

Currently, medication treatment can be divided into motor and non-motor symptom categories. Here, we'll highlight the many categories of Parkinson's medications, as well as what each category can help treat. For the most current, in-depth lists of medication names, side effects, contraindications, and additional information, be sure to head to the medication page of our [Every Victory Counts website](#). We update that regularly as new information becomes available.

MEDICATIONS FOR MOTOR SYMPTOMS

DOPAMINERGIC MEDICATION

Carbidopa/Levodopa

Levodopa is the gold standard treatment for Parkinson's. It was one of the first Parkinson's drugs, and it is still the main drug prescribed to treat Parkinson's for many people. It acts to help with slowness, stiffness, and tremor. Carbidopa/levodopa can be used in conjunction with other medications to address the same symptoms. Carbidopa is now almost always combined with levodopa to enable more levodopa to reach the brain rather than the bloodstream. Common side effects of carbidopa/levodopa include nausea and light-headedness.

GENERIC NAME	TRADE NAME	NOTES
Carbidopa/Levodopa immediate release	Sinemet	Link - merck.com Patient Assistance: Merck - merckhelps.com
Carbidopa/Levodopa orally disintegrating	Parcopa	Dissolvable pill can be an advantage for people with swallowing problems. Link - dailymed.nlm.nih.gov Patient Assistance: UCB Pharma - patientassistance.com
Carbidopa/Levodopa extended release (ER)	Sinemet CR	Brand name (through Merck) has been discontinued (read about alternatives), but generic versions are still available through Mylan, Accord, and Sun Pharmaceuticals. Link - mylan.com Link - sunpharma.com
Carbidopa/Levodopa/Entacapone	Stalevo	An alternative to just carbidopa/levodopa that is combined with entacapone to help with motor fluctuations. May also cause diarrhea, discolored urine. Link - dailymed.nlm.nih.gov Patient Assistance: Novartis - novartis.us

GENERIC NAME	TRADE NAME	NOTES
Carbidopa/Levodopa extended-release capsules	Rytary	Carbidopa and carbidopa/levodopa pellets in each capsule dissolve at different rates with the goal of increasing ON time with fewer dosages. Note that Rytary has slightly different dosages from other carbidopa/levodopa medications. Link - rytary.com Patient Assistance: Amneal - rytary.com Brochure - myrytary.com
Carbidopa/Levodopa enteral solution	Duopa (US)	Administered through a small tube that is surgically inserted into the small intestine rather than delivered in pill form. This can be a helpful alternative for people requiring very frequent dosing or with swallowing issues. Link - duopa.com Patient Assistance: Abbvie - abbvie.com Brochure - duopa.com
Carbidopa/Levodopa inhalation powder	INBRIJA	Used when needed for OFF episodes in adults with Parkinson's treated with regular carbidopa/levodopa medicine. Does not replace regular carbidopa/levodopa medicine. Link - inbrija.com Patient Assistance: Acorda - inbrija.com Brochure - inbrija.com

Dopamine Agonists

Dopamine agonists address the same symptoms as carbidopa/levodopa, namely slowness, stiffness, and tremor. Dopamine agonists can be used alone or in conjunction with other medications to address those symptoms. Common side effects include nausea and light-headedness. Over years of use, dopamine agonists are less likely than carbidopa/levodopa to cause dyskinesias or fluctuations with OFF time, but dopamine agonists may not be quite as effective for control of motor symptoms, and certain side effects are more likely with dopamine agonists, including leg swelling, sleep attacks, and compulsive behaviors, see Chapter 5.

“*My neurologist started my medication plan with a small dose of rasagiline, which was increased several months later, but my visible motor symptoms continued. Ropinirole was added and helped more than rasagiline alone. I met with a movement disorder specialist who added carbidopa/levodopa. I knew within days that it would be highly unlikely anyone could pick me out of a crowd as a person with Parkinson's. I ask questions and am happy my doctors make me feel like my opinion matters when it comes to medications.*”

