before going to bed in the first week and two drops to each side were administered subsequently. Informed consent was given by the patient.
Results No psychological, neurological, autonomic and other side effects were observed associated with tropicamide. On VAS, the patient rated hypersalivation 5/7 at baseline, 4/7 after one drop each, 3/7 after two drops each.
Conclusions The reduction of CIS by oral use of tropicamide eye drops is promising and should be explored with randomized controlled trials.
Disclosure of interest The authors have not supplied their declaration of competing interest.

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EV1025

The therapeutic potential of natural compounds against Alzheimer's disease: A preclinical pharmacological study in both sexes

N. Kokras[1,2,*], M. Dimitriadou[2], I. Sotiropoulos[2,3], A.L. Skaltsounis[4], A. Tsarbopoulos[2,5], C. Dalla[2]
[1] *Medical School, University of Athens, First Department of Psychiatry, Athens, Greece*
[2] *Medical School, University of Athens, Department of Pharmacology, Athens, Greece*
[3] *School of Health Sciences, University of Minho, Life and Health Sciences Research Institute ICVS, Braga, Portugal*
[4] *Faculty of Pharmacy, University of Athens, Department of Pharmacognosy and Natural Products Chemistry, Athens, Greece*
[5] *GAIA Research Center, The Goulandris Natural History Museum, Bioanalytical Department, Kifissia, Greece*
* *Corresponding author.*

Alzheimer's disease (AD), a neurodegenerative neuropsychiatric disorder, is often comorbid with depression and anxiety. Neuropsychiatric disorders are also characterized by sex differences. However, most preclinical pharmacological studies are conducted using only males. Herein, we used male and female twelve-month-old mice (3xTg) expressing mutated forms of human proteins Tau, APP and Presenilin1. These mice are considered a valid animal model of AD. We investigated the effects of the natural compound trans-crocin-4 (TC-4), which is derived from Crocus sativus and the olive compound oleuropein on the cognitive, depressive and anxious profile of 3xTg mice. We found that male and female 3xTg mice exhibited reduced locomotor activity and oleuropeine treatment (100 mg/kg i.p., for 21 days) did not reverse this phenotype. In addition, anxiety- and depressive-like behaviors were not affected by genotype, sex or oleuropeine treatment. Interestingly, oleuropeine exhibited a tendency to enhance cognitive performance in male 3xTg mice. Treatment with TC-4 (50 and 150 mg/kg, i.p., acutely or chronically for 10 days) affected locomotor activity in a sex-differentiated manner. Interestingly, acute TC-4 clearly enhanced cognitive performance in all groups although it reduced center entries in the open field. Additionally, chronic TC-4 treatment enhanced novel object discrimination mainly in male 3xTg mice. Our findings highlight the potential of those natural compounds, which warrant further investigation but also emphasize the benefits of including both males and females in preclinical pharmacological studies.
Disclosure of interest The authors have not supplied their declaration of competing interest.

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EV1026

A comparison of risperidone and olanzapine in the acute treatment of persistent delusional disorder: Data from a retrospective chart review

K. Kulkarni[1,*], R. Arasappa[1], K. Prasad[1], A. Zutshi[2], P. Chand[1], K. Muralidharan[1], P. Murthy[1]
[1] *National Institute of Mental Health & Neurosciences, Psychiatry, Bangalore, India*
[2] *Epworth Hospital, Psychiatry, Melbourne, Australia*
* *Corresponding author.*

Introduction There is a lack of pharmacological trials studying drug response in Persistent Delusional Disorder (PDD) to guide clinical practice. Available reviews of retrospective data indicate good response to second-generation antipsychotics, but even such data from India is sparse.
Objectives and aims We aimed to compare the response of acute PDD to risperidone and olanzapine in our retrospective review.
Methods We conducted a retrospective chart review of patients diagnosed with PDD (ICD-10) from 2000 to 2014 ($n = 455$) at our Center. We selected the data of patients prescribed either olanzapine or risperidone for the purpose of this analysis. We extracted data about dose, drug compliance and response, adverse effects, number of follow-up visits and hospitalizations. The study was approved by the Institute Ethics Committee.
Results A total of 280/455 (61%) were prescribed risperidone and 86/455 (19%) olanzapine. The remaining ($n = 89$; 20%) had received other antipsychotics. The two groups were comparable in sociodemographic and clinical characteristics of PDD. Compliance was good and comparable in both groups (> 80%, $P = 0.2$). Response to treatment was comparable in both groups (85% partial response and > 52% good response, all $P > 0.3$). Olanzapine was effective at lower mean chlorpromazine equivalents than risperidone (240 vs. 391, $P < 0.05$).
Conclusion Our study indicates a good response to both risperidone and olanzapine, if compliance to treatment can be ensured. In the absence of specific treatment guidelines for PDD, second-generation antipsychotics like risperidone and olanzapine offer good treatment options for this infrequently encountered and difficult to treat psychiatric disorder.
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EV1027

Effects of typical and atypical antipsychotics on spontaneous neuronal network activity in vitro

C. Lange-Asschenfeldt*, U. Henning, P. Görtz
Heinrich-Heine-University Duesseldorf, Psychiatry and Psychotherapy, Duesseldorf, Germany
* *Corresponding author.*

Introduction Microelectrode arrays (MEAs) with cultured neuronal networks are highly suitable to quantify neuroactive activity and neurotoxicity of applied substances.
Objective Multiparametric characterization of functional alterations of in vitro-neuronal network activity by different typical and atypical antipsychotics.
Aims To identify differential effects of antipsychotics on spontaneous neuronal network activity as a functional readout.
Methods Cultured networks of dissociated cortical cells of postpartal mice coupled to MEAs were exposed to increasing doses of aripiprazole, clozapine, haloperidol, olanzapine, raclopride, and risperidone.
Results We found a concentration-dependent inhibition of firing patterns for all substances except olanzapine. All other substances