Table 2. Category 2: Randomized Controlled Studies Not Specifically Designed to Address Switching Questions but Providing Useful Information

Publication	Description of Trial	Switched From	Switched To	Duration	Outcomes Measured	Comments and Results
Stahl et al. *J Clin Psychiatry*. **2013**;74(5):507–515. doi PubMed	Open-label continuation of PEARL 2 randomized trial, outpatient, multisite, United States and other countries	Patients treated with fixed-dose olanzapine (n = 69), lurasidone (n = 115), or placebo (n = 62)	Lurasidone flexible-dose in continuation phase (113 patients completed 6 mo of lurasidone treatment)	6 mo	Efficacy and safety	Patients switched from olanzapine to lurasidone showed significant decreases in weight and lipid levels, with minimal change in other groups; efficacy maintained
Hermes et al. *Schizophr Res*. **2011**;128(1–3):166–170. doi PubMed	CATIE* data	Perphenazine, olanzapine, quetiapine, risperidone, ziprasidone		Up to 18 mo	Association between weight change and psychiatric symptom reduction	Statistically but not clinically significant association between change in PANSS and % change in BMI; no evidence that the association between change in symptoms and weight gain differed across medications, despite substantial differences in weight gain and other metabolic measures; switching to drug with less metabolic risk unlikely to result in meaningful loss of clinical benefit
Faries et al. *BMC Psychiatry*. **2009**;9(1):54. doi PubMed	Reanalyses of the same data used in Faries et al, 2008 doi PubMed	Patients assigned to risperidone or olanzapine (n = 450) or conventional AP (n = 214)	Analysis looked at 191 patients who switched antipsychotics compared with 460 who continued initial antipsychotic	1 y	Clinical and economic outcomes after switching	Switching associated with poorer clinical and economic outcomes
Rosenheck et al. *Schizophr Res*. **2009**;107(1):22–29. doi PubMed	Secondary analysis of CATIE* results	First analysis: Patients who continued previous AP (n = 129) Second analysis: Patients on olanzapine (n = 297), risperidone (n = 252), or quetiapine (n = 87) at baseline	First analysis: Patients who switched to olanzapine or risperidone (n = 269) Second analysis: Comparison of those randomly assigned to stay on original AP vs those assigned to switch	Up to 18 mo	Psychiatric symptoms, neurocognition, QOL, neurologic side effects, weight, health costs	No significant differences between stayers and switchers *except* in second analysis: patients who stayed on olanzapine showed greater weight gain than those who switched from olanzapine to another AP
Daumit et al. *Schizophr Res*. **2008**;105(1–3):175–187. doi PubMed	Analysis of data from 1,125 patients in CATIE*	Perphenazine, olanzapine, quetiapine, risperidone, ziprasidone		Up to 18 mo	Comparison of change in 10-y risk for CHD between treatment groups	Impact on 10-y CHD risk differs significantly between antipsychotic agents, with olanzapine producing largest elevation in CHD risk with agents studied in CATIE
Faries et al. *Curr Med Res Opin*. **2008**;24(5):1399–1405. doi PubMed	Post hoc analysis of data from a 1-y, randomized, open-label cost-effectiveness trial, majority outpatient, multicenter, United States	Risperidone	Continue on risperidone (n = 158) vs switching to olanzapine (n = 43).	1 y	Safety and efficacy outcomes (no comparison group)	Olanzapine effective in patients requiring switch from risperidone, more weight gain with olanzapine
Citrome. *Psychiatry (Edgmont)*. **2007**;4(10):23–29. PubMed	CATIE* results interpreted as switching trials	Perphenazine, olanzapine, quetiapine, risperidone, ziprasidone	Olanzapine, quetiapine, risperidone, ziprasidone, clozapine	Up to 18 wk	Discontinuation rate, efficacy, and tolerability	Olanzapine: advantages in all-cause discontinuation and efficacy Quetiapine: advantages in all-cause discontinuation and efficacy for patients who had not responded to perphenazine Risperidone: advantages in tolerability Ziprasidone: most benign metabolic profile and greater likelihood of weight loss in those who had gained significant weight on other APs Clozapine: superior for patients who discontinued other APs due to lack of efficacy
Stroup et al. *Am J Psychiatry*. **2007**;164(3):415–427. doi PubMed	CATIE* results	Perphenazine	Olanzapine, quetiapine, or risperidone	Up to 18 mo	Time to discontinuation	Time to discontinuation longer with quetiapine (median = 9.9 mo) and olanzapine (7.1 mo) than risperidone (3.6 mo)
Essock et al. *Am J Psychiatry*. **2006**;163(12):2090–2095. doi PubMed	CATIE* phase 1 results	More advantageous to stay on original medication, ie, olanzapine, risperidone, or quetiapine, or switch?	Olanzapine, risperidone, quetiapine, ziprasidone	Up to 18 mo	Time to discontinuation	Patients randomly assigned to continue on olanzapine and risperidone had significantly longer times to discontinuation than those who switched antipsychotics. When these "stayers" were removed, differences were attenuated, but original pattern remained. Unless medication change required, may be best to optimize current medication regimen (eg, dosage adjustments, behavioral or psychosocial interventions) before switching medications

*CATIE: Clinical Antipsychotic Trials of Intervention Effectiveness, large randomized, double-blind, multicenter outpatient trial in the United States evaluating 1 first-generation antipsychotic (perphenazine) and 5 second-generation antipsychotics (olanzapine, quetiapine, risperidone, ziprasidone, clozapine); duration up to 18 months.

Abbreviations: AP = antipsychotic, BMI = body mass index, CHD = coronary heart disease, PANSS = Positive and Negative Syndrome Scale, PEARL = Program to Evaluate the Antipsychotic Response to Lurasidone study, QOL = quality of life.