

Ca-19.9 – [Serum] Analysis

Objective

The objective of this test is to quantitatively measure the serum level of Cancer Antigen 19-9 (CA 19-9), a tumor marker commonly used in the diagnosis and monitoring of pancreatic cancer and other gastrointestinal malignancies.

Materials and Methods

Materials:

- Serum sample from patient
- Immunoassay kits (ELISA, chemiluminescence) specific for CA 19-9
- Microplate reader or automated analyzer
- Standard laboratory equipment (pipettes, centrifuge)

Methods:

1. Sample Collection: Collect venous blood and separate serum by centrifugation.
2. Measurement: Perform CA 19-9 quantification using immunoassay methods.
3. Calibration: Use assay-specific calibrators to ensure accuracy.
4. Interpretation: Compare CA 19-9 levels to reference ranges and monitor trends over time.
5. Quality Control: Use positive and negative controls to validate assay performance.

Results

- Normal range: < 37 U/mL (varies by laboratory)
- Elevated CA 19-9: Suggests pancreatic cancer, other gastrointestinal malignancies, or benign conditions like pancreatitis
- Monitoring levels can aid in assessing treatment response and detecting recurrence

Conclusion

CA 19-9 testing is valuable in the management of pancreatic and gastrointestinal cancers. Results should be interpreted alongside clinical findings, imaging, and other diagnostic modalities for comprehensive patient care.