## MEDICATIONS FOR ATTENTION DEFICIT HYPERACTIVITY DISORDERS – methylphenidate based, page 1

Medication	Form	Dose/Schedule	Dose Range	Onset/Duration	Most Common Side Effects	Pro	Precautions
Methylphenidate (MPH) Ritalin Methylin	tablets 5, 10, 20 mg IR chewable 2.5, 5, 10 mg IR liquid 5 mg/5ml 10 mg/5ml IR	Usually given two or three times a day. Begin 5 mg early AM & noon.	Child: 5-45 mg Adoles: 10-60mg Adults: 20-80mg	onset: 15-20 min duration:4 hrs max	Decreased appetite, decreased sleep, less common: headaches, stomach aches, irritability, weight loss, tics, "rebound." Can overstimulate or make too calm if dose is too strong. These are true for all stimulants this page and page 2 down to double line.	EVERY MEDICINE ON THIS PAGE IS (MPH) METHYLPHENIDATE BASED  Methylphenidate is the generic name of all these. Works quickly, effective often. The most studied. Little to no lab testing needed. Good safety history. Methylin has no dye, is very small, and comes in grape chewable and liquid. Focalin is a refined isomer form which may be better tolerated and smoother.	Caution if history of tics or Tourette's or high blood pressure or heart problems. Controlled substance. Must hand write all scripts, no refills, no call ins. True for all stimulants this page and page 2 down to double line.  Some kids get "meaner" with stimulants, especially amphetamines on page 2.
Focalin (dexmethylphenidate) Focalin XR	tablets 2.5, 5, 10mg IR Focalin XR comes in 5, 10, 15, 20, 25, 30, 35, 40mg			Focalin: 4-5 hrs.  Focalin XR: 8 hrs.			
methylphenidate-SR Ritalin SR Methylin ER Metadate ER	tablet 10mg SR 20mg SR 10mg ER 20mg ER	Begin 10 or 20mg SR in AM, may need increase or noon dose. May need regular Ritalin to start in AM or extend duration to PM All 4 of these are time release tablets.	Child: 10-40 mg Adoles: 20-40 mg Adults: 20-80 mg	onset: 30-60 min duration: 5-8hrs	Same as above.	These are longer lasting versions of methylphenidate. Avoids noon dose, usually. Concerta is methylphenidate in a clever osmotic pressure release mechanism pill. Metadate CD uses a third mechanism to extend the duration and smooth the effect of methylphenidate. Metadate CD, Ritalin LA, Aptensio XR, and Focalin XR capsules can be pulled apart and sprinkled on food. Quillivant is a time release liquid while Quillichew is a chewable time release pill. Daytrana is a skin patch.	
Concerta ER	18, 27, 36, 54mg	Once a day in AM	Child: 18-27 mg Adoles: 27-54 mg Adult: 36-72 mg	onset: 15-30 min duration: 8-10 hrs			
Metadate CD  Ritalin LA	10, 20, 30, 40, 50, 60mg CD capsule 10, 20, 30, 40mg capsules	These 2 are time release capsules Start 10-20mg AM Give once a day in AM Max is 60mg/d	Child: 10-40 mg Adoles: 20-40 mg Adult: 20-60 mg	onset: 30 min duration: 6-8 hrs		Metadate CD is 30% IR + 70% ER Ritalin LA is 50% IR + 50% ER	
Quillivant XR  Quillichew ER	Liquid suspension 25mg/5ml (5mg/1ml) Chewable tablets 10, 20 mg scored 40 mg is not scored	Once a day in AM 10-20 mg start	10mg/d = 2 ml 20mg/d = 4 ml 30mg/d = 6 ml 40mg/d = 8 ml 50mg/d = 10 ml Child: 10-40 mg Adoles: 10-60 Adult: 10-60	onset: 30 min duration: 8- 12 hours onset: 30-60 min. duration: 8- 12 hours	Same as above	The only time release liquid stimulant.  The only chewable extended release ADHD med Releases biphasic 30% IR + 70% ER	Comes as powder in bottle, add water, shake vigorously before each use. Refrigerate. Use dropper to measure. Brand only - 2014  New formulation 2016 Brand only
Aptensio XR	Capsule 10, 15, 20, 30, 40, 50, 60 mg	Once a day in AM Start 10 mg	Child: 10-40 mg Adoles: 10-60 Adult: 10-60	onset: 30-45 min. duration: 8 - 12 hours	Same as above	Another capsule option. Can be sprinkled on food. 40% immediate (IR) and 60% delayed release.	New 2016 Brand only
DAYTRANA (methylphenidate transdermal system)	patch 10, 15, 20, or 30 mg/9 hours	One patch per day to hip in early a.m. Remove after 6 to 12 hours – 9 hours is advised.	Child: 10-20 mg patch Adoles: 15-30 mg patch Adult: 15-30 mg	onset: 2 hours duration: 1-2 hours after patch removed	Same as above plus patch may irritate skin.	Although not designed to be cut, patch can be cut to lessen dosage.  Avoids oral dosing. Should cover school day and longer.  Duration can be adjusted by time patch is put on and removed.  May be smoother.  Patch can be removed early to shorten duration.	Slow onset. Patch may come off accidentally. Patch may rarely lastingly discolor skin. Even low dose patch may be too strong for a child. Brand only

