

Clinical pharmacology SELF-ASSESSMENT QUESTIONNAIRE

SAQs – and answers – are now ONLINE for RCP Fellows and Collegiate Members

The SAQs printed in the CME section are best answered online to achieve External CPD credits

The answering process

- To access the questions, log on to the Fellows and Members area <http://www.rcplondon.ac.uk/Members/SAQ> (those who have not yet registered will be automatically directed to the registration pages)
- Select: **Online learning SAQ**
- At the top of the SAQ page select the current CME question paper
- Answer all 10 questions in any order, by indicating true or false
- Check your answers and change them if you wish to
- Click on **Submit for final marking**.
(Note – after submitting your answers NO changes are possible)

The marking process

- You must submit the answers before the closing date shown at the top of the screen
- Answers will be marked automatically on the date displayed for that paper
- You can find your marks with explanations of the answers on the CME page under **My past CME papers**

Registering your External CPD credits

A pass mark of 80% allows you to claim 2 External CPD credits. Thus by answering the SAQs in each issue of *Clinical Medicine* you can achieve 12 external credits in one year.

To claim your credits:

- Online registrants: You should record your credits using the online diary system. All Clinical Medicine SAQs are listed under External Approved CPD
- Manual registrants: You can record your credits using your paper diary sheets. Manual registrants are required to keep evidence of their participation in the SAQ and the score attained.

Please note that past papers will be stored for 12 months.

For those who wish to submit their answers on paper, please see guidance at end of these SAQs

- A 90-year-old 50-kg woman with type 2 diabetes and congestive heart failure becomes increasingly confused, with diarrhoea, anorexia, nausea and vomiting. Drug therapy includes furosemide 120 mg/day, spironolactone 25 mg/day, ramipril 5 mg/day, digoxin 62.5 µg/day, glibenclamide 20 mg/day and metformin 500 mg three times a day. She is in sinus rhythm. Serum creatinine is 140 µmol/l, urea 45 µmol/l, potassium 3.1 mmol/l, serum digoxin 1.3 nmol/l (usual target range 1–2 nmol/l) and plasma glucose 22 mmol/l. Which of the following statements are true and which false?

 - Digoxin toxicity is highly likely
 - The dose of metformin should be increased
 - Hyperosmolar non-ketotic hyperglycaemia is likely
 - She needs short-term potassium supplementation
 - Long-term digoxin should be continued after this acute episode
- A 25-year-old woman with thyrotoxicosis develops atrial fibrillation with a ventricular rate of 150/min. She has a history of generalised tonic-clonic seizures but has been seizure-free with phenytoin 200 mg/day. Serum phenytoin is 30 µmol/l (usual target range 40–80 µmol/l), serum creatinine 75 µmol/l and serum albumin 30 g/l. Which of the following statements are true and which false?