— LORRAINE WILSON



GENERIC NAME	TRADE NAME	NOTES
Ropinirole	Requip	Link - accessdata.fda.gov
Ropinirole XL	Requip XL	Link - accessdata.fda.gov
Pramipexole	Mirapex	Link - docs.boehringer-ingenelheim.com Patient Assistance: Boehringer-Ingelheim - boehringer-ingenelheim.us Brochure - docs.boehringer-ingenelheim.com
Pramipexole ER	Mirapex ER	Link - docs.boehringer-ingenelheim.com Patient Assistance: Boehringer-Ingelheim - boehringer-ingenelheim.us Brochure - docs.boehringer-ingenelheim.com
Rotigotine	Neupro	Patch can be an advantage for people with fluctuations or with swallowing problems. Link - neupro.com Patient Assistance: UCB - ucb-usa.com Brochure - neupro.com
Apomorphine	Apokyn, Kynmobi	Supplementary (on-demand) medication used to treat OFF time (OFF episodes). Subcutaneous Injectable dopaminergic drug (Apokyn) known for being fast-acting and reliable. Sublingual film (Kynmobi) recently approved by the FDA can be an advantage for people with swallowing problems. May cause significant nausea, so usually initiated along with anti-nausea medication. Link: Supernus - apokyn.com Link: Sunovion - sunovionprofile.com Patient Assistance: Supernus - apokyn.com Videos: Supernus - apokyn.com Brochure: Sunovion - kynmobi.com

“ When I get stressed, my medications don’t work right. I’ve found the rescue drug Apokyn to really help when my medications are wearing off. I average about one shot of Apokyn a day.”

— LINDA



MAO-B Inhibitors

Monoamine Oxidase Type B (MAO-B) inhibitors act to block an enzyme that breaks down dopamine, which allows more dopamine to be available to the brain. Like carbidopa/levodopa and dopamine agonists, MAO-B inhibitors are used to treat slowness, stiffness, and tremor. They can be used on their own, though they typically have a milder benefit than carbidopa/levodopa and dopamine agonists. MAO-B inhibitors are often used as supplemental medications to reduce OFF time. Common side effects include nausea, light-

headedness, and insomnia. Because MAO-B inhibitors increase and prolong the effects of dopamine, the side effects of dopamine may also be enhanced, including dyskinesia. There are multiple medications that are contraindicated with MAO-B inhibitors (see table).

GENERIC NAME	TRADE NAME	NOTES
Selegiline	Eldepryl	May cause anxiety, irritability, or insomnia. Link: medlineplus.gov
Selegiline HCL orally disintegrating	Zelapar	May cause anxiety, irritability, or insomnia. Dissolvable pill can be an advantage for people with swallowing problems. Link - bauschhealth.com Patient Assistance: Bausch - bauschhealthpap.com
Rasagiline	Azilect	Link - tevagenerics.com Patient Assistance: Teva - tevausa.com
Safnamide	XADAGO	Approved 2017; approved as an add-on to carbidopa/levodopa to address OFF time. Link - xadago.com Patient Assistance - xadago.com Brochure - xadago.com

COMT Inhibitors

Catechol-o-methyl transferase (COMT) inhibitors block carbidopa/levodopa metabolism, prolonging carbidopa/levodopa's effects. COMT inhibitors thus have no effect on their own and are always used in conjunction with carbidopa/levodopa. COMT inhibitors are used primarily to treat motor fluctuations and reduce OFF time. Possible side effects include diarrhea and discolored urine. Because COMT inhibitors increase and prolong the effects of carbidopa/levodopa, the side effects of carbidopa/levodopa may also be enhanced, including dyskinesia.

GENERIC NAME	TRADE NAME	NOTES
Entacapone	Comtan	Link - empr.com
Tolcapone	Tasmar	Rare but possible serious side effects on the liver, so typically only used if other Parkinson's medications have failed.
Carbidopa/levodopa/ Entacapone	Stalevo	An alternative to just carbidopa/levodopa that is combined with entacapone to help with motor fluctuations. Link - novartis.us Patient Assistance: Novartis - novartis.us

GENERIC NAME	TRADE NAME	NOTES
Opicapone	Ongentys	Approved 2020. Once-daily dosing. Link - accessdata.fda.gov

Amantadine Hydrochloride

Amantadine can be used alone or in conjunction with other medications to treat slowness, stiffness, and tremor. Amantadine has a unique role in the treatment of Parkinson's because it is the only medication that treats motor symptoms while potentially reducing dyskinesias. People with kidney problems need a decreased dosage. Common side effects include nausea and light-headedness. Possible anti-cholinergic side effects include confusion and constipation. Other possible side effects include leg swelling and a reddish rash known as livedo reticularis.

