

Medications for Movement Symptoms

Parkinson's disease (PD) treatment looks different for everyone. Medications help manage movement symptoms and are often taken in combination throughout the day. Treatment often goes beyond medication — exercise, therapy and lifestyle all play a key role in living well with PD.

This fact sheet is for educational purposes only and does not replace medical advice. It also does not include all possible side effects of PD medications. For full details, check the package insert or talk with your healthcare team.

Levodopa

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Carbidopa/levodopa Immediate-release (Sinemet) Tablet				
10/100, 25/100 or 25/250 mg	150-2,000 mg of levodopa/day in separate doses	Nausea, low blood pressure, dizziness, confusion and dyskinesia	For PD symptoms (slowness, stiffness, tremor, etc.)	Typically starts working within 45 minutes
Carbidopa/levodopa Immediate-release (Dhivy) Tablet				
25/100 mg	Up to 8 tablets/day	Same as above	Same as above	Can be snapped in quarters or in half, which may be appropriate for people who split their pills
Carbidopa/levodopa Controlled-release (formerly Sinemet CR) Tablets				
25/100 or 50/200 mg	400-2,400 mg of levodopa/day in separate doses	Same as above	Same as above	Designed to last longer but may not provide enough symptom relief for some people Often used before bed

Levodopa (continued)

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Carbidopa/levodopa Extended-release (Rytary) Capsule*				
23.75/95, 36.25/145, 48.75/195 or 61.25/245 mg	855-2,340 mg of levodopa/day in separate doses	Same as above	Same as above	May be appropriate for people with swallowing issues, as capsules can be opened and the entire contents sprinkled over applesauce
Carbidopa/levodopa Extended-release (Crexont) Capsule*				
35/140, 52.5/210, 70/280 or 87.5/350 mg	560 to 2,100 mg of levodopa/day in separate doses	Same as above	Same as above	Do not crush, chew or divide
Carbidopa/levodopa/entacapone (Stalevo) Tablet [see: entacapone in COMT inhibitors section on page 6]				
12.5/50/200, 18.75/75/200, 25/100/200, 31.25/125/200, 37.5/150/200 or 50/200/200mg	150-1,200 mg of levodopa/day in separate doses	Nausea, low blood pressure, dizziness, dyskinesia, behavioral changes, diarrhea and discolored urine	Replacement for immediate- release carbidopa/ levodopa for people with end-of-dose wearing off	Combines carbidopa/ levodopa and entacapone for convenience

*Extended-release capsules are not interchangeable with other carbidopa/levodopa products. For prescribing and dosing information to share with your doctor, visit [Parkinson.org/Medications](https://www.parkinson.org/medications).

Levodopa (continued)

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Carbidopa/levodopa Enteral Suspension (Duopa) Cassette*				
4.63 mg carbidopa and 20 mg levodopa per mL	Up to 2,000 mg of levodopa over 16 daytime hours	Nausea, low blood pressure, dizziness, dyskinesia and behavioral changes	For treatment of "on/off" fluctuations in people with advanced Parkinson's	Continuous infusion via a surgically implanted tube in the small intestine
Levodopa Inhalation Powder (Inbrija) Capsule				
42 mg	42-84 mg inhaled by mouth up to 5 times/day as needed	Same as above plus cough	Used with carbidopa/levodopa for early morning or sudden "off" episodes	Does not go through the digestive tract, which may be helpful for people with slow stomach emptying or constipation
Foscarbidopa and Foslevodopa (Vyalev) for Subcutaneous Infusion*				
120 mg foscarbidopa and 2,400 mg of foslevodopa per 10 mL	Typically up to 3,525 mg of foslevodopa (equivalent to about 2,500 mg levodopa) over 16-waking hours or 24-hours	Hallucinations, dyskinesia, site irritation or infection, nausea, drop in blood pressure upon standing vomiting, confusion	For movement (motor) fluctuations in people with advanced PD, particularly during "off" periods when symptoms worsen	Continuous infusion under the skin through a small pump, typically in the belly area

*For more information about carbidopa/levodopa enteral suspension, foscarbidopa and foslevodopa for subcutaneous infusion and other advanced treatment options, read *Advanced Treatment Options: A Guide to Deep Brain Stimulation, Pump Medications & Focused Ultrasound* at [Parkinson.org/Library](https://www.parkinson.org/Library) to or call our Helpline at **1-800-4PD-INFO (1-800-473-4636)**.

