

Title:

Carbidopa and levodopa: Drug information

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For additional information see ["Carbidopa and levodopa: Patient drug information"](#)

For abbreviations, symbols, and age group definitions [show table](#)

Special Alerts

Carbidopa/Levodopa Safety Alert March 2026

The FDA is requiring additional safety information for drug products containing carbidopa/levodopa. This includes adding a warning and revising the prescribing information to state that these medications, approved to treat symptoms of Parkinson disease, can cause vitamin B6 deficiency and vitamin B6 deficiency-associated seizures.

An FDA safety review identified 14 cases of seizures linked to vitamin B6 deficiency, primarily in patients taking higher doses of carbidopa/levodopa.

Health care providers are advised to evaluate patients' vitamin B6 levels before starting treatment, periodically during treatment, and if deficiency symptoms appear, and to supplement with vitamin B6 as necessary.

Further information may be found at: <https://www.fda.gov/drugs/drug-safety-and-availability/fda-requiring-warning-about-vitamin-b6-deficiency-and-associated-seizures-drug-products-containing>.

Brand Names: US

Crexont; Dhivy; Duopa; Rytary; Sinemet

Brand Names: Canada

AA-Levocarb CR; AG-Levocarb; APO-Levocarb; APO-Levocarb 100/25; APO-Levocarb 250/25; AURO-Levocarb; Duodopa; JAMP-Levocarb; MINT-Levocarb; PMS-Levodopa-Carbidopa; Pro-Lecarb; TEVA-Levocarbidopa

Pharmacologic Category

Anti-Parkinson Agent, Decarboxylase Inhibitor; Anti-Parkinson Agent, Dopamine Precursor

Dosing: Adult

Parkinson disease

Parkinson disease:

Immediate-release tablet, orally disintegrating tablet:

Note: Tablets are available in carbidopa 25 mg/levodopa 100 mg, carbidopa 10 mg/levodopa 100 mg, and carbidopa 25 mg/levodopa 250 mg strengths. For patients with daily levodopa requirements ≤ 400 mg/day, tablets with carbidopa 25 mg/levodopa 100 mg should be used to decrease the risk of adverse effects from peripheral dopamine. For those with higher daily levodopa requirements, different strength tablets may be given to provide the optimum dosage, as long as a carbidopa dose ≥ 75 mg/day is maintained ([Ref](#)).

Oral: Initial: Carbidopa 12.5 mg/levodopa 50 mg or carbidopa 25 mg/levodopa 100 mg 2 to 3 times daily ([Ref](#)); may increase daily dose by 1 tablet of carbidopa 25 mg/levodopa 100 mg every 1 to 2 days. For patients who require higher doses of levodopa for symptom control, titrating with a tablet that has a carbidopa:levodopa ratio of 1:10 may allow for better symptom control without exceeding the usual maximum dosage of carbidopa. Usual maximum daily dose: Carbidopa 200 mg/day and levodopa 2 g/day; dosing frequency ≥ 4 times daily may be required. **Note:** Some experts use a slower titration (eg, over weeks to months) or less frequent initial dosing (eg, once daily) to improve tolerability and establish the lowest dose of levodopa that provides a satisfactory clinical response ([Ref](#)).

Controlled-release tablet:

Note: Intervals between doses should be 4 to 8 hours while awake; when divided doses are not equal, the smaller doses should be given toward the end of the day.

For patients initiating levodopa therapy:

Note: Controlled-release carbidopa/levodopa may exhibit erratic pharmacokinetics; therefore, controlled-release formulations are not recommended for initial therapy in Parkinson disease ([Ref](#)).

Oral: Initial: Carbidopa 50 mg/levodopa 200 mg 2 times daily, at intervals not < 6 hours; may adjust dose no faster than every 3 days to a maximum dose of levodopa 2.4 g/day.

Conversion from immediate release to controlled release: **Oral:** Initial: Substitute controlled-release dosage at an amount that provides $\sim 10\%$ more levodopa/day; total calculated dosage is administered in divided doses 2 to 3 times/day (or ≥ 3 times/day for patients maintained on levodopa ≥ 700 mg). Depending on clinical response, dosage may need to be increased to provide up to 30% more levodopa/day. May adjust dose every 3 days to a maximum dose of levodopa 2.4 g/day.

Extended-release capsule:

Crexont:

Note: Crexont carbidopa/levodopa ER capsules are **not** interchangeable with IR or controlled-release carbidopa/levodopa products on a 1:1 basis. Crexont carbidopa/levodopa ER capsules are interchangeable with Rytary carbidopa/levodopa ER capsules on a 1:1 basis.

For patients initiating levodopa therapy: **Oral:** Initial: Carbidopa 35 mg/levodopa 140 mg twice daily for 3 days; may increase dose gradually up to a maximum of carbidopa 525 mg/levodopa 2.1 g per day, in up to 4 divided doses.

Conversion from immediate release to Crexont extended release: **Oral:** Initial: Dose based on current total daily dose of levodopa in IR carbidopa/levodopa as follows:

Conversion From Immediate-Release to Crexont Extended-Release

Carbidopa/Levodopa (Capsules)

Total daily dose of levodopa in immediate-release carbidopa/levodopa	Most frequent immediate-release levodopa single dose	Recommended starting dosage of Crexont extended-release carbidopa/levodopa ^a
<500 mg/day	100 mg	280 mg twice daily
	150 mg	420 mg twice daily
	200 mg	560 mg twice daily
≥500 mg/day	100 mg	280 mg 3 times daily
	150 mg	420 mg 3 times daily
	200 mg	560 mg 3 times daily
	>200 mg	700 mg 3 times daily
^a For patients currently treated with IR carbidopa/levodopa plus catechol-O-methyl transferase (COMT) inhibitors (eg, entacapone) and converting to monotherapy with carbidopa/levodopa ER capsules, the initial total daily dose of carbidopa/levodopa ER capsules may need to be increased. ^b Adjust dose or frequency as needed after 1 to 3 days based on response and tolerability; frequency of dosing may be increased to a maximum of 4 times daily if needed and tolerated (maximum dose: carbidopa 525 mg/levodopa 2.1 g per day).		

Rytary:

Note: Rytary carbidopa/levodopa ER capsules are **not** interchangeable with IR or controlled-release carbidopa/levodopa products on a 1:1 basis. Rytary carbidopa/levodopa ER capsules are interchangeable with Crexont carbidopa/levodopa ER capsules on a 1:1 basis.

For patients initiating levodopa therapy: **Oral:** Initial: Carbidopa 23.75 mg/levodopa 95 mg 3 times daily for 3 days; on day 4, may increase to carbidopa 36.25 mg/levodopa 145 mg 3 times daily ([Ref](#)). May increase dose further based on response and tolerability in levodopa 50 mg increments at intervals ≥1 week up to carbidopa 97.5 mg/levodopa 390 mg 3 times daily ([Ref](#)). Frequency of dosing may be increased to a maximum of 5 times daily if needed and tolerated (maximum: carbidopa 612.5 mg/levodopa 2.45 g per day).

Conversion from immediate release to Rytary extended release: **Oral:** Initial: Dose based on current total daily dose of levodopa in IR carbidopa/levodopa as follows:

**Conversion From Immediate-release to Rytary Extended-release
Carbidopa/Levodopa (Capsules)**

Total daily dose of levodopa in immediate- release carbidopa/levodopa	Recommended starting dosage of Rytary extended-release carbidopa/levodopa ^a	
	Total daily dose of levodopa in extended- release carbidopa/levodopa	Initial Rytary extended- release carbidopa/levodopa dosing regimen ^b
400 to 549 mg	855 mg	3 capsules ER carbidopa 23.75 mg/levodopa 95 mg 3 times daily
550 to 749 mg	1.14 g	4 capsules ER carbidopa 23.75 mg/levodopa 95 mg 3 times daily
750 to 949 mg	1.305 g	3 capsules ER carbidopa 36.25 mg/levodopa 145 mg 3 times daily
950 mg to 1.249 g	1.755 g	3 capsules ER carbidopa 48.75 mg/levodopa 195 mg 3 times daily
≥1.25 g	2.205 g	3 capsules ER carbidopa 61.25 mg/levodopa 245 mg 3 times daily
	or	
	2.34 g	4 capsules ER carbidopa 48.75 mg/levodopa 195 mg 3 times daily

^a For patients currently treated with IR carbidopa/levodopa **plus** catechol-O-methyl transferase (COMT) inhibitors (eg, entacapone) and converting to monotherapy with carbidopa/levodopa ER capsules, the initial total daily dose of carbidopa/levodopa ER capsules may need to be increased

carbidopa/levodopa ER capsules may need to be increased.

^b Adjust dose as needed; frequency of dosing may be increased to a maximum of 5 times daily if needed and tolerated (maximum dose: carbidopa 612.5 mg/levodopa 2.45 g per day) (Espay 2017).

Intestinal suspension (Duopa), intestinal gel (Duodopa [Canadian product]):

Note: Prior to initiation of therapy, convert patients from all forms of levodopa to oral IR carbidopa/levodopa tablets. Total daily dose of intestinal infusion (expressed in terms of levodopa) consists of a morning dose, a continuous dose, and extra doses. Maximum daily dose is levodopa 2 g (ie, one cassette per day) administered over 16 hours. Following the daily 16-hour infusion, some patients may require a routine nighttime dosage of oral carbidopa/levodopa. Nighttime intestinal infusion dosing may be necessary in certain rare situations (eg, nocturnal akinesia) ([Ref](#)).