GENERIC NAME	TRADE NAME	NOTES
Amantadine	Symmetrel	Used off-label for treatment of dyskinesias. Link - accessdata.fda.gov
Amantadine extended-release (ER) capsules	GOCOVRI	Only medication approved by the FDA specifically for carbidopa/levodopa-induced dyskinesia. Link - gocovri.com Patient Assistance: Adamas - gocovri.com Brochure - gocovri.com
Amantadine extended-release (ER) tablets	Osmolex ER	Link - osmolex.com Patient Assistance: Vertical - osmolex.com Brochure - osmolex.com

Anticholinergic Medication

Anticholinergic medications are used to treat tremor and dystonia in people with Parkinson's. They do this by reducing the amount of acetylcholine, a neurotransmitter that is in balance with dopamine in the body. Anticholinergic medications are also sometimes prescribed to help with drooling. Anticholinergic medications are usually best tolerated by younger people and should be avoided by elderly people with Parkinson's because they can increase confusion, cognitive slowing, and hallucinations. Other possible side effects include dry mouth, worsening of glaucoma, blurry vision, and urinary retention.

GENERIC NAME	TRADE NAME	NOTES
Trihexyphenidyl	Artane	Link - accessdata.fda.gov Patient Assistance: Teva - tevausa.com

GENERIC NAME	TRADE NAME	NOTES
Benzotropine	Cogentin	Link - akorn.com Brochure - akorn.com
Biperiden	Akineton	Not available in the United States.
Ethopropazine	Parsitan	Not available in the United States.

Adenosine Receptor Antagonist

Adenosine receptor antagonists act to block the reception sites for the neurotransmitter adenosine, which acts as a central nervous system depressant. This medication is approved for use in conjunction with carbidopa/levodopa to help reduce OFF time. These medications can increase ON time without troublesome dyskinesias for many people, but dyskinesias are the most common side effect.

GENERIC NAME	TRADE NAME	NOTES
Istradefylline	Nourianz	The first and only medicine for Parkinson's that targets the adenosine A2A receptor. NOURIANZ is indicated as adjunctive treatment to carbidopa/levodopa in people with Parkinson's who experience OFF times. Link - nourianz.com Patient Assistance: Kyowa Kirin - kyowakirincares.com Brochure - kyowakirincares.com

MEDICATIONS FOR NON-MOTOR SYMPTOMS

PARKINSON'S-RELATED DEPRESSION

Selective Serotonin Reuptake Inhibitors (SSRIs)

SSRIs are the most prescribed antidepressants for Parkinson's-related depression because of their tolerability. These medications can also be used to treat anxiety and obsessive-compulsive disorder (OCD). It often takes four to six weeks of a therapeutic dose for full effect. SSRIs are sometimes combined with other medications such as SNRIs and TCAs (see tables below), but such combinations should be used with caution due to a potential for serotonin syndrome. Possible side effects include headaches, nausea, insomnia, jitteriness, sexual dysfunction, and weight gain.

GENERIC NAME	TRADE NAME	NOTES
Escitalopram	Lexapro	Link - abbvie.com
Citalopram	Celexa	Link - accessdata.fda.gov Patient Assistance: Allergan, part of AbbVie - allergan.com

GENERIC NAME	TRADE NAME	NOTES
Fluoxetine	Prozac	Link - pi.lilly.com Patient Assistance: Eli Lilly - lillycares.com
Fluvoxamine	Generic or Luvox CR	Link - tevagenerics.com Patient Assistance: Teva - tevausa.com
Paroxetine	Paxil, Paxil CR, Pexeva	Possibly more benefit for anxiety than other SSRIs. Possibly more anticholinergic side effects (e.g. dry mouth, constipation). May cause weight gain. Link - pexeva.com
Sertraline	Zoloft	Link - zoloft.com Patient Assistance: Pfizer - zoloft.com

Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)

SNRIs are another class of antidepressants that can treat depression, anxiety, and OCD. Like SSRIs, it often takes four to six weeks after reaching a therapeutic dose for them to take effect. SNRIs can raise blood pressure, and other possible side effects include headache, nausea, sexual dysfunction, and dizziness. Like SSRIs, SNRIs should be used with caution in conjunction with other serotonergic medications due to a potential for serotonin syndrome.