Simultaneous use of alcohol or cigarettes and especially street drugs should be avoided. All medications should be avoided if possible in pregnancy. This chart is intended to be a summary guide, not a full and complete list.

## MEDICATIONS FOR ATTENTION DEFICIT HYPERACTIVITY DISORDERS – amphetamine based and non-stimulants, page 2

Medication	Form	Dose/ Schedule	Dose Range	Onset/ Duration	Most Common Side Effects	Pro	Precautions
DEXEDRINE (dextroamphetamine)	tablet (scored) IR 5mg 10mg	Same as Ritalin	Child:2.5-30 mg Adoles:10-45 mg Adults:10-60 mg	onset: 30 min duration: 4-5 hrs	Similar to Ritalin (MPH) See pg. 1	Stronger and longer effect than Ritalin (MPH). Some people do better with amphetamines. Generic available.	Precautions same as Ritalin (MPH) but more so regarding growth, heart, blood pressure, tics, speedy,
DEXEDRINE - SR	Spansules SR 5mg 10mg 15mg	Begin 5mg in early AM. May only need once a day. May need regular Dexedrine in AM to start effect early, or afternoon dose to extend effect in afternoon.	Child:5-15 mg Adoles: 10-30 mg Adult: 10-40 mg	onset: 30-60 min duration: 6-8 hrs	Similar to MPH – Pg. 1 Less rebound in longer lasting medicines.	Avoids noon dose, usually. Generic available.	agitation, anger and abuse.  Inappropriately, I believe, all amphetamines are FDA approved down to age 3, while milder MPH is only approved down to age 6.
ADDERALL dextroamphetamine and amphetamine ADDERALL-XR	tablet (scored) 5, 7.5, 10, 12.5, 15, 20, 30mg IR capsule: 5, 10, 15 20, 25, 30mg XR	1 or 2 times a day. XR may be once a day.	Child:5-30 mg XR 10-20mg Adoles:10-40 mg XR 10-30mg Adults:10-50 mg XR 10-30mg	IR onset: 30 min duration: 4-6 hrs XR onset: 30-60 min duration: 8-10 hrs	Similar to MPH – Pg. 1	IR Usually once or twice a day. Two doses usually cover a whole day. The XR form should cover the whole school day but may require an after-school IR boost. The XR capsule can be opened and sprinkled on food. Generics are available. Adderall is the most abused stimulant. 25% L and 75%D - amphetamine Stimulants, especially amphetamines, can help narcolepsy.	Adderall is combination of two types of dextroamphetamine and two types of amphetamine.  Adderall is the most abused.  Adzenys and Evekeo have similar potential as they are also combinations of both amphetamine and dextroamphetamine.
EVEKEO D and L amphetamine sulfate	tablet (scored) 5, 10mg IR	once to twice or rarely 3 times a day	Child: 2.5 – 20mg Adoles: 5 – 30mg Adult: 5 – 40mg	onset: 30 min duration: 4-6 hrs	Similar to MPH – Pg. 1 Same as Adderall IR	Very similar to Adderall IR tablets. Is a 50/50 racemic mix of L and D amphetamine New 2016, Brand	
ADZENYS XR ODT oral disintegrating tab D and L amphetamine	tablet: 3.1, 6.3, 9.4, 12.5, 15.7, 18.8 mg XR	Once a day in AM Start 3.1 to 6.3 based on age and weight	Child: 3.1 – 9.4 Adoles: 3.1 – 18.8 Adult: 3.1 – 18.8	onset: 30-60 min duration: up to 12 hours	Similar to MPH – Pg. 1 Same as Adderall XR	This is equivalent to Adderall XR and is the only orally disintegrating ADHD med. New 2016. Brand	Approved use as diet or binge eating treatments is questionable to me.
