

Appendix 2 (as supplied by the authors): Commonly used and recommended medications for the treatment of motor symptoms of Parkinson disease

	Mechanism of Action	Side Effects	Typical Dose	Level of evidence
Levodopa (with carbidopa or benserazide)* (Sinemet, Levocarb. Prolopa)	Metabolism to dopamine	Nausea, vomiting, constipation, psychosis, hallucinations, hypotension, and dyskinesias	300 - 1200 (higher if tolerated)/day (Divided tid, qid, q3h, q2h)	A
Dopamine Agonists (Ropinirole, Pramipexole, Rotigotine patch)	Directly stimulate dopamine receptors	As above, plus leg edema, reward-seeking behaviour, daytime sleepiness and sudden-onset sleep. Skin reactions may occur with the rotigotine patch	Ropinirole: 3-24 mg/day (tid) Pramipexole: 1.5-4.5 mg/ day (tid) Rotigotine: 4-8 mg/24h (patch)	A
Catechol-O-methyltransferase (COMT) inhibitors (Entacapone)	Blocks peripheral COMT activity	Related to increase levodopa delivery; diarrhea, urine discoloration	200 mg pill, up to 8 times/day (Given with each dose of levodopa)	A
Monoamine Oxidase (MAO) Inhibitors (Selegiline, Rasagiline)	Blocks MAO-B to reduce metabolism of dopamine (central and peripheral)	Nausea, hypotension, confusion, and hallucinations	Rasagiline: 0.5 to 1 mg/day (od) Selegiline: 5 to 10mg/day (bid), early in the day	A
Amantadine	Blocks NMDA & acetylcholine receptors	Confusion, hallucinations, Leg edema, rash (livedo reticularis)	100 mg od to 100 mg tid	C
Anticholinergics (e.g. Trihexyphenidyl)	Blocks acetylcholine receptors	Dry eyes & mouth, urinary retention, confusion, worsening of glaucoma	Trihexyphenidyl: 1 to 6 mg/day (tid)	U

* Levodopa should be taken 1 hour prior to, or 2 hours after, meals containing protein, to improve absorption. Sinemet CR (controlled release 100/25mg and 200/50mg) cannot be used to reduce frequency of immediate-release levodopa administration. Levels of evidence are derived from the American Academy of Neurology recommendations. A=established effective, B=probably effective, C=possibly effective, U=data inadequate or conflicting.¹

References

1. Grimes D, Gordon J, Snelgrove B, et al. Canadian Guidelines on Parkinson's Disease. *Can J Neurol Sci.* 2012;39(4 Suppl 4):S1-S30.