Evidence Supporting Antipsychotic Use In Children

	SGA	FGA
Pervasive Developmental Disorder		
Autistic Sx	✓	✓
CGI	⃠	
OC	✓	
ADHD and Disruptive Behavior		
Aggression	⃠	
Anxiety	⃠	
Behavior Sx	✓	
CGI	✓	
Bipolar Disorder		
CGI	✓	
Depression	⃠	
Manic Sx	✓	
Schizophrenia		
CGI	✓	Less than SGA
Positive & Negative Sx	✓	✓

- ⃠ evidence show no difference from placebo
- ✓ evidence shows benefits vs. placebo
- Strength of evidence is generally low quality, with some moderate quality evidence.
- Blanks entries indicate no evidence or insufficient evidence to evaluate
- SGA = Second Generation Antipsychotics, FGA = First Generation Antipsychotics, Sx = Symptoms, CGI = Clinical Global Impressions, OC = Obsessive Compulsive Symptoms, ADHD = Attention Deficit Hyperactivity Disorders

National Average Prescription Cost as defined by Centers for Medicare and Medicaid Services

Generic name	Drug Form	National Average Cost Per Prescription
Fluphenazine	Tablet	$ 13
Haloperidol	Tablet	$ 14
Risperidone	Tablet	$ 15
Perphenazine	Tablet	$ 33
Risperidone	Solution	$ 40
Clozapine	Tablet	$ 46
Chlorpromazine	Tablet	$ 50
Quetiapine	Tablet	$ 76
Olanzapine	Tablet	$ 106
Ziprasidone	Capsule	$ 191
Quetiapine (Seroquel XR®)	Extended Release	$ 408
Asenapine (Saphris®)	Tab Sublingual	$ 485
Lurasidone (Latuda®)	Tablet	$ 503
Paliperidone (Invega®)	Extended Release	$ 637
Aripiprazole (Abilify®)	Solution	$ 690
Aripiprazole (Abilify®)	Tablet	$ 732
Risperidone (Risperidal® Consta®)	Syringe	$ 779

Seida JC, Schouten JR, Boylan K, et al. Antipsychotics for Children and Young Adults: A Comparative Effectiveness Review. Pediatrics. 2012;129(3):e771–e784.

Survey of Retail Prices | Medicaid.gov. Survey of Retail Prices. 2013
http://medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Prescription-Drugs/Survey-of-Retail-Prices.htm l

Body Composition & Metabolic Changes Over 12 Weeks in Children Receiving Antipsychotics

		Mean	(95% CI)	p Value
Weight (kg)	Aripiprazole	4.44	(3.71 to 5.18)	<.001
	Olanzapine	8.54	(7.38 to 9.69)	<.001
	Quetiapine	6.06	(4.90 to 7.21)	<.001
	Risperidone	5.34	(4.81 to 5.87)	<.001
	Untreated	0.19	(−1.04 to 1.43)	0.77
Waist, cm	Aripiprazole	5.4	(2.87 to 7.93)	<.001
	Olanzapine	8.55	(7.43 to 9.67)	<.001
	Quetiapine	5.27	(4.07 to 6.47)	<.001
	Risperidone	5.1	(4.49 to 5.71)	<.001
	Untreated	0.7	(−0.87 to 2.27)	0.4
LDL cholesterol, mg/dL	Aripiprazole	7.38	(0.77 to 13.99)	0.05
	Olanzapine	11.54	(3.97 to 19.11)	0.004
	Quetiapine	3.88	(−3.37 to 11.13)	0.3
	Risperidone	0.21	(−4.14 to 4.56)	0.92
	Untreated	2.99	(−5.18 to 11.16)	0.49

Correll CU, Manu P, Olshanskiy V, et al. Cardiometabolic risk of second-generation antipsychotic medications during first-time use in children and adolescents. JAMA 2009;302(16):1765–1773.

International Diabetes Federation definition of the at-risk groups and metabolic syndrome in children and adolescents

Critera for Metabolic Syndrome in Children and Adolescents

Age group (years)	Obesity Waist Circumference‡	Plus two or more of the following	Triglycerides	HDL-C	Blood pressure	Fasting Plasma Glucose
6–<10	>=90th percentile		Metabolic Syndrome cannot be diagnosed in this age group, but additional testing may be warranted for patients with a family history of risk factors			
10–<16	>=90th percentile or adult cut-off whichever is lower		>=150 mg/dL	<40 mg/dL	Systolic >=130mmHg or Diastolic >=85mm Hg	>=100 mg/dL or T2DM
16+ (Adult criteria)	Male >= 90 cm[*] Female >=80 cm[¥]		>=150 mg/dL	Male <40 mg/dL Female <50 mg/dL	Systolic >=130mmHg or Diastolic >=85mm Hg	>=100 mg/dL
			Or Active Lipid Treatment	Or Active Treatment		Or T2DM

HDL-C, high-density lipoprotein cholesterol; T2DM, type 2 diabetes mellitus

∗   Male Europids >=94cm, Male Japanese >=85cm
¥   Female Japanese >=90cm
‡   Tables for waist Circumference Percentiles for American children by age, gender, and ethnic backgroup available at: http://www.idf.org/webdata/docs/Mets_definition_children.pdf

- Zimmet P, Alberti KGM, Kaufman F, et al. The metabolic syndrome in children and adolescents – an IDF consensus report. Pediatric Diabetes. 2007;8(5):299–306.
- George A, Shaw J, Zimmet P. A new IDF worldwide definition of the metabolic syndrome: the rationale and the results | International Diabetes Federation. Diabetes Voice. 2005;50(3):31–33.