Intestinal infusion via PEG-J tube: Initial:

Morning bolus dose: *Day 1:* Determine levodopa dose by using previous day's **first** oral IR carbidopa/levodopa dose. Reduce this dose to 60% to 80% of first oral IR carbidopa/levodopa dose and administer this amount over 10 to 30 minutes; usual levodopa dose: 100 to 200 mg ([Ref](#)).

Continuous dose: *Day 1:* Determine the amount of oral IR levodopa received in previous day's **total** waking hours. Do not include nighttime or first oral IR carbidopa/levodopa doses. Divide by 16 hours (usual duration of infusion) for hourly infusion rate ([Ref](#)). Usual levodopa dose: 20 to 120 mg/hour ([Ref](#)).

Extra bolus doses: Usual levodopa dose: 10 to 40 mg every 1 to 2 hours as needed ([Ref](#)).

Note: Frequent extra doses may cause or worsen dyskinesias.

Day 2 and subsequent dosage adjustment: After day 1 of intestinal infusion, adjust as needed based on response and tolerability.

Restless legs syndrome, intermittent

Restless legs syndrome, intermittent (alternative agent) (off-label use):

Note: Due to risk of augmentation (worsening symptoms during dopaminergic therapy), limit frequency to 2 to 3 administrations per week. May also be taken as needed prior to specific restless legs syndrome (RLS) triggers, such as prolonged immobility ([Ref](#)).

Immediate-release tablet: Oral: Initial: Carbidopa 12.5 mg/levodopa 50 mg to carbidopa 25 mg/levodopa 100 mg as needed in the evening, at bedtime, or upon waking during the night due to RLS symptoms; may adjust dose (based on levodopa component) no faster than every 3 days to a maximum of 200 mg/day ([Ref](#)).

Controlled-release tablet: Oral: Initial: Carbidopa 25 mg/levodopa 100 mg as needed before bedtime for RLS symptoms that awaken patient during the night; may adjust dose (based on levodopa component) no faster than every 3 days to a maximum dose of 200 mg/day ([Ref](#)).

Discontinuation of therapy: Discontinuation of therapy may result in neuroleptic malignant-like syndrome ([Ref](#)). Avoid sudden discontinuation or rapid dose reduction; some experts recommend a gradual taper over several weeks or more ([Ref](#)).

Dosage adjustment for concomitant therapy: Significant drug interactions exist, requiring

dose/frequency adjustment or avoidance. Consult drug interactions database for more information.

Dosing: Kidney Impairment: Adult

The renal dosing recommendations are based upon the best available evidence and clinical expertise. Senior Editorial Team: Bruce Mueller, PharmD, FCCP, FASN, FNKF; Jason A. Roberts, PhD, BPharm (Hons), B App Sc, FSHP, FISAC; Michael Heung, MD, MS.

Note: Carbidopa has low pharmacologic activity ([Ref](#)); recommendations below focus on levodopa component.

Altered kidney function: No dosage adjustment likely to be necessary for any degree of kidney impairment (levodopa renal clearance in the presence of carbidopa is ~10% of total clearance ([Ref](#)).

Hemodialysis, intermittent (thrice weekly): Levodopa unlikely to be significantly dialyzable (moderate V_d , rapid metabolism): No dose adjustment likely to be necessary. When scheduled doses fall during hemodialysis, administer at least one hour before hemodialysis or after the hemodialysis session has been completed ([Ref](#)).

Peritoneal dialysis: Levodopa unlikely to be significantly dialyzable (moderate V_d , rapid metabolism): No dose adjustment likely to be necessary ([Ref](#)).

CRRT: Levodopa unlikely to be significantly dialyzable (moderate V_d , rapid metabolism): No dose adjustment likely to be necessary ([Ref](#)).

PIRRT (eg, sustained, low-efficiency diafiltration): Levodopa unlikely to be significantly dialyzable (moderate V_d , rapid metabolism): No dose adjustment likely to be necessary ([Ref](#)).

Dosing: Liver Impairment: Adult

There are no dosage adjustments provided in the manufacturer's labeling; use with caution.

Dosing: Adjustment for Toxicity: Adult

Intestinal suspension (Duopa):

Dyskinesias or levodopa-related adverse reactions within 1 hour of morning dose on preceding day: Decrease morning levodopa dose by 20 mg.

Dyskinesias or adverse reactions lasting ≥ 1 hour on the preceding day: Decrease continuous levodopa dose by 6 mg per hour.

Dyskinesias or adverse reactions lasting for 2 or more periods of ≥ 1 hour on the preceding day: Decrease continuous levodopa dose by 12 mg per hour.

Dosing: Older Adult

Refer to adult dosing.

Adverse Reactions (Significant): Considerations

Dyskinesia

Carbidopa and levodopa may cause or exacerbate **dyskinesia**. Peak-dose dyskinesia typically occurs (during maximal plasma concentrations), but diphasic dyskinesia may also occur (beginning and end of a dose cycle). Off-period dystonia may also occur; commonly affects the foot and can be painful. Off-period dystonia tends to occur early in the day, precipitated by anxiety or attempts to walk ([Ref](#)).

Mechanism: Dose- and time-related; appears to involve multiple neuronal pathways and neurotransmitter systems. The primary mechanism involves intermittent or pulsatile stimulation of striatal dopamine (D1) receptors linked to intermittent levodopa delivery to the brain. Off-period dystonia results from low levodopa concentrations ([Ref](#)).

Onset: Varied; may occur early or later with chronic levodopa use. Peak-dose dyskinesias occur early. Off-period dystonia occurs after months or years of chronic levodopa use ([Ref](#)).

Risk factors:

- Higher levodopa doses ([Ref](#))
- Long treatment duration ([Ref](#))
- Anxious-depressed subtype ([Ref](#))
- Asymmetry of caudate binding on DaTscan ([Ref](#))
- Females ([Ref](#))
- Low bodyweight ([Ref](#))
- Motor fluctuations ([Ref](#))
- Non-smoker ([Ref](#))
- Non-tremor dominant phenotype ([Ref](#))
- Young age at onset of Parkinson disease ([Ref](#))

GI effects

Nausea and **vomiting** are frequently reported in Parkinson disease patients taking carbidopa and levodopa; however, the incidence of nausea and vomiting with carbidopa and levodopa is lower than with levodopa alone ([Ref](#)).

Mechanism: May be dose-related ([Ref](#)); attributed to dopamine in peripheral tissues. Peripheral levodopa decarboxylation is inhibited by carbidopa, contributing to less nausea and vomiting than with levodopa alone.

Onset: Varied (based on data from individual components); may occur with the first dose, high doses, or with dose increases of levodopa ([Ref](#)) and may occur with doses of carbidopa ≤ 70 to 100 mg/day.

Risk factors:

- Treatment initiation ([Ref](#))
- High doses ([Ref](#))
- Dose increases ([Ref](#))

Impulse control disorders

Dopaminergic medications have been associated with **impulse control disorder**, including **pathological gambling**, compulsive shopping, binge eating disorder, punding, and compulsive sexual behavior (**increased libido** [including hypersexuality]) ([Ref](#)). Most reports have occurred with dopamine agonist therapy (eg, pramipexole, ropinirole) concurrently with carbidopa/levodopa. Risk with carbidopa/levodopa monotherapy is low ([Ref](#)).

Mechanism: In susceptible individuals with a hypersensitivity to rewards, impulse control disorders may develop with dopamine replacement therapy ([Ref](#)).

Onset: Varied; in case reports, onset ranged from months to years after initiation ([Ref](#)).

Risk factors:

- Young age at the onset of Parkinson disease ([Ref](#))
- Greater use of caffeine and cigarettes ([Ref](#))
- High novelty seeking and impulsivity personality traits ([Ref](#))
- Motor complications ([Ref](#))
- Personal or family history of alcohol or substance use disorder ([Ref](#))
- Personal or family history of gambling ([Ref](#))
- Females (compulsive shopping and eating) ([Ref](#))
- Males (hypersexuality) ([Ref](#))

Orthostatic hypotension

Orthostatic hypotension may occur with carbidopa and levodopa. Neurogenic orthostatic hypotension may occur independently with the pathophysiology of Parkinson disease; dopaminergic medications may contribute (non-neurogenic). Levodopa may contribute less than other dopaminergic medications ([Ref](#)).

Mechanism: Dose-related; may be related to the baroreflex dysfunction caused by levodopa ([Ref](#)). A direct dopamine agonist effect by levodopa may also play a role ([Ref](#)).

Risk factors:

General:

- Cardiac dysfunction ([Ref](#))
- Combined therapies (eg, dopamine agonists, monoamine oxidase inhibitors [MAOIs]) ([Ref](#))
- Concurrent medications that may decrease blood pressure (eg, alpha-blockers, antihypertensives, diuretics, sildenafil) ([Ref](#))
- Dehydration ([Ref](#))

Drug-related:

- Higher doses ([Ref](#))

Peripheral neuropathy

Peripheral neuropathy may occur with carbidopa and levodopa ([Ref](#)).

Mechanism: Exact mechanism unclear; may be related to the metabolic pathway of levodopa, resulting in the accumulation of neurotoxins such as homocysteine (Hcy) and methylmalonic acid (MMA) ([Ref](#)). Immune-mediated inflammatory mechanisms, possibly triggered by the PEG-J tube or by the gel formulation, may also play a role ([Ref](#)).

Onset: Varied; most cases are delayed but some intestinal gel cases are acute or subacute onset ([Ref](#)).