Dopamine Agonists

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Ropinirole [formerly Requip] Tablet Longer-acting form also available				
0.25, 0.5, 1, 2, 3, 4 or 5 mg	12-16 mg total/day in 3 separate doses	Dizziness, leg swelling, nausea, sleep attacks, confusion and behavioral changes, including compulsive behaviors	For PD symptoms (slowness, stiffness, tremor, etc.) and restless legs syndrome (RLS)	Has milder effect than carbidopa/levodopa but can be longer lasting
Pramipexole (Mirapex) Tablet Longer-acting form also available				
0.125, 0.25, 0.5, 0.75, 1 or 1.5 mg	1.5-4.5 mg total/day in 3 separate doses	Same as above	Same as above	Same as above
Rotigotine (Neupro) Patch				
1, 2, 3, 4, 6 or 8 mg/24 hr	2-8 mg/24 hr patch once per day	Same as above, plus skin irritation	Same as above	Same as above, plus does not pass through the digestive tract, which may be helpful for people with slow stomach emptying, swallowing issues or constipation
Apomorphine Hydrochloride Subcutaneous Injection (Apokyn)				
30 mg/3 mL vial	0.2 mL-0.6 mL in each dose, up to 5 times per day	Same as other dopamine agonists, plus redness or bruising at the injection site	"Rescue" or on-demand medication for wearing-off episodes	Anti-nausea medication is recommended before and as needed during treatment

Dopamine Agonists (continued)

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Apomorphine Hydrochloride (Onapgo) for Subcutaneous Infusion*				
98 mg/20 mL single-dose cartridges	Up to 98 mg per day, including continuous dose and any extra doses, typically spread over the waking hours of the day	Same as other dopamine agonists, plus skin irritation at the infusion site	For movement (motor) fluctuations in people with advanced PD, particularly during "off" periods when symptoms worsen	Anti-nausea medication may be recommended during treatment

*For more information about apomorphine hydrochloride for subcutaneous infusion and other advanced treatment options, read *Advanced Treatment Options: A Guide to Deep Brain Stimulation, Pump Medications & Focused Ultrasound* at [Parkinson.org/Library](https://www.parkinson.org/Library) to or call our Helpline at **1-800-4PD-INFO (1-800-473-4636)**.

MAO-B Inhibitors

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Selegiline (L-deprenyl, Eldepryl) Tablet				
Also available as a capsule and an orally disintegrating tablet				
5 mg	5 mg twice/day at breakfast and lunch	Mild nausea, dry mouth, dizziness and constipation	For increasing benefits of carbidopa/levodopa	Can have stimulating effects, which can benefit some people but cause jitteriness, confusion or sleep issues for others
Rasagiline (Azilect) Tablet				
0.5 or 1 mg	Up to 1 mg once daily	Same as above	Same as above	Does not have stimulating effects
Safinamide (Xadago) Tablet				
50 or 100 mg	Up to 100 mg once daily	Same as above	For increasing benefits of carbidopa/levodopa and decreasing "off" time	Same as above

COMT Inhibitors

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Entacapone (Comtan) Tablet				
200 mg	200 mg tablet with each dose of carbidopa/levodopa	Increased side effects of carbidopa/levodopa* plus diarrhea	For increasing benefits of carbidopa/levodopa and decreasing "off" time	May turn urine and other bodily fluids a reddish-brown color
Opicapone (Ongentys) Capsule				
25 or 50 mg	50 mg once/day at bedtime	Increased side effects of carbidopa/levodopa*	Same as above	Should avoid eating food one hour before and one hour after taking
Tolcapone (Tasmar) Tablet				
100 mg	100 mg tablet 3 times/day	Increased side effects of carbidopa/levodopa* plus diarrhea and liver damage	Same as above	Rarely used due to potential for serious side effects

Amantadine

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
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Amantadine (formerly Symmetrel) Capsules

Also available in tablet or liquid form

100 mg	200 mg capsules daily	Nausea, insomnia, lightheadedness, confusion, swollen feet, dry mouth, hallucinations	For levodopa-induced dyskinesia and PD symptoms	May cause a net-like purplish discoloration of the skin on the legs
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Extended-release amantadine (Osmolex ER) Tablets

129, 193 or 258 mg	129-322 mg once/day upon waking	Same as above	Same as above	ER medications should not be split, crushed or chewed because this can release the medication all at once
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Extended-release amantadine (Gocovri)

68.5 or 137 mg capsules	137-274 mg once/day at bedtime	Same as above	Same as above and used for the treatment of "off" time	Same as above
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Anticholinergics

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Trihexyphenidyl [formerly Artane] Also available in liquid form				
2 or 5 mg tablets	1-2 mg 2-3 times/day	Confusion, drowsiness, memory issues, hallucinations, dry mouth, increased heart rate, urinary retention and dizziness	For tremor and dystonia, especially in Young Onset PD	Should be avoided in older adults
Benzotropine (Cogentin) Tablet Also available as an injection				
0.5, 1 or 2 mg tablets	Up to 6 mg tablets taken at bedtime or divided into 2-3 doses per day	Same as above	Same as above	Same as above

Adenosine A2A Antagonist

Formulations & Strengths	Typical Treatment	Common Side Effects	Usage in Parkinson's	Special Considerations
Istradefylline (Nourianz) Tablet				
20 or 40 mg tablets	20-40 mg tablets once/day	Dyskinesia, insomnia, hallucinations and dizziness	Combined with carbidopa/levodopa to manage "off" time	Should be taken soon after waking in the morning to avoid nighttime sleep disruptions