

Collagen Crosslinks, Any Method – (82523) NCD 190.19

Indications:

Generally, collagen crosslink testing is useful mostly in “fast losers” of bone. The age when these bone markers can help direct therapy is often pre-Medicare. By the time a fast loser of bone reaches age 65, she will most likely have been stabilized by appropriate therapy or have lost so much bone mass that further testing is useless. Coverage for bone marker assays may be established, however, for younger Medicare beneficiaries and for those men and women who might become fast losers because of some other therapy such as glucocorticoids. Safeguards should be incorporated to prevent excessive use of tests in patients for whom they have no clinical relevance.

Collagen crosslinks testing is used to:

- Identify individuals with elevated bone resorption, who have osteoporosis in whom response to treatment is being monitored.
- Predict response (as assessed by bone mass measurements) to FDA approved antiresorptive therapy in postmenopausal women.
- Assess response to treatment of patients with osteoporosis, Paget’s disease of the bone, or risk for osteoporosis where treatment may include FDA approved antiresorptive agents, anti-estrogens or selective estrogen receptor moderators.

Limitations:

Because of significant specimen to specimen collagen crosslink physiologic variability (15-20%), current recommendations for appropriate utilization include:

- one or two base-line assays from specified urine collections on separate days; followed by a repeat assay about 3 months after starting anti-resorptive therapy; followed by a repeat assay in 12 months after the 3-month assay; and thereafter not more than annually, unless there is a change in therapy in which circumstance an additional test may be indicated 3 months after the initiation of new therapy.
- Some collagen crosslink assays may not be appropriate for use in some disorders, according to FDA labeling restrictions.

Most Common Diagnoses (which meet medical necessity) *

E05.00	Thyrotoxicosis with Diffuse Goiter
E05.90	Thyrotoxicosis, Without Thyrotoxic Crisis or Storm
E05.91	Thyrotoxicosis, with Thyrotoxic Crisis or Storm
E06.3	Autoimmune Thyroiditis
E21.3	Hyperparathyroidism
E55.9	Vitamin D Deficiency
E61.1	Iron Deficiency
M80.00XA	Age-Related Osteoporosis with Current Pathological Fracture, Unspecified Site, Initial Encounter
M80.0B1A	Age-Related Osteoporosis with Current Pathological Fracture, Right Pelvis, Initial Encounter
M80.0B2A	Age-Related Osteoporosis with Current Pathological Fracture, Left Pelvis, Initial Encounter
M81.0	Age-Related Osteoporosis Without Current Pathological Fracture
M85.80	Other Specified Disorders of Bone Density and Structure

M88.9	Osteitis Deformans
Z79.899	Other Long Term (Current) Drug Therapy

*For the full list of diagnoses that meet medical necessity see the Collagen Crosslinks National Coverage Determination 190.19 document.

The above CMS and WPS-GHA guidelines are current as of: 07/01/2025.