

## Procalcitonin (PCT) Interpretation Guide (per manufacturer package insert)

### RISK OF SEPSIS

PCT Concentration	Interpretation	Further Options
PCT ≤ 0.5 ng/mL	Systemic infection (sepsis) is not likely.  Local bacterial infection is possible.	Low risk for progression to severe infection (severe sepsis / septic shock).  Caution: PCT levels below 0.5 ng/mL do not exclude an infection, because localized infections may be associated with such low levels.  If PCT is measured very early after a bacterial challenge (usually <6 hours), these values may still be low. In this case, PCT should be re-assessed 6-24 hours later.
PCT > 0.5 and ≤ 2.0 ng/mL	Systemic infection is possible, but other conditions are known to elevate PCT as well.	Moderate risk for progression to severe systemic infection (severe sepsis / septic shock).  The patient should be closely monitored both clinically and by re-assessing PCT within 6-24 hours.
PCT > 2.0 ng/mL	Systemic infection (sepsis) is likely, unless other causes are known.	High risk for progression to severe systemic infection (severe sepsis / septic shock).

### ANTIBIOTIC USE FOR PATIENTS WITH SUSPECTED OR CONFIRMED LOWER RESPIRATORY TRACT INFECTION

Initial PCT Value	
PCT Concentration	Antibiotic Use Recommendation
PCT ≤ 0.10 ng/mL	Antibiotic therapy <u>strongly</u> discouraged
PCT 0.10 – 0.25 ng/mL	Antibiotic therapy discouraged
PCT 0.26 – 0.50 ng/mL	Antibiotic therapy encouraged; repeat daily for 3 days to consider early cessation
PCT > 0.5 ng/mL	Antibiotic therapy <u>strongly</u> encouraged; repeat daily for 3 days to consider early cessation
<b>Antibiotic therapy may be discontinued if the current PCT value is ≤ 0.25 ng/mL or the change in PCT is &gt; 80%</b>	

### ANTIBIOTIC DISCONTINUATION FOR PATIENTS WITH SUSPECTED OR CONFIRMED SEPSIS

<b>Antibiotic therapy may be discontinued if the current PCT value is ≤ 0.50 ng/mL or the change in PCT is &gt; 80%</b>
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