Surrey Heartlands Integrated Care System
Area Prescribing Committee (APC)

Evidence review

Medicine details	
Name, brand name	Prazosin
Manufacturer	n/a
Licensed Indication	*Hypertension* *Congestive heart failure* *Raynaud's phenomenon and Raynaud's disease* *Benign prostatic hyperplasia*
Proposed indication	For the treatment of post traumatic stress disorder (PTSD) (nightmares and sleep disturbances) This is an unlicensed indication. Starting dose 1mg at night and titrated gradually to reduce the risk of hypotension. Usual dose range 2-15mg nocte.
Scope:	**Included**: **The use of prazosin for the treatment of PTSD** **Excluded**: The use of prazosin for licensed indications as listed above
Requested by	SABP clinicians

Evidence Review

Relevant guidance / reviews

This indication has been recommended as a second line treatment in the Maudsley Prescribing Guidelines in Psychiatry. First line treatments (in order of preference) are SSRIs and Venlafaxine, both of which are recommended in NICE guidelines.

Second line treatments are not presented in any specific order within the Maudsley Guidelines, but are noted to be either less well tolerated or have a weaker evidence base than those in the first line treatment options.

NICE guidelines emphasise that all patients with PTSD should have access to trauma-focused psychological therapies, and that drug treatments for PTSD should not be used as a routine first-line treatment for adults (in general use or by specialist mental health professionals) in preference to a trauma-focused psychological therapy.

NHS Scotland guidelines have been published for the use of prazosin for PTSD-related nightmares.

There are All-Wales prescribing guidelines for PTSD which include prazosin as an option for adjunctive treatment with an SSRI or venlafaxine, or as part of triple therapy with either an SSRI or venlafaxine, and with quetiapine or risperidone. (First and second line treatments are SSRIs, followed by either venlafaxine or an alternative SSRI)

Clinical Effectiveness

- Post-traumatic stress disorder (PTSD) develops after a stressful event or situation of an exceptionally threatening or catastrophic nature. It is a disorder that can affect people of any age. Around 25–30% of people experiencing a traumatic event go on to develop PTSD.
- PTSD can present with a range of symptoms. In adults the most common of these are vivid, distressing memories of the event or flashbacks, known as intrusive symptoms. Another prominent symptom is avoidance of trauma-related reminders or general social contact. People with PTSD often try to push memories of the event out of their mind and avoid thinking or talking about it in detail. On the other hand, people may also reflect excessively on questions that prevent them from coming to terms with the event – for example, why it happened to them, how it could have been prevented, or how they could take revenge. People with PTSD often have nightmares related to the trauma that affect their sleep.
- Symptoms of PTSD often develop immediately after the traumatic event but in some people (fewer than 15%) onset is delayed. People may not present for treatment for months or years despite experiencing considerable distress. PTSD is a treatable disorder, even for people who present many years later, but assessment can be challenging because many people avoid talking about their problems even when presenting with associated complaints.
- Two significant distressing symptoms of PTSD, nightmares (intrusion) and sleep disturbance (alteration in arousal), are often resistant to pharmacological treatment. The mechanism for these symptoms appears to be enhanced postsynaptic adrenoceptor responsiveness to central nervous system (CNS) noradrenaline. Randomised clinical trials provide evidence that the off-label use of prazosin, a brain-active alpha-1 adrenoceptor antagonist, is effective and safe in the treatment of nightmares and sleep disturbance associated with PTSD, and contributes to an improvement in overall clinical status without affecting blood pressure.

  The following is taken from the Traumatic Stress Wales PTSD Prescribing Algorithm:

  Background

  PTSD is a mental disorder that may develop after exposure to a particularly distressing and catastrophic event with a lifetime prevalence between 1.9% – 8.8%. (1) The disorder is characterised by symptoms of re-experiencing, hyperarousal, avoidance, and altered mood and cognition.

