Bone Resorption Assessment

Genova Diagnostics Europe

Patient: **SAMPLE REPORT**
DOB: June 10, 1965
Sex: F

Order Number: 93081234
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Route Number: A071234

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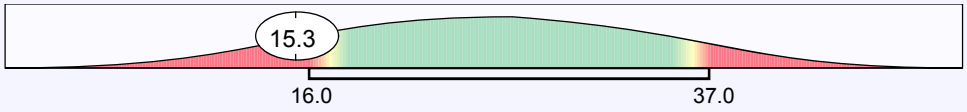
Chemistry Parameters

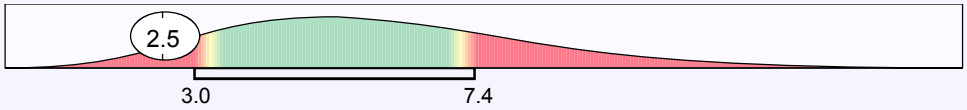
Pyridinium Crosslinks/Creatinine

Ref Range nmol/mmol



Deoxypyridinoline/Creatinine

Ref Range nmol/mmol



Commentary

Commentary is provided to the practitioner for educational purposes, and should not be interpreted as diagnostic or treatment recommendations. Diagnosis and treatment decisions are the responsibility of the practitioner.

Pyridinium crosslinks consist of both pyridinoline and deoxypyridinoline. Deoxypyridinoline is found predominantly in bone tissue, whereas pyridinoline is found in both bone and cartilage. Pyridinium crosslinks are released when bone is broken down (or resorbed). While not diagnostic of osteoporosis, these markers may be used to monitor bone resorption status and therefore are a useful gauge of treatment efficacy.

Pyridinium Crosslinks are low, suggesting an unusually slow rate of collagen turnover, including bone and connective tissue. The remodeling process allows for repair. Although some animal research suggests compromised bone quality with excessive suppression of resorption, there is currently no established clinical significance on reduced rates of bone turnover in humans.

Low levels of pyridinium crosslinks have been reported in fibromyalgia, severe burns, and acute lymphoblastic leukemia in children.

Deoxypyridinoline (DPD) is low, suggesting an unusually slow rate of bone turnover. Bone remodeling is a natural process of resorption and formation that allows for repair. Although some animal studies have demonstrated accumulation of microdamage and impaired bone quality with excessive amounts of bone-suppressive medication, there is currently no established clinical significance on reduced rates of bone turnover in humans. There may be extraordinary cases of growth hormone deficiency, which could lead to a very low deoxypyridinoline.