

MKSAP Questions

February 3rd 2026

1. A 28-year-old woman presents to your clinic for evaluation of infertility. She and her partner have been attempting conception for 14 months without success. Her menstrual cycles occur every 45-60 days. She has a BMI of 32 kg/m² and notes increased facial hair growth over the past 3 years. Physical examination reveals terminal hair on the chin and upper lip. Her partner's semen analysis is normal. Transvaginal ultrasound shows bilateral polycystic ovarian morphology. Serum testosterone is elevated at 75 ng/dL (normal <70 ng/dL), and TSH is normal.

Which of the following is the most appropriate first-line pharmacological treatment for ovulation induction in this patient?

- A. Clomiphene citrate
- B. Letrozole
- C. Metformin
- D. Gonadotropins
- E. Laparoscopic ovarian drilling

2. A 30-year-old woman with PCOS presents for management of irregular menses and hirsutism. She does not desire pregnancy at this time. Her BMI is 28 kg/m², blood pressure is 125/78 mmHg, and she has moderate facial hirsutism. Fasting glucose is 92 mg/dL, and lipid panel shows total cholesterol 210 mg/dL, LDL 135 mg/dL, HDL 42 mg/dL, and triglycerides 165 mg/dL.

Which of the following represents the most appropriate first-line pharmacological therapy for this patient's menstrual irregularities and hyperandrogenic symptoms?

- A. Metformin monotherapy
- B. Spironolactone monotherapy
- C. Combined oral contraceptive
- D. Progestin-only pill
- E. Letrozole

3. A 45-year-old man with obesity (BMI 32 kg/m²) and type 2 diabetes presents for weight management. He has tried lifestyle modifications including dietary changes and increased physical activity for the past 6 months with a registered dietitian, achieving only 2% weight loss. His hemoglobin A1c is 8.1% on metformin 1000 mg twice daily. He has no history of pancreatitis, medullary thyroid carcinoma, or multiple endocrine neoplasia type 2.

Which of the following pharmacologic agents would be expected to produce the greatest weight loss in this patient?

- A. Orlistat
- B. Phentermine-topiramate
- C. Naltrexone-bupropion
- D. Liraglutide
- E. Tirzepatide

4. A 52-year-old woman presents for management of obesity. Her BMI is 34 kg/m^2 , blood pressure is 148/92 mmHg, fasting glucose is 118 mg/dL, and hemoglobin A1c is 6.3%. She has tried multiple commercial weight loss programs over the past 5 years with initial success but has regained the weight each time. She is motivated to lose weight to improve her health. Physical examination reveals a waist circumference of 38 inches. She takes lisinopril for hypertension and atorvastatin for dyslipidemia.

Which of the following represents the most appropriate initial weight loss goal for this patient?

- A. 3% weight loss over 6 months
- B. 5-10% weight loss over 6 months
- C. 15% weight loss over 6 months
- D. Achieve BMI $<25 \text{ kg/m}^2$ within 12 months
- E. 20 kg weight loss over 6 months

5. A 42-year-old woman of Southeast Asian ancestry presents for health maintenance. Her BMI is 26 kg/m^2 , waist circumference is 33 inches, blood pressure is 138/86 mmHg, fasting glucose is 112 mg/dL, and lipid panel shows LDL 145 mg/dL, HDL 38 mg/dL, and triglycerides 185 mg/dL. She has no other medical conditions and takes no medications.

Which of the following is the most appropriate recommendation regarding antiobesity medication for this patient?

- A. Antiobesity medication is not indicated because her BMI is $<27 \text{ kg/m}^2$
- B. Antiobesity medication should be considered given her ancestry and metabolic comorbidities
- C. Antiobesity medication should only be initiated if BMI increases to $\geq 30 \text{ kg/m}^2$
- D. Lifestyle modification alone is sufficient; pharmacotherapy is premature
- E. Antiobesity medication is contraindicated in patients with prediabetes