GENERIC NAME	TRADE NAME	NOTES
Duloxetine	Cymbalta	Some research suggests may reduce OFF time. May also have pain benefit. Link - pi.lilly.com Patient Assistance: Eli Lilly - lillycares.com Brochure - guildlink.com.au
Venlafaxine	Effexor or Effexor XR	May also have pain benefit. Link - effexorxr.com Patient Assistance: Pfizer - effexorxr.com
Desvenlafaxine	Pristiq	Link - pristiq.com Patient Assistance: Pfizer - pristiq.com
Milnacipran	Savella	Approved to treat chronic pain from fibromyalgia; sometimes used off-label to treat depression and anxiety. Link - savella.com Patient Assistance: Allergan, part of AbbVie - savingscardactivation.com Brochure - savella.com

GENERIC NAME	TRADE NAME	NOTES
Nefazodone	Serzone	Requires periodic monitoring of liver function. Link - tevagenerics.com Patient Assistance: Teva - tevausa.com

Tricyclic Antidepressants (TCAs)

TCAs are another class of medications used to treat depression, anxiety, and OCD. They are prescribed less often than SSRIs and SNRIs due to higher likelihood of side effects. Possible side effects include dry mouth, constipation, orthostatic hypotension, urinary retention, and confusion. People with heart conditions (such as arrhythmia or QTc prolongation) should use TCAs with caution. Like SSRIs and SNRIs, it often takes four to six weeks after reaching a therapeutic dose for them to take effect. These medications should be used with caution in conjunction with other serotonergic medications due to the potential for serotonin syndrome.

GENERIC NAME	TRADE NAME	NOTES
Amitriptyline	Elavil	Often used at bedtime due to possible sedation. Link: Mylan - mylan.com Brochure - urmc.rochester.edu
Nortriptyline	Sensoval, Aventyl, Pamelor	May have fewer side effects than other TCAs. Link - mallinckrodt.com Patient Assistance: Mallinckrodt - mallinckrodt.com
Imipramine	Tofranil, Tofranil PM	Link - mallinckrodt.com Patient Assistance: Mallinckrodt - mallinckrodt.com

Other Antidepressants

These medications can also have benefits for depression, anxiety, and OCD. Like SSRIs, SNRIs, and TCAs, it often takes four to six weeks after reaching a therapeutic dose for these drugs to take effect. Some of these medications should be used with caution in conjunction with serotonergic medications due to the potential for serotonin syndrome.

GENERIC NAME	TRADE NAME	NOTES
Bupropion	Wellbutrin, Wellbutrin XL	Less likely than other antidepressants to cause weight gain or sexual side effects. More likely than other side effects to have tremor as a side effect. Should be avoided if there is a history of seizures. Link - wellbutrinxl.com Patient Assistance: Bausch - wellbutrinxl.com Brochure - wellbutrinxl.com

GENERIC NAME	TRADE NAME	NOTES
Mirtazapine	Remeron	May cause sedation (also used to help with insomnia) or increased appetite (also used to help with weight gain). Also available as a dissolvable pill, which can be an advantage for people with swallowing problems. Link - merck.com Patient Assistance: Merck - merckhelps.com
Trazodone	Desyrel, Oleptro, Trialodine	May cause sedation (also used to help with insomnia). Link - tevagenerics.com Patient Assistance: Teva - tevausa.com
Vilazodone	Viibryd	Link - viibryd.com Patient Assistance: Allergan, part of AbbVie - viibryd.com
Vortioxetine	Trintellix	

OTHER NON-MOTOR SYMPTOMS

Constipation

One of the most common non-motor symptoms of Parkinson's, constipation can severely affect quality of life. Lifestyle changes like increasing water, increasing dietary fiber, and increasing exercise are the cornerstones of treatment. Lowering medications that may have anticholinergic side effects may be necessary. Specific pharmacological interventions are also available. Common side effects include bloating, gas, upset stomach, and dizziness. For more on constipation and Parkinson's, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Lubiprostone	Amitiza	Shown to significantly relieve symptoms and be well-tolerated in people with Parkinson's. May also cause chest pain. Link - amitiza.com Patient Assistance: Mallinckrodt under license by Takeda - takeda.com
Polyethylene glycol 3350	MiraLax	Gentle and well-tolerated by people with Parkinson's. May also cause increased sweating. Link: available OTC - miralax.com Brochure - miralaxhcp.com
Senna		OTC for constipation
Dulcolax		OTC for constipation

