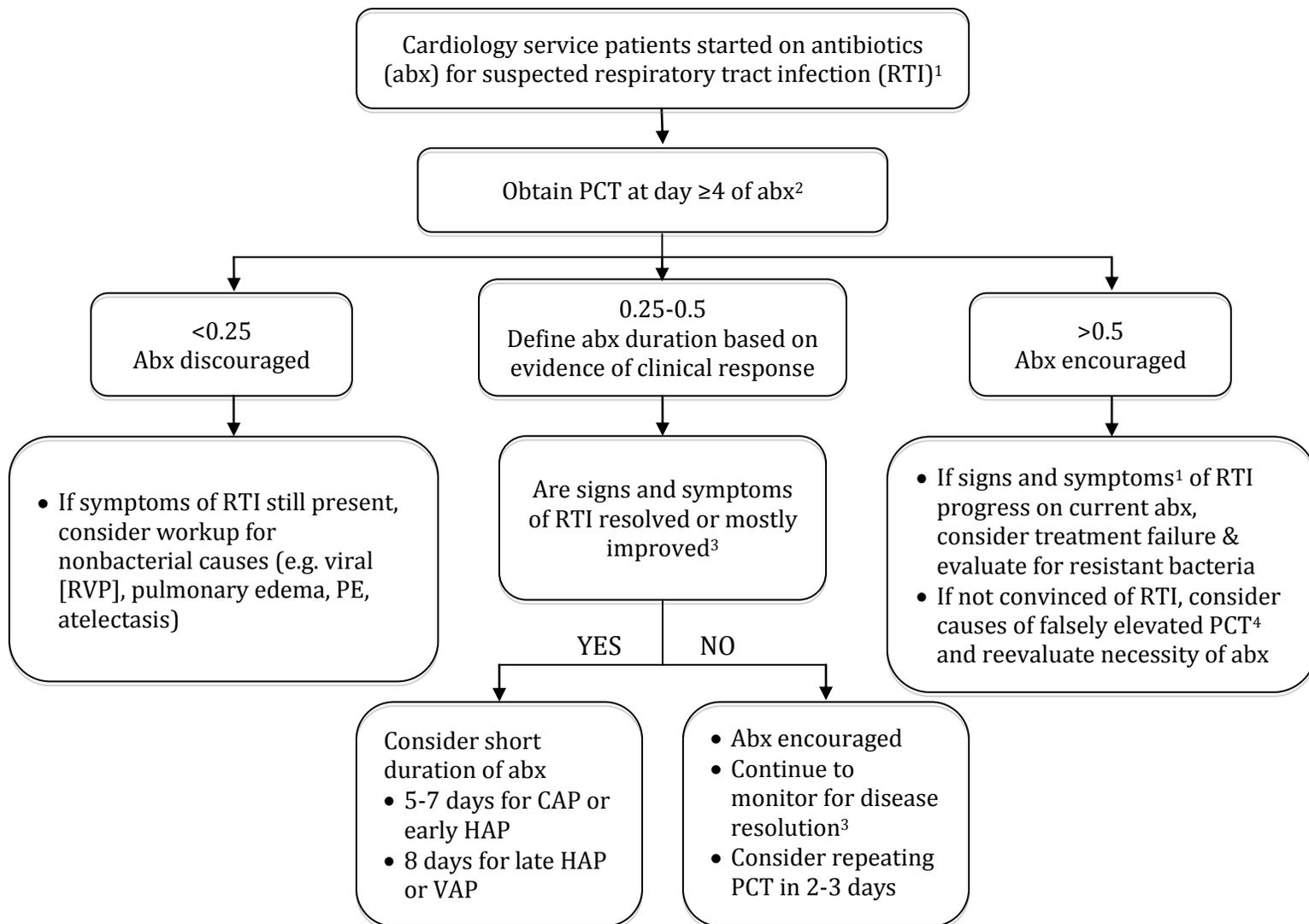


Procalcitonin (PCT)-Based Algorithm to Guide Antibiotic Duration Cardiology Service Patients



¹ Signs and symptoms of RTI include new infiltrate on chest radiograph, fever >100.4°F, leukocytosis, purulent sputum, decline in oxygenation, cough, and dyspnea

² Can consider abx discontinuation before day 4 if patient demonstrates clinical response (see footnote 3 for definition)

³ Clinical response defined as resolution of leukocytosis, defervescence of fever, return to baseline oxygen saturation, decreased sputum production, and improvement in cough and dyspnea

⁴ Causes of a falsely elevated PCT include trauma/burns, pancreatitis, malignancies, recent major surgery, cardiogenic shock, severe SIRS, ARDS, or fungal infection

Recommended Reading

- Schuetz P, Briel M, Christ-Crain M, et al. Procalcitonin to guide initiation and duration of antibiotic treatment in acute respiratory infections: an individual patient data meta-analysis. *Clin Infect Dis* 2012 ;55(5):651-62.
- Schuetz P, Christ-Crain M, Thomann R, et al. Effect of procalcitonin-based guidelines vs standard guidelines on antibiotic use in lower respiratory tract infections: the ProHOSP randomized controlled trial. *JAMA* 2009;302(10):1059-66.

As always, sound clinical judgement should be applied in conjunction with the information provided by these guidelines. In some instances, expert opinion should be solicited. If needed, a CAUSE representative is available to assist with decisions regarding antibiotic therapy (806-6494).