

DRUG CARDS | DAILY



NAME(S): Generic: alprazolam (al PRAY zoe lam) | **Brand:** Xanax

PHARMACOLOGIC & THERAPEUTIC CLASS: Benzodiazepine | Hypnotic

DOSAGE FORM & STRENGTH: **Tab**s: 0.25 mg, 0.5 mg, 1 mg, 2 mg | **ODT:** 0.25 mg, 0.5 mg, 1 mg, 2 mg | **ER Tab**s: 0.5 mg, 1 mg, 2 mg, 3 mg | **Concentrate:** 1 mg/mL

INDICATION(S) & DOSING(S): ADULTS

1. **Generalized anxiety disorder:** Acute tx. Tx range 0.25-0.5 mg PO tid. Initiate 0.25 mg PO tid. Dose inc every 3-4 days to a max of 4 mg/day.
2. **Panic disorder:** For IR dosage form the tx range is b/t 0.5-3 mg PO tid. Initiate 0.5 mg PO tid. Dose inc up to 1 mg/day every 3-4 days. For the ER dosage form the tx range is b/t 3-6 mg PO qd. Initiate 0.5-1 mg PO qd. Dose inc by 1 mg/day every 3-4 days. Do not crush/chew ER formulation.
- **OFF LABEL | Vertigo:** Initiate 0.5 mg q 8 h prn.

INDICATION(S) & DOSING(S): PEDIATRICS

- **OFF LABEL | Anxiety:** Limited data. For children 7 years of age and older. Tx range 0.125-0.25 mg PO tid. Initiate 0.125 mg PO tid. Dose inc 0.125 mg/dose every 3-4 days with a max of 3.5 mg/day.

MECHANISM OF ACTION & PHARMACOLOGY

- **MOA:** Alprazolam increases the inhibitory effect of GABA on neurons causing increased neuronal membrane permeability of chloride ions resulting in the less excitable state of hyperpolarization creating stabilization. There is a binding to postsynaptic GABA neuron at stereospecific benzodiazepine receptors affecting multiple locations of the CNS such as the limbic system. Effects appear to be linked to GABA-A receptors and not GABA-B receptors. | Medication is rapidly **absorbed**. | Hepatically **metabolized** into two active metabolites (4-hydroxyalprazolam, alpha-hydroxyalprazolam) and an inactive metabolite (benzophenone) via CYP3A4 pathway. | **Excreted** in the urine as the unchanged drug as well as the metabolites. | **Time to Peak** for IR is 1-2 hours. ER is ~9 hours and dec by 1/3rd if taken with high-fat meal and inc by 1/3rd if taken 1 hour or more after a high fat meal. ODT is 1.5-2 hours but ~15 min if taken w/ water. Inc to ~\$ hour if w/ high fat meal. | **Half-Life Elimination** in adults is ~11.2 hours when taking the mean of IR & ER. IR is 6.3-26.9 hours. ER is 10.7-15.8 hours. ODT mean is 12.5 hours. In obese pts 21.8 hours. Elderly 16.3 hours. Pts w/ alcoholic liver dz 19.7 hours. | 80% **protein bound** primarily to albumin.

SPECIAL POPULATIONS & CONSIDERATIONS

- **Asian Americans:** Max conc ↑15% and half-life elimination ↑25%. | **Smokers:** Conc ↓50%. | **Elderly:** When initiating consider starting at the lower end of the dosing range and lower dose inc tapers. | **Discontinuing Therapy:** Taper dose no more than 0.5 mg/day every 3 days (Adults & Peds). | **Renally Impaired:** No adjustments. | **Hepatically Impaired:** Consider dose freq and dose strength adjustments. For example, initiate 0.25 mg PO bid-tid for IR. If ER initiate 0.5 mg PO qd. | **Contraindications & Cautions:** Avoid abrupt w/d; caution if CNS depression, alcohol use, hx of seizures, depression, changes in smoking habits, if elderly/debilitated, and pts w/ pulmonary impairment. | **Pregnancy:** Consider alternative. Risk of teratogenicity, neonatal w/d, floppy



infant syndrome. | **Lactation:** Limited data. May consider short-term use. Monitor infant closely. Risk of infant CNS depression.

SIDE EFFECTS

- **Common:** Hypotension, dizziness, irritability, impaired coordination, libido changes, menstrual irregularities, etc.
- **Serious:** Seizures, dependency, abuse/misuse, tachycardia, syncope, angioedema, suicidality, etc.

