#### **ASSESSMENT OF 15 MCQS**

## FPSC NO: 91 MCQS ON OSTEOPOROSIS: A GROWING PRIMARY CARE CONCERN 2021 Submission DEADLINE: 25 May 2021, 12 NOON

#### **INSTRUCTIONS**

- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (www.cfps2online.org)
- Attempt ALL the following multiple choice questions.
- There is only ONE correct answer for each question.
- The answers should be submitted to the College of Family Physicians Singapore via the College Online Portal before the submission deadline stated above.
- · There will be NO further extension of the submission deadline

## I. Which of these patients should not be screened for osteoporosis?

- A. A postmenopausal woman with type I or type 2 diabetes
- B. A postmenopausal women with a history or rheumatoid arthritis
- C. A postmenopausal women with a current history of primary hyperparathyroidism
- D. 45-year-old postmenopausal women with the cessation of menses since 35 years old due to premature menopause
- E. A premenopausal woman who has hyperthyroidism and no fracture history

## 2. Which of these are not fields that are found when calculating the FRAX score?

- A. Alcohol intake
- B. Smoking history
- C. Lack of exercise
- D. Hip fracture in a parent
- E. Secondary osteoporosis

# 3. Which of these statements are true with regards to interpreting the bone mineral density (BMD) report of a 55-year-old postmenopausal female?

- A. T-score of spine is -0.9, total hip -2.0, neck of femur -2.6 this patient has osteopenia
- B. T-score of spine is -0.9, total hip 0.9, neck of femur -1.0- this patient has normal bone mineral density
- C. T-score of spine is -0.9, total hip -2.4, neck of femur -2.0 this patient has osteoporosis
- D. US heel shows a T-score of -2.8 this patient has osteoporosis
- E. Two regions of interest in a BMD assessment of the hip and spine need to be taken into account when interpreting it

#### 4. Which of these statements are false?

- A. FRAX score takes into account only current alcohol and smoking habits
- B. OSTA helps to identify patients who are at low, moderate and high risk of osteoporosis

- C. Low risk of osteoporosis connotes a three percent risk of osteoporosis
- D. Both low and moderate risk of osteoporosis means you can defer investigating further with BMD
- E. Secondary causes of postmenopausal osteoporosis include endocrine causes such as hyperparathyroidism, premature menopause and hyperthyroidism

#### 5. Which of these is not a risk factor for osteoporosis?

- A. Prolonged immobilisation
- B. Early menopause
- C. Family history of osteoporosis
- D. Height loss of > 2cm
- E. BMI 22.5 kg/m<sup>2</sup>

#### 6. Thresholds for Intervention based on FRAX can be

- A. Age-dependent
- B. Weight-dependent
- C. Height-dependent
- D. Fixed, at ten percent for Major Osteoporotic Fractures and three percent for Hip Fractures
- E. Hybrid, with choice of age-dependent curves and fixed thresholds groups for the same age groups

### 7. The risk of fracture with Type 2 Diabetes Mellitus is equivalent to that of

- A. Age 65 years
- B. Rheumatoid arthritis
- C. Prednisolone 5 mg daily
- D. Hyperthyroidism
- E. Smoking

# 8. A 75-year-old patient who has suffered two fragility fractures of the spine seven months ago, with DXA BMD T-score -3.1 in the spine and -3.5 in the hip is classified as:

- A. Low-risk
- B. Low-medium risk
- C. High-risk

- D. High-Very high risk
- E. Very High-risk

## 9. The patient in Question 10 should be offered, as first line therapy, if there are no contraindications:

- A. Menopausal hormone therapy HRT or Tibolone
- B. A SERM such as Raloxifene or Bazedoxifene
- C. Oral bisphosphonates such as Alendronate or Risedronate
- D. Anabolic therapy such as Teriparatide or if not feasible, SC Denosumab or IV Zoledronate
- E. Vertebroplasty or kyphoplasty

#### I 0. A 55-year-old female patient with T2DM has DXA T-scores of -2.2 in the spine and -1.0 in the femoral neck. Which of the following statements is true?

- A. If there are no fragility fractures, she has Osteopaenia in the spine and normal BMD in the hip
- B. If there are no fragility fractures, she has Osteopaenia and needs calculation of FRAX scores to decide on whether to treat pharmacologically
- C. If there are no fragility fractures, she has Osteoporosis on DXA and requires pharmacological treatment
- D. If she has a fragility fracture, and her FRAX scores are low, she does not require pharmacological treatment
- E. If she has a fragility fracture of the spine, she can be offered Raloxifene as she is young and Raloxifene is good for improving spinal BMD and reducing spinal fractures

## II. What are the most important goals for osteoporosis and fragility fracture patients?

- A. Affordable bone mineral density (BMD) to allow early diagnosis and monitor treatment response
- B. Recovery of pre-fracture functional level and reduction of fracture risk
- C. Affordable effective therapy so that every patient can be treated
- D. Empower patient through health literacy improvement and self-management training
- E. Accessible and convenient care provided by a family physician

#### 12. The most appropriate target for the treatto-target (T2T) strategy for osteoporosis is:

- A. Bone turnover markers
- B. Fracture Risk Assessment Tool
- C. Bone Mineral Density
- D. Trabecular bone score
- E. Bone strength measurement

### 13. Treatment with bisphosphonates may be interrupted after 3-5 years,

- A. In patients who has a previous hip fracture, but the BMD Neck of Femur T-score has improved to greater than -2.0
- B. In patients who has previous vertebra fracture but the BMD L2-4 T-score has improved to greater than -2.0
- C. In patients who are fearful of bisphosphonate side effects
- D. In patients in whom fracture risk is low or lowered because of the treatment itself
- E. In a patient who requests for a drug holiday

## 14. Patients who are at high risk of fracture can safely stop denosumab therapy if

- A. They have prior exposure to bisphosphonate therapy
- B. They continue alternative osteoporosis therapy
- C. They have low bone turnover markers
- D. They do not have fractures before
- E. They are adherent to lifestyle measures for falls prevention

#### 15. Patient can stop osteoporosis treatment when their BMD T score is:

- A. -1.0
- B. -1.5
- C. -2.0
- D. -2.5
- Associated with no increase in the risk of fracture for the same age population