

## CPD questionnaire • January/February

### Psilocybin: revealing the enigmas of a revolutionary fungus

1. Which receptor is primarily responsible for psilocybin's psychoactive effects?

- a 5-HT1A
- b 5-HT2A
- c Dopamine D2
- d NMDA

2. What was a key finding of Dr. Nico Dosenbach's study on psilocybin and the brain?

- a Psilocybin activates the default mode network (DMN)
- b Psilocybin only affects serotonin levels in the brain
- c Psilocybin desynchronises brain activity and boosts plasticity
- d Psilocybin permanently alters the brain's structure

3. What is a significant risk associated with psilocybin use, particularly when not supervised?

- a Serotonin syndrome
- b Addiction
- c Permanent psychosis
- d Cardiac arrest

4. What is the mechanism behind psilocybin's potential to treat depression, according to research?

- a Increasing dopamine release in the prefrontal cortex
- b Enhancing GABAergic transmission
- c Reducing activity in the default mode network (DMN)
- d Promoting the synthesis of norepinephrine

### The adequacy and safety of anticoagulation therapy with warfarin at the medical outpatient clinic of an academic hospital

5. What is the most feared consequence of poorly managed anticoagulant therapy?

- a Dizziness
- b Nausea and vomiting
- c Headache
- d Bleeding

6. The commonest comorbidity in the study was.....

- a Hypertension
- b Malignancy
- c Chronic liver disease
- d Dyslipidaemia

7. What test can be used to monitor warfarin?

- a Full blood count
- b Rosendaal method of linear interpolation
- c Time in therapeutic range
- d International normalised ratio

8. The commonest thrombo-embolic complication the patients on warfarin anticoagulant therapy experienced was:

- a Recurrence of DVT
- b Recurrence of both DVT and PE
- c Cerebrovascular accidents
- d Recurrence of PE

### Beyond metformin: the expanding landscape of Type 2 diabetes treatment

9. What is the main concern with counterfeit semaglutide products in South Africa?

- a They have been approved by health authorities but are expensive
- b They lack clinical evidence for diabetes management
- c They pose serious safety risks due to unknown formulations
- d They cause excessive weight gain and hypoglycaemia

10. Which of the following drug classes works by inhibiting carbohydrate digestion and absorption in the intestines?

- a Thiazolidinediones
- b Alpha-glucosidase inhibitors
- c Meglitinides
- d DPP-4 inhibitors

11. Which of the following drug classes enhances insulin secretion by inhibiting the enzyme responsible for degrading GLP-1 and GIP?

- a DPP-4 inhibitors
- b SGLT-2 inhibitors
- c Thiazolidinediones
- d Alpha-glucosidase inhibitors

12. What is the primary mechanism of action of metformin in managing Type 2 Diabetes Mellitus?

- a Stimulating pancreatic  $\beta$ -cell insulin secretion
- b Reducing hepatic glucose production and increasing insulin sensitivity
- c Blocking the sodium-glucose cotransporter in the kidneys
- d Activating glucagon-like peptide-1 (GLP-1) receptors

### A review on holistic and pharmacological management of insomnia

13. What is the first-line therapy option for insomnia according to clinical guidelines?

- a Over-the-counter antihistamines
- b Benzodiazepine receptor agonists
- c Cognitive behavioural therapy for insomnia (CBT-I)
- d Melatonin supplements

**14. Which melatonin agonist is indicated for the treatment of sleep-onset insomnia?**

- a Ramelteon
- b Diphenhydramine
- c Zolpidem
- d Tasimelteon

**15. Which of the following options describes the mechanism of action of benzodiazepines in treating insomnia?**

- a Binding to histamine receptors
- b Enhancing GABA affinity for its binding site
- c Blocking orexin receptors
- d Stimulating melatonin receptors

**16. Which of the following is a common side effect of antihistamines used to treat insomnia?**

- a Dry mouth
- b Weight gain
- c Diarrhoea
- d Increased appetite

The answers for these CPD questions will be in the upcoming issue of the SAPJ.  
This activity can contribute towards your CPD compliance.

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### CPD answers • November/December 2024

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1. b    2. c    3. d    4. b    5. a    6. c    7. b    8. b    9. c    10. b    11. b    12. c    13. b