

NTX-TELOPEPTIDE, URINE
Test ID: NTXPR

EXPLANATION: Effective June 19, 2012, NTX-Telopeptide, Test ID NTXP, performed in Rochester, will be made obsolete. It will be replaced with NTX-Telopeptide, Test ID NTXPR and will be performed at Mayo Medical Laboratories, New England.

USEFUL FOR:

1. As an adjunct in the diagnosis of medical conditions associated with increased bone turnover
2. In the differential diagnosis of osteomalacia versus osteoporosis
3. Identifying individuals with osteoporosis with elevated bone turnover and consequent increased risk for rapid disease progression
4. Prediction of bone densitometry response to antiresorptive therapy of osteoporosis
5. Monitoring and assessing effectiveness of therapy in patients treated for osteopenia, osteoporosis, Paget disease, or other disorders treated with antiresorptive therapy
6. As an adjunct in monitoring response to other therapeutic intervention in diseases with increased bone turnover (e.g., rickets, osteomalacia, hyperthyroidism)

METHODOLOGY: Vitros ECI Competitive Assay (NTX – Telopeptide, U)
Enzymatic Colorimetric Assay (Creatinine, U)

REFERENCE VALUES:

All units are reported in nmol Bone Collagen Equivalents/mmol creatinine.

Males

<6 years: 576-1,763
6-13 years: 307-1,367
14-17 years: 102-1,048
> or =18 years: 21-66

Females

<6 years: 576-1,763
6-13 years: 307-1,367
14-17 years: 55-378
> or =18 years: 19-63

Values are based on Mayo in-house studies of 75 children and adolescents age 3.5 to 18.5 and >100 adults.

SPECIMEN REQUIREMENTS:**Container/Tube:** Plastic, 13-mL urine tube**Specimen Volume:** 4 mL**Collection Instructions:**

1. Collect urine for 24 hours.
2. No preservative.
3. Refrigerate specimen during collection.

Additional Information:

1. 24-Hour collection is preferred, but second-morning voided or random specimen is also acceptable.

SPECIMEN STABILITY INFORMATION:

Specimen Type	Temperature	Time
Urine	Frozen (preferred)	30 days
	Refrigerated	5 days

CAUTIONS:

The intraindividual coefficient of variation of urine N-terminal telopeptide (NTx) measurements is approximately 30%. Part of this variation is due to diurnal fluctuations, and a 24-hour collection is preferred. However, a second-morning void and other random collections are acceptable. In the latter case, it is recommended that the measurement is repeated at least once in order to allow a more accurate estimation of the true average bone turnover in a patient.

Very dilute specimens may not allow measurement of a urine creatinine level and, therefore, reporting of NTx values normalized to creatinine becomes impossible.

Inadvertent collection of urine for NTx measurements in a collection bottle that contains an acidic preservative results in substantial artifactual elevations of apparent NTx concentrations; such specimens are unacceptable.

LIST FEE: \$ 180.80**CPT CODE:** 82523**DAY(S) SET UP:** Monday through Friday, 3rd shift**ANALYTIC TIME:** 1 day

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or
Rita Baird, MML Laboratory Technologist Resource Coordinator
Telephone: 800-533-1710