Risk factors:

- Chronic exposure to levodopa ([Ref](#))
- Genetic factors (eg, quantitative or functional deficiency of 5,10-methylenetetrahydrofolate reductase (MTHFR) ([Ref](#)))
- Older adults ([Ref](#))

Psychiatric behavior abnormalities

Psychiatric behavior abnormalities such as **agitation**, **confusion**, **delirium**, **delusion**, **disorientation**, **hallucination** (including **auditory hallucination** and **visual hallucination**), **paranoid ideation**, and **psychosis** may occur ([Ref](#)). These behaviors are generally reversible with dose adjustment; discontinuation rarely required ([Ref](#)).

Mechanism: Dose-related; may induce hypersensitivity of limbic dopamine receptors ([Ref](#)).

Onset: Varied; may progress over weeks to months ([Ref](#)).

Risk factors:

- Higher doses of levodopa ([Ref](#))
- History of a major psychotic disorder ([Ref](#))
- Older adults with prior history of dementia ([Ref](#))
- Younger patients (mania) ([Ref](#))

Withdrawal syndrome/Parkinsonism-hyperpyrexia syndrome

Withdrawal syndrome, also known as Parkinsonism-hyperpyrexia syndrome (PHS), is a rare but potentially fatal condition in patients with Parkinson disease (PD) and is manifested by pyrexia, muscle rigidity, a reduced level of consciousness, and autonomic instability. It is generally believed that rapid withdrawal of antiparkinsonian drugs or abrupt changes in medication regimens is the primary cause of this syndrome ([Ref](#)).

Mechanism: Withdrawal; most likely sudden suppression of central dopaminergic activity. May also include changes in peripheral and central sympathetic outflow and alteration in central serotonin metabolism ([Ref](#)).

Onset: Varied; typically within 18 hours to 7 days following trigger ([Ref](#)).

Risk factors:

- Altered absorption/bioavailability of levodopa ([Ref](#))

- Concurrent antipsychotics ([Ref](#))
- Dehydration and excessively hot weather ([Ref](#))
- Physiological stressors (eg, infection, injury, surgery, trauma) ([Ref](#))
- Rapid withdrawal of levodopa ([Ref](#))

Adverse Reactions

The following adverse drug reactions and incidences are derived from product labeling unless otherwise specified.

>10%:

Cardiovascular: Orthostatic hypotension (enteral suspension: 70% to 73%; oral: 1% to 68%) ([table 1](#))

Carbidopa and Levodopa: Adverse Reaction: Orthostatic Hypotension

Drug (Carbidopa and Levodopa)	Placebo	Dose	Dosage Form	Indication	Number of Patients (Carbidopa and Levodopa)	Number of Patients (Placebo)	Comments
73%	N/A	N/A	Enteral suspension	Advanced Parkinson disease	37	N/A	Orthostatic systolic hypotension (≥30 mm Hg decrease)
70%	N/A	N/A	Enteral suspension	Advanced Parkinson disease	37	N/A	Orthostatic diastolic hypotension (≥20 mm Hg decrease)
68%	N/A	N/A	Immediate- release oral	Advanced Parkinson disease	34	N/A	Orthostatic systolic hypotension (≥30 mm Hg decrease)
62%	N/A	N/A	Immediate- release	Advanced Parkinson	34	N/A	Orthostatic diastolic

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			oral	disease			hypotension (≥20 mm Hg decrease)
5%	1%	97.5 mg carbidopa/390 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	98	92	N/A
1%	1%	36.25 mg carbidopa/145 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	87	92	N/A
1%	1%	61.25 mg carbidopa/245 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	104	92	N/A
1%	N/A	N/A	Controlled-release tablet	Moderate to severe Parkinson disease	491	N/A	N/A
1%	N/A	N/A	Immediate-release tablet	Moderate to severe Parkinson disease	524	N/A	N/A

Gastrointestinal: Constipation (enteral suspension: 22%; oral: ≤6%), nausea (enteral suspension: 30%; oral: 2% to 21%) ([table 2](#))

Carbidopa and Levodopa: Adverse Reaction: Nausea

Drug (Carbidopa and Levodopa)	Placebo	Dose	Dosage Form	Indication	Number of Patients (Carbidopa and Levodopa)	Number of Patients (Placebo)
30%	N/A	N/A	Enteral suspension	Advanced Parkinson disease	37	N/A

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21%	N/A	N/A	Immediate-release oral	Advanced Parkinson disease	34	N/A
3%	N/A	N/A	Extended-release capsules	Advanced Parkinson disease	201	N/A
2%	N/A	N/A	Immediate-release oral	Advanced Parkinson disease	192	N/A
20%	9%	97.5 mg carbidopa/390 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	98	92
19%	9%	61.25 mg carbidopa/245 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	104	92
14%	9%	36.25 mg carbidopa/145 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	87	92
6%	N/A	N/A	Controlled-release tablet	Moderate to severe Parkinson disease	491	N/A
6%	N/A	N/A	Immediate-release tablet	Moderate to severe Parkinson disease	524	N/A
4%	N/A	N/A	Extended-release capsules	Parkinson disease	256	N/A

Nervous system: Depression (enteral suspension: 11%; oral: 1% to 2%), dizziness (2% to 19%), headache (oral: 1% to 17%)

Neuromuscular & skeletal: Dyskinesia (2% to 17%) ([table 3](#)), increased creatine phosphokinase in blood specimen (enteral suspension: ≤17%)

Carbidopa and Levodopa: Adverse Reaction: Dyskinesia

Drug (Carbidopa and Levodopa)	Placebo	Dose	Dosage Form	Indication	Number of Patients (Carbidopa and Levodopa)	Number of Patients (Placebo)
14%	N/A	N/A	Enteral suspension	Advanced Parkinson disease	37	N/A
12%	N/A	N/A	Immediate- release oral	Advanced Parkinson disease	34	N/A
5%	0%	97.5 mg carbidopa/390 mg levodopa 3 times daily	Extended- release capsules	Early Parkinson disease	98	92
4%	0%	61.25 mg carbidopa/245 mg levodopa 3 times daily	Extended- release capsules	Early Parkinson disease	104	92
2%	0%	36.25 mg carbidopa/145 mg levodopa 3 times daily	Extended- release capsules	Early Parkinson disease	87	92
17%	N/A	N/A	Controlled- release tablet	Moderate to severe Parkinson disease	491	N/A

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12%	N/A	N/A	Immediate-release tablet	Moderate to severe Parkinson disease	524	N/A
2%	N/A	N/A	Extended-release capsules	Parkinson disease	256	N/A

Renal: Increased blood urea nitrogen (enteral suspension: $\leq 13\%$)

1% to 10%:

Cardiovascular: Chest pain (oral: $\leq 1\%$), hypertension (enteral suspension: 8%), ischemia (oral: $\leq 2\%$), peripheral edema (enteral suspension: 8%)

Dermatologic: Skin rash (enteral suspension: 5%)

Endocrine & metabolic: Increased serum glucose ($\geq 1\%$)

Gastrointestinal: Anorexia (oral: 1%), diarrhea ($\leq 5\%$), dyspepsia ($\leq 5\%$), vomiting (oral: 1% to 5%) ([table 4](#)), xerostomia (oral: 1% to 7%)

Carbidopa and Levodopa: Adverse Reaction: Vomiting

Drug (Carbidopa and Levodopa)	Placebo	Dose	Dosage Form	Indication	Number of Patients (Carbidopa and Levodopa)	Number of Patients (Placebo)
5%	3%	97.5 mg carbidopa/390 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	98	92
2%	3%	36.25 mg carbidopa/145 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	87	92
2%	3%	61.25 mg carbidopa/245 mg levodopa 3 times daily	Extended-release capsules	Early Parkinson disease	104	92

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2%	N/A	N/A	Controlled-release tablet	Moderate to severe Parkinson disease	491	N/A
2%	N/A	N/A	Immediate-release tablet	Moderate to severe Parkinson disease	524	N/A
1%	N/A	N/A	Extended-release capsules	Parkinson disease	256	N/A

Genitourinary: Bacteriuria (enteral suspension: 5%; oral: ≥1%), hematuria (oral: ≥1%), urinary frequency (oral: ≤1%), urinary tract infection (oral: 2%)

Hematologic & oncologic: Decreased hematocrit (oral: ≥1%), decreased hemoglobin (oral: ≥1%), leukocyturia (enteral suspension: 5%; oral: ≥1%)

Nervous system: Abnormal dreams (oral: ≤6%), anxiety (2% to 8%), confusion (2% to 8%), hallucination (≤5%; including auditory hallucination, visual hallucination), insomnia (oral: 1% to 9%), on-off phenomenon (oral: 1% to 2%), paresthesia (oral: ≤1%), polyneuropathy (enteral suspension: 5%), psychosis (≤5%), sleep disorder (enteral suspension: 5%)

Neuromuscular & skeletal: Back pain (oral: ≤2%), dystonia (oral: ≤2%), muscle cramps (oral: ≤1%), shoulder pain (oral: ≤1%)

Respiratory: Atelectasis (enteral suspension: 8%), dyspnea (oral: ≤2%), oropharyngeal pain (enteral suspension: 8%), upper respiratory tract infection (enteral suspension: 8%; oral: 1% to 2%)

Miscellaneous: Fever (enteral suspension: 5%)

<1%: Hematologic & oncologic: Malignant melanoma (causation not established; melanoma more common in Parkinson disease than the general population)

Postmarketing (any dosage form):

Cardiovascular: Acute myocardial infarction ([Ref](#)), cardiac arrhythmia ([Ref](#)), phlebitis

Dermatologic: Alopecia ([Ref](#)), bullous rash (including pemphigus-like reactions) ([Ref](#)), diaphoresis, discoloration of sweat, urticaria ([Ref](#))

