

Medal Ranking - Benzodiazepines and Z-Drugs For Insomnia

Medal rankings provide prescribers with a quick overview on cost-effective prescribing in areas where the formulary product choices have little therapeutic difference.

Please prescribe the agents offering greatest overall value to the health economy but note that hypnotics should not be routinely prescribed.

Contents

Summary	1
Rationale.....	2
Illustrative cost saving.....	3
Actions	3
References.....	3

Summary

Choice	Cost /week	Recommended Treatment Duration	Recommended dose	Approval
Zolpidem 5mg	£0.41	2 weeks	One at night	
Zolpidem 10mg	£0.43	2 weeks	One at night	
Zopiclone 3.75mg	£0.42	4 weeks	One at night	
Zopiclone 7.5mg	£0.40	4 weeks	One at night	
Zaleplon 5mg	£1.56	2 weeks	One at night	
Zaleplon 10mg	£1.88	2 weeks	One at night	
Temazepam 10mg*	£4.45	4 weeks	One at night	
Temazepam* 10mg/5ml	£8.83	4 weeks	One at night	
Diazepam Clonazepam Clobazam Lormetazepam* Ioprazolam* Flunitrazepam			Non-formulary for this indication - do not use	

Flurazepam~ Nitrazepam 5mg~				
--------------------------------	--	--	--	--

*= Short duration of action ~ = Long duration of action with next day residual effects

- Use first line
- Use second line
- Try to avoid, use third line if needed
- No formal commissioning position, avoid use
- Not commissioned. **Do not use**

[Back to top](#)

Rationale

Guidance (NICE, 2004) states that:

- If a hypnotic is indicated then the drug with the lowest acquisition cost should be used. ‘Z-drugs’ (zaleplon, zolpidem, zopiclone) are non-benzodiazepine hypnotics which act on the benzodiazepine receptor: there is a lack of compelling evidence to distinguish between the ‘Z-drugs’ or the shorter-acting benzodiazepine hypnotics.
- When, after due consideration of the use of non-pharmacological measures, hypnotic drug therapy is considered appropriate for the management of severe insomnia interfering with normal daily life, it should be prescribed for short periods of time only in strict accordance with their licensed indications.
- A switch from one hypnotic drug to another should only occur if a patient experiences an adverse reaction directly related to a specific agent.
- Patients who have not responded to one of these hypnotic drugs should not be prescribed any other.

A large meta-analysis of randomised controlled trials (NPC, 2012) found that out of every **13 people** over the age of 60 taking a hypnotic for at least five consecutive nights, on average:

- Only **one** person will find their sleep improves (an average of 25 minutes longer sleep and one less night-time awakening every other night). The hypnotic made no difference to the sleep pattern of the other 12 people (their sleep would improve, or not improve, just as if they had taken placebo).
- **Two** people will have an adverse event (e.g. hangover drowsiness, confusion, psychomotor effects) due to taking a hypnotic. The hypnotic made no difference to the remaining 11 people.
- And when comparing ‘Z-drugs’ with benzodiazepines, the authors found no differences in outcomes between the two groups.

The elderly whilst benefiting from a small improvement in sleep (BMJ, 2005), due to altered pharmacodynamics, are particularly vulnerable to the adverse effects of hypnotics, resulting in hangover effects e.g. drowsiness and confusion and thus precipitating falls. Benzodiazepines are also **GOLD** associated with an increased risk of, and mortality from, CAP (Obiora , et al., 2012).

Withdrawal of long term hypnotic should not occur suddenly and should take place according to a valid regimen.

[Back to top](#)

Illustrative cost saving

If a 4 week course of the bronze medal ranked temazepam was replaced with a 2 week course of the gold medal zolpidem, in the last financial year the CCG saving could have been £171K.

[Back to top](#)

Actions

1. Ensure that hypnotics are not prescribed indiscriminately or routinely.
2. Ensure that their use is reserved for severe insomnia.
3. That new patients are initiated on the gold medal ranked choice.
4. Ensure that treatment is short term only for the licensed duration usually 2-4 weeks including tapering off from the medication.
5. Ensure a review and removal of the drug occurs after a 2-4 week period.
6. Consider **review** of existing patients who are prescribed hypnotics, but switching is not recommended unless there is an adverse reaction (NICE, 2004).

[Back to top](#)

References

Obiora , E., Hubbard , R., Sanders, R. & Myles , P., 2012. The impact of benzodiazepines on occurrence of pneumonia and mortality from pneumonia: a nested case-control and survival analysis in a population-based cohort.. *Thorax*, p. 202374.

BMJ, 2005. *Sedative hypnotics in older people with insomnia: meta-analysis of risks and benefits*. [Online]

Available at: <http://www.bmj.com/content/331/7526/1169>

[Accessed 18 09 2014].

NICE, 2004. *Guidance on the use of zaleplon, zolpidem and zopiclone for the management of insomnia TA77*. [Online]

Available at: <http://www.nice.org.uk/guidance/ta77/resources/guidance-guidance-on-the-use-of-zaleplon-zolpidem-and-zopiclone-for-the-shortterm-management-of-insomnia-pdf>

[Accessed 18 09 2014].

NPC, 2012. *Merec Bulletin*. [Online]

Available at: http://www.npc.nhs.uk/merec/therap/other/merec_bulletin_vol22_no4.php#HYP

[Accessed 18 09 2014].

[Back to top](#)