

DXA SCAN: June 26, 2026

CLINICAL HISTORY: 70 years of age, Female, referred for evaluation of bone density. Patient history and risk factors for low bone density (information provided by patient) include:

White Female

Has used the following medications: Vitamin D, Calcium

Patient maximum height was 64.7

Menopause Age: 54 years of age

Drinks caffeinated beverages

Onset of menses at age 12

Number of children 4

COMPARISON: DXA scan on 05/08/2025

PROCEDURE COMMENTS: The scan was done using array mode on a Hologic Horizon A machine (S/N 305309M) with APEX software version 5.6.1.2.

The lumbar spine and forearm are using the BMDCS/Hologic Reference database. The hip is using the BMDCS/NHANES reference database. The whole body is using the NHANES/Hologic reference database.

Bone Density images are available for viewing on the Stanford Healthcare PACS.

FINDINGS: The positioning for the scan was good. Scan artifacts were not observed.

There were moderate degenerative changes noted in the lumbar spine, which may give higher than expected BMD results.

Bone Density (Spine)

Region	BMD	T-Score	Z-Score
AP Spine (L1)	0.812	-1.6	0.3
AP Spine (L2)	0.809	-2.0	0.1
AP Spine (L3)	0.783	-2.7	-0.5
AP Spine (L4)	0.788	-2.5	-0.2
AP Spine (L1-L4)	0.797	-2.3	-0.1

Bone Density (Left Hip)

Region	BMD	T-Score	Z-Score
Femoral Neck	0.642	-1.9	-0.1
Femoral Troch	0.629	-0.7	0.6
Femoral Inter	0.797	-2.0	-0.7
Left Total Hip	0.718	-1.8	-0.3

Bone Density (Right Hip)

Region	BMD	T-Score	Z-Score
Femoral Neck	0.799	-0.4	1.4
Femoral Troch	0.523	-1.8	-0.4
Femoral Inter	0.708	-2.5	-1.3
Right Total Hip	0.665	-2.3	-0.8

World Health Organization criteria for BMD impression
classify patients as:

Normal (T-score at or above -1.0),

Osteopenia (T-score between -1.0 and -2.5), or

Osteoporosis (T-score at or below -2.5).

10-year Fracture Risk(1):

Major Osteoporotic Fracture 10%
Hip Fracture 1.9%

Reported Risk Factors:

US (Caucasian), T-score(WHO)=-1.8, BMI=21.9
(1) FRAX(R) Version 3.08. Fracture probability calculated for an untreated patient. Fracture probability may be lower if the patient has received treatment.

Previous Exams:

Region	Exam	Age	BMD	T-Score	BMD Change	BMD Change
	Date		g/cm2		vs Baseline	vs Previous

AP Spine (L1-L4)

	06/26/2026	70	0.797	-2.3	-1.8%#	12.8%*
	05/08/2025	69	0.707	-3.1	-12.9%*#	-12.9%*#
	12/02/2019	63	0.812	-2.1		

Total Hip(Left)

	06/26/2026	70	0.718	-1.8	-8.7%*#	2.9%
	05/08/2025	69	0.698	-2.0	-11.2%*#	-11.2%*#
	12/02/2019	63	0.786	-1.3		

Email Preview

Total Hip(Right)

	06/26/2026	70	0.665	-2.3	-5.9%*#	9.6%*
	05/08/2025	69	0.607	-2.7	-14.1%*#	-14.1%*#
	12/02/2019	63	0.706	-1.9		

*Denotes significance at 95% confidence level, LSC for AP Spine = 0.022 g/cm2, LSC for Total Hip = 0.027 g/cm2, site specific LSC for AP Spine = 0.044 g/cm2 or 0.053 g/cm2 for different

scan types , site specific LSC for Total Hip = 0.030 g/cm² or 0.037 g/cm² for different scan types

Discussion: This patient's lowest T-score is low at one or more skeletal sites. It meets the World Health Organization's (WHO) criteria for low bone mass (T-score between -1.0 and -2.5).

The patient's 10-year risk of fracture as calculated by FRAX is less than the threshold where pharmacological therapy is recommended by the National Osteoporosis Foundation (NOF).

However, all treatment decisions require clinical judgment and consideration of individual patient factors, including patient preferences, comorbidities, previous drug use, risk factors not captured in the FRAX model (e.g., frailty, falls, vitamin D deficiency, increased bone turnover, interval significant decline in bone density) and possible under or overestimation of fracture risk by FRAX. The patient should follow a healthful lifestyle (good nutrition with adequate calcium and vitamin D, and appropriate weight-bearing exercise).

Follow-up: Consider repeating this study in 2 to 3 years to reassess this patient's status, or sooner if there is some new clinical indication.

IMPRESSION: The patient has low bone mass, based on the lowest T-score.

The patient has an estimated ten-year risk of hip fracture of 1.9% and an estimated ten-year risk of major osteoporotic fracture of 12.8% based on the WHO FRAX algorithm.

The BMD for the AP Spine (L1-L4) increased significantly by 12.8% since the last DXA exam.

The BMD for the Total Hip(Right) increased significantly by 9.6% since the last DXA exam.