

Official 2017 Carlat ADHD Pediatric Stimulant Comparison Table

Medication	Pediatric Dose (starting–max*)	Available Strengths (in mg except where noted)	Duration of Action (h)	Can It Be Split?	Generic Available?	Ages Approved for ADHD	Delivery System/Notes
Methylphenidates							
<i>Short-acting</i>							
Focalin (dexamethylphenidate)	2.5 mg BID–10 mg BID	2.5, 5, 10	3–4	Yes	Yes	6–17, adults	D-enantiomer of methylphenidate but twice as potent
Methylin CT	2.5 mg BID–20 mg TID	2.5, 5, 10	3–4	Yes	Yes	6–17, adults	Chewable tablets
Methylin Oral Solution	2.5 mg BID–20 mg TID	5 mg/5 mL, 10 mg/5 mL	3–4	NA	No	6–17, adults	Clear, grape-flavored liquid
Ritalin	2.5 mg BID–20 mg TID	5, 10, 20	3–4	Yes	Yes	6–17, adults	Immediate-release tablets
<i>Intermediate-acting</i>							
Ritalin SR (generic only)	10 mg q AM–60 mg q AM	10, 20	4–8	No	Yes	6–17, adults	Continuous-release tablets (less predictable because of wax matrix)
<i>Long-acting</i>							
Aptensio XR	10 mg q AM–60 mg q AM	10, 15, 20, 30, 40, 50, 60	8–12	Can be sprinkled; do not crush or chew	No	6–17, adults	ER capsules; 40% IR, 60% ER
Concerta (OROS – osmotic [controlled] release oral [delivery] system)	18 mg q AM–72 mg q AM (max 54 mg if < 12 yo)	18, 27, 36, 54	10–16	No; do not crush or chew	Yes	6–17, adults	Initial release, then continuous capsule. 22% IR, 78% ER; hard shell may make it more difficult to abuse.
Cotempla XR-ODT	17.3 mg q AM–51.8 mg q AM	8.6, 17.3, 25.9	8–12	No	No	6–17	Orally disintegrating tablets; 25% IR, 75% ER
Daytrana patch (methylphenidate transdermal system)	10 mg q AM–30 mg q AM. Remove after 9 hours.	10, 15, 20, 30	8–12	No	No	6–17	Continuous release patch. Duration can be shortened by decreasing wear time; effects persist up to 5 hours after removal.
Focalin XR (dexamethylphenidate XR)	5 mg q AM–30 mg q AM	5, 10, 15, 20, 25, 30, 35, 40	8–12	Can be sprinkled; do not crush/chew	Yes	6–17, adults	Capsules of 50% immediate-release beads & 50% delayed-release beads. Mimics BID dosing; twice the potency of methylphenidate.
Metadate CD	20 mg q AM–60 mg q AM	10, 20, 30, 40, 50, 60	8–12	Can be sprinkled; do not crush/chew	Yes	6–17, adults	30% immediate-release beads and 70% delayed-release beads; mimics BID dosing
QuilliChew	20 mg q AM–60 mg q AM	20, 30, 40	8–12	Yes	No	6–17, adults	Chewable ER capsules; 30% IR, 70% ER
Quillivant XR	20 mg q AM–60 mg q AM	25 mg/5 mL	8–12	No	No	6–17, adults	Oral solution; 20% IR, 80% ER; shake well
Ritalin LA	20 mg q AM–60 mg q AM	10, 20, 30, 40, 60	8–12	Can be sprinkled; do not crush/chew	Yes	6–17, adults	50% immediate-release beads & 50% delayed-release beads

Amphetamines							
Short-acting							
Dexedrine (dextroamphetamine)	3–5 yo: 2.5 mg q AM–20 mg BID 6–16 yo: 5 mg q AM–20 mg BID	5, 10	3–5	Yes	Yes	3–16	Tablets
Liquadd, ProCentra (dextroamphetamine)	5 mg q AM–20 mg BID	5 mg/5 mL	3–5	NA	Yes	3–16	Bubblegum-flavored liquid
Intermediate-acting							
Adderall (mixed amphetamine salts)	3–5 yo: 2.5 mg q AM–20 mg BID 6–17 yo: 5 mg q AM–20 mg BID	5, 7.5, 10, 12.5, 15, 20, 30	6–8	Can be crushed	Yes	3–17, adults	Mixed salt of l- and d-amphetamine
Long-acting							
Adderall XR (mixed amphetamine salts)	6–12 yo: 5 mg q AM–30 mg q AM 13–17 yo: 10 mg q AM–40 mg q AM	5, 10, 15, 20, 25, 30	8–12	Can be sprinkled; do not crush/chew	Yes	6–17, adults	50% IR, 50% ER mixed salt of l- and d-amphetamine; beads; mimics BID dosing
Adzenys XR-ODT, Adzenys ER (amphetamine)	6–12 yo: 6.3 mg q AM–18.8 mg q AM; 13–17 yo: 6.3 mg q AM–12.5 mg q AM	3.1, 6.3, 9.4, 12.5, 15.7, 18.8; 1.25 mg/mL	8–12	No (ODT, liquid)	No	6–17, adults	ER orally disintegrating tablets: 3.1 mg is equivalent to 5 mg mixed salts product; increasing dose preparations are equivalent to 10 mg, 15 mg, 20 mg, 25 mg, and 30 mg respectively; oral liquid (available early 2018)
Mydayis (mixed amphetamine salts)	12.5 mg q AM–25 mg q AM	12.5, 25, 37.5, 50	10–12+	Can be sprinkled; do not crush/chew	No	13–17, adults	pH-dependent ER formulation; effects may last up to 16 hours
Vyvanse (lisdexamfetamine)	30 mg q AM–70 mg q AM	10, 20, 30, 40, 50, 60, 70	8–12	Can be dissolved in water	No	6–17, adults	Capsules; lisdexamfetamine is prodrug of dextroamphetamine
Non-stimulants							
Intuniv (guanfacine extended-release)	1–4 mg daily (do not increase faster than 1 mg/wk)	1, 2, 3, 4	24	No	Yes	6–17	ER tablet; not a 1:1 conversion from IR
Strattera (atomoxetine)	Dosage varies.**	10, 18, 25, 40, 60, 80, 100	24	No	Yes	6–17, adults	Norepinephrine reuptake inhibitor
Tenex (guanfacine immediate-release)	1–4 mg daily (do not increase faster than 1 mg/wk)	1, 2	17	Can be crushed	Yes	Not FDA-approved for ADHD	Tablets
Wellbutrin (bupropion)	1.4–6 mg/kg/day	IR: 75, 100; SR: 100, 150, 200; XL: 150, 300, 450	6–9	Yes	Yes	Not FDA-approved for ADHD	SR (12 hour) and XL (24 hour) versions exist
<p>* Maximum dose based on FDA recommendations (see this issue's interview with Dr. Buchanan for information regarding higher doses) ** Strattera dosing: Weight < 70 kg, start 0.5 mg/kg, target 1.2 mg/kg, max 1.4 mg/kg; weight > 70 kg, 40 mg–100 mg</p>							