Endocrine & metabolic: Hot flash, hyponatremia ([Ref](#)), increased libido (including hypersexuality) ([Ref](#)), pyridoxine deficiency ([Ref](#)), weight gain, weight loss

Gastrointestinal: Abdominal pain, bruxism, discoloration of saliva, duodenal ulcer, dysgeusia, dysphagia, flatulence, gastrointestinal hemorrhage, heartburn, hiccups ([Ref](#)), sialorrhea

Genitourinary: Glycosuria, priapism, proteinuria, urinary incontinence, urinary retention, urine discoloration

Hematologic & oncologic: Agranulocytosis, anemia, hemolytic anemia ([Ref](#)), Henoch-Schonlein purpura ([Ref](#)), leukopenia ([Ref](#)), positive direct Coombs test ([Ref](#)), thrombocytopenia ([Ref](#))

Hepatic: Increased serum alanine aminotransferase, increased serum alkaline phosphatase, increased serum aspartate transaminase, increased serum bilirubin

Hypersensitivity: Angioedema

Nervous system: Abnormal gait, agitation, asthenia, ataxia, behavioral changes, central nervous system stimulation, changes in thinking, decreased mental acuity, delirium, delusion ([Ref](#)), dementia, disorientation, drowsiness, euphoria, extrapyramidal reaction, falling, fatigue, glossopyrosis, Horner syndrome, impulse control disorder ([Ref](#)), malaise, memory impairment, narcolepsy, nervousness, nightmares, numbness, paranoid ideation ([Ref](#)), pathological gambling ([Ref](#)), peripheral neuropathy, seizure, suicidal ideation ([Ref](#)), suicidal tendencies ([Ref](#)), trismus, withdrawal syndrome (Parkinsonism-hyperpyrexia syndrome) ([Ref](#))

Neuromuscular & skeletal: Lower extremity pain

Ophthalmic: Blepharospasm ([Ref](#)), blurred vision, diplopia, mydriasis, oculogyric crisis ([Ref](#))

Respiratory: Cough, hoarseness

Contraindications

Hypersensitivity to levodopa, carbidopa, or any component of the formulation; concurrent use with nonselective monoamine oxidase inhibitors (MAOIs) or use within the last 14 days

Significant drug interactions exist, requiring dose/frequency adjustment or avoidance. Consult drug interactions database for more information.

Tablets: Additional contraindications: Narrow angle glaucoma

Canadian labeling: Additional contraindications (not in US labeling): Clinical or laboratory evidence of uncompensated cardiovascular, endocrine, hepatic, hematologic or pulmonary disease (eg, including bronchial asthma), or renal disease; concomitant administration of a sympathomimetic amine (eg, epinephrine, norepinephrine, isoproterenol); in the presence of a suspicious, undiagnosed skin lesion or history of melanoma; intestinal gel therapy in patients with any condition preventing the required placement of a PEG tube for administration (ie, pathological changes of gastric wall, inability to bring gastric and abdominal wall together, blood coagulation disorders, peritonitis, acute pancreatitis, paralytic ileus).

Warnings/Precautions

Concerns related to adverse effects:

- Somnolence: Somnolence and falling asleep while engaged in activities of daily living (including operation of motor vehicles) have been reported; some cases reported that there were no warning signs for the onset of symptoms. Symptom onset may occur well after initiation of treatment; some events have occurred more than 1 year after start of therapy. Prior to treatment initiation, evaluate for factors that may increase these risks such as concomitant sedating medications, and the presence of sleep disorders. Monitor for drowsiness or sleepiness. If significant daytime sleepiness or episodes of falling asleep during activities that require active participation occurs (eg, driving, conversations, eating), discontinue the medication. There is insufficient information to suggest that dose reductions

will eliminate these symptoms. If therapy is continued, advise patient to avoid driving and other potentially dangerous activities.

- Vitamin B6 deficiency: Reductions in vitamin B6 levels may occur, and use of higher doses may increase the risk of vitamin B6 deficiency; seizures due to B6 deficiency have been reported and only resolved after vitamin B6 administration (did not respond to traditional antiseizure medications). Symptoms of vitamin B6 deficiency may include anemia, cheilosis, confusion, dermatitis, glossitis, and/or neuropathy. Supplement with vitamin B6, as needed.

Disease-related concerns:

- Cardiovascular disease: Use with caution in patients with severe cardiovascular disease, including a history of myocardial infarction who have residual atrial, nodal, or ventricular arrhythmias.
- Endocrine disease: Use with caution in patients with endocrine disease and when interpreting plasma/urine catecholamine levels; falsely diagnosed pheochromocytoma has been rarely reported.
- Glaucoma: Use with caution in patients with glaucoma; monitor IOP carefully; some formulations are contraindicated in patients with narrow-angle glaucoma.
- Hepatic impairment: Use with caution in patients with hepatic impairment.
- Peptic ulcer disease: Oral products: Use with caution in patients with a history of peptic ulcer disease; risk of GI hemorrhage may be increased.
- Renal impairment: Use with caution in patients with renal impairment.
- Respiratory disease: Use with caution in patients with respiratory disease.

Special populations:

- Presurgical assessment of the indication for use, symptoms and goals of therapy should be documented to enable postsurgical assessment. A small case study suggests no clinically significant alteration in pharmacodynamic response in patients undergoing gastric bypass, sleeve gastrectomy, or gastric banding ([Ref](#)). Monitor for continued efficacy after bariatric surgery and consider switching to an alternative medication if symptoms worsen.
- Older adult: Use with caution in elderly patients; may be more sensitive to CNS effects (eg, hallucinations) of levodopa.

Dosage forms specific issues:

- Intestinal suspension (Duopa): GI complications (eg, bezoar, ileus, implant-site erosion/ulcer, intestinal hemorrhage, intestinal ischemia, intestinal obstruction, intestinal perforation, pancreatitis, peritonitis, pneumoperitoneum, postoperative wound infection) may occur (may be fatal). Patients should notify their health care provider immediately if abdominal pain, prolonged constipation, nausea, vomiting, fever, and/or melanotic stool occur.
- Intestinal gel (Duodopa [Canadian product]): Product should be prescribed only by neurologists experienced in the treatment of Parkinson disease and who have completed the Duodopa Education Program. Response to levodopa/carbidopa intestinal gel therapy should be assessed with a short-term test period of administration via a temporary nasojejun tube prior to placement of a percutaneous endoscopic gastrostomy-jejunostomy (PEG-J) tube for permanent access and administration. Sudden deterioration in therapy response with recurring motor symptoms may indicate PEG-J tube complications (eg, displacement) or obstruction of the infusion device. Tube or infusion device complications may require initiation of oral levodopa/carbidopa therapy until complications are

resolved.

Other warnings/precautions:

- Body fluid discoloration: Urine, saliva, or sweat may appear dark in color (red, brown, black) during therapy.
- Dietary protein: Distribute dietary protein throughout the day to avoid fluctuations in levodopa absorption. A high-protein diet may reduce the effectiveness of the enteral formulations.

Dosage Forms: US

Excipient information presented when available (limited, particularly for generics); consult specific product labeling. [DSC] = Discontinued product

Capsule Extended Release, Oral:

Crexont: Carbidopa 87.5 mg and levodopa 350 mg

Crexont: Carbidopa 70 mg and levodopa 280 mg, Carbidopa 52.5 mg and levodopa 210 mg [contains fd&c blue #1 (brilliant blue)]

Crexont: Carbidopa 35 mg and levodopa 140 mg [contains quinoline yellow (d&c yellow #10)]

Rytary: Carbidopa 23.75 mg and levodopa 95 mg, Carbidopa 36.25 mg and levodopa 145 mg, Carbidopa 48.75 mg and levodopa 195 mg, Carbidopa 61.25 mg and levodopa 245 mg [contains fd&c blue #2 (indigotine, indigo carmine)]

Generic: Carbidopa 23.75 mg and levodopa 95 mg, Carbidopa 36.25 mg and levodopa 145 mg, Carbidopa 48.75 mg and levodopa 195 mg, Carbidopa 61.25 mg and levodopa 245 mg

Suspension, Enteral:

Duopa: Carbidopa 5 mg and levodopa 20 mg per mL (100 mL)

Tablet, Oral:

Dhivy: Carbidopa 25 mg and levodopa 100 mg [scored]

Sinemet: Carbidopa 10 mg and levodopa 100 mg [scored; contains corn starch, fd&c blue #2 (indigotine, indigo carmine)]

Sinemet: Carbidopa 25 mg and levodopa 100 mg [contains corn starch, quinoline yellow (d&c yellow #10)]

Sinemet: Carbidopa 25 mg and levodopa 100 mg [DSC] [scored; contains corn starch, quinoline yellow (d&c yellow #10)]

Generic: Carbidopa 10 mg and levodopa 100 mg, Carbidopa 25 mg and levodopa 100 mg, Carbidopa 25 mg and levodopa 250 mg

Tablet Disintegrating, Oral:

Generic: Carbidopa 10 mg and levodopa 100 mg, Carbidopa 25 mg and levodopa 100 mg, Carbidopa 25 mg and levodopa 250 mg

Tablet Extended Release, Oral:

Generic: Carbidopa 25 mg and levodopa 100 mg, Carbidopa 50 mg and levodopa 200 mg

Generic Equivalent Available: US

May be product dependent

Pricing: US

Capsule Extended Release (Carbidopa-Levodopa ER Oral)

23.75-95 mg (per each): \$4.49

36.25-145 mg (per each): \$4.49

48.75-195 mg (per each): \$4.49

61.25-245 mg (per each): \$5.64

Capsule Extended Release (Crexont Oral)

