

Typical Anti-psychotic (FGA)

Haldol/Haliperidal

Thorazome/chloropromazine

Serentil/mesoridazine

Mellaril/Thoridazinel

Permitil/Fluphenazine

Trilafon/Perphenazine

Stelazine/Trifluoperazine

Loxitane/loxapine

Moban/Molindone

Navane/Thiothixene

Typical/First Generation Drugs (FGA) are full D2 agonist causing a dopamine blockade which increases the cascade effect increasing the incident of EPS with low dopamine.

Neuro S/E

Lower Dopamine

Efficacious

Can be more affordable for PT

Effects of Dopamine

Low dopamine = parkinson symptoms

High dopamine = psychosis symptoms

Dopamine has impact on other neurotransmitters and hormones.

EPS

Acute Dystonia Can occur in hours

Akathisia Can occur in days

Parkinsonism Can occur in weeks

Tardive Dyskinesia Can occur in years

Typical time frame for presentation of EPS symptoms in a patient taking Anti-psych meds. There are other non-psych meds that can also increase the risk of EPS.

EPS is less likely to occur with SGA, than with FGA:

--> FGA full blockade without the additional 5HT receptors, as in the SGA.

--> Partial agonism by some of the SGA at the D2 receptor site.

DOPAMINE

D Drugs

O psychhOsis

P Prolactin

A Attention

M Motivation

I Involuntary Movements

N Nausea

E Energy

Signs for too much Dopamine leading to psychosis.

Other Important S/E by Pharmaceutical

Clozaril/clozapine blood concerns with agranulocytosis

Atypical Anti-psych (SGA) Partial D2 Action

Abilify/aripiprizole D2 partial agonist + 5HT targets

Rexulti/brexpiprizole D2 partial agonist + 5HT targets

Vraylar/cariprazine D2 and D3 partial agonist + 5HT targets

Partial dopamine agonism will lower dopamine levels, but not as much as the full agonist of FGA and some SGA. SGA agonism (partial and full) will increase the serotonin levels. There is an unknown relationship between dopamine and serotonin in symptom relief of psychosis. The agonism effect on the 5HT receptors varies from pharmaceutical formulary and is not consistent within the classification of SGA.

Typically, lower EPS with Neuro S/E but increase risk of Metabolic S/E.

Atypical Anti-psych (SGA) Full D2 Agonism

Fanapt/Iliperidone D2 agonist + 5HT

Saphris/Asenapine D2 agonist + 5HT

Latuda/lurasidone D2 agonist + 5HT

Seroquel/quetiapine D2 agonist + 5HT

Zyprexa/olanzapine D2 agonist + 5HT



Atypical Anti-psych (SGA) Full D2 Agonism (cont)

Risperidal/risperidone D2 agonist + 5HT

Clozaril/clozapine D2 agonist + 5HT

Full dopamine agonism at D2 lowers dopamine levels SGA agonism of 5HT (partial and full) will increase the serotonin levels. There is an unknown relationship between dopamine and serotonin in symptom relief of psychosis. The agonism effect on the 5HT receptors varies from pharmaceutical formulary and is not consistent within the classification of SGA.

Typically, lower EPS with Neuro S/E but increase risk of Metabolic S/E. Cost can be a barrier to care with limited access.

Long Acting Injectable (LAI)

Aristada/- Initio	aripiprazole lauroxil (pro drug)	4-8 weeks Glut Inj	Schizo; D2 partial agonist, 5HT
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Risperidal Consta	risperidone	2-4 weeks	Glut
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Invega/Su stenna Trinza	paliperidone (component of Risperidal)	1-3 months	Glut
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Geodon	ziprasidone	2-4 weeks	Glut
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Zyprexa	olanzapine	2-4 weeks	
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Vivitrol	naltrexone	30 days Glut	Opioid and ETOH addiction; in combination of Therapy
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Maintena	aripiprazole (abilify)	30 days Delt or Glut	Schizo, BP1 in Adults
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SGA Drug Ending Short Cuts r/t S/E

-Apine	increase in sedation and weight gain with decrease in EPS symptoms
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-Idone	decrease in sedation and weight gain with increase in EPS symptoms
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- Piprazole	decrease in weight gain with increase in EPS symptoms
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Known S/E with drug ending by class for the SGA.