  Currently the recommended first line treatment for PTSD is trauma based psychological therapy, with pharmacological treatment only being considered as a second line option. (2)

  The International Society for Traumatic Stress Studies PTSD Prevention and Treatment Guidelines (3), which are based on the most up to date empirical evidence (4), gave recommendations for Sertraline, Paroxetine, Fluoxetine, Venlafaxine and Quetiapine as pharmacological treatments of PTSD. (3) NICE (2018) have also published their guidelines on PTSD, recommending SSRI's or Venlafaxine as pharmacological treatment of PTSD. (2) This contrasts with the previous NICE (2005) guidelines which recommended the use of Mirtazapine, Amitriptyline, Phenelzine and Paroxetine.

  Updates in the Evidence Base

  A recently published Cochrane review by Williams et al (5) recommended SSRIs as a class, as well as the specific agents mirtazapine and amitriptyline. This review departed from most previous ones in using the Clinician Global Impression (CGI) scale as the primary efficacy outcome variable, which resulted in sertraline being found ineffective versus placebo, antipsychotics as a class being found ineffective versus placebo, and venlafaxine having no studies that included CGI

as an outcome variable. This review should be considered with caution for a number of reasons; the CGI is a brief, subjective tool for clinicians to rate the global functioning of a patient before and after starting an intervention and is not as detailed and disorder specific as the gold standard Clinician Administered PTSD Scale (CAPS); CGI is not universally adopted in randomized controlled trials of PTSD interventions, and the omission of studies that do not use it will naturally omit their efficacy data from other measures; the review did not demonstrate a class effect of SSRIs and so this recommendation is not evidence-based.

A network meta-analysis of comparative efficacy by de Moraes Costa et al (6) included studies of monotherapy and augmentation together and concluded that there is a lack of evidence for a medication class effect in PTSD, and that topiramate, risperidone, quetiapine, paroxetine, venlafaxine, fluoxetine and sertraline are treatments associated with significantly greater efficacy when compared to placebo, either directly or indirectly. Notably, topiramate outperformed prazosin, but was based upon two monotherapy studies of topiramate previously assessed by Hoskins et al (4) who found a lack of superiority of topiramate monotherapy compared to placebo; we have not chosen to add topiramate to the TSW prescribing algorithm.

Interestingly, risperidone was found to be superior to prazosin (both drugs studied in augmentation trials only), and so [the Traumatic Stress Wales PTSD guidelines] have emphasized the use of risperidone as an augmentation agent in the new algorithm.

A meta-analysis by Huang et al (7) recommended that SSRIs and atypical psychotics as a class had significant efficacy in patients with severe or extremely severe PTSD, but only atypical antipsychotics showed superior efficacy in veterans.

- A meta-analysis of cannabis by Rehman et al (8) found a lack of placebo-controlled studies and currently THC-based medicines cannot be considered an evidence-based intervention for PTSD.
- A meta-analysis by von Kanel et al (9) found that benzodiazepine use in individuals who have suffered from pain secondary to acute coronary syndrome is associated with a significant increase in developing more severe PTSD symptoms.

1) Bisson JI, Cosgrove S, Lewis C, Robert NP. Post-traumatic stress disorder. BMJ (Clinical research ed). 2015;351:h6161-h. doi: 10.1136/bmj.h6161

2) Post-traumatic stress disorder | Guidance and guidelines | NICE [Internet]. Nice.org.uk. 2018 [cited 29 January 2019]. Available from: https://www.nice.org.uk/guidance/ng116

3) International Society for Traumatic Stress Studies. Post-traumatic Stress Disorder: Prevention and Treatment Guidelines. International Society for Traumatic Stress Studies;2018 [accessed 27th Oct 2018]. Available from: https://www.istss.org/

4) Hoskins MD, Bridges J, Sinnerton R, et al. Pharmacological therapy for post-traumatic stress disorder: a systematic review and meta-analysis of monotherapy, augmentation and head-to-head approaches. Eur J Psychotraumatol. 2021;12(1):1802920. Published 2021 Jan 26. doi:10.1080/20008198.2020.1802920