35-140 mg (per each): \$5.75

52.5-210 mg (per each): \$5.75

70-280 mg (per each): \$5.75

87.5-350 mg (per each): \$5.75

Capsule Extended Release (Rytary Oral)

23.75-95 mg (per each): \$4.99

36.25-145 mg (per each): \$4.99

48.75-195 mg (per each): \$4.99

61.25-245 mg (per each): \$6.27

Suspension (Duopa Enteral)

4.63-20 mg/mL (per mL): \$2.89

Tablet, controlled release (Carbidopa-Levodopa ER Oral)

25-100 mg (per each): \$0.94 - \$0.99

50-200 mg (per each): \$1.81 - \$1.90

Tablet, orally-disintegrating (Carbidopa-Levodopa Oral)

10-100 mg (per each): \$1.22

25-100 mg (per each): \$1.38

25-250 mg (per each): \$1.75

Tablets (Carbidopa-Levodopa Oral)

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10-100 mg (per each): \$0.05 - \$0.77

25-100 mg (per each): \$0.05 - \$1.18

25-250 mg (per each): \$0.08 - \$1.11

Tablets (Dhivy Oral)

25-100 mg (per each): \$4.50

Tablets (Sinemet Oral)

10-100 mg (per each): \$1.58

25-100 mg (per each): \$1.78

Disclaimer: A representative AWP (Average Wholesale Price) price or price range is provided as reference price only. A range is provided when more than one manufacturer's AWP price is available and uses the low and high price reported by the manufacturers to determine the range. The pricing data should be used for benchmarking purposes only, and as such should not be used alone to set or adjudicate any prices for reimbursement or purchasing functions or considered to be an exact price for a single product and/or manufacturer. Medi-Span expressly disclaims all warranties of any kind or nature, whether express or implied, and assumes no liability with respect to accuracy of price or price range data published in its solutions. In no event shall Medi-Span be liable for special, indirect, incidental, or consequential damages arising from use of price or price range data. Pricing data is updated monthly.

Dosage Forms: Canada

Excipient information presented when available (limited, particularly for generics); consult specific product labeling.

Gel, Enteral:

Duodopa: Carbidopa 5 mg and levodopa 20 mg per mL (100 mL)

Tablet, Oral:

Generic: Carbidopa 10 mg and levodopa 100 mg, Carbidopa 25 mg and levodopa 100 mg, Carbidopa 25 mg and levodopa 250 mg

Tablet Extended Release, Oral:

Generic: Carbidopa 25 mg and levodopa 100 mg, Carbidopa 50 mg and levodopa 200 mg

Extemporaneous Preparations

An oral suspension containing carbidopa 1.25 mg and levodopa 5 mg per mL may be made with tablets. Crush ten tablets each containing carbidopa 25 mg and levodopa 100 mg and reduce to a fine powder. Add small portions of a 1:1 mixture of Ora-Sweet® and Ora-Plus® and mix to a uniform paste; mix while adding the vehicle in equal proportions to **almost** 200 mL; transfer to a calibrated bottle, rinse mortar with vehicle, and add sufficient quantity of vehicle to make 200 mL. Label "shake well" and "refrigerate". Stable 42 days under refrigeration. Also stable 28 days at room temperature ([Ref](#)).

Prescribing and Access Restrictions

Duodopa intestinal gel [Canadian product]: In Canada, the Duodopa Education Program is a risk mitigation program established to provide safe and effective use of Duodopa in advanced Parkinson patients. The program involves:

- Education of prescribing neurologists and other health care providers on suitable candidates for treatment, surgical procedures (PEG tube placement), and follow-up care including infusion device education.
- Distribution of educational materials to patients and caregivers describing Duodopa intestinal gel and its proper use, PEG tube placement, and complications associated with the mode of administration and/or PEG tube placement.

Administration: Adult

Intestinal suspension (Duopa): Remove one cassette from refrigerator 20 minutes prior to use (failure to use at room temperature may result in inaccurate dosage). Administer as a 16-hour infusion through either a nasojejunal tube (temporary administration) or through a percutaneous endoscopic gastrostomy-jejunostomy (PEG-J) tube (long-term administration) connected to the CADD-Legacy 1400 pump. At the end of administration, disconnect the tube from the pump at the end of the infusion and flush with room-temperature drinking water with a syringe. Following discontinuation of the daily infusion, patients should administer their routine night-time dosage of oral immediate-release carbidopa/levodopa.

Intestinal gel (Duodopa [Canadian product]): Gel is administered directly to the jejunum via a portable infusion pump (CADD-legacy Duodopa pump). Administer through a temporary nasojejunal tube for a short-term test period to evaluate patient response and for dose optimization. Long-term administration requires placement of PEG-J tube for intestinal infusion. Continuous maintenance dose is infused throughout the day for up to 16 hours; if necessary, may administer at night (eg, nocturnal akinesia). Disconnect PEG-J tube from infusion pump at end of infusion and flush with room temperature water to prevent occlusion of tubing. Following discontinuation of the daily infusion, patients should administer their routine night-time dosage of oral levodopa/carbidopa.

Oral:

Extended-release capsule (Rytary, Crexont): Administer with or without food; a high-fat, high-calorie meal may delay the absorption of levodopa by ~2 hours. Swallow capsules whole; do not chew, divide, or crush capsules. Patients who have difficulty swallowing intact capsules may open the capsule, sprinkle entire contents on a small amount of applesauce (1 to 2 tablespoons) and consume immediately without chewing (do not store for future use). Do not take Crexont with alcohol.

Oral tablet formulations: Space doses evenly over the waking hours. Administer with meals to decrease GI upset. Controlled release product should not be chewed or crushed. Orally disintegrating tablets do not require water; the tablet should disintegrate on the tongue's surface before swallowing.

Dhivy: Administer without regard to food; tablets may be broken at score lines if patient has difficulty swallowing large tablets.

Bariatric surgery: Carbidopa plus levodopa is available in an ER formulation. Bariatric surgery may significantly alter the release characteristics in an unknown manner. Carbidopa plus levodopa is also available in IR formulations. Oral suspensions may contain nonabsorbable sugars (eg, sorbitol, mannitol, xylitol) that can cause dumping syndrome ([Ref](#)). Refer to product labeling. Providers should determine if the condition being treated can be safely monitored or if a switch to an alternative formulation or medication is necessary ([Ref](#)).

Preparation for Administration: Adult

Intestinal suspension (Duopa): Fully thaw in refrigerator prior to use. To ensure controlled thawing, take the cartons containing the seven individual cassettes out of the transport box and separate the cartons from each other. Assign a 12-week, use-by date based on the time the cartons are put into the refrigerator to thaw (may take up to 96 hours to thaw). Once thawed, the individual cartons may be packed in a closer configuration within the refrigerator. Remove one cassette from refrigerator 20 minutes prior to administration (failure to use at room temperature may result in inaccurate dosage).

Storage/Stability

Oral formulations: Store at 20°C to 25°C (68°F to 77°F); excursions permitted between 15°C to 30°C (59°F to 86°F). Protect from light and moisture

Intestinal suspension (Duopa): Store in freezer at -20°C (-4°F). Fully thaw in refrigerator at 2°C to 8°C (36°F to 46°F) prior to use; protect from light. To ensure controlled thawing, remove the cartons containing the seven individual cassettes from the transport box and separate the cartons from each other. Assign a 12-week, use-by date based on the time the cartons are put in the refrigerator to thaw (may take up to 96 hours to thaw). Once thawed, the individual cartons may be packed in a closer configuration within the refrigerator. Cassettes are for single use only and should be discarded daily following infusion (up to 16 hours). Do not re-use opened cassettes.

Intestinal gel (Duodopa [Canadian product]): Store in refrigerator at 2°C to 8°C (36°F to 46°F). Keep in outer carton to protect from light. Cassettes are for single use only and should be discarded daily following infusion (up to 16 hours).

Use: Labeled Indications

Parkinson disease: Treatment of Parkinson disease, postencephalitic parkinsonism, and symptomatic parkinsonism that may follow carbon monoxide and/or manganese intoxication; treatment of motor fluctuations in advanced Parkinson disease (intestinal suspension [Duopa] only).

Use: Off-Label: Adult

Parkinsonism (including corticobasal degeneration, dementia with Lewy bodies, drug-induced parkinsonism, multiple system atrophy, and progressive supranuclear palsy); Restless legs syndrome, intermittent

Medication Safety Issues

Sound-alike/look-alike issues:

Sinemet may be confused with Janumet (ISMP List of Confused Drug Names ©ISMP 2024)

High alert medication:

The Institute for Safe Medication Practices (ISMP) includes this medication among its list of drug classes (anti-Parkinson agent) which have a heightened risk of causing significant patient harm when used in error (ISMP List of High-Alert Medications in Long-Term Care (LTC) Settings ©ISMP 2021).

International issues:

Zimox: Brand name for carbidopa and levodopa [Greece], but also the brand name for amoxicillin [Italy]

Zimox [Greece] may be confused with Diamox which is a brand name for acetazolamide [Canada and multiple international markets]

Metabolism/Transport Effects

Refer to individual components.

Drug Interactions

Note: Interacting drugs may **not be individually listed below** if they are part of a group interaction (eg, individual drugs within “CYP3A4 Inducers [Strong]” are NOT listed). For a complete list of drug interactions by individual drug name and detailed management recommendations, use the drug interactions program by clicking on the “Launch drug interactions program” link above.

