CTX (C-Terminal Telopeptides of Type I Collagen), Urine

Analyte: C-terminal telopeptides of type I collagen

Specimen Type: Urine

Optimum Volume: 0.5 mL

2-8°C	-20°C	-70°C
5 days	26 days	2 years

Reporting units: ug/L; ug/mmol Cr (normalized)

Method: ELISA

Biological or Clinical Significance:

Type I collagen CTX accounts for more than 90% of the organic matrix of bone and is synthesized primarily in bone. During renewal of the skeleton, type I collagen is degraded, and small peptide fragments are excreted in the urine. One of these fragments, which is specific for type I collagen, can be measured as an indication of human bone resorption and may be used as an aid in monitoring bone resorption changes of anti-resorptive therapies and predicting skeletal response in postmenopausal women undergoing anti-resorptive therapies. This assay has been reported as useful for follow-up of anti-resorptive treatment of patients with metabolic bone disease.

Principle of Test Method:

The urine CTX assay is a solid-phase ELISA designed to measure human CTX in urine. It employs the competitive enzyme immunoassay principle. CTX is reported as a normalized ratio to urinary creatinine in order to account for variations in urine flow rate. Therefore CTX and urine creatinine are preferably tested from the same aliquot.