Clinical Practice Guideline for the Pharmacologic Treatment of Chronic Insomnia in Adults: An American Academy of Sleep Medicine Clinical Practice Guideline

RECOMMENDED FOR TREATING SLEEP ONSET INSOMNIA

**ESZOPICLONE**

We suggest that clinicians use eszopiclone as a treatment for sleep onset and sleep maintenance insomnia (versus no treatment) in adults. (Weak)

- **Sleep Latency**: Mean reduction was 14 minutes greater, compared to placebo (95% CI: 3 to 24 minute reduction)
- **Quality of Sleep**: Moderate-to-Large1 improvement in quality of sleep, compared to placebo*

*This recommendation is based on trials of 2 mg and 3 mg doses of eszopiclone.

**RAMELTEON**

We suggest that clinicians use ramelteon as a treatment for sleep onset insomnia (versus no treatment) in adults. (Weak)

- **Sleep Latency**: Mean reduction was 9 minutes greater, compared to placebo (95% CI: 6 to 12 minute reduction)
- **Quality of Sleep**: No improvement2 in quality of sleep, compared to placebo*

*This recommendation is based on trials of 8 mg doses of ramelteon.

**TEMAZEPAM**

We suggest that clinicians use temazepam as a treatment for sleep onset and sleep maintenance insomnia (versus no treatment) in adults. (Weak)

- **Sleep Latency**: Mean reduction was 37 minutes greater, compared to placebo (95% CI: 21 to 53 minute reduction)
- **Quality of Sleep**: Small1 improvement in quality of sleep, compared to placebo*

*This recommendation is based on trials of 15 mg doses of temazepam.

**TRIAZOLAM**

We suggest that clinicians use triazolam as a treatment for sleep onset insomnia (versus no treatment) in adults. (Weak)

- **Sleep Latency**: Mean reduction was 9 minutes greater, compared to placebo (95% CI: 4 to 22 minute reduction)*
- **Quality of Sleep**: Moderate3 improvement in quality of sleep, compared to placebo*

*This recommendation is based on trials of 0.25 mg doses of triazolam.
**QUALITY OF EVIDENCE**
- High
- Moderate
- Low
- Very Low

**BENEFITS VERSUS HARMS**
- **B>h** Benefits outweigh harms
- **B=H** Benefits approximately equal harms
- **H>b** Harms outweigh benefits

**PATIENT VALUES AND PREFERENCES**
- Vast majority of patients would use
- Majority of patients would use
- Majority of patients would not use
- Vast majority of patients would not use

*Based on subjective reporting
1 Based on Cohen d: 0.2 = small effect, 0.5 = moderate effect, 0.8 = large effect
2 Based on a 7-point Likert scale (1 = excellent, 7 = very poor)
3 Based on a 4-point scale (1 = good, 4 = poor)

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### RECOMMENDED FOR TREATING SLEEP ONSET INSOMNIA (CONTINUED)

**ZALEPLON**
We suggest that clinicians use zaleplon as a treatment for sleep onset insomnia (versus no treatment) in adults. (Weak)
- **Sleep Latency**: Mean reduction was 10 minutes greater, compared to placebo (95% CI: 0 to 19 minute reduction)
- **Quality of Sleep**: No improvement in quality of sleep, compared to placebo

*This recommendation is based on trials of 5 mg and 10 mg doses of zaleplon.*

**ZOLPIDEM**
We suggest that clinicians use zolpidem as a treatment for sleep onset and sleep maintenance insomnia (versus no treatment) in adults. (Weak)
- **Sleep Latency**: Mean reduction was 5–12 minutes greater, compared to placebo (95% CI: 0 to 19 minute reduction)
- **Quality of Sleep**: Moderate improvement in quality of sleep, compared to placebo