Alcohol (Ethyl): May increase serum concentrations of Levodopa (Oral). *Risk X: Avoid*

Alfuzosin: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Alizapride: May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk X: Avoid*

Amifostine: Blood Pressure Lowering Agents may increase hypotensive effects of Amifostine. Management: When used at chemotherapy doses, hold blood pressure lowering medications for 24 hours before amifostine administration. If blood pressure lowering therapy cannot be held, do not administer amifostine. Use caution with radiotherapy doses of amifostine. *Risk D: Consider Therapy Modification*

Amisulpride (Injection): May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk X: Avoid*

Amisulpride (Oral): Anti-Parkinson Agents (Dopamine Agonist) may decrease therapeutic effects of Amisulpride (Oral). Amisulpride (Oral) may decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk X: Avoid*

Antipsychotic Agents (First Generation [Typical]): May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). Management: Avoid concomitant therapy if possible. If antipsychotic use is necessary, consider using atypical antipsychotics such as clozapine, quetiapine, or ziprasidone at lower initial doses, or a non-dopamine antagonist (eg, pimavanserin). *Risk D: Consider Therapy Modification*

Antipsychotic Agents (Second Generation [Atypical]): May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). Management: Consider avoiding atypical antipsychotic use in patients with Parkinson disease. If an atypical antipsychotic is necessary, consider using clozapine, quetiapine, or ziprasidone at lower initial doses, or a non-dopamine antagonist (eg, pimavanserin). *Risk D: Consider Therapy Modification*

Arginine: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Barbiturates: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

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Biperiden: May increase adverse/toxic effects of Levodopa-Foslevodopa. Specifically, the risk of choreic movements or dyskinesias may be increased. *Risk C: Monitor*

Blood Pressure Lowering Agents: May increase hypotensive effects of Levodopa-Foslevodopa. *Risk C: Monitor*

Bornaprine: May increase adverse/toxic effects of Levodopa-Foslevodopa. Specifically, dyskinesia may be increased. *Risk C: Monitor*

Brimonidine (Topical): May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Brivudine: May increase adverse/toxic effects of Anti-Parkinson Agents (Dopamine Agonist). Specifically, the risk of chorea may be increased. *Risk C: Monitor*

Bromopride: May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk C: Monitor*

Bromperidol: May decrease hypotensive effects of Blood Pressure Lowering Agents. Blood Pressure Lowering Agents may increase hypotensive effects of Bromperidol. *Risk X: Avoid*

BuPROPion: Anti-Parkinson Agents (Dopamine Agonist) may increase adverse/toxic effects of BuPROPion. *Risk C: Monitor*

Diazoxide (Immediate Release): May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Droxidopa: Carbidopa may decrease therapeutic effects of Droxidopa. Carbidopa may decrease active metabolite exposure of Droxidopa. Carbidopa may increase serum concentrations of Droxidopa. *Risk C: Monitor*

DULoxetine: Blood Pressure Lowering Agents may increase hypotensive effects of DULoxetine. *Risk C: Monitor*

Fluorodopa F18: Coadministration of Anti-Parkinson Agents (Dopamine Agonist) and Fluorodopa F18 may alter diagnostic results. Management: Discontinue medications used to treat Parkinson disease, including dopamine agonists, 12 hours prior to fluorodopa F 18 administration if these medications can be safely withheld. *Risk D: Consider Therapy Modification*

Fosphenytoin-Phenytoin: May decrease therapeutic effects of Levodopa-Foslevodopa. *Risk C: Monitor*

Glycopyrrolate (Systemic): May decrease serum concentrations of Levodopa-Foslevodopa. *Risk C: Monitor*

Herbal Products with Blood Pressure Lowering Effects: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Hypotension-Associated Agents: Blood Pressure Lowering Agents may increase hypotensive effects of Hypotension-Associated Agents. *Risk C: Monitor*

Iron Preparations: May decrease serum concentrations of Levodopa (Oral). Only applies to oral iron preparations. Management: Consider separating doses of the agents by 2 or more hours to minimize the effects of this interaction. Monitor for decreased therapeutic effects of levodopa during concomitant therapy, particularly if doses cannot be separated. *Risk D: Consider Therapy Modification*

Isoniazid: May decrease therapeutic effects of Levodopa-Foslevodopa. *Risk C: Monitor*

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Kava Kava: May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). Kava Kava may increase adverse/toxic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk C: Monitor*

Levodopa-Foslevodopa: Blood Pressure Lowering Agents may increase hypotensive effects of Levodopa-Foslevodopa. *Risk C: Monitor*

Macimorelin: Coadministration of Levodopa-Foslevodopa and Macimorelin may alter diagnostic results. *Risk X: Avoid*

Metergoline: May increase adverse/toxic effects of Levodopa-Foslevodopa. Management: Consider the need for possible reductions in levodopa dose with initiation of or increasing doses of metergoline. Monitor for evidence of increased levodopa adverse effects with use of the combination. *Risk D: Consider Therapy Modification*

Methotrimeprazine: May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). Anti-Parkinson Agents (Dopamine Agonist) may decrease therapeutic effects of Methotrimeprazine. *Risk X: Avoid*

Metoclopramide: May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk X: Avoid*

Molsidomine: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Monoamine Oxidase Inhibitors: Levodopa-Foslevodopa may increase adverse/toxic effects of Monoamine Oxidase Inhibitors. Of particular concern is the development of hypertensive reactions when levodopa is used with nonselective MAOI. *Risk X: Avoid*

Multivitamins/Fluoride (with ADE): May decrease therapeutic effects of Levodopa-Foslevodopa. Management: Concurrent use of a multivitamin and levodopa (without carbidopa) should be avoided. *Risk D: Consider Therapy Modification*

Multivitamins/Minerals (with ADEK, Folate, Iron): May decrease therapeutic effects of Levodopa (Oral). Multivitamins/Minerals (with ADEK, Folate, Iron) may decrease serum concentrations of Levodopa (Oral). Only applies to oral iron-containing preparations. Management: Separate doses of these agents by 2 or more hours. Monitor for decreased levodopa effects, particularly if doses cannot be separated. Concurrent use of a multivitamin and levodopa (without carbidopa) should be avoided. *Risk D: Consider Therapy Modification*

Multivitamins/Minerals (with AE, No Iron): May decrease therapeutic effects of Levodopa-Foslevodopa. Management: Concurrent use of a multivitamin and levodopa (without carbidopa) should be avoided. *Risk D: Consider Therapy Modification*

Naftopidil: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Nicergoline: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Nicorandil: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Nitroprusside: Blood Pressure Lowering Agents may increase hypotensive effects of Nitroprusside. *Risk C: Monitor*

Obinutuzumab: May increase hypotensive effects of Blood Pressure Lowering Agents. Management: Consider temporarily withholding blood pressure lowering medications beginning 12 hours prior to obinutuzumab infusion and continuing until 1 hour after the end of the infusion. *Risk D: Consider Therapy Modification*

Papaverine: May decrease therapeutic effects of Levodopa-Foslevodopa. Papaverine may increase

hypotensive effects of Levodopa-Foslevodopa. *Risk C: Monitor*

Pentoxifylline: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Pholcodine: Blood Pressure Lowering Agents may increase hypotensive effects of Pholcodine. *Risk C: Monitor*

Phosphodiesterase 5 Inhibitors: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Prostacyclin Analogues: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Pyridoxine: May decrease therapeutic effects of Levodopa-Foslevodopa. Management: The concomitant use of pyridoxine and levodopa (in the absence of a dopa decarboxylase inhibitor (DDI)) should be avoided. Use of a DDI (eg, carbidopa) with levodopa will essentially eliminate the risk of this interaction. *Risk D: Consider Therapy Modification*

Reserpine: Levodopa-Foslevodopa may increase hypotensive effects of Reserpine. Reserpine may decrease therapeutic effects of Levodopa-Foslevodopa. Management: Consider alternatives to the coadministration of levodopa and reserpine. If combined, monitor for reduced levodopa efficacy and hypotension. *Risk D: Consider Therapy Modification*

Sapropterin: May increase adverse/toxic effects of Levodopa-Foslevodopa. *Risk C: Monitor*

Sepiapterin: May increase neurotoxic effects of Levodopa-Foslevodopa. *Risk C: Monitor*

Silodosin: May increase hypotensive effects of Blood Pressure Lowering Agents. *Risk C: Monitor*

Solriamfetol: May increase adverse/toxic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk C: Monitor*

Spiramycin: May decrease serum concentrations of Carbidopa. And thus may decrease the effectiveness of levodopa. *Risk C: Monitor*

Sulpiride: May decrease therapeutic effects of Anti-Parkinson Agents (Dopamine Agonist). *Risk X: Avoid*

Tiapride: Levodopa-Foslevodopa may decrease therapeutic effects of Tiapride. Tiapride may decrease therapeutic effects of Levodopa-Foslevodopa. *Risk X: Avoid*

Trihexyphenidyl: Adverse/toxic effects of Levodopa-Foslevodopa and Trihexyphenidyl may increase with coadministration. *Risk C: Monitor*

Vesicular Monoamine Transporter 2 (VMAT2) Inhibitors: May decrease therapeutic effects of Levodopa-Foslevodopa. Management: Consider alternatives to the coadministration of levodopa and vesicular monoamine transporter 2 (VMAT2) inhibitors. If combined, monitor for reduced levodopa efficacy. *Risk D: Consider Therapy Modification*

Food Interactions

High protein diets have the potential to impair levodopa absorption; levodopa competes with certain amino acids for transport across the gut wall or across the blood-brain barrier. Management: Avoid high protein diets.

Pregnancy Considerations

Carbidopa can be detected in the umbilical cord, but absorption in fetal tissue is minimal. Levodopa crosses the placenta and can be metabolized by the fetus and detected in fetal tissue (Merchant 1995).

