What role for vortioxetine?

**Question 1**
Mr JH, aged 37 years, has been diagnosed with moderate depression. His symptoms have not remitted despite first-line treatment with citalopram. Approximately what proportion of patients do not respond satisfactorily to their first antidepressant?

- a. 13%
- b. 20%
- c. 33%
- d. 50%
- e. 66%

**Answer:** c. Approximately one third of patients treated for depression do not respond satisfactorily to first-line antidepressant pharmacotherapy. There is some evidence to show that approximately 50% of patients who do not respond to their first treatment are likely to respond to the second antidepressant (irrespective of whether it comes from the same class or a different one).

**Question 2**
Mr JH discusses alternative treatments with his GP. During the discussion Mr JH asks about vortioxetine. On which receptor system is vortioxetine thought to exert its antidepressant effect?

- a. Dopaminergic
- b. Melatonergic
- c. Histaminergic
- d. Serotonergic
- e. Noradrenergic

**Answer:** d. Vortioxetine is from a new class of psychotropic drugs, the bis-aryl-sulfanyl amines, and acts on the serotonin (5-HT) system.

**Question 3**
In a meta-analysis of 10 placebo-controlled studies evaluating vortioxetine in patients with moderate or severe depression, compared with placebo what were the numbers-needed-to-treat to achieve a response (i.e. ≥50% reduction from baseline in the Montgomery-Asberg Depression Rating Scale [MADRS] or the Hamilton Depression Rating Scale [HAM-D] score) or remission (i.e. reduction from baseline in MADRS score ≤10, 17-item HAM-D score ≤7, or 24-item HAM-D score ≤10) for vortioxetine?

- a. 7 and 13
- b. 9 and 18
- c. 10 and 21
- d. 11 and 18
- e. 12 and 24

**Answer:** b. Response and remission rates were higher with vortioxetine than placebo (odds ratio 1.7, 95% CI 1.3 to 2.1; and 1.4, 95% CI 1.1 to 1.8, respectively), with numbers-needed-to-treat of 9 and 18, respectively.

---

**Complete this module online**
This CME/CPD module is available for completion online via BMJ Learning (learning.bmj.com) by subscribers to the online version of DTB. If you would like to add online access to your current subscription, please contact our Customer Services team on +44 (0)20 7383 6270 or email support@bmjgroup.com. As well as allowing you to complete CME/CPD modules online, an online subscription also gives you unlimited access to the entire DTB archive back to volume 1, issue 1.

For further information, please visit www.dtb.bmj.com
What role for \( \text{vortioxetine} \)?

**Question 4**

Nausea is the most common cause of patients stopping treatment with vortioxetine. How long does nausea usually last during treatment with vortioxetine?

- a. Up to 1 week
- b. 1–2 weeks
- c. 2–3 weeks
- d. 3–4 weeks
- e. Up to 8 weeks

**Answer:** b. The most common adverse events with vortioxetine are nausea and headache. Nausea usually lasts 1–2 weeks, occurs more often in women, and is the adverse event that most commonly causes patients to stop taking vortioxetine.

**Question 5**

Which one of the following statements about vortioxetine is correct?

- a. The licensed dose range for vortioxetine is 10–40mg daily
- b. Vortioxetine is contraindicated in patients taking strong CYP2D6 inhibitors
- c. The National Institute for Health and Care Excellence recommends vortioxetine for use in patients who have responded inadequately to three antidepressants during the initial episode of depression
- d. Efficacy of vortioxetine has been demonstrated in all dosage groups across all studies
- e. Vortioxetine can be stopped abruptly as it has a long half-life

**Answer:** e. Treatment can be stopped abruptly as vortioxetine has a long half-life (66 hours) and there is no evidence of clinically important discontinuation symptoms.