

# DRUG CARDS | DAILY



**NAME(S): Generic:** quetiapine (kwe TYE a peen) | **Brand:** Seroquel, Seroquel XR

**THERAPEUTIC & PHARMACOLOGIC CATEGORY:** **Second Generation Antipsychotic** | Atypical Antipsychotic

**DOSAGE FORM & STRENGTH:** **Tablet:** 25 mg, 50 mg, 100 mg, 200 mg, 300 mg, 400 mg | **ER Tablet:** 50 mg, 150 mg, 200 mg, 300 mg, 400 mg.

**INDICATION(S) & DOSING(S): ADULTS** (Distinguish b/t [IR-immediate release] & [ER-extended release] dosing; Adjust accordingly for elderly or debilitated.)

1. **Schizophrenia: [IR]** Range of 150-750 mg/day PO divided bid-tid. When starting initiate 25 mg PO bid w/ 50-150 mg/day increases up to 300-400 mg/day PO divided bid-tid by day 4. Dose adjust by 50-100 mg/day q2days prn. Max 800 mg/day. **[ER]** Range of 400-800 mg PO qpm. Initiate at 300 mg PO qpm with 300 mg/day increases prn up to max of 800 mg/day.
2. **Bipolar I disorder (manic): [IR]** Range of 200-400 mg PO bid. Initiate at 50 mg PO bid with 100 mg/day inc up to 200 mg PO bid by day 4. Then 200 mg/day inc prn to a max of 800 mg/day.
3. **Bipolar I disorder (manic, mixed): [ER]** Range of 400-800 mg PO qpm. Initiate at 300 mg PO qpm for 1 dose. Then 600 mg PO qpm for 1 dose. Then 200 mg/day dose inc prn to a max of 800 mg/day.
4. **Bipolar disorder (acute depressive): [IR & ER]** Desired dose of 300 mg PO qhs. Initiate 50 mg PO qhs for 1 dose. Then 100 mg PO qhs for 1 dose. Then 200 mg PO qhs for 1 dose. Then 300 mg PO qhs. Max of 600 mg/day but doses >300 mg rarely more effective.
5. **Major depressive disorder:** Adjunct treatment. **[ER]** Range of 150-300 mg PO qpm. Initiate at 50 mg PO qpm for 2 days. Then inc to 150 mg PO qpm for 2 days. Max of 300 mg/day.
- **OFF LABEL | Treatment resistant generalized anxiety disorder: [IR]** Range of 50-150 mg PO qd. Initiate at 25 mg PO qd w/ 25-50 mg/day dose inc to max of 300 mg/day. **[ER]** Range of 50-150 mg PO qd. Initiate at 50 mg PO qd with dose inc of 50 mg/day to a max of 300 mg/day. Give on empty stomach.

**INDICATION(S) & DOSING(S): PEDIATRICS**

1. **Schizophrenia: [IR, 13-17 yo]** Range of 400-800 mg/day PO divided bid-tid. Initiate 25 mg PO bid for 1 day. Then 50 mg PO bid for 1 day. Then dose inc by 100 mg/day up to 200 mg/day PO bid by day 5. Then may dose in by 50-100 mg/day adjustments prn up to may of 800 mg/day. **[ER, 13-17 yo]** Range of 400-800 mg/day PO qpm. Initiate at 50 mg PO qpm for 1 day. Then 100 mg PO qpm for 1 day. Then dose inc by 100 mg/day up to a max of 800 mg/day. Give on empty stomach and tablet must be taken whole (Do not cut, chew, crush).
2. **Bipolar I disorder (acute manic): [IR, 10-17 yo]** Same a schizophrenia. **[ER, 10-17 yo]** Same as schizophrenia

**MECHANISM OF ACTION & PHARMACOLOGY**

- **MOA:** Quetiapine has antagonist effects a numerous neurotransmitter receptors in the brain (5HT1A, 5HT2, D1, D2, H1, and adrenergic alpha1/alpha2 receptors). The H1 receptor and adrenergic alpha-1 receptor antagonism is purposed to cause the observed state of feeling drowsy and orthostatic hypotension (respectively). The drug does not appear to have an effect on benzodiazepine and cholinergic muscarinic receptors. The active metabolite (norquetiapine) has a high affinity for muscarinic M1 receptors unlike the parent drug quetiapine. **Antipsychotic activity is proposed to be a result of both dopamine type 2 (D2) and serotonin type 2 (5HT2) antagonism.** There may also be antagonism at receptors similar to the D2 and 5HT2 receptors but not yet understood. | **Absorption** was observed to inc with high-fat meals & dec in pediatrics vs adults when adjusted by weight but of little consequence when dose adjusted between adults of varying weights. | Hepatatically **metabolized** via the CYP3A4 pathway forming two inactive metabolites. | 73% **excreted** in the urine as the metabolized forms with 20% fecally. | The **time to peak** in ages 12-17 years old the IR form is b/t 0.5-3 hours. In adults the



IR form is 1.5 hours and the ER form is 6 hours. | **Half-life elimination** b/t the ages of 12-17 years was 5.3 hours. In adults the IR was ~6 hours and ER was ~7 hours. | Quetiapine is 83% **protein bound** in the plasma.

