Aims To compare the threshold for sweet (test) and salt (control) after 1 and 4 weeks of SSRI escitalopram therapy in depressed patients.

Methods The project was approved by the institutional ethics committee. Following informed consent, depressed patients were initiated on escitalopram 10 mg/d (increased to 15 or 20 mg, if required after 1 week,). Taste recognition threshold, intensity and pleasantness were measured for sweet and salt. Each tastant was made −1 to −3 (100 mM–1 mM). Regional recognition thresholds were determined at the tip of the tongue using a cotton bud well soaked in the tastant.

Results Three males and 4 females of mean ages 39.1 years completed the study. There was significant shift to the left for sweet thresholds between days 0 and 7, and 7 and 28 [$F(Dfn, Dfd) = 9.242$ (4.162) $P < 0.0001$]. A similar shift to the left was seen for salt but day 7 only [$F(Dfn, Dfd) = 6.213$ (4.162)].

Conclusion The increase in serotonin throughput as envisaged through SSRI treatment was paralleled by decrease in sweet thresholds.

Disclosure of interest The authors have not supplied their declaration of competing interest.

EW0771

Metabolic outcomes of Red yeast rice administration in patients treated with second-generation antipsychotics

G.M. Troili[*], A. Bruno, G. Pandolfo, M. Crucitti, R.A. Zoccali, M.R.A. Muscatello

University of Messina, Psychiatric Unit, Department of Biomedical and Dental Sciences and Morphofunctional Imaging, Messina, Italy
[*] Corresponding author.

Rationale Second-generation antipsychotics (SGAs) are notoriously associated with a wide range of metabolic adverse effects, and their chronic use is related with an increased risk for the development of metabolic syndrome (MS). The nutraceutical approach to the management of MS might be a promising strategy in the prevention of cardio-metabolic risk. In this context, Red yeast rice (RYR) have been shown to have a lipid lowering effect in an increasing number of clinical studies.

Objectives The present study was aimed to explore the efficacy and safety of RYR treatment on metabolic parameters in a sample of subjects receiving atypical antipsychotics.

Methods Ten outpatients treated with atypical APs assumed RYR at single daily dose of 200 mg/day for 30 days. Total cholesterol, high-density lipoprotein cholesterol (HDL), low-density lipoprotein cholesterol (LDL), triglycerides, fasting levels of glucose, and glycated hemoglobin were determined.

Results RYR administration non-resulted in a statistically significant reduction of metabolic parameters in the study sample. However, a trend for total cholesterol (T0 vs. T1: 159.6 vs. 145.6) and LDL (T0 vs. T1: 94.1 vs. 77.6) decrease was observed.

Conclusions Our findings in patients receiving atypical antipsychotics did not confirm the beneficial effect of RYS on lipemic profiles previously found in subjects who do not take this class of drugs. Further clinical trials with adequately-powered and well-designed methodology are needed to better explore the RYS effectiveness on the SGAs-induced metabolic side effects.

Disclosure of interest The authors have not supplied their declaration of competing interest.

EW0772

Preserved cognition and reduced age-related cognitive decline during treatment with angiotensin II receptor blockers: A 20-year follow-up study

D. Wincewicz[1,2,*], T. Tolmunen[3,4], A.K. Brem[5,6,7], J. Kauhanen[8], S. Lehto[3,4]
[1] *Medical University of Bialystok, Department of Clinical Pharmacology, Bialystok, Poland*
[2] *Medical University of Bialystok, Department of Psychiatry, Bialystok, Poland*
[3] *University of Eastern Finland, Institute of Clinical Medicine, Kuopio, Finland*
[4] *University of Eastern Finland, Department of Psychiatry, Kuopio, Finland*
[5] *Max Planck Institute of Psychiatry, Department of Neuropsychology, Munich, Germany*
[6] *BIDMC Harvard Medical School, Berenson–Allen Center for Noninvasive Brain Stimulation, Department of Neurology, Boston, USA*
[7] *University of Oxford, Department of Experimental Psychology, Oxford, United Kingdom*
[8] *University of Eastern Finland, Institute of Public Health and Clinical Nutrition, Kuopio, Finland*
[*] Corresponding author.

Introduction Modulators of the brain renin-angiotensin system (RAS) have been shown to improve cognitive functioning in several animal models of neuropsychiatric disorders. Moreover, the brain RAS has been considered a new target for the treatment of Alzheimer's disease (AD). However, there are no population-based follow-up studies supporting this hypothesis.

Objectives Cross-sectional and prospective relationships between cognitive decline and ARB treatment were examined in the population-based Kuopio Ischemic Heart Disease Risk Factor Study.

Aims To evaluate procognitive/antidementia capacity of orally delivered angiotensin II receptor blockers (ARB).

Methods The study was conducted on a sample of 1774 subjects (920 females, 854 males; age range at baseline: 42–61 years) from Eastern Finland. An established cutoff score of at least 2-point decrease in the Mini Mental State Examination over a 9-year follow-up was used to detect age-related cognitive decline in the cross-sectional setting. In the prospective setting, a hospital discharge diagnosis of dementia/AD was used as outcome variable. Cross-sectional relationships were determined with logistic regression and prospective analyses were conducted with the Cox proportional hazards model (both adjusted for relevant background variables).

Results Cross-sectional analysis displayed a decrease of the odds of cognitive decline ($n = 87$; 4.9% of participants) in those with ARB treatment; OR = 0.445, 95% CI: 0.22–0.90, $P = 0.024$. Furthermore, in the prospective setting, the risk of dementia/AD diagnosis ($n = 149$; 8.4% of participants) was significantly reduced in ARB treated participants; HR = 0.621, 95% CI: 0.40–0.98, $P = 0.038$.

Conclusions ARB treatment is associated with a decreased risk for age-related cognitive decline and dementia/AD manifestation.

Disclosure of interest The authors have not supplied their declaration of competing interest.

EW0773

The effect of Qing Huan Ling on the hypoglutamatergic schizophrenia model in mice

Y. Zhang[1,*], F. Liu[2], Z. Dai[2], Q. Wu[1]
[1] *Xi'an Mental Health Center, Pharmacy Lab, China*