Mirtazapine augmentation enhances cognitive and negative symptoms in schizophrenic patients treated with risperidone: a randomised controlled trial

Submission date	Recruitment status	Prospectively registered
27/05/2009	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
01/12/2009	Completed	Results
Last Edited	Condition category	Individual participant data
01/12/2009	Mental and Behavioural Disorders	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number N/A

Study information

Scientific Title

The effect of mirtazapine augmentation of risperidone in the treatment of cognitive and negative symptoms of schizophrenia: a randomised controlled trial

Study objectives

Our hypothesis is that mirtazapine augmentation to the 'typical' atypical antipsychotics, risperidone that demonstrates potent inhibitors of of 5-hydroxytryptamine2 (5-HT2), alpha-2 adrenergic receptors can enhance cognitive function and reduce negative symptoms in patients with schizophrenia.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Bundang CHA Institutional Review Board (Ethics Committee) approved on the 22nd December 2008 (ref: 2008-15)

Study design

Double-blind randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Schizophrenia

Interventions

Mirtazapine was added to the on-going pharmacotherapy with risperidone in the mirtazapine group. The initial dosage was 15 mg/day at bedtime for the first two weeks. Thereafter, a daily dose of 30 mg/day was given at bedtime through the remainder of the study (six weeks). Doses of risperidone were fixed for the duration of the study.

Intervention Type

Drug

Phase

Phase IV

Drug/device/biological/vaccine name(s)

Mirtazapine, risperidone

Primary outcome(s)

- 1. Positive and Negative Syndrome Scale (PANSS), collected for each patient at week 0, week 2, week 4, and week 8
- 2. Scale for the Assessment of Negative Symptoms (SANS), collected for each patient at week 0, week 2, week 4, and week 8
- 3. Digit Span of K-WAIS (Korean-Wechsler Adult Intelligence Scale), collected at weeks 0 and 8

- 4. Controlled Oral Word Association Test (COWAT), collected at weeks 0 and 8
- 5. Korean-Complex Figure Test (K-CFT), collected at weeks 0 and 8
- 6. Korean-Auditory Verbal Learning Test (K-AVLT), collected at weeks 0 and 8
- 7. Estimated intelligence quotient (IQ) by the sum of Vocabulary scores and Block Design scores on the K-WAIS, collected at weeks 0 and 8
- 8. Timed Coding Test, collected at weeks 0 and 8

Key secondary outcome(s))

- 1. Barnes Akathisia Rating Scale, collected at weeks 0 and 8
- 2. Simpson-Angus Scale for Expyramidal Side-effects, collected at weeks 0 and 8
- 3. Clinical Global Impression (CGI), collected at weeks 0 and 8
- 4. Hamilton Rating Scale for Depression (HAMD), collected at weeks 0 and 8
- 5. Body weight, collected at weeks 0 and 8
- 6. Abdominal circumference, collected at weeks 0 and 8

Completion date

31/03/2009

Eligibility

Key inclusion criteria

- 1. Aged between 21 and 70 years, either sex
- 2. Diagnosed with schizophrenia based on the Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) (SCID)
- 3. Receiving treatment of oral risperidone (Risperdal Quicklet®) or RLAI (risperidone long acting-injection) as outpatients. In addition, the subjects had to have been stable for at least eight weeks in an outpatient setting immediately prior to initiation of this study.
- 4. Presence of positive or negative symptoms or both, resulting in the illness of at least moderate severity (greater than or equal to 4 on the Clinical Global Impression [CGI] Severity Scale)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. Evidence of organic mental disorder or mental retardation
- 2. Severe drug or alcohol dependence that required inpatient treatment and/or detoxification
- 3. Presence of a depressive episode. To exclude subjects with depressive episodes, the Hamilton Rating Scale for Depression (HAMD) was used (patients who scored more than 17 on HAMD were excluded).
- 4. Other conditions, such as a serious medical condition, a history of bipolar or schizoaffective

disorder, substance misuse, suicidality, possibility of pregnancy, lactation, or inability /unwillingness to use contraception

Date of first enrolment 01/10/2008

Date of final enrolment 31/03/2009

Locations

Countries of recruitment Korea, South

Study participating centre Department of Psychiatry Seongnam-Si Korea, South 463-712

Sponsor information

Organisation

Bundang CHA Hospital (South Korea)

ROR

https://ror.org/04yka3j04

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Bundang CHA Hospital (South Korea)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet
Participant information sheet
11/11/2025 No Yes