Drooling

Sialorrhea, or excessive drooling, is another common non-motor symptom of Parkinson's. The medications listed below are used either on- or off-label to address drooling. Side effects vary by treatment, but the most common is dry mouth. For more on drooling, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Atropine drops		Used off-label to treat excessive drooling. This is an anticholinergic medication, but systemic side effects are less likely because of local, sublingual dosing. Link - accessdata.fda.gov
Glycopyrrolate (and other anticholinergics like benzotropine, trihexyphenidyl, and hyoscyamine)	Cuvposa, Robinul, Cogentin, Artane, Levsin/SL, Hyosyne, Oscimin	Used off-label to treat excessive drooling. These are anticholinergic medications, and dry mouth is often a side effect. Possible side effects include confusion, cognitive slowing, hallucinations, worsening of glaucoma, blurry vision, and urinary retention. Link - cuvposa.com Patient Assistance: Merz - cuvposa.com Brochure - cuvposa.com
Scopolamine patch	Transderm-scop	Used off-label to treat excessive drooling. Patch can be an advantage for people with swallowing problems. This is an anticholinergic medication. Possible side effects include confusion, cognitive slowing, hallucinations, worsening of glaucoma, blurry vision, and urinary retention. Link - accessdata.fda.gov Patient Assistance: Novartis - novartis.us
Botulinum toxins (onabotulinumtoxinA, rimabotulinumtoxinB, incobotulinumtoxinA)	Myobloc, Xeomin	These medications are injected into the salivary glands. Myobloc and Xeomin are FDA-approved for sialorrhea. Botox is used off-label for sialorrhea. Injections are typically performed every 3 months. Dry mouth is the most common side effects. Link: Botox - botox.com Link: Myobloc - myobloc.com Link: Xeomin - xeomin.com Link: MYO Sialorrhea - myobloc.com/Sialorrhea Patient Assistance: for Botox – Allergan, part of AbbVie - allergan.com Patient Assistance: for Myobloc – Solstice, part of Supernus - myobloc.com Copay Assistance: Myobloc - myobloc.com Patient Assistance: for Xeomin – Merz - xeomin.com Brochure: Botox - botoxmedical.com Brochure: Myobloc - myobloc.com Brochure: Xeomin - xeomin.com

Fatigue

Fatigue means low energy and is a common symptom in Parkinson's. Fatigue often overlaps with sleepiness and/or depression. Because medication treatment options for fatigue may be of limited benefit, treatment of any overlapping sleepiness or depression is paramount. Lifestyle changes are also important, including budgeting energy for your most important activities, exercising regularly, eating well, drinking lots of water, getting enough sleep, and taking breaks when needed. Spending time with other people helps some people feel more engaged and energetic. Medication can have some benefits for fatigue. Possible side effects include headaches, dizziness, anxiety, nervousness, and insomnia. For more information on fatigue, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Modafinil	Provigil	Approved to treat excessive sleepiness among people with sleep apnea or narcolepsy; used off-label for Parkinson's. Link - tevagenerics.com Patient Assistance: Teva - tevausa.com
Methylphenidate	Ritalin	Approved to treat ADHD and narcolepsy; used off-label for Parkinson's. Should not be take with MAO-B inhibitors. Link - novartis.us Patient Assistance: Novartis - novartis.us

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Overactive Bladder (OAB)

The bladder is a muscle, and spasms of the bladder muscle can cause urinary urgency and/or frequency among people with Parkinson's. Lifestyle changes can be of some benefit in reducing OAB: weight loss, reducing consumption of alcohol and caffeine, and reducing fluid intake at night. Pelvic floor strengthening with Kegel exercises can be helpful. Medications can also reduce the bladder spasms of OAB. Possible side effects include headaches, constipation, dry mouth, blurry vision, and urinary retention. Most OAB medications work via anticholinergic effects, and they can have the side effects of anticholinergic medications (see Anticholinergic Medication). For more on OAB, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Tropium	Sanctura	Link - tevagenerics.com Patient Assistance: Teva - tevausa.com
Darifenacin	Enablex	Link - accessdata.fda.gov Patient Assistance: Allergan, part of AbbVie - allergan.com
Tolterodine	Detrol	Link - detrolla.com Patient Assistance: Pfizer - detrolla.com Brochure - detrolla.com

