

Prazosin Tablets

Background

All prazosin tablets are currently shorted.¹

Table 1: Canadian Suppliers of Prazosin Tablets²

Product	Strength	DIN	Manufacturer
Apo-Prazo	1 mg	00882801	APX
	2 mg	00882828	
	5 mg	00882836	
Teva-Prazosin	1 mg	01934198	TEV
	2 mg	01934201	
	5 mg	01934228	

Health Canada approved indication of prazosin tablets³:

- Treatment of mild to moderate essential hypertension

Off-label use:

- Post-traumatic stress disorder: as an adjunct to reduce the frequency of trauma nightmares⁴

Management Options

Please note: Compounding pharmacies report that they can compound prazosin capsules.⁵

Mild to Moderate Essential Hypertension

Pharmacological Alternatives

For the purposes of this document, we will only discuss other nonselective α_1 -adrenergic receptor antagonists. The alternatives for hypertension are doxazosin and terazosin.^{4,6} All of the nonselective agents are associated with dizziness, orthostatic hypotension, headache, edema, and nasal congestion.^{4,7} Caution is required to prevent hypotension, especially in geriatric patients: start low and titrate slowly; if combining these agents with other antihypertensives and medications that reduce blood pressure is necessary, reduce the dose of the existing agent.⁴ See Table 2 for differences among the agents.

Table 2: Comparison of Nonselective Alpha1 -Adrenergic Receptor Antagonists^{4,6,7}

Product	Dose	Drug/Food Interactions	Half-life
Doxazosin	Start at 1 mg at bedtime- titrate slowly q1-2 weeks Usual dose: 1 -8 mg daily Max: 16 mg daily No dosage alteration required for renal dysfunction	<ul style="list-style-type: none"> • Minor substrate of CYP2C19, CYP2D6, and CYP3A4. Strong CYP3A4 inhibitors may increase serum concentration of doxazosin. • Food does not affect absorption 	16–30 hours

Prazosin	<p>Start at 0.5 mg at bedtime – titrate slowly. Usual dose: 1-15 mg/day divided two to three times daily Max: 20 mg/day</p> <p>ClCr <50 mL/min - initial dose 0.5 mg daily. Increase doses cautiously.</p>	<ul style="list-style-type: none"> • Can increase digoxin levels • Food may delay absorption 	2-3 hours
Terazosin	<p>Start at 1mg at bedtime – titrate slowly. Usual dose: 1-5mg once daily Max: 20 mg/day given once or twice daily</p> <p>No dosage alteration required for renal dysfunction</p>	<ul style="list-style-type: none"> • Food has little effect on absorption 	~12 hours

Post-Traumatic Stress Disorder (PTSD)-Related Nightmares

Pharmacological Alternatives

Prazosin is the most studied medication for PTSD-related nightmare treatment. Although use is off-label, it is considered a first-line treatment option. Typical doses are 3-16 mg daily with doses up to 40 mg daily required for some.^{7-9,12} If prazosin has been effective, another nonselective alpha₁-adrenergic receptor antagonist would be a logical choice for an alternative. Both doxazosin and terazosin have some evidence of efficacy.

Although many other medications have been used for this indication with only weak or preliminary evidence of efficacy, clonidine and nabilone have been listed here since clonidine also has alpha-adrenergic effects and nabilone has shown significant improvement in PTSD-related nightmares.^{8,17,18}

- **Nonselective Alpha₁ -Adrenergic Receptor Antagonists**

- Doxazosin⁸⁻¹²

- Dose similarly to prazosin. Usual dose: 4–16 mg PO daily at bedtime.^{8,11} Doses up to 48 mg daily have been used.¹¹
- Longer half-life results in better coverage for the sleeping hours and into daytime if necessary.^{8,9,11}
- Less risk of hypotension in normotensive populations than with prazosin.^{9,11,12}

- Terazosin

- Start at 1-2 mg PO daily at bedtime and titrate to effect.^{13,14} Dosing range: 1-20 mg daily. Doses up to 50 mg daily have been used.¹³
- Reports of better tolerability than prazosin.¹⁴

- **Clonidine**

- May be more effective for sleep onset than sleep maintenance.¹²
- Start at 0.1mg PO daily at bedtime and titrate to effect.^{13,15,16} Usual dose: 0.1–2 mg PO daily¹³
- Common side effects: hypotension, dry mouth, constipation, skin irritation, dizziness, and fatigue¹²

- **Nabilone**^{8,17-20}
 - Only preliminary evidence available, however findings are promising for the treatment of PTSD-related insomnia and nightmares.^{8,17,18}
 - Start with 0.5mg PO daily at bedtime and titrate.¹⁷⁻²⁰ Usual dose is 0.5 – 6 mg once daily.
 - Well tolerated by study subjects.¹⁹ Most common side effects: dry mouth, dizziness, forgetfulness, and headache.^{18,19}

Prepared by Dorothy Sanderson BSP; reviewed by Carmen Bell BSP medSask | Jun 2023
© 2023 medSask, University of Saskatchewan. All rights reserved.



