

# Aptensio XR

(methylphenidate XR)

[Full Prescribing Information](#)

[DailyMed Drug Information](#)

## Forms/Strengths

- **Capsules:** 10 mg, 15 mg, 20 mg, 30 mg, 40 mg, 50 mg, 60 mg, 70 mg

## Dosing

- **Age:**  $\geq 6$  y/o
- **Onset:** ~ 60-120 min
- **Duration:** 8-12 hours
- **Release Profile:** 40% IR, 60% ER
- **Considerations:** Capsules may be swallowed whole or opened, and the entire contents can be sprinkled on applesauce.
- **Initial Dose:** 10 mg
- **Titration:** 10 mg weekly
- **Max Dose:** 60 mg/day

## Quick Facts

- Blocks reuptake of dopamine and norepinephrine via DAT and NET inhibition, increasing synaptic levels primarily in prefrontal cortex for improved attention and impulse control
- Biphasic release: ~50% immediate-release beads, ~50% delayed-release beads for rapid onset and sustained effect
- Common side effects include appetite suppression, insomnia, and mild cardiovascular changes
- **Black box warning:** Potential for abuse, misuse, and dependence; sudden death reported in patients with structural cardiac abnormalities
- Monitor growth in children; caution in patients with tics, bipolar disorder, or psychosis

- Not for use within 14 days of MAOIs due to hypertensive crisis risk
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## Indications

- **ADHD (ICD-10: F90.0)**
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## Off-Label Uses

- **Narcolepsy (ICD-10: G47.411):** Occasionally used for daytime sleepiness
  - **Treatment-resistant depression (ICD-10: F32.x, F33.x):** Adjunct for augmentation in select cases
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## How to Take

- **Administration:** Once daily in the morning with or without food; high-fat meals may delay Tmax and increase exposure; do not crush/chew capsules; if unable to swallow, sprinkle entire contents on  $\leq 1$  tablespoon applesauce and swallow immediately
  - **Missed Dose:** Take next dose as scheduled; do not double dose
  - **Discontinuation/Tapering:** May discontinue abruptly after short-term use; taper if long-term ( $>4$  weeks) or high-dose to minimize rebound symptoms
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## Side Effects

- **Common:**
    - Appetite/weight loss
    - Insomnia, headache
    - Abdominal pain, nausea, dry mouth
    - Increased heart rate/blood pressure, anxiety/irritability
  - **Serious:**
    - **Black box warning:** Drug abuse/dependence; assess risk prior to use
    - Cardiovascular: Sudden death/myocardial infarction in patients with cardiac disease, priapism
    - Psychiatric: Psychosis, mania, aggression, suicidal ideation
    - Peripheral vasculopathy (e.g., Raynaud's): Digital ulceration
    - Hypersensitivity: Rash, anaphylaxis
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# Monitoring / Labs

- Baseline and periodic: Heart rate, blood pressure, weight/height (pediatrics)
  - Psychiatric status for new/worsening symptoms
  - Growth parameters every 3-6 months in children; consider drug holiday
  - CBC, CMP if long-term use; signs of abuse/diversion
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# Education

- **When to Call the Doctor:**
    - Severe **mood changes, aggression, or suicidal thoughts**.
    - Chest pain, rapid heartbeat, shortness of breath (**cardiovascular concerns**).
    - Uncontrolled movements, tics, or worsening anxiety.
    - Numbness, coldness, or color changes in fingers or toes (**circulatory issues**).
    - Unexplained weight loss or **delayed growth in pediatric patients**.
  - **Safety Tips:**
    - **Monitor blood pressure and heart rate**, especially in patients with cardiovascular risk.
    - Use caution in patients with **anxiety, bipolar disorder, or psychosis**, as symptoms may worsen.
    - Avoid **caffeine and other stimulants**, which may amplify side effects.
    - Ensure **adequate hydration and nutrition**, as appetite suppression is common.
    - **Tapering may be required** if discontinuing after long-term use.
  - **Parent Tips for Pediatric Patients:**
    - **Encourage a nutrient-dense diet** to counteract appetite suppression.
    - Administer in the **morning before school** for optimal effect.
    - Monitor **school performance and behavioral changes**.
    - Observe for **sleep disturbances**; adjust timing if necessary.
    - Communicate regularly with **teachers and caregivers** about medication effects.
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# Additional Information

- **Contraindications:**
  - Hypersensitivity to methylphenidate
  - Concurrent/use within 14 days of MAOIs
  - Glaucoma, severe hypertension, symptomatic cardiac disease
- **Pregnancy:** Category C (older); limited human data—use if benefit outweighs risk; neonatal withdrawal possible
- **Lactation:** Present in breast milk; weigh risks (irritability, reduced weight gain in infant)
- **Drug Interactions:**

- MAOIs/serotonergics: Hypertensive crisis/serotonin syndrome
  - CYP2D6 inhibitors (e.g., bupropion): Increased methylphenidate levels
  - Acidifiers (e.g., vitamin C): Decreased absorption; alkalinizers (e.g., antacids): Increased absorption
  - Pressors (e.g., alpha-agonists): Potentiated hypertension
  - Alcohol: Accelerated release from capsules
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## References

1. FDA. Concerta (methylphenidate HCl) Prescribing Information, 2023.  
[https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2023/021121s042lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/021121s042lbl.pdf)
  2. DailyMed. Methylphenidate Hydrochloride Extended-Release Capsules, 2024.  
<https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=example> (generic XR capsules)
  3. UpToDate. Methylphenidate: Drug information, 2025.  
<https://www.uptodate.com/contents/methylphenidate-drug-information>
  4. American Academy of Pediatrics. ADHD Clinical Practice Guideline, 2021.  
<https://publications.aap.org/pediatrics/article/148/6/e2021055352/180000/Clinical-Practice-Guideline-for-the-Diagnosis>
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