

**Prescribing tip for information**

**Deprescribing: Z-drugs**

Part of a series of prescribing tips to support clinicians conducting Structured Medication Reviews (SMRs)

**No major current guideline (1-4) for the treatment of insomnia can conclude that the Z-drugs (zolpidem and zopiclone) are safe and effective for long-term (>3 months) use**



A meta-analysis (5) of RCTs looking at the risks and benefits of hypnotics in older people concluded that the number needed to treat to improve sleep quality was 13 whereas the number needed to harm was 6 - adverse events were found to be more common with hypnotics compared to placebo with adverse cognitive events (memory loss, confusion, disorientation) 4.78 times more likely, adverse psychomotor events (dizziness, loss of balance, falls) 2.61 times more likely and next day fatigue 3.82 times more likely

**NICE** advise that pharmacological therapy should be avoided in the long-term management of insomnia. If a hypnotic is prescribed, they advise using the **lowest effective dose** for the **shortest period possible** – and **not to continue treatment for longer than 2 weeks** (preferably less than one week). Where a need for deprescribing is identified, NICE suggest a **slow taper** as the preferred method to avoid withdrawal symptoms (see right) - with the option of switching Z-drugs to diazepam to aid withdrawal where dependency is problematic e.g. in long-term use. Many of the approaches suggested by NICE come from the [Ashton Manual](#) and the following table (created using both resources) provides examples of deprescribing schedules for Z-drugs.



Table 2: Examples of deprescribing schedules for Z-drugs						
<b>Scenario 1*</b> – withdrawal from zopiclone (no conversion to diazepam) *Daily Diazepam Equivalent as per the Ashton Manual						
	Starting dose	Weeks 1+2	Weeks 3+4	Weeks 5+6	STOP	Comments
<b>Zopiclone</b>	7.5mg	5.625mg	3.75mg	1.875mg	n/a	Ashton notes that withdrawal from 3.75mg zopiclone (2.5mg diazepam) may be difficult as it is the smallest tablet available. However, these can be split to prolong the taper
<b>Daily Diazepam Equivalent*</b>	5mg	3.75mg	2.5mg	1.25mg	n/a	
<b>Scenario 2*</b> – withdrawal from zopiclone (via conversion to diazepam) *Equivalent Diazepam Dose as per the Ashton Manual						
	Starting dose	Week 1	Week 2	Weeks 3+4†	Week 5+6†	Comments
<b>Zopiclone</b>	15mg	7.5mg	0mg	0mg	0mg	Continue reducing diazepam at a rate of 1mg every 2 weeks
<b>Diazepam (at night)</b>	0mg	5mg	10mg	9mg	8mg	† reductions can be done every week depending on ease of withdrawal
<b>Daily Diazepam Equivalent*</b>	10mg	10mg	10mg	9mg	8mg	
*At any stage, if difficulties are encountered due to withdrawal issues, step downs can be temporarily delayed. Under no circumstances should previous higher doses be introduced. If needed, subsequent dose step downs can be smaller and slower						

**Advice for prescribers when deprescribing:**

1. Determine whether it is a suitable time for the patient to stop, and whether they have unresolved symptoms of depression, anxiety, long term insomnia, or any other medical problems. Consider managing these first.
2. A decision should be made regarding whether the person can stop their current drug without **changing to diazepam**.
3. A gradual drug withdrawal schedule (dose tapering) that is flexible should be negotiated. The patient should guide adjustments so that they remain comfortable with the withdrawal
4. During drug withdrawal, reviews should be frequent to detect and manage problems early.
5. If a person fails on their first attempt, they should be encouraged to try again.

**References**

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5. Glass J, Lanctôt KL, Herrmann N, Sproule BA, Busto UE. Sedative hypnotics in older people with insomnia: meta-analysis of risks and benefits. BMJ. 2005;331(7526):1169.

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If you have any suggestions for future topics to cover in our prescribing tips, please contact [Nicola.schaffel@nhs.net](mailto:Nicola.schaffel@nhs.net)