#### SPECIAL POPULATIONS & CONSIDERATIONS

- **Renal Impairment:** No adjustments needed. | **Hepatic Impairment:** IR form, start at 25 mg qd with inc b/t 25-50 mg/day. ER form, start at 50 mg qpm with inc of 50 mg/day. | **Elderly or debilitated:** [IR] dose inc after initiate at lower range of 25-50 mg/day (instead of 50-150 mg/day). [ER] dose inc lowered to 50 mg/day (instead of 300 mg/day) | **Discontinue If ANC <1000 or unexplained dec in WBC.** | **Pregnancy/Lactation:** Caution advised due to neonatal EPS risk or w/d s/sx in 3rd trimester. Caution advised in breastfeeding due to limited data.

#### SIDE EFFECTS

- **Common:** Constipation, drowsiness, upset stomach, **somnolence, weight gain**, dry mouth, tremor, & rash.
- **Serious:** Depression exacerbation, extrapyramidal symptoms (EPS), seizures, stroke, QT prolongation, hyperglycemia, priapism, intestinal obstruction, agranulocytosis, leukopenia, & neutropenia, among others.

**BLACK BOX WARNING: Dementia-Related Psychosis** – Do not use in dementia-related psychosis. Inc in mortality in elderly pts on antipsychotics commonly due to cardiovascular or infectious events. **Suicidality** – Inc risk in children/adolescents/young adults w/ major depressive or other psychiatric disorders. Risk not a prevalent in pts >24 yo or >65 yo. Observe for clinical worsening, suicidality, and changes in behavior.

#### DRUG INTERACTIONS

- **Interaction profile characteristics:** CYP3A4 substrate, anticholinergic effects, CNS depression, dec histamine effects, dopamine antagonist, hyperglycemia, hypotensive, lowers seizure threshold, EPS & prolonged QT interval. | **Drugs to avoid:** Amiodarone, azithromycin, butalbital, codeine, clonidine, clozapine, ethanol, glucagon, levofloxacin, ziprasidone, among many others.

#### MONITORING PARAMETERS (NOTE: Check at baseline, periodically, during initiation, & dose increases)

- Lipids, fasting glucose, BP, CBC w/ differential, weight, s/sx of suicidal thoughts or changes in behavior, clinical worsening.

#### PATIENT COUNSELING INFORMATION

- Commonly used to treat **schizophrenia** in adults/children 13 years and older, **bipolar disorder (manic depression)** in adults and children 10 years and older, as an **adjunct for major depressive disorder** in adults
- **Do not cut/crush/chew** ER tablets and recommended on **empty stomach**. IR tablets w/ or w/o food.
- Drink plenty of liquids and periodically check BP in children/teenagers. **Dizziness/lightheadedness** common **during initiation and dose increases**.
- Do not abruptly stop taking quetiapine.

#### REFERENCE(S)

1. <https://www.drugs.com/ppa/quetiapine.html>
2. <https://online.epocrates.com/drugs/1229/quetiapine>
3. <https://www.webmd.com/drugs/2/drug-4689-8274/quetiapine-oral/quetiapine-oral/details>

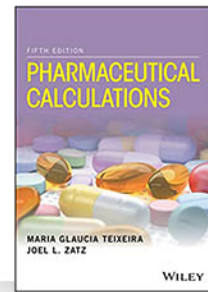


# PREPARE FOR SUCCESS!

## Comprehensive (NAPLEX)



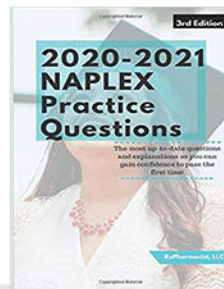
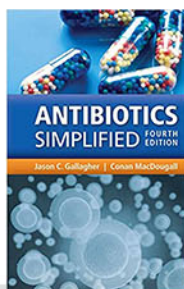
## Calculations (NAPLEX)



## Pharmacy Law (MPJE)



## Supplemental



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# DRUG CARDS DAILY

Monday at 7 am EST  
(6 am CST, 4 am PST)

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So you landed that perfect job offer or got the perfect match for your PGY1 and now the **ONLY** thing standing in your way is passing the NAPLEX and MPJE.

Here are some NAPLEX & MPJE prep recommendations to help you do everything you can to **pass the first time!**

## HEY STUDENT!

When I was P1 one of the best pieces of advice I got from those before me was to use a NAPLEX Prep book while learning each topic.

This helps focus your learning and the repetition helps to retain info and indirectly prepare you for the NAPLEX



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