adding MRI-based biological factors significantly improved the prediction of training-related change compared to a model based simply on age and baseline performance. **Conclusions:** Cognitive training can stabilize episodic memory in MCI and transfers to other cognitive functions. When extended to alternative treatment options, stratification based on biological factors is a useful step towards individualised medicine.

**P4-027**  
**ENHANCING THE POWER OF PHYSICAL AND MENTAL ACTIVITIES VERSUS RISK FACTORS INDUCING PROGRESSION OF ALZHEIMER’S DISEASE IN RATS: IMPACT OF EPICALCATECHIN-3-GALLATE IN COMBINATION WITH VITAMIN E, VITAMIN C AND SELENIUM**  
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**Background:** Alzheimer’s disease (AD) is the most common cause of dementia. It is a progressive neurodegenerative disease that leads to impairment of memory and cognitive ability. Social isolation (SI) increases oxidative stress and exacerbates memory deficits while protein malnutrition (PM) increases oxidative damage in the brain and predict the progression of AD. Physical and mental activities suggest that daily oral Theracurmin® leads to improved memory and attention in non-demented middle-aged and older adults. The FDDNP-PET findings raise the hypothesis that decreases in plaque and tangle accumulation in brain regions modulating mood and memory are associated with curcumin supplementation.