Vertebral Assessment Report

Name:	Doe, Jane	Sex:	Female	Age:	65
Patient ID:	123458	Ethnicity:	White	Height:	62.0 in
Referring Provider:	Jones, William G	Date of Birth:	12/2/1946	Weight:	140.0 lb

Indication: postmenopausal; screening for osteoporosis; parental hip fracture; history of glucocorticoids; rheumatoid arthritis;

Accession number: 082987120719001

Bone Density: Exam date 7/19/2012

Region	BMD (g/cm^2)	T-Score	Z-Score	Classification
AP Spine(L1-L4)	1.020	-0.2	1.6	Normal
Femoral Neck(Left)	0.685	-1.5	0.1	Osteopenia
Total Hip(Left)	0.854	-0.7	0.5	Normal

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).

FRAX®   WHO Fracture Risk Assessment Tool

10-year Fracture Risk[1]:

Major Osteoporotic Fracture	37%
Hip Fracture	6.9%

Reported Risk Factors:
US (Caucasian), Neck BMD=0.685, BMI=25.6, parental fracture, smoking, glucocorticoids, rheumatoid arthritis, alcohol use

Impression: The patient has low bone mass, based on the Left Femoral Neck T-score. The patient has an estimated ten-year risk of hip fracture of 6.9% and an estimated ten-year risk of major fracture of 37%, based on the WHO FRAX algorithm. The patient has risk factors, including: parental hip fracture, smoking, excessive alcohol use, history of glucocorticoid therapy.

Discussion: BONE DENSITY IS LOW AT ONE OR MORE SKELETAL SITES. THE PATIENT'S BMD AND CLINICAL RISK FACTORS CONTRIBUTE TO THIS PATIENT'S HIGH RISK OF FRACTURE.
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 hip fracture and 10 year risk of a major osteoporotic fracture as calculated by FRAX exceeds 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 a repeat BMD and Vertebral Fracture Assessment (VFA) exam in 2 years or sooner if medically necessary, to reassess this patient's status

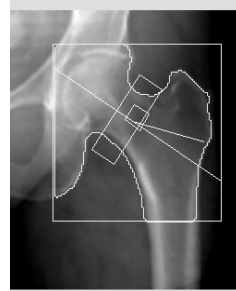**Reported by:** Victoria Queen M.D. on 07/19/2012 1:31:00 PM.

Name:	**Doe, Jane**	Sex:	Female	Height:	62.0 in
Patient ID:	123458	Ethnicity:	White	Weight:	140.0 lb
Age:	65	Date of Birth:	12/02/1946	Menopause Age:	42

Scan Date: July 19, 2012
Scan ID: A07191205

DAP: 3.5 cGy*cm²

Scan Type: a Left Hip

Scan Date: July 19, 2012
Scan ID: A07191206

DAP: 4.6 cGy*cm²

Scan Type: a Lumbar Spine
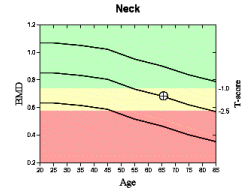
Scan Date: July 19, 2012
Scan ID: A07191208
Scan Type: a SE Lateral Image
DAP: 1.6 cGy*cm²

Scan Date: July 19, 2012
Scan ID: A07191207
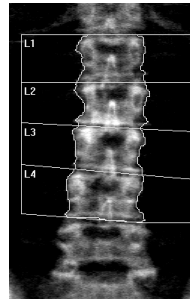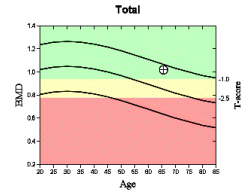Scan Type: a SE AP Image
DAP: 1.2 cGy*cm²

Results:

	BMD (g/cm²)	T-Score	PR (%)	Z-Score	AM (%)
Left Hip (Neck)	0.685	-1.5	81	0.1	101
Left Hip (Total)	0.854	-0.7	91	0.5	108
Spine (Total)	1.020	-0.2	97	1.6	120

Total BMD CV 1%

Summary:

	Classification
Left Hip BMD (Neck)	Osteopenia
Left Hip BMD (Total)	Normal
Spine BMD (Total)	Normal

A spine fracture indicates 5X risk for subsequent spine fracture and 2X risk for subsequent hip fracture.

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