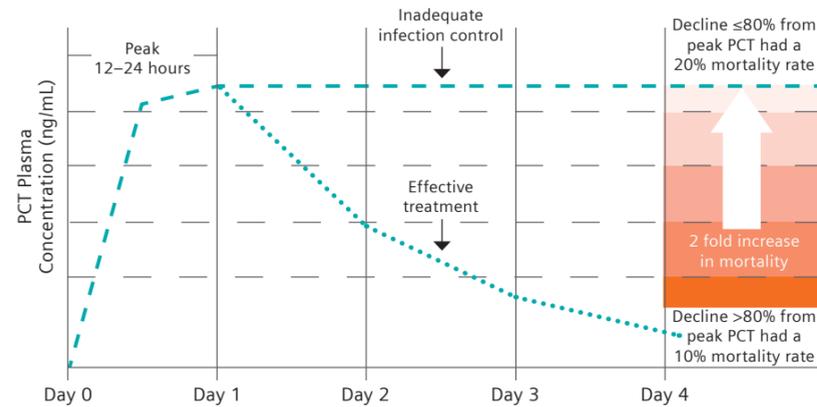


B·R·A·H·M·S Procalcitonin (PCT) Assay

PCT values rise in relation to sepsis severity, providing clinicians with a valuable tool for risk assessment of critically ill patients diagnosed with severe sepsis or septic shock.



PCT levels increase 2–4 hours after bacterial insult and return to normal as the infection is resolved.¹³

Approximate half-life of 24 hours.

High specificity and sensitivity for bacterial infection.

Indicator for disease severity and treatment response.

PCT-guided antibiotic therapy has resulted in reduction of antibiotic exposure by

35%
for
LRTI
patients

23%
for
critically ill
ICU patients

with no negative effects in regards to mortality, complications, or length of stay.¹⁻¹²

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey toward expanding precision medicine, transforming care delivery, and improving patient experience, all made possible by digitalizing healthcare.

An estimated 5 million patients globally benefit every day from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics, and molecular medicine, as well as digital health and enterprise services.

We are a leading medical technology company with over 120 years of experience and 18,000 patents globally. Through the dedication of more than 50,000 colleagues in 75 countries, we will continue to innovate and shape the future of healthcare.

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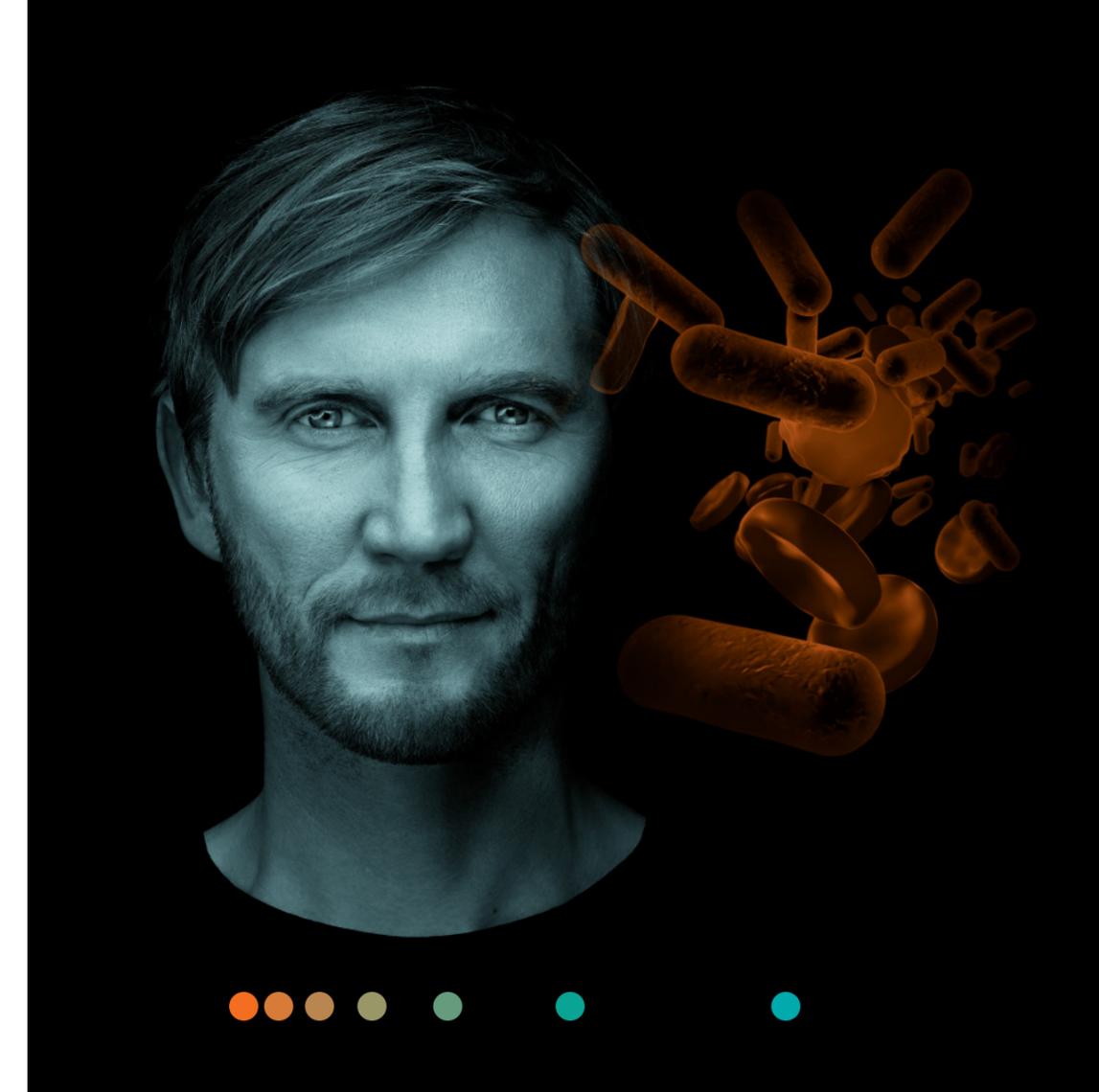
Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

