

# DTB CME/CPD Answers



Drug and Therapeutics Bulletin

## 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.  $\geq 50\%$  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  $\leq 10$ , 17-item HAM-D score  $\leq 7$ , or 24-item HAM-D score  $\leq 10$ ) 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.

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### 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.