South East London Integrated Medicines Optimisation Committee
Formulary recommendation

Reference	**160**
Intervention:	**Prazosin tablets for the management of nightmare disorder in adults with Post Traumatic Stress Disorder** (Prazosin is an alpha$_1$-selective adrenergic receptor blocker and works by relaxing blood vessels to increase blood flow. For the management of nightmare disorder, prazosin reduces the CNS sympathetic outflow throughout the brain.)
Date of Decision	**February 2025**
Date of Issue:	**April 2025 (time limited approval for 12 months)**
Recommendation:	**Amber 2 – initiation and minimum 3 months' supply by the specialist Sleep Centre at Guy's and St.Thomas' NHS Foundation Trust (GSTfT) until dose is stable after which prescribing may be transferred to primary care**

Further Information:	• Prazosin is accepted for use in South East London for the management of nightmare disorder in adults with Post Traumatic Stress Disorder (PTSD) in line with the nightmare disorder pathway.
	• The use of prazosin in this setting is **off-label***. The off-label nature should be explained to the patient/carer and informed consent gained.
	• Treatment with prazosin in this setting is accepted for use as a **first line** pharmacological treatment option in line with the nightmare disorder pathway under the following criteria:
	  ○ Lifestyle factors and treatment of any underlying co-morbidities (physical and mental health) have been optimised
	  ○ Trial of Image Rehearsal Therapy (IRT) for at least 3 months (where appropriate)
	• The initiation of prazosin in this setting is **restricted** to the specialist Sleep Centre at GSTfT, until a patient's dose is stable and a review determining if ongoing treatment is indicated has occurred. Prescribing can then be continued in primary care under "Amber 2" arrangements.
	• Prazosin should be initiated at 0.5mg at bedtime, the dose may be increased gradually in steps of 0.5mg fortnightly, up to maximum of 10mg at night if required and well tolerated. Patients should be maintained on the minimum effective dose.
	• Treatment response with prazosin is generally observed within the first 6 months, but duration of treatment should be individualised based on the trajectory of response and any adverse events.
	• If there is no treatment response observed at 6-months despite an optimal stable dose, then gradual discontinuation of prazosin should be considered. See the nightmare disorder pathway for further information.
	• Patients will remain under the care of the specialist Sleep Centre at GSTfT and after the initial treatment reviews, patients will be reviewed at 3, 6 and 12 months, followed by annual reviews.
	• This approval is **time limited to one year** to enable experience of use with prazosin. A report summarising patient numbers and outcomes with prazosin for the management of nightmare disorder in adults with PTSD will be presented back to the Committee after 1 year, **coordinated by the formulary applicant**. The report will include:
	- The total number of patients initiated by GSTfT on prazosin for the management of nightmare disorder in adults with PTSD
	- Whether use of prazosin in line with this recommendation/ nightmare disorder pathway and the rationale for any deviation
	- Patient related outcomes, including:
	  (i) Response to treatment (including, but not limited to, quality of life aspects and safety)
	  (ii) Adverse effects
	  (iii) Number of patients switching from prazosin to alternative treatment
	
	*Prazosin is licensed for use in the management of hypertension, congestive heart failure, raynaud's phenomenon and raynaud's disease and benign prostatic hyperplasia

