

## **Pneumonia guideline review questions**

### **Diagnostic tests**

1. In adults with lower respiratory tract infection in the community, what is the clinical value and cost effectiveness of testing C-reactive protein, procalcitonin or performing a chest X-ray over clinical assessment to inform antibiotic prescribing decisions and need for hospital admission?

### **Severity assessment**

2. In adults presenting with a lower respiratory tract infection or suspected community-acquired pneumonia in the community, what is the most accurate and cost-effective severity assessment tool to identify patients whose outcome will be improved by referral to hospital?
3. In adults with community-acquired pneumonia (presenting to Accident and Emergency) what is the most accurate and cost-effective severity assessment tool to stratify patients at first presentation according to who would benefit from
  - a) hospital admission?
  - b) ITU assessment?
4. In adults with hospital-acquired pneumonia what is the most accurate and cost-effective severity assessment tool to stratify patients at first presentation according to who would benefit from ITU assessment?

### **Microbiological tests**

5. In adults with community-acquired pneumonia or hospital-acquired pneumonia in a hospital setting, what microbiological test or combination of tests at presentation (including urinary pneumococcal and urinary legionella antigen, blood culture and sputum culture) is most likely to be clinically and cost effective?

### **Antibiotic treatment**

6. In adults with suspected community-acquired pneumonia is earlier rather than later antibiotic administration more clinically and cost effective?
7. In adults with hospital-acquired pneumonia is earlier rather than later antibiotic administration more clinically and cost effective?
8. In adults with community-acquired pneumonia what is the most clinically- and cost-effective empirical antibiotic choice?
9. In adults with hospital-acquired pneumonia what is the most clinically- and cost-effective empirical antibiotic choice?
10. In adults with community-acquired pneumonia what is the clinical and cost effectiveness of short- compared with longer-course antibiotics?
11. In adults with hospital-acquired pneumonia what is the clinical and cost effectiveness of short- compared with longer-course antibiotics?

## **Glucocorticosteroid treatment**

12. In adults with community-acquired pneumonia or hospital-acquired pneumonia requiring management in hospital, what is the clinical and cost effectiveness of initial glucocorticosteroid treatment in addition to antibiotic treatment compared with antibiotic treatment alone?

## **Gas exchange management**

13. In adults with community-acquired pneumonia or hospital-acquired pneumonia managed in hospital, what is the clinical and cost effectiveness of non-invasive ventilation compared with continuous positive airways pressure or usual care?

14. In adults with community-acquired pneumonia or hospital-acquired pneumonia managed in hospital, what is the clinical and cost effectiveness of non-invasive ventilation, continuous positive airways pressure or usual care compared with elective intubation?

## **Monitoring response**

15. In adults with community-acquired pneumonia or hospital-acquired pneumonia managed in hospital, what is the clinical and cost effectiveness of C-reactive protein or procalcitonin monitoring in addition to clinical observation in helping to determine when to stop or change treatment and when to discharge?

## **Safe discharge**

16. What is the prognostic value, clinical and cost effectiveness of various factors for assessing whether it is safe to discharge adults with community-acquired pneumonia or hospital-acquired pneumonia requiring management in hospital?

## **Patient information**

17. What advice should be given to adults about what symptoms and duration of symptoms can be expected following treatment for community-acquired or hospital-acquired pneumonia, and when should patients be advised to consult or re-consult a GP?