GENERIC NAME	TRADE NAME	NOTES
Fesoterodine	Toviaz	Link - toviaz.com Patient Assistance: Pfizer - pfizerrxpathways.com Brochure - toviaz.com
Solifenacin	Vesicare	Not recommended for people at high risk of QT prolongation. Link - vesicare.com Patient Assistance: Astellas - astellaspharmasupportsolutions.com Brochure - vesicare.com
Oxybutynin	Ditropan	Crosses into the brain more than other OAB medications, may be more likely to worsen confusion. Link - accessdata.fda.gov Patient Assistance: Teva - tevausa.com
Mirabegron	Myrbetriq	Unlike the other OAB medications (which are anticholinergic), this medication is a beta-3 agonist. Less likely than other OAB medications to cause cognitive side effects. Should not be used by people with uncontrolled hypertension. Link - myrbetriq.com Patient Assistance: Astellas - myrbetriq.com

Pain

Pain is a frequent and often under-recognized symptom of Parkinson's. Pain can be compounded by other factors including age, arthritis, spinal stenosis, and neuropathy. Lifestyle changes, especially exercising and making your home safer, are important steps for pain reduction and management. Other specialists can be helpful, such as a massage therapist, physical therapist, or acupuncturist. Treatments for motor symptoms in Parkinson's (like dopamine medications and deep brain stimulation surgery) can also reduce pain. For more on pain and Parkinson's, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Acetaminophen	Tylenol	Sustained use of high doses can cause liver problems.
NSAIDs (Ibuprofen, Naproxen, Aspirin)	Advil or Motrin, Aleve, Aspirin	Used to treat pain, fever, and inflammation. Typically, it does not cause any neurological side effects. May cause stomach pain or ulcers, increased risk of bleeding, high blood pressure. Sustained use can cause kidney problems. Aspirin can cause tinnitus. Available OTC.
Certain antidepressants (duloxetine, TCAs)	See chart for antidepressants.	See chart for antidepressants.

GENERIC NAME	TRADE NAME	NOTES
Anti-seizure medication (gabapentin, pregabalin)	Neurontin, Lyrica	<p>These medications are widely used for treating other painful conditions such as neuropathy and fibromyalgia. They may be of benefit for people with Parkinson's. May cause sleepiness, unsteadiness, edema, and weight gain.</p> <p>Link: Neurontin - pfizer.com Link: Lyrica - lyrica.com Patient Assistance: Pfizer for Neurontin - pfizerrxpathways.com Patient Assistance: Pfizer for Lyrica - lyrica.com Brochure: Lyrica - pfizerpro.com</p>

Neurogenic Orthostatic Hypotension (nOH)

Neurogenic orthostatic hypotension (nOH) is a common symptom of Parkinson's. nOH refers to a drop in blood pressure when changing positions, especially when standing up. Non-pharmacological changes can be very effective. These include increasing fluid intake, increasing salt and caffeine intake, wearing compression stockings or an abdominal binder, and raising the head of the bed during sleep. Medications can also improve nOH in people with Parkinson's. Possible side effects include high blood pressure when lying down (supine hypertension). For more on nOH, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Droxidopa	Northera	<p>Mechanism is increasing circulating norepinephrine. Only medication specifically indicated for symptomatic nOH.</p> <p>Link - northera.com Patient Assistance: Lundbeck - northera.com Brochure - northera.com</p>
Midodrine	ProAmatine	<p>Mechanism is blood vessel constriction. Possible side effects include tingling, itchiness, and hair standing up.</p> <p>Link - accessdata.fda.gov</p>
Fludrocortisone	Florinef	<p>Mechanism is increased fluid retention. Should not be used by people with heart failure. Possible side effects include leg swelling. Requires testing for blood potassium levels.</p>

Parkinson's-Related Dementia

Dementia refers to difficulty with thinking and memory that impairs day-to-day function and the ability to live independently. Dementia often develops in people with advanced Parkinson's. The medications used for Parkinson's-related dementia are cholinesterase inhibitors. This means they increase the amount of acetylcholine, which is involved in thinking and memory. These medications often have a modest benefit. They can also sometimes help with reducing freezing of gait. Note that anticholinergic medications have the opposite effect (they lower acetylcholine), so anticholinergic medications should

usually be avoided by a person with Parkinson’s-related dementia. These medications are all approved for Alzheimer’s, which is a different type of dementia. Possible side effects include nausea, vomiting, diarrhea, dizziness, and tremor. For more on dementia and Parkinson’s, see Chapter 5.