BLACK BOX WARNING: (1) Risk from Concomitant Opioid Use – Risk of respiratory depression, coma, death, & profound sedation. Limit to min dose/duration and monitor for s/sx of respiratory depression and profound sedation. (2) Addiction/Abuse/Misuse – Risk of addiction/abuse/misuse which can lead to overdose/death especially when used w/ other meds associated with poor outcomes such alcohol or drugs of abuse. Assess for addiction/abuse/misuse. (3) Dependence/Withdrawal Reactions – Extended/continuous use may lead to physical dependence and risk of dependence/withdrawal. Gradual taper if discontinuing long term usage. Avoid **rapid dose cessation to avoid w/d and life-threatening reactions.**

DRUG INTERACTIONS

- **Considerations for DI:** CYP3A4 substrate/inhibitor, CNS depression, & hypotensive effects.
- **Contraindicated drugs:** Atazanavir, clarithromycin, ketoconazole, nefazodone, and others.
- **Some drugs of note:** Amiodarone, buprenorphine, butalbital, cat's claw, cimetidine, danazol, 5-HTP, amitriptyline, cetirizine, citalopram, clozapine, colchicine, nortriptyline, and others.

MONITORING PARAMETERS

- S/sx of abuse/misuse/addiction, LFTs if prolonged usage

PATIENT COUNSELING INFORMATION

- Alprazolam is used to treat **anxiety disorders**, anxiety caused by depression, and **panic disorders**.
- **Extended release** tablets are intended to be **taken whole** and are **not to be broken, crushed, or chewed**.
- If a dose is missed take it as soon as you can unless it is almost time for the next dose.
- **Can slow/stop breathing** if recently used opioid, alcohol, or other drugs than can slow breathing.
- Should not take alprazolam if taking **ketoconazole** or **itraconazole** or if you have **breathing problems** such as COPD or sleep apnea. Also do not use if patient has **drug or alcohol addiction** or **suicidal thoughts or behaviors**.

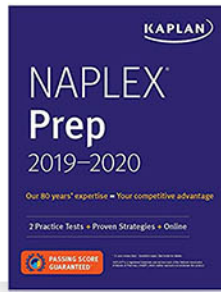
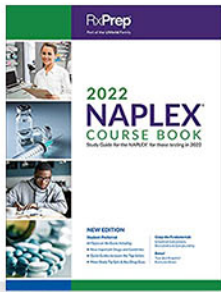
REFERENCE(S) & RESOURCE(S)

1. <https://online.epocrates.com/drugs/13010/alprazolam/Monograph>
2. <https://www.drugs.com/ppa/alprazolam.html>
3. <https://www.webmd.com/drugs/2/drug-8171-7244/alprazolam-oral/alprazolam-oral/details>
4. https://www.medscape.com/content/2003/00/45/67/456734/456734_tab.html

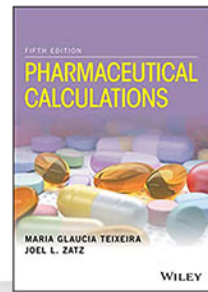
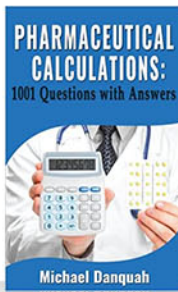
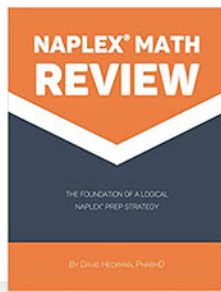
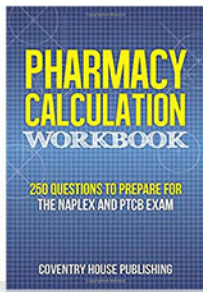


PREPARE FOR SUCCESS!

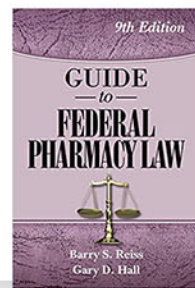
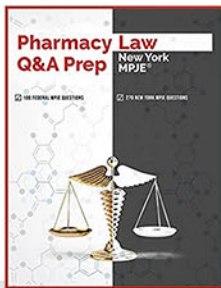
Comprehensive (NAPLEX)



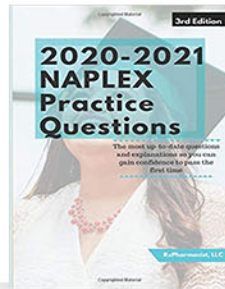
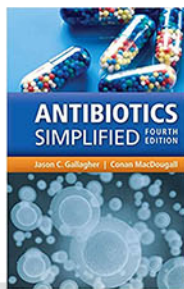
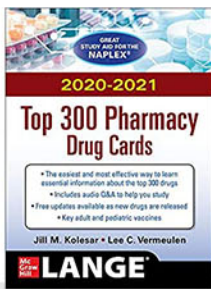
Calculations (NAPLEX)



Pharmacy Law (MPJE)



Supplemental



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DRUG CARDS DAILY

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

HEY NEW GRAD!

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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