

Second-generation (atypical) antipsychotic medications tip sheet

Second-generation antipsychotic medicationsⁱ

- Aripiprazole/Abilify/Abilify Maintena/Aristada
- Asenapine/Saphris/Secuado
- Clozapine/Clozaril/Versacloz/FazaClo/Denzapine
- Iloperidone/Fanapt
- Lurasidone/Latuda
- Olanzapine/Zyprexa/Zyprexa Relprevv
- Brexpiprazole/Rexulti
- Cariprazine/Vraylar
- Paliperidone/Invega/Invega Sustenna/Invega Trinza
- Quetiapine/Seroquel/Seroquel XR
- Risperidone/Risperdal/Risperdal Consta
- Ziprasidone/Geodon

Medical issues related to second-generation antipsychotics usage in adults^{ii, iii}

Second-generation antipsychotics may cause abnormal blood work in adults such as:

- Elevated serum glucose
- Elevated serum lipids
- Increased prolactin levels

Conditions experienced may include:

- Fatigue
- Heart disease
- Stroke
- Significant weight gain
- Diabetes
- Diabetic ketoacidosis
- May increase the risk of mortality in elderly patients with dementia related psychosis

Medication specific adverse effects include:^{iv, v}

- Risperidone—dizziness, anxiety, sedation, and extrapyramidal side effects
- Paliperidone—temperature sensitivity and QTc prolongation
- Olanzapine—increased appetite and somnolence
- Quetiapine—somnolence, orthostatic hypertension, dizziness (less likely to cause extrapyramidal side effects)
- Ziprasidone—prolongation of QTc (minimal weight gain side effect)
- Aripiprazole—agitation, headache, and akathisia like restlessness

Monitoring patients on second-generation antipsychotics medication^{vi}

The FDA recommends the following screening measures for monitoring patients using second-generation antipsychotics. These guidelines may be modified with changes in medication and/or as clinically indicated.

Measure	Baseline	4 weeks	8 weeks	12 weeks	Quarterly	Annually
Personal/Family History	X					X
Weight/body mass index	X	X	X	X	X	X
Waist Circumference	X					X
Blood Pressure	X			X	x	X
Fasting Blood Glucose	X			X	x	X
Fasting Lipid Profile	X			X	x	X

Patients prescribed Clozapine require monitoring of absolute neutrophil count weekly for the first six months and, if normal, can be monitored every two weeks after that.

Enhancing outcomes through educating on the benefits of key lifestyle changes^{vii, viii, ix}

- Regular exercise
- Discontinuing smoking
- Healthy eating
- Symptom awareness
- Medication adherence
- Shared decision making
- Support system identification

Potential benefits of second-generation antipsychotic medications^x

- Treats both positive and negative symptoms of schizophrenia
- Stabilizes mood
- Reduction in psychosis
- Reduces behavioral disturbances.
- Less incidence of extra pyramidal symptoms
- Less incidence of tardive dyskinesia

Issues related to use in children^{xi}

The utilization of antipsychotic medication to treat children and adolescents is most successful when done in conjunction with a multifaceted approach as there is a need for ongoing research and identification of practice parameters. As with the adult population, monitoring labs and vital signs are part of the management process. Collaboration and the slow introduction with consistent monitoring are required to establish safe and beneficial treatment outcomes. It is suggested that this population not be treated with more than one antipsychotic at a time and that all other resources are considered prior to induction of an antipsychotic medication. It is

recommended that practitioners treating children and adolescents with antipsychotic medication read the SAMHSA strategies to promote best practice in antipsychotic prescribing for children and adolescents.

Summary

- Second-generation antipsychotics should be used for approved indications.
- Second-generation antipsychotics can have significant metabolic side effects; these effects vary between the different drugs. Monitoring can reduce the risk of metabolic side effects. Practitioners should base selection of antipsychotic on individual risk factors for each patient. For instance, previous response, side effect profiles, family history, co-morbid conditions, medical vulnerabilities, tolerances and patient preference/expectations.^{xii}

These guidelines are not intended to replace a practitioners' clinical judgment. They are designed to provide information and to assist practitioners with decisions regarding care. The guidelines are not intended to define a standard of care or exclusive course of treatment. Practitioners using these guidelines are responsible for considering patients' particular situations in evaluating the appropriateness of these guidelines.

ⁱ The APA Practice Guideline for the Treatment of Patients w Schizophrenia, Third Edition. Copyright 2021. <https://doi.org/10.1176/appi.books.9780890424841>

ⁱⁱ The APA Practice Guideline for the Treatment of Patients w Schizophrenia, Third Edition. Copyright 2021. <https://doi.org/10.1176/appi.books.9780890424841>

ⁱⁱⁱ Chokhawala K, Stevens L. Antipsychotic Medications. [Updated 2023 Feb 26]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519503/>

^{iv} The APA Practice Guideline for the Treatment of Patients w Schizophrenia, Third Edition. Copyright 2021. <https://doi.org/10.1176/appi.books.9780890424841>

^v Chokhawala K, Stevens L. Antipsychotic Medications. [Updated 2023 Feb 26]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519503/>

^{vi} DeJongh BM. Clinical pearls for the monitoring and treatment of antipsychotic induced metabolic syndrome. Ment Health Clin. 2021 Nov 8;11(6):311-319. doi: 10.9740/mhc.2021.11.311. PMID: 34824956; PMCID: PMC8582768.

^{vii} The APA Practice Guideline for the Treatment of Patients w Schizophrenia, Third Edition. Copyright 2021. <https://doi.org/10.1176/appi.books.9780890424841>

^{viii} Chokhawala K, Stevens L. Antipsychotic Medications. [Updated 2023 Feb 26]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519503/>

^{ix} <https://www.samhsa.gov/>

^x Chokhawala K, Stevens L. Antipsychotic Medications. [Updated 2023 Feb 26]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519503/>

^{xi} https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/pep19-antipsychotic-bp_508.pdf

^{xii} DeJongh BM. Clinical pearls for the monitoring and treatment of antipsychotic induced metabolic syndrome. Ment Health Clin. 2021 Nov 8;11(6):311-319. doi: 10.9740/mhc.2021.11.311. PMID: 34824956; PMCID: PMC8582768.