GENERIC NAME	TRADE NAME	NOTES
Rivastigmine	Exelon pill or patch	Only medication specifically approved for Parkinson’s-related dementia. Available as a patch, which often causes less nausea, and can also be an advantage for people with swallowing problems. Link - exelonpatch.com Patient Assistance: Novartis - novartis.us Amneal approved to produce generic patch
Donepezil	Aricept pill or dissolvable pill	Dissolvable pill can be an advantage for people with swallowing problems. Link - aricept.com
Galantamine	Razadyne, Razadyne ER	Patient Assistance: Johnson & Johnson - janssenprescriptionassistance.com

Hallucinations/Delusions (Psychosis)

Hallucinations refer to seeing or hearing things that aren’t there. Delusions refer to believing things that are not true. The presence of hallucinations or delusions is technically known as psychosis. These symptoms may range from mild to severe. Possible side effects of medications to treat psychosis include drowsiness, low blood pressure, and constipation. For more on hallucinations and delusions, see Chapter 5.

GENERIC NAME	TRADE NAME	NOTES
Rivastigmine, Donepezil, Galantamine	Exelon, Aricept, Razadyne	See above for information about dementia.
Pimavanserin	Nuplazid	Only medication specifically approved by the FDA for Parkinson’s psychosis. Less sedating than quetiapine. May cause edema. Link - nuplazid.com Patient Assistance: Acadia - nuplazid.com Brochure - nuplazidhcp.com
Quetiapine	Seroquel, Seroquel SR	Off-label for Parkinson’s psychosis. Can be sedating, so often dosed at bedtime. May cause sleepiness, dizziness, dry mouth, orthostatic hypotension, and weight gain. Link - azpicentral.com Patient Assistance: AstraZeneca - azandmeapp.com

GENERIC NAME	TRADE NAME	NOTES
Clozapine	Clozaril	Off-label for Parkinson's psychosis. More evidence of benefit than quetiapine but used less frequently due to requirement for weekly blood tests to check for low white blood cell counts. May have some benefit for tremor. May cause sleepiness, dizziness, drooling, tachycardia, and rarely seizures. Link - clozaril.com Patient Assistance: HLS Therapeutics - clozaril.com

Sexual Problems

Changes in sexual function and drive can occur as part of Parkinson's, and also possibly as side effects of certain medications, particularly antidepressants. Medications for erectile dysfunction (ED) and lubrication for pain with sex (especially for women experiencing vaginal dryness) can be useful, but often lifestyle changes and alternative therapies are especially effective. Hypersexuality and compulsive sexual behavior are side effects of dopaminergic agonists and can often be treated by reducing dosage. For more on sexual problems and Parkinson's, see Chapters 6 and 13.

GENERIC NAME	TRADE NAME	NOTES
Sildenafil, tadalafil, vardenafil	Viagra, Cialis, Levitra	Used to treat erectile dysfunction (ED). Can worsen orthostatic hypotension. Other possible side effects include headache, stuffy nose, and nausea. Link - viagra.com Patient Assistance: Pfizer - viagra.com Brochure - viagra.com
Apomorphine	Apokyn	See above for information about dopamine agonists. Some evidence of benefit for erectile dysfunction.

Sleep

Sleep problems are prevalent among people with Parkinson's. Sleep problems include insomnia, Restless Leg Syndrome (RLS), Periodic Limb Movements Disorder (PLMD), Excessive Daytime Sleepiness (EDS), and REM Sleep Behavior Disorder (RBD). Medication may also have a role to play in the treatment sleep problems for people with Parkinson's, but a combined behavioral and medication treatment plan is often best. For more on sleep, see Chapter 6.

GENERIC NAME	TRADE NAME	NOTES
Carbidopa/levodopa or dopamine agonist	See charts about carbidopa/levodopa and dopamine agonists.	See previous charts for more information about carbidopa/levodopa and dopamine agonists. An extra nighttime dose of carbidopa/levodopa (especially Sinemet CR) or a dopamine agonist can be used to treat RLS and PLMD.