Shared Care/ Transfer of care required:	N/A
Cost Impact for agreed patient group	• The application estimates that approximately 10 patients per annum in SEL may be eligible for treatment with prazosin in this setting. • Assuming all 10 patients are titrated up to 5mg by 1.5 months and then tolerate titration up to the maximum dose of 10mg daily by month 3, this equates to a total cost of ~£283 per patient per annum and ~ £2,830 per annum for all 10 patients (~£142 per 100,000 population) per year.
Usage Monitoring & Impact Assessment	**Acute Trusts:** • Monitor and audit usage of prazosin as agreed and report back to the Committee in 12 months (data to be collated and presented no later than **May 2026**).
	SEL Borough Medicines Teams: • Monitor ePACT2 data • Exception reports from GPs if inappropriate prescribing requests are made to primary care.
Evidence reviewed:	**References (from evidence evaluation)** 1. Nightmares and nightmare disorder in adults. UpToDate. Available here [Accessed: 04/01/2024]. 2. Night terrors. NHS choices. Available here [Accessed: 04/01/2024] 3. Levin R, Nielsen TA. Disturbed dreaming, posttraumatic stress disorder, and affect distress: a review and neurocognitive model. Psychol Bull. 2007 May;133(3):482-528. doi: 10.1037/0033-2909.133.3.482. PMID:17469988. 4. International Classification of Diseases .11th Revision; World Health Organization, 2019/2021 5. American Academy of Sleep Medicine. International Classification of Sleep Disorders, 3rd ed, text revision, American Academy of Sleep Medicine, 2023. 6. Wilson S, Anderson K, Baldwin D, Dijk DJ, Espie A, Espie C, Gringras P, Krystal A, Nutt D, Selsick H, Sharpley A. British Association for Psychopharmacology consensus statement on evidence-based treatment of insomnia, parasomnias and circadian rhythm disorders: An update. J Psychopharmacol. 2019 Aug;33(8):923-947. doi: 10.1177/0269881119855343. Epub 2019 Jul 4. PMID: 31271339. 7. Morgenthaler TI, Auerbach S, Casey KR, Kristo D, Maganti R, Ramar K, Zak R, Kartje R. Position Paper for the Treatment of Nightmare Disorder in Adults: An American Academy of Sleep Medicine Position Paper. J Clin Sleep Med. 2018 Jun 15;14(6):1041-1055. doi: 10.5664/jcsm.7178. PMID: 29852917; PMCID: PMC5991964. 8. Hypovase Tablets 0.5mg - summary of product characteristics (SmPC) - (EMC). Available here [Accessed: 04/01/2024] 9. Kung S, Espinel Z, Lapid MI. Treatment of nightmares with prazosin: a systematic review. Mayo Clin Proc. 2012 Sep;87(9):890-900. doi: 10.1016/j.mayocp.2012.05.015. Epub 2012 Aug 9. PMID: 22883741; PMCID: PMC3538493. 10. Ahmadpanah M, Sabzeiee P, Hosseini SM, Torabian S, Haghighi M, Jahangard L, Bajoghli H, Holsboer-Trachsler E, Brand S. Comparing the effect of prazosin and hydroxyzine on sleep quality in patients suffering from posttraumatic stress disorder. Neuropsychobiology. 2014;69(4):235-42. doi: 10.1159/000362243. Epub 2014 Jun 27. PMID: 24993832. 11. Raskind MA, Peskind ER, Chow B, Harris C, Davis-Karim A, Holmes HA, Hart KL, McFall M, Mellman TA, Reist C, Romesser J, Rosenheck R, Shih MC, Stein MB, Swift R, Gleason T, Lu Y, Huang GD. Trial of Prazosin for Post-Traumatic Stress Disorder in Military Veterans. N Engl J Med. 2018 Feb 8;378(6):507-517. doi: 10.1056/NEJMoa1507598. PMID: 29414272. 12. Yücel DE, van Emmerik AAP, Souama C, Lancee J. Comparative efficacy of imagery rehearsal therapy and prazosin in the treatment of trauma-related nightmares in adults: A meta-analysis of randomized controlled trials. Sleep Med Rev. 2020 Apr;50:101248. doi: 10.1016/j.smrv.2019.101248. Epub 2019 Nov 28. PMID: 31855732. 13. Reist C, Streja E, Tang CC, Shapiro B, Mintz J, and Hollifield M (2021). Prazosin for treatment of post-traumatic stress disorder: a systematic review and metaanalysis. CNS Spectrums 26(4), 338–344. 14. Zhang Y, Ren R, Sanford LD, Yang L, Ni Y, Zhou J, Zhang J, Wing YK, Shi J, Lu L, Tang X. The effects of prazosin on sleep disturbances in post-traumatic stress disorder: a systematic review and metaanalysis. Sleep Med. 2020 Mar;67:225-231. doi: 10.1016/j.sleep.2019.06.010. Epub 2019 Jun 22. PMID: 31972510; PMCID: PMC6986268. 15. Paiva HS, Filho IJZ, Cais CFDS. Using Prazosin to Treat Posttraumatic Stress Disorder and Associations: A Systematic Review. Psychiatry Investig. 2021 May;18(5):365-372. doi: 10.30773/pi.2020.0411. Epub 2021 May 14. PMID: 33979949; PMCID: PMC8169333. 16. Pathway for the pharmacological management of co-morbid insomnia in adults. Available here [Accessed: 04/01/2024]. 17. Pharmacological management of REM behaviour disorder (RBD). Available here [Accessed: 04/01/2024]. 18. De Berardis D, Serroni N, Marini S, Moschetta FS, Martinotti G, Di Giannantonio M. Agomelatine for the treatment of posttraumatic stress disorder: a case report. Ann Clin Psychiatry. 2012 Aug;24(3):241-2. PMID: 22860244. 19. Warner MD, Dorn MR, Peabody CA. Survey on the usefulness of trazodone, in patients with PTSD with insomnia or nightmares. Pharmacopsychiatry. 2001 Jul;34(4):128-31. doi: 10.1055/s-2001-15871. PMID: 11518472.

NOTES:

a) SEL IMOC recommendations and minutes are available publicly via the website.

b) This SEL IMOC recommendation has been made on the cost effectiveness, patient outcome and safety data available at the time. The recommendation will be subject to review if new data becomes available, costs are higher than expected or new NICE guidelines or technology appraisals are issued.

c) Not to be used for commercial or marketing purposes. Strictly for use within the NHS