

Overview

Useful For

Identifying undetermined metabolic bone disease in submitted slide specimens

Diagnosing renal osteodystrophy

Diagnosing osteomalacia

Diagnosing osteoporosis

Diagnosing Paget disease

Assessing the effects of therapy

Identifying disorders of the hematopoietic system

Diagnosing aluminum toxicity

Identifying the presence of iron in the bone

Special Instructions

- [Bone Histomorphometry Specimen Preparation](#)
- [Bone Histomorphometry: Patient Information](#)

Method Name

Consultation

NY State Available

No

Specimen

Specimen Type

Varies

Necessary Information

[Bone Histomorphometry: Patient Information](#) (T352) in Special Instructions must be completed and sent with the specimen. The laboratory requires this information in order to perform testing.

Specimen Required**Supplies:** Bone Histomorphometry Specimen Preparation (T579)**Specimen Type:** Bone**Source:** Anterior iliac crest**Container/Tube:** Slides**Collection Instructions:** A minimum of 1 Goldner Trichrome-stained slide and 1 hematoxylin and eosin-stained slide are required.**Additional Information:** For more information, see [Bone Histomorphometry Specimen Preparation](#) (T579) in Special Instructions.**Forms**[Bone Histomorphometry: Patient Information](#) (T352) in Special Instructions[Bone Histomorphometry Specimen Preparation](#) (T579) in Special Instructions**Reject Due To**

Bone	Decalcified bone
------	------------------

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Varies	Ambient		

Clinical & Interpretive**Clinical Information**

Bone histomorphometry is a very sophisticated procedure utilizing full thickness bone biopsy.

Techniques such as 2-time interval labeling with tetracycline permit the direct measurement of the rate of bone formation. The information derived is useful in the diagnosis of metabolic bone diseases including renal osteodystrophy, osteomalacia, and osteoporosis. Other obtainable information relate to disorders such as aluminum toxicity and iron abnormalities.

Reference Values

The laboratory will provide an interpretive report.

Interpretation

Clinical endocrinologists trained in histomorphometric techniques review and interpret the histological appearance.

A pathologist interprets the bone marrow from a hematoxylin and eosin-stained slide.

No histomorphometric values are given.

Cautions

Mineralization or bone formation rates can be done only when tetracycline has been administered on a specific schedule prior to biopsy.

Biopsy site of preference is iliac crest.

Clinical Reference

Recker RR: Bone Histomorphometry: Techniques and Interpretation. Boca Raton, FL, CRC Press, 1983

Performance**Method Description**

The histologic appearance of all sections are reviewed and interpreted by a clinician-histomorphometrist. A hematoxylin and eosin-stained section is reviewed for abnormalities by a pathologist. Telephone consultations with responsible physicians are carried out whenever possible. (Hodgson SF, Johnson KA, Muhs JM, et al: Outpatient percutaneous biopsy of the iliac crest: methods, morbidity, and patient acceptance. Mayo Clin Proc 1986;61:28-33)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

21 to 26 days

Performing Laboratory Location

Rochester

Fees & Codes**Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact [Customer Service](#).

Test Classification

This test was developed, and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

88321

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
BHISI	Bone HistoMorph Interp Only	60570-9

Result ID	Test Result Name	Result LOINC® Value
71168	Interpretation	59465-5
71169	Bone Marrow Interpretation	51628-6
71170	Participated in the Interpretation	No LOINC Needed
71171	Report electronically signed by	19139-5
71172	Material Received	22633-2
71787	Case Number	80398-1
601909	Disclaimer	62364-5