5) Williams, T., Phillips, N. J., Stein, D. J., & Ipser, J. C. (2022). Pharmacotherapy for post traumatic stress disorder (PTSD). The Cochrane database of systematic reviews, 3(3), CD002795. https://doi.org/10.1002/14651858.CD002795.pub3

6) de Moraes Costa G, Zanatta FB, Ziegelmann PK, Soares Barros AJ, Mello CF. Pharmacological treatments for adults with post-traumatic stress disorder: A network meta-analysis of comparative efficacy and acceptability. J Psychiatr Res. 2020;130:412-420. doi:10.1016/j.jpsychires.2020.07.046

7) Huang ZD, Zhao YF, Li S, et al. Comparative Efficacy and Acceptability of Pharmaceutical Management for Adults With Post-Traumatic Stress Disorder: A Systematic Review and Meta-Analysis. Front Pharmacol. 2020;11:559. Published 2020 May 8. doi:10.3389/fphar.2020.00559

8) Rehman Y, Saini A, Huang S, Sood E, Gill R, Yanikomeroglu S. Cannabis in the management of PTSD: a systematic review. AIMS Neurosci. 2021;8(3):414-434. Published 2021 May 13. doi:10.3934/Neuroscience.2021022

9) von Känel R, Schmid JP, Meister-Langraf RE, et al. Pharmacotherapy in the Management of Anxiety and Pain During Acute Coronary Syndromes and the Risk of Developing Symptoms of Posttraumatic Stress Disorder. J Am Heart Assoc. 2021;10(2):e018762. doi:10.1161/JAHA.120.018762

Safety

- Common adverse effects: Dizziness 10%, headache 8%, drowsiness 8%, lack of energy 7%, weakness 7%, palpitations 5% and nausea 5%.
- It is suggested in the All-Wales guidelines that prazosin may not be suitable for patients with low blood pressure, such as in very low Body Mass Index (BMI) cases. For patients already prescribed anti-hypertensive medications, please seek advice from their GP or Cardiologist whether prazosin can be safely used, and whether their existing medications may need to be reviewed.
- As there is a risk of severe first-dose hypotension, the first and second doses should be taken whilst sitting on a bed just before lying down. It is important to keep well hydrated while taking prazosin and to get up slowly – initially sitting up on the bed and then slowly standing up. For the first two nights it is important to sit on the toilet to pass water rather than stand up.
- However, it should be noted that the doses used for PTSD are generally much lower than the dose in hypertension so the chances of side effects are very low.

Patient factors

- As this medication is being used for an off-label indication, it is important to ensure that people prescribed it are aware that the patient information leaflet will focus on its licensed indications

Impact to Secondary/specialist care

- Prior to starting the person's BP would be checked to establish a suitable starting dose; there is no other specific monitoring required

Impact to Primary Care

- There is no specific monitoring or training required

Cost implications

Current Drug Tariff (June 2026) cost is £2.69 per 60 x 500 microgram tablets.

- Over the past 12 months, secondary care expenditure on prazosin in Surrey was £921, equating to approximately 8,300 tablets across 120 prescriptions. In Sussex, 26,911 tablets were dispensed between April 2025 and March 2026 at a total cost of £1,971. However, these figures should be interpreted in the context of population size, as Sussex has a substantially larger population than Surrey. The Mental Health (MH) weighted populations for NHS Surrey Heartlands ICB and NHS Sussex ICB are 795,557 and 1,745,950, respectively.
- Primary care expenditure on prazosin between March 2025 and April 2026 was £21,611.34 across both systems (£8,020.47 in Surrey and £13,590.86 in Sussex), based on ePACT2 data accessed on 8 June 2026. It should be noted that the clinical indication for prazosin prescribed in primary care cannot be determined from these data.

In the 2023/24 Adult Psychiatric Morbidity Survey of Mental Health and Wellbeing in England in the large general population sample, 5.7% screened positive for PTSD in the last month.

