

	Bone Turnover Markers Testing	
	Policy Number: POL-PP-264 AHS – G2051	Original Creation Date: 7/1/2025
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	Policy Status: Active	Next Review Date: 10/1/2026

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Blue KC reserves the right to review and revise these policies when necessary. When there is an update, we will publish the most current policy to: <https://providers.bluekc.com/ContactUs/PaymentPolicies>.

PROVIDER/ENTITY IMPACTED					
<input checked="" type="checkbox"/> PROFESSIONAL	<input checked="" type="checkbox"/> FACILITY	<input type="checkbox"/> DME	<input type="checkbox"/> AMBULATORY SURGERY	<input checked="" type="checkbox"/> LAB	<input type="checkbox"/> OTHER

LINES OF BUSINESS IMPACTED						
<input checked="" type="checkbox"/> COMMERCIAL	<input checked="" type="checkbox"/> BLUE MEDICARE ADVANTAGE	<input checked="" type="checkbox"/> ACA QHP¹	<input checked="" type="checkbox"/> SMALL GROUP ACA	<input checked="" type="checkbox"/> JAA²	<input checked="" type="checkbox"/> FEP³	<input type="checkbox"/> DENTAL

¹ ACA QHP: Affordable Care Act Qualified Health Plan for Individual/Family ² JAA: Joint Administrative Account ³ FEP: Federal Employee Program

Disclaimer

Blue KC has developed Provider Payment Policies to provide guidance on payment methodologies as they pertain to submitted claims. These policies are written following industry standard recommendations from sources such as:

- Current Procedural Terminology
- Centers for Medicare and Medicaid
- American Medical Association
- National Correct Coding Initiative
- Other professional organizations and societies

Coverage of any service is determined by date of service, a member's eligibility and benefit limits for the service or services rendered, all terms of the Provider Service Agreement, and other standards of coding rules and guidelines.

Final payment is subject to the application of claims adjudication and edits common to the industry.

For confirmation of which services may be eligible for coverage and description of when medical services are considered medically necessary, not medically necessary, or investigational, please contact:

- Blue KC Provider Hotline for Commercial lines of Business 816-395-3929
- Affordable Care Act Provider Hotline 866-859-3822
- Blue Medicare Advantage Provider Hotline 866-508-7140

In the event of a conflict between any policies, the Member's coverage document will govern.

Description/Application

Bone metabolism involves a continual, dynamic equilibrium between bone growth and resorption. Bone turnover markers (BTMs) are biochemical markers for assessment of bone formation or bone resorption. These markers may be useful in determining risk of fracture and bone loss.

Policy

Application of coverage criteria is dependent upon an individual’s benefit coverage at the time of the request.

For individuals with osteoporosis who are about to begin or who are actively being treated with bisphosphonates, measurement of bone turnover markers to assess an individual’s compliance with bisphosphonate therapy or for fracture risk prediction **may be reimbursed** at the following intervals:

- To establish baseline levels before initiating bisphosphonate treatment
- Every three months after initiation or change of therapy for the first year.
- Every two years when no medication changes have occurred.

For individuals with osteoporosis, measurement of bone turnover markers to monitor teriparatide treatment **may not be reimbursed**.

The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of an individual’s illness.

- As a diagnostic test for osteoporosis, measurement of bone turnover markers **may not be reimbursed**.
- In the diagnosis and management of patients with other conditions associated with high rates of bone turnover, measurement of bone turnover markers **may not be reimbursed**.

NOTES

Note 1: Bone turnover markers include:

Bone formation markers

- Serum bone-specific alkaline phosphatase (BSAP/BALP)
- Serum osteocalcin (OC)
- Serum type 1 procollagen (C-terminal/N-terminal): C1NP or P1NP

Bone resorption markers

- Urinary hydroxyproline (HYP)
- Urinary total pyridinoline (PYD)
- Urinary free deoxypyridinoline (DPD)
- Urinary or serum collagen type 1 cross-linked N-telopeptide (NTX)
- Urinary or serum collagen type 1 cross-linked C-telopeptide (CTX)
- Bone sialoprotein (BSP)
- Serum Tartrate-resistant acid phosphatase 5b (TRACP5b)
- Cathepsin

Coding

CPT/HCPCS	Description
82523	Collagen cross links, any method
83500	Hydroxyproline; free
83505	Hydroxyproline; total
83937	Osteocalcin (bone gla protein)
84080	Phosphatase, alkaline; isoenzymes

References and Resources

Avalon Medical Policy AHS - G2051 – Bone Turnover Markers Testing

Related Documents

Avalon Medical Policy AHS- G2005 Vitamin D Testing

Avalon Medical Policy AHC – G2164 Parathyroid Hormone, Phosphorus, Calcium, and Magnesium Testing

Revision History

Version	Date	Summary of Revisions
001	07/01/2025	Initial version
002	10/01/2025	Avalon 4 th Quarter updates