Exercise & Physical Activity Resource Center (EPARC)

University of California, San Diego

9500 Gilman Drive, La Jolla, CA 92093

Phone: (858) 534-9315 Fax: (858) 534-9404

DXA Bone Densitometry Report: Monday, April 17, 2023

Dear Dr. Carpuic,

Your patient Leonard Glassner completed a BMD test on 04/10/2023 using the **Lunar Prodigy Advance DXA System** (analysis version: 18 [SP 3]) manufactured by **GE Healthcare**. The following summarizes the results of our evaluation.

PATIENT BIOGRAPHICAL:

Name:	Glassner, Leonard	**Patient Age:**	70.5		
Ethnicity	White	**Birth Date:**	09/09/1952	**Height:**	68.8 in.
Gender:	Male	**Exam Date:**	04/10/2023	**Weight:**	123.8 lbs.

ASSESSMENT:

The BMD measured at AP Spine L1-L4 is 0.843 g/cm² with a T-score of -2.8 is low. A follow up DXA test is recommended in one year to monitor response to therapy.

Site	Region	Date Measured	Young Adult	BMD	% Change vs. Previous [1]	Significant Change? [1]
			T-score	g/cm2		
DualFemur	Neck Left	04/10/2023	**-1.8**	0.791	-	
DualFemur	Neck Right	04/10/2023	**-1.8**	0.793	-	
DualFemur	Total Left	04/10/2023	**-2.0**	0.751	-	
DualFemur	Total Right	04/10/2023	**-1.9**	0.774	-	
AP Spine	L1-L4	04/10/2023	**-2.8**	0.843	-	

World Health Organization (WHO) criteria for post-menopausal, Caucasian Women:
Normal: T-score at or above -1 SD
Osteopenia: T-score between -1 and -2.5 SD
Osteoporosis: T-score at or below -2.5 SD

[1] Values only displayed with repeat scans

FRAX* RESULTS: *(version: 4.1)*

10-year Probability of Fracture	
Major Osteoporotic Fracture	**Hip Fracture**
9.7 %	3.7 %
Population:	USA (Caucasian)
Risk Factors:	Family Hist. (Parent hip fracture)

FRAX results based on DualFemur (Right) Neck BMD; -The 10-year probability of fracture may be lower than reported if the patient has received treatment.; -Major Osteoporotic Fracture: Clinical Spine, Forearm, Hip or Shoulder

FOLLOW-UP:

People with diagnosed cases of osteoporosis or osteopenia should be regularly tested for bone mineral density. For patients eligible for Medicare, routine testing is allowed once every 2 years. The testing frequency can be increased to one year for patients who have rapidly progressing disease, or for those who are receiving medical therapy to restore bone mass.

Exercise & Physical Activity Resource Center (EPARC)
University of California, San Diego
9500 Gilman Drive, La Jolla, CA 92093
Phone: (858) 534-9315 Fax: (858) 534-9404

DXA Bone Densitometry Report: Monday, April 17, 2023

COMMENTS:

Modest discordance observed between the scans of the proximal femur and the AP Spine. It may be worthwhile to capture a forearm scan in the future.

Trabecular bone score (TBS) is a measure of bone texture correlated with bone microarchitecture.
TBS derived from AP Spine = 1.386 (T-score= -0.6).
TBS T-score shows substantial discordance from BMD T-score.

FRAX 10-year probability of fracture calculated despite patient having received treatment for osteoporosis. Actual fracture risk may differ, as FRAX is designed for individual's who have not received treatment.

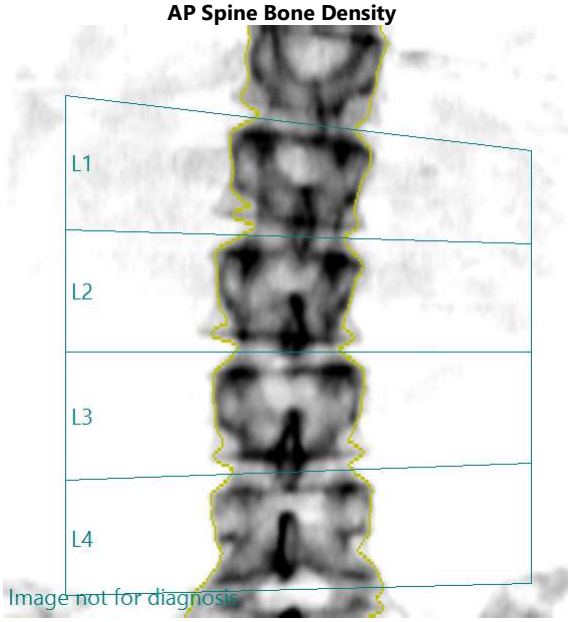
For further information, or for digital images of these scans, please contact David Wing --UCSD School of Bone Densitometry Clinical Director-- at 858.534.9315 or dwing@eng.ucsd.edu.

