

Psych Advances Summary

Extended Release Viloxazine Compared with Atomoxetine for Attention Deficit Hyperactivity Disorder

In this real-world study comparing viloxazine extended-release (ER) with atomoxetine for pediatric and adult attention-deficit hyperactivity disorder (ADHD), viloxazine ER demonstrated greater improvement in total ADHD symptoms in both children and adults, and in inattention and hyperactivity/impulsivity. Additionally, viloxazine ER displayed more rapid onset of action and greater tolerability than atomoxetine.

Patients treated with viloxazine ER had greater improvements in the total ADHD-RS-5 mean score from baseline (40.3 ± 10.3 to 13.9 ± 10.2) than those treated with atomoxetine (33.1 ± 12.1) and in inattention ($t = -8.57$; $p < 0.00001$) and in hyperactivity/impulsivity ($t = -9.87$; $p < 0.00001$). Greater improvements in the total AISRS mean score from baseline were also shown in those treated with viloxazine ER (37.3 ± 11.8 to 11.9 ± 9.4) in inattention ($t = -3.50$; $p < 0.004$) and in hyperactivity/impulsivity ($t = -3.90$; $p < 0.02$) than those treated with atomoxetine (28.8 ± 14.9). 89% of children and 87% of adults treated with viloxazine ER reported a positive response by 2 weeks versus 14% and 13% treated with atomoxetine, respectively.

This open-label, unblinded, retrospective study evaluated the efficacy and tolerability of viloxazine ER as an alternative treatment for ADHD in patients who had an inadequate response or experienced adverse effects from atomoxetine consisting of 35 pediatric patients and 15 adult patients at outpatient psychiatric centers. Patients were initially off both viloxazine ER and atomoxetine to set a baseline, with atomoxetine doses prior to the switch ranging between 25 mg to 100 mg, and the transition to viloxazine ER with doses from 100 mg to 600 mg. A washout period of 5 days was instituted between medications.

Viloxazine ER demonstrated a better tolerability profile with 4% of patients discontinuing treatment due to side effects versus 36% discontinuing atomoxetine, and a total of 96% of patients preferring viloxazine ER over atomoxetine. Patients treated with viloxazine ER did not present with the common side effects typically associated with psychostimulants, such as appetite suppression, insomnia, or exacerbation of mood disorders.

Viloxazine ER (Qelbree®) is a serotonin-norepinephrine modulator that is thought to inhibit the reuptake of norepinephrine. Viloxazine ER is approved by the U.S. Food and Drug Administration (FDA) for the treatment of ADHD in adults and pediatric patients 6 years and older.

References

Price MZ, Price RL. Extended-Release Viloxazine Compared with Atomoxetine for Attention Deficit Hyperactivity Disorder. *CNS Drugs*. 2023;37(7):655-660. doi:10.1007/s40263-023-01023-6

QELBREE [package insert]. Rockville, MD: Supernus Pharmaceuticals, Inc.; 2022.

Polling Questions

Question 1

What are the potential advantages of viloxazine ER for the treatment of ADHD in adults and pediatric patients aged 6 years and older?

- A) Improvements in ADHD symptoms by 1 week and 2 weeks in children and adults, respectively
- B) No required adjustment for CYP2D6
- C) Ease of administration with the ability to open capsules
- D) All of the above

Correct Answer: *D) All of the above. Viloxazine ER provides all 3 advantages including improvement in ADHD symptoms by 1 week and 2 weeks in children and adults, respectively, no required adjustment for CYP2D6, and ease of administration with the ability to open capsules.*

Your score: 1/2

Nice job!

[CTA: Next Question]

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Question 2

What factor(s) may cause clinicians to consider prescribing nonstimulants either as monotherapy or in combination over psychostimulants? [Select all that apply]

- A) Gastrointestinal upset
- B) Risk of abuse and side effects (eg, appetite suppression, wear off)
- C) Potential exacerbation of mood, anxiety, and tics
- D) None

Correct Answer: *B) Risk of abuse and side effects (eg, appetite suppression, wear off) and C) Potential exacerbation of mood, anxiety, and tics. Due to risks of abuse and side effects as well as potential exacerbation of mood, anxiety, and tics, nonstimulant medications may help mitigate such side effects and concerns surrounding psychostimulants.*

Your score: 2/2

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