

ASSESSMENT OF 15 MCQS

FPSC NO : 120

**MCQS ON COMBATting COMMON RESPIRATORY ILLNESSES:
VACCINATION STRATEGIES IN SINGAPORE
SUBMISSION DEADLINE: 10 September 2024, 12 NOON**

INSTRUCTIONS

- To submit answers to the following multiple choice questions, you are required to log on to the College Online Portal (<https://lms.wizlearn.com/cfps/>)
- Please contact sfp@cfps.org.sg if you have not received an email on the new LMS account.
- 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

1. Regarding RSV infections, which statement is FALSE?

- The immune response to a primary RSV infection is long-lasting and usually efficacious in preventing a second infection
- By the first year of life, the majority of children have already been infected by RSV
- Children in developing countries have a higher rate of RSV-associated mortality than those in developed countries
- Among the elderly, the morbidity and mortality of RSV infections is similar to or even worse than non-pandemic influenza infections
- In adults, the diagnostic sensitivity of upper respiratory swab PCR tests tends to be less than in children

2. Which of the following factors is NOT associated with increased severity of RSV infection?

- Prematurity in an infant
- A history of well-controlled asthma
- Diabetes mellitus with a HbA1c of 7%
- A history of pulmonary hypertension
- A previous RSV infection two years ago

3. Which statement is TRUE?

- RSV is highly infectious, requiring airborne precautions in the acute hospital setting
- In Singapore, RSV infections are more common during the monsoon seasons
- In most healthy people, RSV causes upper respiratory tract infections, but children under the age of two are at a higher risk of lower respiratory tract involvement
- In young children under two years old, RSV most commonly presents with signs and symptoms of pneumonia
- In adults, RSV is the most common viral pathogen causing chronic obstructive pulmonary disease exacerbations

4. On the prevalence and socioeconomic impact of RSV:

- RSV infections, while more prevalent than previously thought in adults, have a lower morbidity and mortality rate as compared to influenza
- The economic impact of RSV on healthcare expenditure relates to both the acute infection and longer-term effects especially in those with pre-existing chronic medical conditions
- RSV infections mainly place a significant burden on inpatient healthcare resources and have less impact on outpatient resources
- Infectious disease surveillance systems in the majority of countries around the world place a high priority on monitoring RSV infection rates
- For public health surveillance, all patients who have a viral respiratory tract infection should have a nasal swab PCR test

5. On RSV prevention methods:

- Palivizumab is a monoclonal antibody against RSV, approved for adults at high risk of severe RSV infections
- Hand-washing and mask-wearing are less important than immunisation in the prevention of RSV infections
- The currently available RSV vaccines are effective in lowering hospitalisation and mortality rates
- RSV vaccination is associated with a risk of immune-mediated neurological complications that are rare but may have significant morbidity
- Current guidelines recommend RSV vaccination for infants less than two years old and adults 60 years and older

