CARIPRAZINE SPECIFICITY PROFILE IN THE TREATMENT OF ACUTE SCHIZOPHRENIA
A META-ANALYSIS AND META-REGRESSION OF RANDOMIZED-CONTROLLED TRIALS

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Background & Aims

Second generation antipsychotics (SGAs) are not a homogeneous pharmaceutical class: different efficacy and side effects profile were demonstrated.

Tailored therapy: identification of the specificity of subsets of patients and the specificity of different SGAs in order to assign the therapy accordingly.

AIM: Establish cariprazine - a new dopamine D2 and D3 receptor partial agonist antipsychotic - efficacy profile in acute schizophrenia.

Materials & Methods

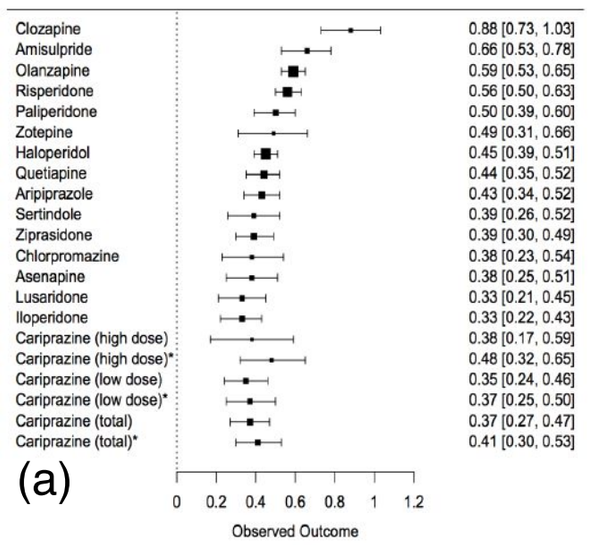
Study selection
Data collected from randomized, placebo-controlled clinical trails using cariprazine in acute schizophrenia. Low (<6 mg/day) and high (≥6 mg/day) cariprazine doses were separately considered, since different dose ranges demonstrated to have specific efficacy profiles for other SGAs.

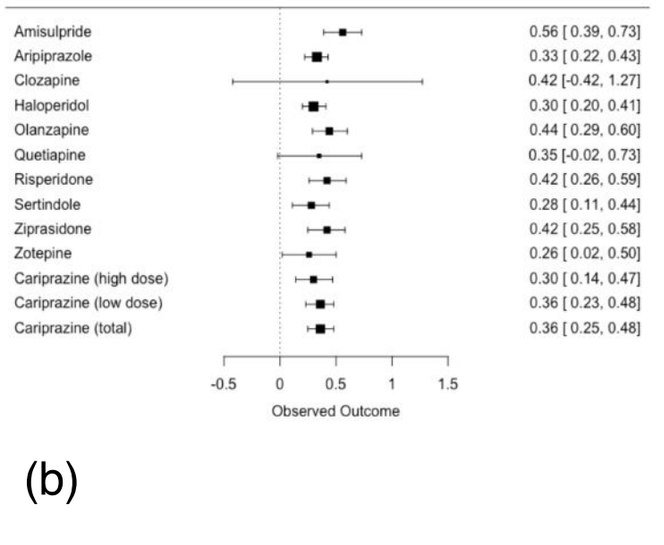
Outcomes
- Effect of low and high cariprazine doses compared to placebo on various symptom domains (overall symptoms, positive and negative symptoms, quality of life)
- Effect of low and high cariprazine compared to placebo vs. the effect of other antipsychotics to placebo on various symptom domains (data for other antipsychotics from previous meta-analyses [1], [2])

Statistical analysis
- Fixed-effects network meta-analysis: effect of low and high cariprazine doses vs placebo on symptom domains of interest (measured as mean difference (MD) or odds ratio (OR) with 95% CI).
- Comparison with other antipsychotics: standardized mean difference (SMD), based on Hedge's *g*, and its 95% CI.
- Meta-regression: possible impact of clinical-demographic variables (age, gender, baseline PANSS score, duration of disease and number of previous hospitalizations) on total symptom improvement.

Results

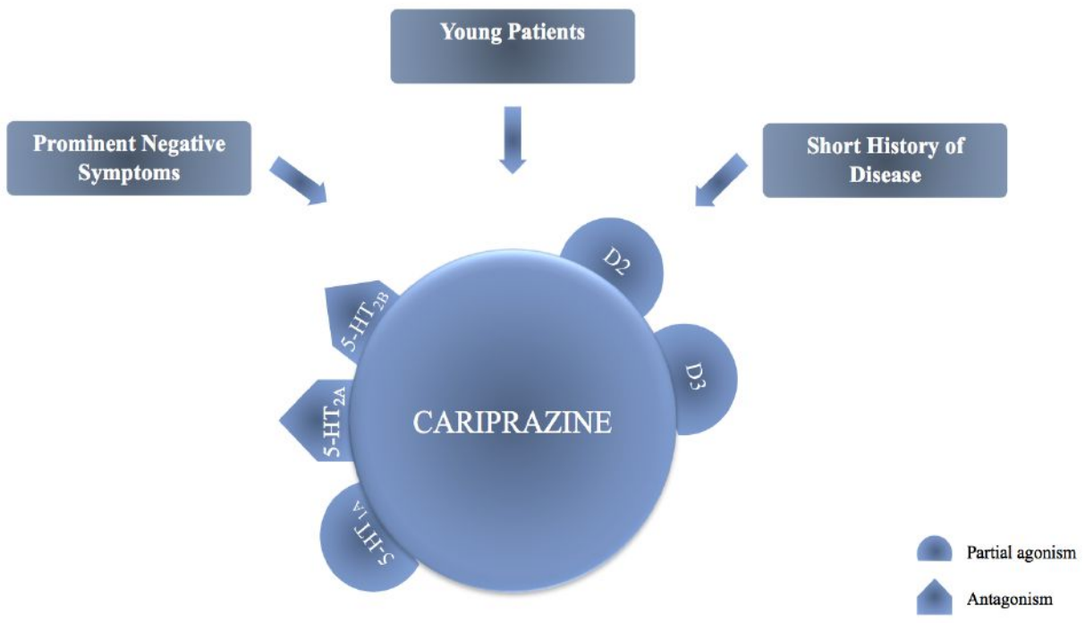
Four studies (2144 subjects) were included:
- Cariprazine was superior to placebo in all symptoms domain (no significant differences between high and low doses).
- Significant modulators in favor of high doses over placebo: higher baseline severity, younger age, shorter history of disease; similar trends for low doses.
- Cariprazine vs other antipsychotics SMD to placebo showed modest impact on overall symptoms (a) but higher efficacy in treating negative symptoms (b)





Discussion

Both high and low cariprazine doses are more effective than placebo for the treatment of acute schizophrenia in all symptom domains. Cariprazine may be particularly indicated when negative symptoms are prominent and in young patients with relatively short duration of disease. Since the short-term of analyzed outcomes (six weeks), the found effect on negative symptoms probably reflects improvement in secondary rather than primary negative symptoms [3]. High doses did not demonstrate further benefit compared to low doses and they were associated with higher incidence of side effects



References:
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