Oral versus depot antipsychotic drugs for schizophrenia—a critical systematic review and meta-analysis of randomised long-term trials.

Abstract: Non-adherence is a major problem in the treatment of schizophrenia. Depot antipsychotic drugs are thought to reduce relapse rates by improving adherence, but a systematic review of long-term studies in outpatients is not available. We searched the Cochrane Schizophrenia Group's register, ClinicalTrials.gov, Cochrane reviews on depot medication, and the reference sections of included studies for randomised controlled trials lasting at least 12 months in outpatients that compared depot with oral antipsychotics in schizophrenia. Data on relapse (primary outcome), rehospitalisation, non-adherence, and dropout due to any reason, inefficacy of treatment and adverse events were summarised in a meta-analysis using a random-effects model. Study quality was assessed with the Cochrane collaboration's risk of bias tool, and publication bias with funnel plots. Ten studies with 1700 participants met the inclusion criteria. Depot formulations significantly reduced relapses with relative and absolute risk reductions of 30% and 10%, respectively (RR 0.70, CI 0.57-0.87, NNT 10, CI 6-25, P=0.0009), and dropout due to inefficacy (RR 0.71, CI 0.57-0.89). Limited data on non-adherence, rehospitalisation and dropout due to any reason and adverse events revealed no significant differences. There were several potential sources of bias such as limited information on randomisation methods, problems of blinding and different medications in
the depot and oral groups. Other studies reduced a potential superiority of depot by excluding non-adherent patients. Depot antipsychotic drugs significantly reduced relapse. Due to a number of methodological problems in the single trials the evidence is, nonetheless, subject to possible bias.