 - She should be given a small dose of propranolol to slow her heart rate

CME Clinical pharmacology SAQs

- (b) The dose of phenytoin should be increased
- (c) She should be given a large dose of carbimazole
- (d) The first dose of warfarin should be 5 mg
- (e) If digoxin is used, she will need a low dose because of hypoalbuminaemia
- 3 A clinical trial was undertaken of the effects of reducing cholesterol on outcome in patients with ischaemic heart disease. Which of the following would be appropriate surrogate end-points for this trial and which would not?**
- (a) Sudden cardiac death
- (b) Non-fatal myocardial infarction
- (c) Plasma low-density lipoprotein cholesterol
- (d) Stroke
- (e) Admission to hospital for angina
- 4 A 55-year-old man is admitted to hospital with bone pain due to metastases from lung cancer. He is incorrectly given morphine sulphate 10 mg (Sevredol) instead of morphine sulphate SR (MST) 10 mg. Which of the following statements are true and which false?**
- (a) The commonest cause of occurrences such as this is dispensing error
- (b) The most likely cause of this sort of error is termed a mistake
- (c) The appropriate use of the trade-name MST is recommended to avoid such errors
- (d) A lapse in the prescribing or administration could cause such an error
- (e) Errors in the use of a different formulation such as this are rarely fatal
- 5 A 27-year-old staff nurse administers intravenously a dose of amoxicillin syrup, intended for nasogastric administration, because he confuses the inlet ports. Which of the following statements are true and which false?**
- (a) The staff nurse should be dismissed
- (b) Such errors might be eliminated by redesigning the inlet ports for nasogastric tubes and intravenous lines
- (c) Education for trainee nurses is unlikely to prevent or substantially reduce the rate of such errors
- (d) Better labelling of the syringe containing amoxicillin syrup would stop most such errors
- (e) The error constitutes a mistake because the staff nurse did not know which port to use
- 6 An 86-year-old woman becomes dehydrated and hypotensive when given Lasix® (furosemide) 40 mg daily in error for Losec® (omeprazole) 40 mg daily. The prescription chart specified 'Write approved name'. Which of the following statements are true and which false?**
- (a) Failure to write the drug by the approved name constitutes a violation
- (b) The pharmacist is likely to have made a mistake in dispensing Lasix® in place of Losec®
- (c) The patient should have realised the error
- (d) Healthcare staff should not be disciplined for violations
- (e) Double-checking before administration will prevent such errors
- 7 A 48-year-old man with chronic asthma taking long-term inhaled beta-2 agonist and inhaled corticosteroid develops worsening bronchospasm. His general practitioner adds prednisolone 40 mg daily. Five days later he presents to the accident and emergency department. As he has not previously been treated with oral theophylline he is given a loading dose infusion of aminophylline and also ciprofloxacin for a presumed upper respiratory tract infection. The following day he begins to vomit and is found to**
- have a serum potassium of 2.8 mmol/l but no ECG changes suggestive of hypokalaemia. Which of the following statements are true and which false?**
- (a) Hypokalaemia may occur following nebulised beta-2 agonist
- (b) Aminophylline may have contributed to the development of hypokalaemia
- (c) Ciprofloxacin may inhibit the metabolism of aminophylline
- (d) Ciprofloxacin may induce the metabolism of aminophylline
- (e) The patient should be given one litre of normal saline with 80 mmol of potassium added over the next two hours
- 8 A 76-year-old woman with long-standing ischaemic heart disease is admitted to hospital with congestive heart failure and frequent paroxysms of atrial fibrillation. She is already taking furosemide, ramipril, carvedilol, atorvastatin, aspirin and fluoxetine. She is treated with amiodarone and warfarin. Which of the following statements are true and which false?**
- (a) Carvedilol and amiodarone may interact to cause bradycardia
- (b) The response to warfarin may be enhanced in some patients taking atorvastatin
- (c) Low-dose aspirin displaces warfarin from its binding sites, enhancing its effect
- (d) Furosemide will enhance the elimination of amiodarone
- (e) Fluoxetine will markedly reduce the metabolism of amiodarone
- 9 A patient with cystic fibrosis develops a maculopapular eruption after receiving intravenous piperacillin and gentamicin for seven days. The patient improves after stopping the antibiotics, but presents again six weeks later with another respiratory infection. Because of the history of rash attributed to piperacillin, the patient is treated with**

ceftazidime alone. However, this also results in the development of a rash, this time after only one dose. Which of the following statements are true and which false?

- (a) Resolution of symptoms on dechallenge is indicative of a drug aetiology
- (b) Occurrence of the reaction much sooner after starting the second antibiotic than on primary exposure is indicative of an immune-mediated adverse reaction
- (c) A negative skin test would exclude the drugs as the cause of symptoms
- (d) Lack of previous reports of cross-reactivity indicates that the drugs were unlikely to be responsible for the adverse effect
- (e) Desensitisation is a reasonable management option in this patient

10 Which of the following statements regarding adverse drug reaction (ADR) reporting by the yellow card system in the UK are true and which false?

- (a) ADR reporting is compulsory
- (b) All serious ADRs should be reported
- (c) ADR reporting provides good ADR incidence data
- (d) Doctors, dentists, coroners, pharmacists and nurses are allowed to report on yellow cards
- (e) Yellow card reports can be used to establish definitively that a drug has caused a particular reaction

Guidelines on completing the answer sheet for those who wish to submit their answers on paper

A loose leaf answer sheet is enclosed, which will be marked electronically at the Royal College of Physicians. **Answer sheets must be returned by 21 March 2005** to: CME Department (SAQs), Royal College of Physicians, 11 St Andrews Place, London NW1 4LE.

Overseas members only can fax their answers to 020 7487 4156

Correct answers will be published in the next issue of *Clinical Medicine*.

*Further details on CME are available from the CME department at the Royal College of Physicians (address above or telephone 020 7935 1174 extension 306 or 309).

Your completed answer sheet will be scanned to enable a quick and accurate analysis of results. To aid this process, please keep the following in mind:

- 1 Please print your GMC Number firmly and neatly
- 2 Only write in allocated areas on the form
- 3 Only use pens with black or dark blue ink
- 4 For optimum accuracy, ensure printed numbers avoid contact with box edges
- 5 Please shade circles like this: ● Not like this: ☉
- 6 Please mark any mistakes made like this: ✖
- 7 Please do not mark any of the black squares on the corners of each page
- 8 Please fill in your full name and address on the back of the answer sheet in the space provided; this will be used to mail the form back to you after marking.

CME Infection SAQs

Answers to the CME SAQs published in *Clinical Medicine* November/December 2004

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
a) F	a) F	a) T	a) F	a) F	a) T	a) T	a) F	a) T	a) T
b) F	b) F	b) F	b) F	b) F	b) F	b) T	b) F	b) F	b) T
c) F	c) T	c) F	c) F	c) F	c) F	c) T	c) T	c) F	c) F
d) T	d) T	d) F	d) T	d) F	d) T	d) F	d) F	d) T	d) T
e) T	e) F	e) F	e) F	e) F	e) F	e) T	e) T	e) T	e) F