DYANAVEL XR oral suspension D and L amphetamine	liquid suspension 2.5mg/ml (1 ml = 1 cc)	Once a day in AM Start 2.5 mg Max 20 mg	Child: 2.5 – 10mg Adoles: up to 20mg Adult: up to 20mg	onset: 30-60 min duration: up to 12 hours	Similar to MPH – Pg. 1 Same as Adderall XR	This is simply an Adderall like mixed amphetamine XR option in a liquid form. Does not need refrigeration. Comes ready mixed, shake before using. New 2016. Brand.	
VYVANSE (lisdexamfetamine)	capsule: 10, 20, 30, 40, 50, 60, 70 mg XR	Once a day in AM	Child: 10-50 mg Adoles: 20-70 mg Adult: 20-70 mg	onset: 30-45 min duration: 8-12 hrs	Similar to MPH – Pg. 1	Longer duration. Capsule can be opened and sprinkled on food. Pro – drug avoids IV and snorting routes of abuse. Brand only. May be gentlest amphetamine.	
Strattera (atomoxetine)	capsules 10, 18, 25, 40, 60, 80, 100mg	Once or twice daily. Start in AM. Give evening if sedation.	Based on weight, 0.5 to 1.5mg/kg, target 1-1.4 mg/kg	onset 30-60 min duration: 5-8 hrs, steady state	Stimulant side effects but milder (see Ritalin); plus sedation, nausea possible.	Increases norepinephrine (NRI) stimulant-like action but lasts all day. Not a controlled substance. No direct dopamine effect so may be better tolerated.	Takes 2 to 4 weeks for maximum effects. Must be taken 7 days a week. Only available as brand.
Tenex (guanfacine)	tablets 1.0 mg 2.0 mg	Begin in evening. May need 3 times/day. No patch form. Must take 7 d/wk.	child: 1.0-5.0mg Adoles: 1.0-4mg Adult:2.0-6mg	onset 30-45 min duration: 4-8 hrs	Less sedating than Clonidine, but can cause sedation, sometimes (25%) nightmares. May lower blood pressure.	Less sedating than Clonidine. Same other benefits. Can be given 2 or 3 times/day. May need 1-2 weeks to build up. Helps tics, hyperactivity. Does not cut appetite. Invented to treat high blood pressure. Generic available.	Will not help attention as much as stimulants. Do not stop suddenly, same as Clonidine. May rarely have unexpected heart effects.
Intuniv (guanfacine ER)	tablets 1, 2, 3, 4 mg	Intuniv usually AM, once a day			Intuniv is once a day in AM, longest duration, least sedating, often smoother and is a new brand.		
Catapres (clonidine)	0.1 mg 0.2 mg Patch (TTS-1/2/3)	Begin in evening due to sedation. May need to build up to 4 times/day. Patch on skin lasts 5-7 days. Must take 7 d/wk.	Adoles: 0.1-0.6mg Patch up to TTS-3	duration: 3-5 hrs patch 4-7 days duration	Very sedating. May lower blood pressure, dizziness. Skin irritation common with patch.	Helps tics. Helps severe hyperactivity and impulsivity. May need 1-2 weeks to build up. Does not cut appetite. Invented to treat hypertension. Has been used to treat opiate and/or nicotine withdrawal. Older, generic available.	Avoid if serious depression. Partial effect on attention. Taper off slowly to avoid rebound hypertension or agitation. May rarely have unexpected heart effects.
Kapvay (clonidine ER)	tablets 0.1, 0.2mg	Kapvay usually AM May be given BID			Kapvay is similar to Intuniv.	Simultaneous use of alcohol or sisconttoe and consciolly star	

Other options include imipramine, bupropion, amantadine, modafinil, pramipexole (Mirapex), donepezil (Aricept), and memantine (Namenda). Simultaneous use of alcohol or cigarettes and especially street drugs should be avoided. All medications should be avoided if possible in pregnancy. This chart is intended to be a summary guide, not a full and complete list.