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B·R·A·H·M·S Procalcitonin (PCT) Assay

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Initiating antibiotic therapy for patients with suspected or confirmed lower respiratory tract infection (LRTI)

PCT (ng/mL)	< 0.10	0.10–0.25	0.26–0.50	> 0.50
Ongoing Infection?	Very unlikely	Unlikely	Likely	Very likely
Interpretation	ABx strongly discouraged	ABx discouraged	ABx encouraged	ABx strongly encouraged

Important Considerations

Antibiotic therapy should be considered regardless of PCT result if the patient is clinically unstable, is at high risk for adverse outcome, has strong evidence of bacterial pathogen, or the clinical context indicates antibiotic therapy is warranted.

If antibiotics are withheld, reassess if symptoms persist/worsen and /or repeat PCT measurement with 6–24 hours.

In order to assess treatment success and to support a decision to discontinue antibiotic therapy, follow-up samples should be tested once every 1–2 days, based upon physician discretion taking into account patient's evolution and progress.

1/3 of Antibiotic Prescriptions are Unnecessary

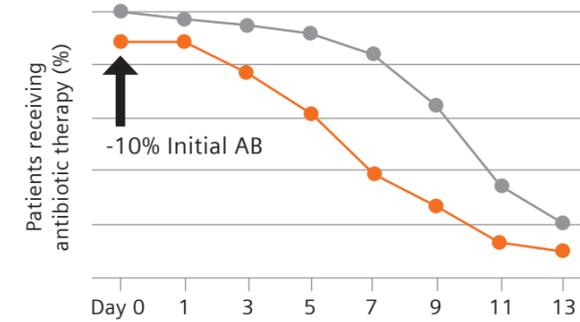


Reducing Antibiotic Exposure

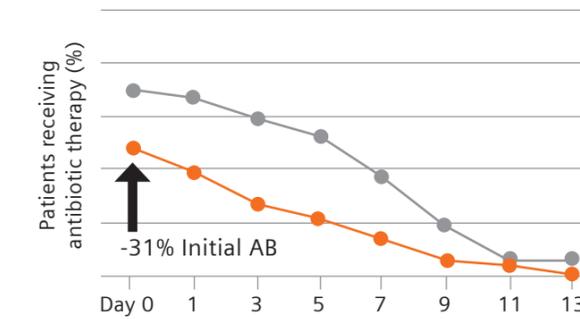
Procalcitonin has been shown to reduce antibiotic prescription rate and exposure duration in LRTI.¹

Duration of antibiotic exposure and antibiotic prescription rates were significantly reduced in the PCT group in comparison to the standard of care group for community-acquired pneumonia (CAP) (n=925), acute exacerbations of COPD (n=228) and bronchitis (n=151) in the ProHosp trial.

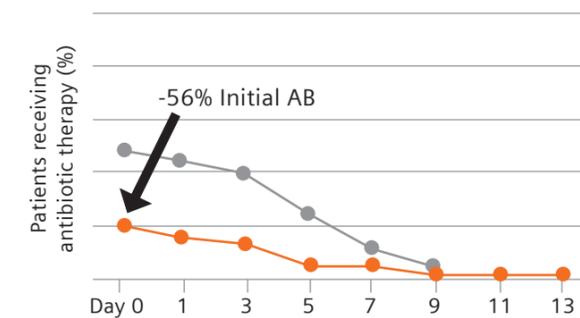
Community-acquired pneumonia (CAP)



Acute exacerbations of COPD (AECOPD)



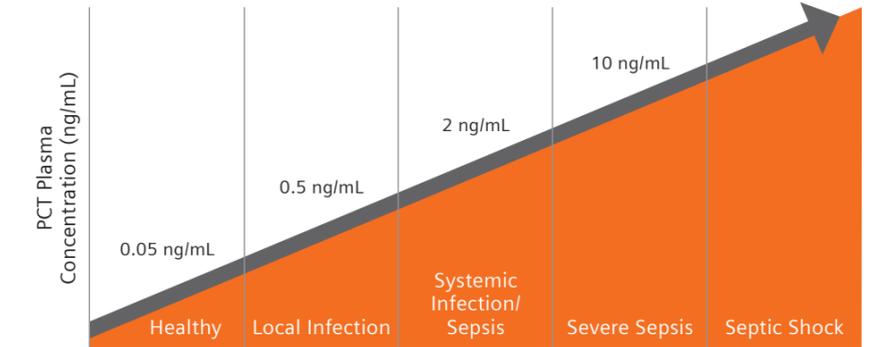
Bronchitis



■ PCT ■ Control

Aiding Differential Diagnosis

The Siemens Healthineers B-R-A-H-M-S PCT Assay aids clinicians in the risk assessment of critically ill patients on their first day of intensive care unit (ICU) admission for progression to severe sepsis and septic shock.



Please note: PCT levels below 0.5 ng/mL do not exclude an infection, because localized infections (without systemic signs) may also be associated with such low levels. If the PCT measurement is done very early after the systemic infection process has started (usually <6 hours), these values may still be low. PCT values may be elevated independent of bacterial infection following surgical intervention or pro-inflammatory treatment.

Discontinuing antibiotics for patients with lower respiratory tract infection (LRTI), or suspected or confirmed sepsis



Important Considerations

If clinical picture has not improved and PCT remains high, re-evaluate and consider treatment failure or other causes.