Extrapolating from an estimated population of approximately 800,000 adults in Surrey Heartlands ICB, it might be predicted that 45,600 adults might be experiencing PTSD. However, the proportion seeking treatment, and requiring third line treatment will be much smaller than this.

Summarise decisions in other areas

South West London – Green, without any specification for indication

Frimley – Amber no shared care - Restricted for (off label) use in adults (over 18years) as an add on treatment for persistent nightmares (as per Maudsley guidelines), despite optimal treatment (as recommended by NICE [NG116] 5 December 2018) for PTSD. Treatment initiated and stabilised by specialist prior to handover to GP

Kent and Medway Mental Health Trust – initiated by specialist

Special Considerations

- It is recommended that this would be a third line treatment option, as per the Maudsley guidelines, with an SSRI, and venlafaxine as first and second choices respectively.
- It is suggested that this could be considered for transfer to primary care once the dose is stabilised for a minimum of one month.
- Usual starting dose would be 1mg ON with the view of increasing this on a weekly basis until a response is gained. The usual dose is between 3-6mg ON.
- SABP clinicians have tried using doxazosin in the past instead but the results have been generally poorer in practice. Most patient prefer prazosin despite having to take a high number of tablets. In terms of impact, the improvement in sleep for these patients make it a better and safer choice than other night sedation.

Recommendation to APC

- It is recommended that this be considered for a "**Blue** (Surrey) / **Purple** (Sussex), specialist stabilisation for 1 month"

Other considerations

- The optimum duration of treatment is not established, so, in discussion with the individual patient it would be appropriate to try withdrawing this medication after a period of stability, particularly if psychological therapy has also been effective in reducing other PTSD symptoms.

References

- Bisson JI, Berliner L, Cloitre M, *et al.* The International Society for Traumatic Stress Studies New Guidelines for the Prevention and Treatment of Posttraumatic Stress Disorder: Methodology and Development Process. Journal of Traumatic Stress (2019) 32, 475–483.
- NICE Guideline NG 116 Post-traumatic stress disorder Published 5 December 2018
- Taylor, D.M., Barnes, T.R.E. and Young, A.H. (2025). Depression and Anxiety Disorders. In The Maudsley Prescribing Guidelines in Psychiatry (eds D.M. Taylor, T.R.E. Barnes and A.H. Young).
- NHS Scotland. Prazosin for PTSD-related nightmares (Guidelines). Last reviewed 27.06.2024. Available via Prazosin for PTSD-related nightmares (Guidelines) | Right Decisions
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- Wilson, H., Wilson, C., Morris, S., Fear, N., Hatch, S., McManus, S., Oram, S., & Wessely, S. (2025). Posttraumatic stress disorder. In Morris, S., Hill, S., Brugha, T., McManus, S. (Eds.), Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2023/4. NHS England.

Equality Impact Assessment

Protected characteristics Protected Characteristics - Information	**Describe any considerations or concerns for each group.**	**Describe suggested mitigations to reduce inequalities.**
Age	Older adults may be more sensitive to the hypotensive effects of this medication	A lower starting dose, and a more gradual increase may be warranted
Disability	n/a	
Gender reassignment	n/a	
Marriage and civil partnership	n/a	
Pregnancy & maternity	Prazosin hydrochloride was not teratogenic in rats and rabbits. Although no teratogenic effects were seen in animal testing, the safety of prazosin during pregnancy has not yet been established. It may be used in the management of severe hypertension in pregnancy, only when, in the opinion of the physician, potential benefit outweighs potential risk. Prazosin has been shown to be excreted in small amounts in human milk. Caution should be exercised when Prazosin is administered to nursing mothers	A review of the current knowledge of the safety of this medicine in pregnancy should be undertaken at the time it is considered for prescribing, taking into account other treatment options, as well as the person's comorbidities.
Race	n/a	
Religion and belief	n/a	
Sex	n/a	
Sexual orientation	n/a	
Impact on any other vulnerable groups?	n/a	

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