

# 國立成功大學

## 113學年度碩士班招生考試試題

編 號：264

系 所：臨床藥學與藥物科技研究所

科 目：調劑學

日 期：0202

節 次：第 1 節

備 註：不可使用計算機

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

一、選擇題 (單選題 10%，每題 2.5%)

1. About antineoplastic drugs, which of the following is incorrect?
  - (A) Paclitaxel should not be stored and administered in a polyvinyl chloride (PVC) container to avoid leaching of the plasticizer diethylexyl- phthalate (DEHP).
  - (B) The management for extravasation of doxorubicin is to stop infusion immediately, remove needle/cannula, and warm compresses.
  - (C) Standard infusion solution for taxotere is 5% glucose water.
  - (D) When cisplatin is used with paclitaxel, paclitaxel should be given first.
  - (E) The dose of Etoposide needs to be adjusted in patients with a serum creatinine clearance  $<50$  ml/min.
  
2. About the treatment of sepsis and septic shock in adults, which of the following is incorrect?
  - (A) IV broad-spectrum antibiotic within 1 hour of diagnosis of sepsis and septic shock against likely bacterial/fungal pathogens is needed.
  - (B) Initiate vasopressor therapy to maintain MAP  $\geq 65$  mm Hg is needed.
  - (C) Use insulin dosing protocol when two consecutive blood glucose levels are  $>180$  mg/dL (10 mmol/L), targeting an upper blood glucose  $\leq 180$  mg/dL (10 mmol/L).
  - (D) Stress ulcer prophylaxis, either proton pump inhibitors or H2 receptor blockers, should be given to each patient.
  - (E) Empiric antimicrobial regimens in hospital-acquired sepsis is ceftriaxone or ciprofloxacin/levofloxacin.
  
3. About the treatment of COPD, which of the following is incorrect?
  - (A) For patients with asthma and overlapping COPD symptoms or with blood eosinophils  $\geq 300$  cells/ $\mu$ L, considering the use of ICS+LABA as initial treatment may be appropriate
  - (B) While inhaling the Ultibro Breezhaler (indacaterol/ glycopyrronium), users can hear the sound of the capsule rotating but there won't be any distinctive taste.
  - (C) Spiriva Respimat (tiotropium) may worsen the symptoms of prostatic hyperplasia and/or bladder neck obstruction.
  - (D) Trelegy Ellipta inhaler (Fluticasone/Umeclidinium/Vilanterol) should not be used for acute exacerbations of COPD or asthma, as it may increase the risk of mortality.
  - (E) Foster MDI (Beclomethasone/ Formoterol) should be stored in the pharmacy under refrigeration (2-8 °C), but after dispensing, it can be stored at temperatures  $< 25$  °C for up to 3 months.
  
4. According to the guidance of American College of Clinical Pharmacy for Patient Care Process for Comprehensive Medication Management, please arrange the following options in order
  - (A) ABDEC (B) BACED (C) BECAD (D) ECABA (E) CDEAB
  - A. The clinical pharmacist implements the care plan in collaboration with the healthcare team and the patient or caregiver

- B. The clinical pharmacist assures the collection of the necessary subjective and objective information about the patient and is responsible for analyzing information in order to understand the relevant medical/medication history and clinical status of the patient.
- C. The clinical pharmacist develops an individualized, evidence-based care plan in collaboration with the healthcare team and the patient or caregiver.
- D. The clinical pharmacist provides ongoing follow-up and monitoring to optimize the care plan and identify and resolve medication therapy problems, with the goal of optimizing medication use and improving care.
- E. The clinical pharmacist assesses the information collected and formulates a problem list consisting of the patient's active medical problems and medication therapy problems in order to prioritize recommendations to optimize medication use and achieve clinical goal.

二、簡答題 (90%)

1. The 2023 American Geriatrics Society Beers Criteria® lists Proton-Pump Inhibitors (PPIs) as potentially inappropriate medications for older adults. Explain the rationale behind this classification and provide recommendations for their use in clinical practice. (10%)
2. Medication errors, often due to Look-Alike, Sound-Alike (LASA) medicines, are a significant global cause of patient harm. The World Health Organization (WHO) categorizes main actions to prevent or minimize LASA errors into four parts: actions by products, patients, health and care workers, and health care institutions, facilities, and countries. Describe the specific actions that can be taken in each of these categories to address LASA medication errors." (15%)
3. Healthcare workers involved in handling antineoplastic hazardous drugs or waste face significant health risks. What processes or management strategies should be implemented during the dispensing of these drugs to ensure safety? (10%)
4. Hypertension, a leading modifiable cause of cardiovascular disease and all-cause mortality globally, requires clear definition and grading. Describe the criteria for defining and grading hypertension, and discuss the pharmacological treatments available, taking into account specific conditions such as chronic kidney disease, aging, or gender-specific considerations for women. (15%)
5. A 53-year-old female, her height is 154 cm, and the weight is 63 kg. The past history were hypertension, CAD, Type 1 DM, and atherosclerosis. She had a regular visit to the cardiology department, and the usual medications she received were aspirin 100 mg QD, atorvastatin 10 mg QD, hydrochlorothiazide 12.5 mg QD, NPH insulin 30 U AM & 15 U PM. Two weeks ago (12/3), because of poor blood pressure control, a lisinopril 10 mg QD treatment was prescribed and the dose of hydrochlorothiazide was increased from 12.5 mg QD to 25 mg QD. This time (12/20), she complaints dizziness, oliguria, and ankle edema for two days, the physical examination and kidney ultrasound found edema both legs and renal artery stenosis. The diagnosis this time

is AKI. Please answer the following questions: What are the risk factors for AKI of this patients? What medications need modification based on the current condition of this patient? And how to modify? (20%)

Date	BP (mmHg)	BUN (mg/dL)	CRE (mg/dL)
12/20	146/88	41	2.3
12/3	163/95	26	1.6

6. Please explain the risks and mechanisms of alcohol-dependent patients taking acetaminophen. If a doctor prescribes acetaminophen 500 mg Q6H to an alcohol-dependent patient with sever hepatitis, what recommendations would you have? (10%)
7. About Latent Tuberculosis Infection (LTBI): Who is recommended to screen for LTBI? According to the Taiwan Guidelines for Tuberculosis Diagnosis & Treatment, what are the preferred initial treatment options for LTBI? Please provide the five most common side effects of anti-TB medications and the corresponding culprit drugs, and (10%)