

Procalcitonin, Serum

Test ID: PRCAL

Useful for:

Monitoring antibiotic therapy and all-cause mortality for patients diagnosed with severe sepsis or septic shock in the Intensive Care Unit (ICU) or when obtained in the emergency department or other medical wards prior to ICU admission.

Method:

Electrochemiluminescence

Reference Values:

0.00-0.24 ng/mL

Specimen Requirements:

Preferred Collection Tube: Serum gel

Acceptable Collection Tube: Red top

Submission Container: Sarstedt Aliquot Tube, 5 mL (T914)

Specimen Volume: 0.6 mL

Collection Instructions:

1. Serum gel tubes should be centrifuged within 2 hours of collection.
2. Red-top tubes should be centrifuged and the serum aliquoted into a plastic vial within 2 hours of collection.

Minimum Volume: 0.5 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum	Frozen (preferred)	90 days
	Ambient	24 hours
	Refrigerate	48 hours

Cautions:

This assay is not indicated to be used as a stand-alone diagnostic assay to determine the risk of 28-day all-cause mortality. Changes in procalcitonin should always be interpreted in the context of the clinical status of the patient and other laboratory results. There is no uniformly recognized interpretation of the change in procalcitonin concentration levels for the prediction of mortality, and overall mortality is strongly dependent on many factors, including pre-existing patient risk factors and clinical course.

The need to continue intensive care unit care at day 4 and other covariates (eg, age, SOFA score) are also significant predictors of 28-day cumulative mortality risk.

Validation of this test as an aid in predicting mortality was performed in a study population with an overall 28-day mortality of 22%.

Serum biotin concentrations up to 1200 ng/mL do not interfere with this assay. Concentrations up to 1200 ng/mL may be present in specimens collected from patients taking extremely high doses of biotin up to 300 mg per day. In a study among 54 healthy volunteers, supplementation with 20 mg/day biotin resulted in a maximum serum biotin concentration of 355 ng/mL 1 hour post-dose.

CPT Code:

84145

Day(s) Performed: Monday through Sunday**Report Available:** Same day/1 to 2 days**Questions**

Contact Nancy Benson, Laboratory Resource Coordinator at 800-533-1710.