- 6. Which of the following statements about the COVID-19 subvariant JN.1 is correct?**
- It causes more severe disease than previous Omicron subvariants
 - It has been classified by the World Health Organization (WHO) as a Variant of Concern (VOC)
 - It is less transmissible than previous Omicron subvariants
 - It has shown increased immune evasion capabilities
 - Current vaccines have lost their efficacy against JN.1
- 7. A 68-year-old man with type 2 diabetes mellitus and hypertension is diagnosed with COVID-19. His eGFR is 65 mL/min/1.73m². He takes metformin, lisinopril, and hydrochlorothiazide daily. Which antiviral treatment approach is most appropriate?**
- Standard dose Paxlovid
 - Reduced dose Paxlovid
 - 3-day course of Remdesivir
 - Molnupiravir
 - No antiviral treatment
- 8. Which of the following best characterises the immune response to COVID-19 vaccination in an individual who has previously been infected with SARS-CoV-2?**
- Decreased antibody titres compared to vaccination-naïve individuals
 - Enhanced T-cell response but diminished B-cell memory
 - Hybrid immunity with potentially broader and more durable protection
 - Increased risk of vaccine-related adverse events
 - Selective immunity against only the infecting variant
- 9. In the context of COVID-19 and influenza, which of the following is correct?**
- Co-infection with both viruses is commonly seen
 - Antiviral treatments for COVID-19 and influenza cannot be administered concurrently
 - COVID-19 and influenza vaccines can be safely co-administered in the same visit
 - Rapid antigen tests are highly sensitive and can always reliably distinguish between COVID-19 and influenza
 - Obtaining a confirmed diagnosis is not necessary as both are self-limiting viral illnesses
- 10. A 45-year-old woman with no significant medical history presents with persistent fatigue, cognitive difficulties, and shortness of breath three months after a mild COVID-19 infection. Which of the following is the most appropriate next step?**
- Reassure the patient that symptoms will resolve on their own
 - Prescribe a course of antibiotics
 - Order a chest X-ray and comprehensive blood tests
 - Refer immediately to a long COVID specialist clinic
 - Recommend an additional dose of COVID-19 vaccine
- 11. A 65-year-old man, who has never received pneumococcal vaccination and has no comorbid medical conditions, visits his family physician for a health screening. How should PCV20 be administered?**
- Administer one dose of PCV20 now, with no need for further PCV20 doses
 - Administer one dose of PCV20 now and repeat the PCV dosing 1 year later
 - Administer one dose of PCV20 now and repeat the PCV dosing 5 years later
 - Administer one dose of PCV20 when the man turns 75, with no need for further PCV20 doses
 - Administer one dose of PCV20 when the man turns 75 and repeat the PCV dosing 5 years later
- 12. A 70-year-old chronic smoker has never received pneumococcal vaccination and is now diagnosed with chronic obstructive pulmonary disease. How should PCV20 be administered?**
- Administer one dose of PCV20 now, with no need for further PCV20 doses
 - Administer one dose of PCV20 now and repeat the PCV dosing 1 year later
 - Administer one dose of PCV20 now and repeat the PCV dosing 5 years later
 - Administer one dose of PCV20 when the man turns 75, with no need for further PCV20 doses
 - Administer one dose of PCV20 when the man turns 75 and repeat the PCV dosing 5 years later

13. A 65-year-old woman received both PCV13 and PPSV23 vaccination when she was 60 years old. She has chronic renal failure and visits her family physician for routine follow-up. How should PCV20 be administered?

- A. No need to administer PCV20, unless the patient wishes to get it
- B. Administer one dose of PCV20 now, with no need for further PCV20 doses
- C. Administer one dose of PCV20 now and repeat the PCV dosing 1 year later
- D. Administer one dose of PCV20 when the woman turns 70, with no need for further PCV20 doses
- E. Administer one dose of PCV20 when the woman turns 70 and repeat the PCV dosing 5 years later

14. A 70-year-old man has no comorbid medical conditions and visits his family physician for health screening. He received PCV13 from another family physician three years ago. How should PCV20 be administered?

- A. No need to administer PCV20, unless the patient wishes to get it
- B. Administer one dose of PCV20 now, with no need for further PPSV23 dosing
- C. Administer one dose of PCV20 now and administer PPSV23 1 year later
- D. Administer one dose of PCV20 when the man turns 72, with no need for further PCV20 doses
- E. Administer one dose of PCV20 when the man turns 72 and administer PPSV23 1 year later

15. A 50-year-old woman with diabetes mellitus visits her family physician for smoking cessation. She has not received pneumococcal vaccination before. How should PCV20 be administered?

- A. No need to administer PCV20, unless the patient wishes to get it
- B. Administer one dose of PCV20 now, with no need for further PPSV23 dosing
- C. Administer one dose of PCV20 now and administer PPSV23 two months later
- D. Administer one dose of PCV20 now and administer PPSV23 1 year later
- E. Administer one dose of PCV20 when the woman turns 65, with no need for further PCV20 doses