The incidence of Parkinson disease in pregnancy is relatively rare, and although information related to the use of carbidopa/levodopa in pregnant women is limited (Ball 1995; Cook 1985; Golbe 1987; Serikawa 2011; Shulman 2000; Tüfekçioğlu 2018; Zlotnik 2014), this combination has the most outcome information available for the treatment of pregnant women (Seier 2017). Current guidelines note that the available information is insufficient to make a recommendation for the treatment of restless legs syndrome in pregnant women (Aurora 2012).

Breastfeeding Considerations

Levodopa is present in breast milk.

A study was done in one breastfeeding woman at 4.5 months postpartum who had been taking carbidopa/levodopa for several years. Regardless of the formulation (sustained release or immediate release), peak levodopa concentrations in the breast milk were found ~3 hours after the maternal dose and returned to baseline ~6 hours after the dose. The highest milk concentration (3.47 nmol/L) was found following the immediate release tablet, and this was 27% of the peak maternal plasma concentration (occurring 30 minutes after the dose) and ~40% of the simultaneous plasma concentration. Carbidopa was not evaluated (Thulin 1998).

According to the manufacturer, the decision to breastfeed during therapy should consider the risk of infant exposure, the benefits of breastfeeding to the infant, and the benefits of treatment to the mother. Lactation may be inhibited by levodopa.

Dietary Considerations

Avoid high protein diets (>2 g/kg) which may decrease the efficacy of levodopa via competition with amino acids in crossing the blood-brain barrier. Some products may contain phenylalanine.

Monitoring Parameters

Signs and symptoms of Parkinson disease; periodic hepatic function tests, BUN, creatinine, and CBC; periodic skin examinations; signs and symptoms of postural hypotension (eg, BP, standing and sitting/supine; especially during dose escalation); vitamin B₆ (prior to initiation, periodically during treatment, and as clinically indicated); symptoms of dyskinesias, mental status changes; cardiac function (particularly during initial dosage adjustment), IOP (in patients with glaucoma); signs and symptoms of Parkinsonism-hyperpyrexia syndrome, especially if abrupt dose reduction or discontinuation required (as with surgery); drowsiness or sleepiness; signs of depression (including suicidal thoughts); signs and symptoms of peripheral neuropathy prior to therapy and periodically during therapy; risk factors for neuropathy prior to initiation (eg, deficiency of vitamin B₆ and/or B₁₂, diabetes mellitus, hypothyroidism). Monitor closely for melanoma.

Additional Canadian labeling recommendations include vitamin B₁₂, vitamin B₆, folic acid, homocysteine, and methylmalonic acid levels prior to initiation and regularly thereafter (Duodopa Canadian product monograph).

Mechanism of Action

Parkinson disease symptoms are due to a lack of striatal dopamine; levodopa circulates in the plasma to the blood-brain-barrier (BBB), where it crosses, to be converted by striatal enzymes to dopamine; carbidopa inhibits the peripheral plasma breakdown of levodopa by inhibiting its decarboxylation, and thereby increases available levodopa at the BBB

Pharmacokinetics (Adult Data Unless Noted)

Absorption: Absorption of levodopa may be decreased with high-fat, high-calorie, or high-protein meal.

Distribution: Levodopa: 0.9 to 1.6 L/kg (in presence of carbidopa), crosses the blood-brain barrier;
Carbidopa: Does not cross the blood-brain barrier.

Protein binding: Levodopa: 10% to 30%; Carbidopa: ~36%.

Metabolism: Levodopa has two major pathways (decarboxylation and O-methylation) and two minor pathways (transamination and oxidation) of metabolism; Carbidopa inhibits the decarboxylation of levodopa to dopamine in the peripheral tissue to allow greater levodopa distribution into the CNS.

Bioavailability:

Controlled release: Levodopa: Bioavailability is ~75% relative to availability from IR formulation;
Carbidopa: Bioavailability is ~58% relative to availability from IR formulation.

Extended release:

Rytary: Levodopa: Bioavailability is ~70% relative to availability from IR formulation; Carbidopa: Bioavailability is ~50% relative to availability from IR formulation.

Crexont: Levodopa: Bioavailability is ~88% to 99% relative to availability from IR formulation;
Carbidopa: Bioavailability is ~103% to 123% relative to availability from IR formulation.

Intestinal gel [Canadian product]: Levodopa: Similar bioavailability relative to oral administration of tablet formulations (81% to 98%).

Intestinal suspension: Levodopa: 97% relative to oral IR tablets.

Half-life elimination: Levodopa (in presence of carbidopa): Immediate release: 1.5 to 2 hours; controlled release: 1.6 hours; extended release: 1.9 hours (Hsu 2015; manufacturer's labeling).

Time to peak (levodopa component): Immediate release: 0.5 to 1 hour; controlled release: 1.5 to 2 hours; extended release: 1 to 4.5 hours (Hsu 2015; manufacturer's labeling). Intestinal gel [Canadian product]: 2.9 hours with therapeutic plasma levels reached 10 to 30 minutes following morning bolus dose; intestinal suspension: 2.5 hours.

Excretion: Urine.

Pharmacokinetics: Additional Considerations (Adult Data Unless Noted)

Older adult: The AUC and C_{max} of levodopa may be increased in elderly patients.

Sex: Increased carbidopa and levodopa peak concentrations and systemic exposure in females compared with males.

Patient Counseling Points

(For additional information [see "Carbidopa and levodopa: Patient drug information"](#))

What is this drug used for?

- It is used to treat Parkinson's disease.
- It is used to treat signs like Parkinson's disease caused by other health problems.
- It may be given to you for other reasons. Talk with the doctor.

All drugs may cause side effects. However, many people have no side effects or only have minor side effects. Call your doctor or get medical help if any of these side effects or any other side effects bother you or do not go away:

All products:

- Bad dreams
- Constipation
- Feeling dizzy or sleepy
- Dry mouth
- Headache
- Trouble sleeping
- A dark red, brown, or black color in your saliva, urine, or sweat

All oral products:

- Upset stomach or throwing up

Enteral suspension:

- Throat pain

WARNING/CAUTION: Even though it may be rare, some people may have very bad and sometimes deadly side effects when taking a drug. Tell your doctor or get medical help right away if you have any of the following signs or symptoms that may be related to a very bad side effect:

All products:

- High or low blood pressure like very bad headache or dizziness, passing out, or change in eyesight
- Low vitamin B6 levels like confusion, depression, swelling or cracking of the lips, pain or swelling of the tongue, redness or swelling of the skin, tiredness or weakness, seizures, or unusual numbness or tingling
- New or worse behavior or mood changes like depression or thoughts of suicide
- Hallucinations (seeing or hearing things that are not there)
- Feeling confused
- Strong urges that are hard to control (such as eating, gambling, sex, or spending money)
- A skin lump or growth

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- Change in color or size of a mole
- Trouble controlling body movements that is new or worse
- Eyelid twitching
- Muscle twitching
- Stomach pain; black, tarry, or bloody stools; throwing up blood; or throw up that looks like coffee grounds
- Chest pain or pressure, a fast heartbeat, or an abnormal heartbeat
- Fever, chills, or sore throat; any unexplained bruising or bleeding; or feeling very tired or weak
- Dark urine or yellow skin or eyes
- Change in eyesight, eye pain, or severe eye irritation
- Shortness of breath
- Feeling very sleepy or falling asleep during activities like driving, eating, or talking
- Signs of an allergic reaction, like rash; hives; itching; red, swollen, blistered, or peeling skin with or without fever; wheezing; tightness in the chest or throat; trouble breathing, swallowing, or talking; unusual hoarseness; or swelling of the mouth, face, lips, tongue, or throat.

Enteral suspension:

- A burning, numbness, or tingling feeling that is not normal
- Problem with the device or problem where the tube goes into your body
- Swelling in the arms or legs
- Stomach or bowel problems like dark, tarry, or bloody stools; fever; upset stomach or throwing up; constipation that does not go away; or stomach pain

Note: This is not a comprehensive list of all side effects. Talk to your doctor if you have questions.

Consumer Information Use and Disclaimer: This information should not be used to decide whether or not to take this medicine or any other medicine. Only the healthcare provider has the knowledge and training to decide which medicines are right for a specific patient. This information does not endorse any medicine as safe, effective, or approved for treating any patient or health condition. This is only a limited summary of general information about the medicine's uses from the patient education leaflet and is not intended to be comprehensive. This limited summary does NOT include all information available about the possible uses, directions, warnings, precautions, interactions, adverse effects, or risks that may apply to this medicine. This information is not intended to provide medical advice, diagnosis or treatment and does not replace information you receive from the healthcare provider. For a more detailed summary of information about the risks and benefits of using this medicine, please speak with your healthcare provider and review the entire patient education leaflet.