*This recommendation is based on trials of 10 mg doses of zolpidem.*

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### RECOMMENDED FOR TREATING SLEEP MAINTENANCE INSOMNIA

**DOXEPIN**
We suggest that clinicians use doxepin as a treatment for sleep maintenance insomnia (versus no treatment) in adults. (Weak)
- **Total Sleep Time**: Mean improvement was 26–32 minutes longer, compared to placebo (95% CI: 18 to 40 minute improvement)
- **Wake After Sleep Onset**: Mean reduction was 22–23 minutes greater, compared to placebo (95% CI: 14 to 30 minute reduction)
- **Quality of Sleep**: Small-to-Moderate improvement in quality of sleep, compared to placebo

*This recommendation is based on trials of 3 mg and 6 mg doses of doxepin.*

**ESZOPICLONE**
We suggest that clinicians use eszopiclone as a treatment for sleep onset and sleep maintenance insomnia (versus no treatment) in adults. (Weak)
- **Total Sleep Time**: Mean improvement was 28–57 minutes longer, compared to placebo (95% CI: 18 to 76 minute improvement)
- **Wake After Sleep Onset**: Mean reduction was 10–14 minutes greater, compared to placebo (95% CI: 2 to 18 minute reduction)
- **Quality of Sleep**: Moderate-to-Large improvement in quality of sleep, compared to placebo

*This recommendation is based on trials of 2 mg and 3 mg doses of eszopiclone.*
### RECOMMENDED FOR TREATING SLEEP MAINTENANCE INSOMNIA (CONTINUED)

| **TEMAZEPAM** | We suggest that clinicians use temazepam as a treatment for sleep onset and sleep maintenance insomnia (versus no treatment) in adults. (Weak) 
|---|---|
| **Total Sleep Time:** Mean improvement was 99 minutes longer, compared to placebo (95% CI: 63 to 135 minute improvement) | ⊕⊕⊕⊝ ⊹>⊇  
| **Wake After Sleep Onset:** Not reported | ⊕⊝⊝⊝  
| **Quality of Sleep:** Small¹ improvement in quality of sleep, compared to placebo* | This recommendation is based on trials of 15 mg doses of temazepam. |

<table>
<thead>
<tr>
<th><strong>SUVOREXANT</strong></th>
<th>We suggest that clinicians use suvorexant as a treatment for sleep maintenance insomnia (versus no treatment) in adults. (Weak)</th>
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| **Total Sleep Time:** Mean improvement was 10 minutes longer, compared to placebo (95% CI: 2 to 19 minute improvement) | ⊕⊕⊕⊝ ⊹>⊇  
| **Wake After Sleep Onset:** Mean reduction was 16–28 minutes greater, compared to placebo (95% CI: 7 to 43 minute reduction) | ⊕⊝⊝⊝⊝  
| **Quality of Sleep:** Not reported* | This recommendation is based on trials of 10, 15/20, and 20 mg doses of suvorexant. |

<table>
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<tr>
<th><strong>ZOLPIDEM</strong></th>
<th>We suggest that clinicians use zolpidem as a treatment for sleep onset and sleep maintenance insomnia (versus no treatment) in adults. (Weak)</th>
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</table>
| **Total Sleep Time:** Mean improvement was 29 minutes longer, compared to placebo (95% CI: 11 to 47 minute improvement) | ⊕⊕⊕⊝ ⊹>⊇  
| **Wake After Sleep Onset:** Mean reduction was 25 minutes greater, compared to placebo (95% CI: 18 to 33 minute reduction) | ⊕⊝⊝⊝⊝  
| **Quality of Sleep:** Moderate¹ improvement in quality of sleep, compared to placebo* | This recommendation is based on trials of 10 mg doses of zolpidem. |

### NOT RECOMMENDED FOR TREATING INSOMNIA

We suggest that clinicians not use the following drugs for the treatment of sleep onset or sleep maintenance insomnia (versus no treatment) in adults: Diphenhydramine, Melatonin, Tiagabine, Trazodone, L-tryptophan, Valerian. (Weak)