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SCHIZOPHRENIA Factsheet

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What is placebo response?

Placebo effects in pharmaceutical trials vary widely, with response rates varying from 20% to 70%. The placebo response can include improvement in symptoms and even adverse reactions that have been associated with the antipsychotic being tested. Placebo effects can substantially influence conclusions about the efficacy of antipsychotic medications as they minimise any differences in response to the antipsychotic and the placebo.

What is the evidence for placebo response?

Overall, moderate to high quality evidence found the response to antipsychotics was greater than the response to placebo. There was less variability in response to antipsychotics than in response to placebo, with older studies, those with younger patients, higher dose treatments, and greater mean-difference in symptom-change being associated with less variability.

There was a small to medium-sized improvement in overall symptoms with placebo. The response was greatest in studies with more efficacious drugs, younger samples, shorter illness duration, more severe baseline symptoms, shorter study duration, increased number of study sites, and non-university or non-Veteran Affairs settings.

For people with stable schizophrenia and predominant negative symptoms, there was a small placebo response in negative symptoms which was most apparent in studies with larger numbers of arms in the trial, larger numbers of study sites, and industry sponsorship (vs. academic settings).

There was increased improvement in symptoms from baseline to follow-up in placebo arms of clinical trials over time (1960 to 2014). Conversely, there is decreased improvement in symptoms from baseline to follow-up in treatment arms of clinical trials over time. This may be explained by enrolment of less severely ill patients at baseline and higher expectations that medications will improve symptoms.

There was greater improvement in PANSS total scores in the placebo arm of studies using last observation carried forward (LOCF) methods than in studies using mixed-effect models for repeated measures (MMRM). Studies involving more countries and studies in outpatient settings had greater placebo response in the analysis of MMRM methods, while studies with shorter study duration showed greater placebo response in the analysis of LOCF methods.

Around 66% of people receiving placebo also report an adverse event. These correspond to the same type of adverse event found with antipsychotics. 27% reported nervous system disorders, 13% reported gastrointestinal disorders, and 30% reported psychiatric disorders (anxiety, depression, agitation etc). A higher level of schizophrenia symptoms at baseline was associated with more adverse events.

For more information see the technical table

NeuRA
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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at **neura.edu.au/donate/schizophrenia**.

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