Brand Names: International

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International Brand Names by Country

For country code abbreviations ([show table](#))

(AE) United Arab Emirates: Apo levocarb | Duodopa | Levomed | Sinemet; (AR) Argentina: Lebocar | Lebocar ap | Lecarge | Parkinel | Sinemet cr | Zomer; (AT) Austria: Levocar | Sinemet; (AU) Australia: Apo levocarb | Apo levodopa/carbidopa | Duodopa | Kinson | Levo/Carbidopa sandoz | Levohexal | Sinacarb | Sinadopa | Sinemet; (BD) Bangladesh: Carlev | Co dopa | D Dopa Plus | Levopa | Parkinor | Perkidopa | Synamet | Syndopa | Twindopa | Zimox; (BE) Belgium: Sinemet; (BG) Bulgaria: Duodopa | Sinemet | Sinemet cr | Sinepar; (BR) Brazil: Carbidol | Carbidopa + levodopa | Carbidopa/levodopa | Cronomet | Duodopa | Duosync | Levocarb | Parkidopa | Parklen | Sinemet; (BZ) Belize: Nakom; (CH) Switzerland: Carbidopa levodopa | Duodopa | Sinemet | Sinemet cr | Zamdopa; (CL) Chile: Carbidopa/levodopa | Grifoparkin | Levofamil | Protonis | Saniter Compuesto | Sinemet cr; (CN) China: Carbidopa + l-dopa | Carbidopa and levodopa | Compound carbidopa | Sinemet; (CO) Colombia: Cinetol | Levodopa carbidopa | Levodopa/carbidopa sandoz | Parken | Sinemet; (CR) Costa Rica: Levodopa/carbidopa | Nakom; (CZ) Czech Republic: Duodopa | Isicom | Lecardop | Levodopa/Carbidopa mylan | Nakom | Nakom mite | Pipoda | Sinemet cr; (DE) Germany: Dopadura c | Duodopa | Isicom | Levo c al | Levobeta c | Levocarb | Levocarb 1 A Pharma | LevoCarb 1A Pharma | Levocomp | Levodop | Levodopa c comp | Levodopa carbid | Levodopa Comp | Levodopa comp c | Levodopa ratio comp | Levodopa RPH | Levodopa/carbidopa | Levodopa/Carbidopa AbZ | Levodopa/Carbidopa CT | Levodopa/Carbidopa Fair Med | Levodopa/carbidopa neuraxpharm | Levodopa/carbidopa ratiopharm | Nacom | Sinemet | Striaton | Toniform | Tremopar; (DO) Dominican Republic: Cloisone | Dolxen | Eurodopa | Levodopa/carbidopa sandoz | Parkil | Sinemet | Sorkinox; (EC) Ecuador: Aldana xr | Carbidopa levodopa | Carbidopa y levodopa | Carbidopa/levodopa | Cloisone | Grifoparkin | Levodox | Levocarchem | Levodopa + carbidopa | Licebral | Parken | Sinemet | Sinemet cr | Syndopa | Syndopa cr; (EE) Estonia: Duodopa | Isicom | Nakom | Sinemet cr; (EG) Egypt: Carbolev | Futaparky | Lecardopa | Levocar | Parkicarlevo | Parkidopa | Shatoo | Sinemet | Sonismapex; (ES) Spain: Carbidopa/levodopa davur | Doporio | Levodopa/carbidopa ratiopharm | Levodopa/carbidopa teva | Sinemet; (ET) Ethiopia: Carbidopa and levodopa | Credanil; (FI) Finland: Carbidopa/levodopa fairmed | Carbidopa/levodopa orifarm | Carbidopa/levodopa Orion | Duodopa | Kardopal | Levocar | Levodopa/carbidopa accord | Sinemet | Sinemet depot; (FR) France: Carbidopa Levodopa Teva | Levodopa/carbidopa accord lp | Sinemet; (GB) United Kingdom: Apodespan | Caramet | Carbidopa/levodopa Orion | Co careldopa | Co careldopa kent | Numient | Sinemet | Tilolec; (GR) Greece: Credanil | Duodopa | Sinemet | Sinemet cr | Sinemet lp | Sinemet Plus | Zimox; (GT) Guatemala: Carledop | Involan; (HK) Hong Kong: Apo levocarb | Levomed | Levomet | Sinemet; (HR) Croatia: Nakom | Sinemet; (HU) Hungary: Carbidopa-levodopa-b | Duellin | Duodopa | Levodopa/carbidopa teva | Parlekarv | Sinemet; (ID) Indonesia: Anti-parkinson; (IE) Ireland: Caramet | Carbidopa/levodopa fairmed | Duodopa | Sinemet; (IL) Israel: Dopicar | Sinemet cr; (IN) India: Duodopa | Duodopa plus | Lcd | Levopa-c | Neocare | Paradopa | Parkimet plus | Sinemet | Syndopa | Syndopa plus | Tidomet; (IQ) Iraq: Bidopa | Parkin c fort; (IT) Italy: Carbidopa e levodopa accord | Carbidopa/levodopa | Duodopa | Sinemet; (JO) Jordan: Credanil | Sinemet; (JP) Japan: Carcopa | Dopacol | Duodopa | Leprinton | Menesit | Neodopaston | Neodopaston l100 | Neodopaston l250 | Parkiston; (KE) Kenya: Sinemet; (KR) Korea, Republic of: Duodopa intestinal gel | Isicom | Levoda | Perkin 25-100 | Perkin 25-250 | Perkin cr | Promet | Sinemet | Sinemet cr; (KW) Kuwait: Duodopa | Levacin | Sinemet; (LB) Lebanon: Carlevo | Sinemet; (LT) Lithuania: Isicom | Levodopa/carbidopa fair med healthcare | Levomed | Nakom | Sinemet | Sinepar | Syndopa | Tidomet plus | Zimox; (LU) Luxembourg: Sinemet; (LV) Latvia: Duodopa | Nakom | Sinemet | Zimox; (MX) Mexico: Cloisone | Lemdopa | Racovel | Rinzovar | Sinemet | Sinemet cr | Ternovag; (MY) Malaysia: Apo levocarb | Credanil | Levomed | Sinemet; (NG) Nigeria: Pardopa | Sinemet; (NL) Netherlands: Doporio | Duodopa | Levodopa/carbidopa | Levodopa/carbidopa accord | Levodopa/Carbidopa mylan | Levodopa/carbidopa neuraxph | Levodopa/carbidopa pch | Levodopa/carbidopa pch retard | Numient | Sinemet | Sinemet lp | Sinemet Plus; (NO) Norway: Carbidopa/levodopa fairmed | Carbidopa/levodopa Orion | Duodopa | Levocomp | Levodop neuraxpharm | Sinemet | Sinemet Depot mite; (NZ) New Zealand: Kinson | Sindopa | Sinemet; (PA) Panama: Cloisone | Nakom; (PE) Peru: Carbidopa + levodopa | Carbidopa/levodopa | Carbipharm | Cinetol | Cloisone | Darpott | Grifoparkin | Lecarge | Licebral amex | Mebexit | Sindrob | Sinemet cr | Sulconar; (PH) Philippines: Carbidel | Lavidia | Ledocar | Medolev | Pardopa | Parkimet | Parkimet CR | Sinedin | Sinemet | Sinemet cr | Tidomet | Twindopa | Vexdopa; (PK) Pakistan: Cardop | Dopasel | Neudopa | Sinedopa | Sinemet; (PL) Poland: Duodopa | Nakom | Pardopa | Parkador | Poldomet | Sinemet cr; (PR) Puerto Rico: Carbidopa and levodopa | Carbidopa/levodopa | Crexont | Dhivy | Duopa | Sinemet cr; (PT) Portugal: Dopadura c | Duodopa | Ledopsan | Levodopa + Carbidopa fairmed | Sinemet cr; (PY) Paraguay: Carbidopa + levodopa prosalud | Grifoparkin | Istonil | Levodopa carbidopa cellofarm | Levodopa carbidopa dasanti | Levodopa carbidopa heisecke | Licebral | Nestplena | Sinemet | Sionus; (QA) Qatar: Credanil | Dopadex SR | Duodopa (Carbidopa-Levodopa) | Half Sinemet CR | Levocomp Retard | Rytary | Sinemet | Sinemet CR | Sinemet Plus; (RO) Romania: Credanil | Duodopa | Isicom | Zimox; (RU) Russian Federation: Carbidopa levodopa | Carbidopa/levodopa | Duellin | Duodopa | Nakom | Sinemet | Sinemet cr | Syndopa | Tidomet | Tidomet forte | Tidomet ls | Tidomet plus | Tremonorm | Vero levocarb; (SA) Saudi Arabia: Apo levocarb | Duodopa | Levomed | Sinemet | Sinemet

Plus | Syndopa; (SE) Sweden: Carbidopa/levodopa fairmed | Carbidopa/levodopa orifarm | Carbidopa/levodopa Orion | Duodopa | Karbidopa/levodopa ebb | Levocar | Levodopa/carbidopa accord | Levodopa/carbidopa ratiopharm | Sinemet | Sinemet Depot mite; (SG) Singapore: Cardopar | Sinemet | Tidomet; (SI) Slovenia: Doporio | Nakom; (SK) Slovakia: Carlevo | Duodopa | Isicom | Nakom | Sinemet | Sinemet cr; (SV) El Salvador: Levodopa & carbidopa; (TH) Thailand: Duodopa | Levomed | Levomed 25/250 | Levomet | Levomet 25/250 | Sinemet | Syndopa | Tidomet; (TR) Turkey: Dopadex sr | Sinemet; (TW) Taiwan: Bidopar | Duodopa | Lecadopa | Majormet | Sinemet | Sinemet cr; (UA) Ukraine: Carbidopa/levodopa | Carbilevodop | Confundus | Levocom | Levocom retard acino | Nakom | Sindopa | Sinemet; (UG) Uganda: Tidomet | Tidomet forte; (UY) Uruguay: Lebocar | Lebocar ap | Levomet | Licebral | Licebral cr | Sinemet cr; (VE) Venezuela, Bolivarian Republic of: Carbidol | Carbidopa+levodopa | Cinemet cr | Cinemet cr half | Levodopa carbidopa | Levodopa, carbidopa | Parken | Rotidin | Sinemet | Sinemet cr | Sorkinox | Welldopa; (VN) Viet Nam: Creamec | Masopen | Vedilma; (ZA) South Africa: Carbilev | Lecardop | Sinemet | Teva carbi levo

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