References:

1. McKesson Canada. PharmaClik. 2023. Accessed June 7, 2023. <http://clients.mckesson.ca>
2. Drug product database online query. Health Canada. 2023. Accessed Jun 7, 2023. <https://health-products.canada.ca/dpd-bdpp/>
3. Apo-Prazo. Product Monograph. Apotex Inc. 2018. Accessed Jun 7, 2023. https://pdf.hres.ca/dpd_pm/00047230.PDF
4. Alpha₁-Adrenergic Receptor Antagonists. CPS. Canadian Pharmacists Association. Updated June 1, 2015. Accessed June 7, 2023. <https://www-e-therapeutics-ca.cyber.usask.ca/new/documents/MONOGRAPH/en/Alpha1AdrenergicReceptorAntagonistsCPhA>
5. Phone communication with Medical Arts Pharmacy and Medicine Shoppe RUH
6. Regier L, Jensen B, Lee C. Diuretics and Miscellaneous Hypertensives. RxFiles. University of Saskatchewan. Updated May 2023. Accessed June 7, 2023. <https://www.rxfiles.ca/RxFiles/uploads/documents/members/CHT-HTN-diuretics.pdf>
7. Doxazosin, Prazosin & Terazosin. Lexicomp. Wolters Kluwer. Updated June 1, 2023. Accessed June 7, 2023. <https://online-lexi-com.cyber.usask.ca>
8. Procyshyn RM, Bezchlibnyk-Butler KZ, Kim DD, eds. *Clinical Handbook of Psychotropic Drugs Online*. Hogrefe Publishing; 2022. Accessed June 14, 2023. <http://chpd.hogrefe.com>
9. Waltman SH, Shearer D, Moore BA. Management of Post-Traumatic Nightmares: a Review of Pharmacologic and Nonpharmacologic Treatments Since 2013. *Curr Psychiatry Rep*. 2018 Oct 11;20(12):108. doi: 10.1007/s11920-018-0971-2. PMID: 30306339
10. Sethi R, Vasudeva S. Doxazosin for the treatment of nightmares: does it really work? A case report. *Prim Care Companion CNS Disord*. 2012;14(5):PCC.12I01356. doi: 10.4088/PCC.12I01356. Epub 2012 Sep 13. PMID: 23469321; PMCID: PMC3583762
11. Smith C, Koola MM. Evidence for Using Doxazosin in the Treatment of Posttraumatic Stress Disorder. *Psychiatr Ann*. 2016;46(9):553-555. doi: 10.3928/00485713-20160728-01. Epub 2016 Sep 12. PMID: 27667865; PMCID: PMC5033510
12. Bajor LA, Balsara C, Osser DN. An evidence-based approach to psychopharmacology for posttraumatic stress disorder (PTSD) - 2022 update. *Psychiatry Res*. 2022 Nov;317:114840. doi: 10.1016/j.psychres.2022.114840. Epub 2022 Sep 9. PMID: 36162349
13. Detweiler MB, Pagadala B, Candelario J, Boyle JS, Detweiler JG, Lutgens BW. Treatment of Post-Traumatic Stress Disorder Nightmares at a Veterans Affairs Medical Center. *J Clin Med*. 2016 Dec 16;5(12):117. doi: 10.3390/jcm5120117. PMID: 27999253; PMCID: PMC5184790
14. Nirmalani-Gandhy A, Sanchez D, Catalano G. Terazosin for the treatment of trauma-related nightmares: a report of 4 cases. *Clin Neuropharmacol*. 2015 May-Jun;38(3):109-11. doi: 10.1097/WNF.000000000000077. PMID: 25970279
15. Alao A, Selvarajah J, Razi S. The use of clonidine in the treatment of nightmares among patients with co-morbid PTSD and traumatic brain injury. *Int J Psychiatry Med*. 2012;44(2):165-9. doi: 10.2190/PM.44.2.g. PMID: 23413663
16. Kinzie JD, Leung P. Clonidine in Cambodian patients with posttraumatic stress disorder. *J Nerv Ment Dis*. 1989;177(9):546-50.
17. Orsolini L, Chiappini S, Volpe U, Berardis D, Latini R, Papanti GD, Corkery AJM. Use of Medicinal Cannabis and Synthetic Cannabinoids in Post-Traumatic Stress Disorder (PTSD): A Systematic Review. *Medicina (Kaunas)*. 2019 Aug 23;55(9):525. doi: 10.3390/medicina55090525. PMID: 31450833; PMCID: PMC6780141
18. Fraser GA. The use of a synthetic cannabinoid in the management of treatment-resistant nightmares in posttraumatic stress disorder (PTSD). *CNS Neurosci Ther*. 2009 Winter;15(1):84- doi: 10.1111/j.1755-5949.2008.00071.x. PMID: 19228182; PMCID: PMC6494011.
19. Jetly R, Heber A, Fraser G, Boisvert D. The efficacy of nabilone, a synthetic cannabinoid, in the treatment of PTSD-associated nightmares: A preliminary randomized, double-blind, placebo-controlled cross-over design study. *Psychoneuroendocrinology*. 2015 Jan;51:585-8. doi: 10.1016/j.psyneuen.2014.11.002. Epub 2014 Nov 8. PMID: 25467221
20. Forsythe ML, Boileau AJ. Use of cannabinoids for the treatment of patients with post-traumatic stress disorder. *J Basic Clin Physiol Pharmacol*. 2021 Mar 4;33(2):121-132. doi: 10.1515/jbcp-2020-0279. PMID: 33662194