GENERIC NAME	TRADE NAME	NOTES
Clonazepam	Klonopin	Can be used to treat insomnia, RLS, PLMD, and RBD. Possible side effects include excessive sleepiness, dizziness, and confusion. Link - accessdata.fda.gov
Gabapentin	See previous chart for more information about pain. Can be used to treat RLS and PLMD.	See chart about pain medications.
Melatonin		Dietary supplement, not FDA-approved. Can be used to treat insomnia and RBD. May cause headache, dizziness, and nausea. Available OTC.
Sedating antidepressants (trazodone, mirtazapine)	Desyrel, Remerol	See previous pages for more information in Other Antidepressants. Can be used to treat insomnia.

MEDICATIONS TO AVOID OR USE WITH CAUTION

It can be challenging to keep track of all your medications, especially if you're taking medications for both motor and non-motor symptoms. However, keeping an accurate, up-to-date list of your medications decreases the likelihood of an unwanted medication interaction. Studies have found that one in three people with Parkinson's have been prescribed contraindicated drugs while they were hospitalized, which highlights the importance of always having an up-to-date list of medications available.

CLASS	GENERIC NAME	TRADE NAME	NOTES
MAO-B contraindicated medications	Pain Medications Meperidine Tramadol Methadone	Demerol Ultram Dolophine	Most prescription antidepressants have a potential interaction with MAO-B inhibitors. Prescription antidepressants have been used safely in thousands of people with Parkinson's, but your prescribing physician may need to inform the pharmacy if they consider the benefits to outweigh the risks.
	Antidepressants St. John's Wort	Several brands	
	Muscle relaxants Cyclobenzaprine	Flexeril	
	Cough suppressants Dextromethorphan	Robitussin, other brands	
	Decongestants/ stimulants Pseudoephedrine Phenylephrine Ephedrine	Sudafed Vicks Sinex, etc. Emerphed, Akovaz, etc.	
	Other medications Linezolid Phenelzine Tranlycypromine Isocarboxazid	Zyvox Nardil Parnate Marplan	

CLASS	GENERIC NAME	TRADE NAME	NOTES
First generation antipsychotics	Loxapine Pimozide Fluphenazine Trifluoperazine Haloperidol Chlorpromazine Thiothixine Perphenazine Thioridazine	Loxitane Orap Prolixin Stelazine Haldol Thorazine Navane Trilafon Mellaril	These medications block dopamine receptors in the brain, thus countering the desired effects of Parkinson's medications and likely worsening Parkinson's motor symptoms.
Second generation antipsychotics	Lurasidone Asenapine Olanzapine Aripiprazole Iloperidone Cariprazine Risperidone Brexipiprazole Ziprasidone Paliperidone	Latuda Saphris Zyprexa Abilify Fanapt Vraylar Risperdal Rexulti Geodon Invega	These medications block dopamine receptors in the brain, thus countering the desired effects of Parkinson's medications and likely worsening Parkinson's motor symptoms. These medications block less dopamine than first generation antipsychotics, but they should nonetheless be avoided.
Antiemetics	Prochlorperazine Chlorpromazine Promethazine Metoclopramide Droperidol	Compazine Thorazine Phenergan Reglan Inapsine	These medications treat nausea by blocking dopamine receptors in the brain, thus countering the desired effects of Parkinson's medications and possibly worsening Parkinson's motor symptoms.
Treatments for hyperkinetic movements	Tetrabenazine Valbenazine Deutetrabenazine	Xenazine Ingrezza Austedo	These medications are used for a condition called tardive dyskinesia, which is different than carbidopa/levodopa-induced dyskinesia. These medications lower dopamine, possibly worsening Parkinson's motor symptoms.
Antihypertensives	Reserpine Methyldopa	Serpalan Aldomet	These medications reduce dopamine, possibly worsening Parkinson's motor symptoms..
Antidepressants	Amoxapine Phenelzine Isocarboxazid Tranlycypromine	Asendin Nardil Parnate Marplan	Amoxapine is a TCA but unlike other TCAs also blocks dopamine receptors. Phenelzine, isocarboxazid, and tranlycypromine are nonselective MAO inhibitors and cannot be taken in conjunction with MAO-B inhibitors.

“ I was taking 28 pills a day and had really bad reactions to a couple of the drugs. I started seeing the world in a very manic way. When I stopped sleeping and my previous doctor's solution was to add a sleeping pill to the mix, I found a new doctor. Medication helps, but I wanted a more integrated approach to managing the disease, not just adding more and more pills.”

— JILL ATER