Exercise & Physical Activity Resource Center (EPARC)

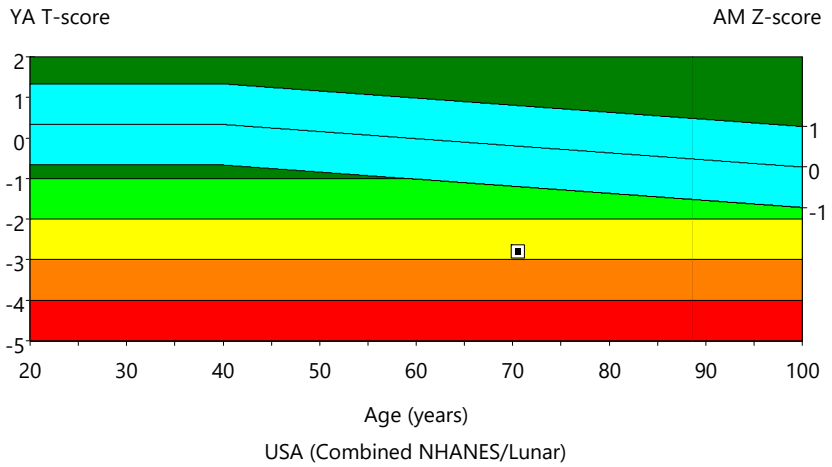
University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093
Phone: (858) 534-9315

Patient:	Glassner, Leonard			**Referring Physician:**	Dr. Carpuic
Birth Date:	09/09/1952	**Age:**	70.5 years	**Patient ID:**	(not specified)
Height:	68.8 in.	**Weight:**	123.8 lbs.	**Measured:**	04/10/2023 1:29:52 PM (18 [SP 3])
Sex:	Male	**Ethnicity:**	White	**Analyzed:**	04/14/2023 3:44:20 PM (18 [SP 3])

AP Spine Bone Density



AP Spine: L1-L4 (BMD)



COMMENTS:

Densitometry: USA (Combined NHANES/Lunar)

Region	BMD (g/cm²)	YA (%)	YA T-score	AM (%)	AM Z-score
L1	0.817	72	-2.6	75	-2.3
L2	0.866	72	-2.8	74	-2.6
L3	0.844	70	-3.0	72	-2.8
L4	0.843	70	-3.0	72	-2.8
L1-L4	0.843	71	-2.8	73	-2.6

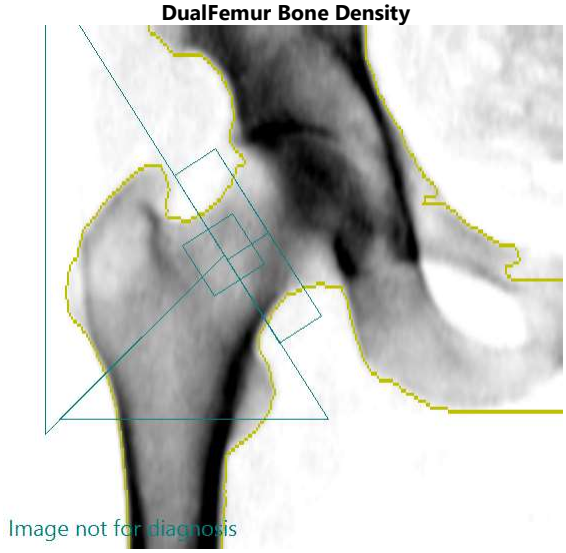
Statistically 68% of repeat scans fall within 1SD (± 0.024 g/cm² for AP Spine L1-L4 BMD); T-score: USA (Combined NHANES (ages 20-30) / Lunar (ages 20-40)) AP Spine, Female, White Reference Population (v113); Z-score: Matched for Age, Sex, Ethnicity; World Health Organization - Definition of Osteoporosis and Osteopenia for Caucasian Women: Normal = T-score at or above -1.0 SD; Osteopenia = T-score between -1.0 and -2.5 SD; Osteoporosis = T-score at or below -2.5 SD; (WHO definitions only apply when a young healthy Caucasian Women reference database is used to determine T-scores.)
Date created: 04/17/2023 2:42:20 PM 18 [SP 3]; Filename: gz1xsr7i6g.dfx; AP Spine; 76,3.00:50.03:12.0 0.00:7.32 0.60x1.05 17.1:%Fat=6.4%; 0.00:0.00 0.00:0.00; Scan Mode: Standard; 37.0 µGy; 1.23 cGy*cm²

Exercise & Physical Activity Resource Center (EPARC)

University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093
Phone: (858) 534-9315

Patient:	Glassner, Leonard			**Referring Physician:**	Dr. Carpuic
Birth Date:	09/09/1952	**Age:**	70.5 years	**Patient ID:**	(not specified)
Height:	68.8 in.	**Weight:**	123.8 lbs.	**Measured:**	04/10/2023 1:29:52 PM (18 [SP 3])
Sex:	Male	**Ethnicity:**	White	**Analyzed:**	04/14/2023 3:44:20 PM (18 [SP 3])

DualFemur Bone Density

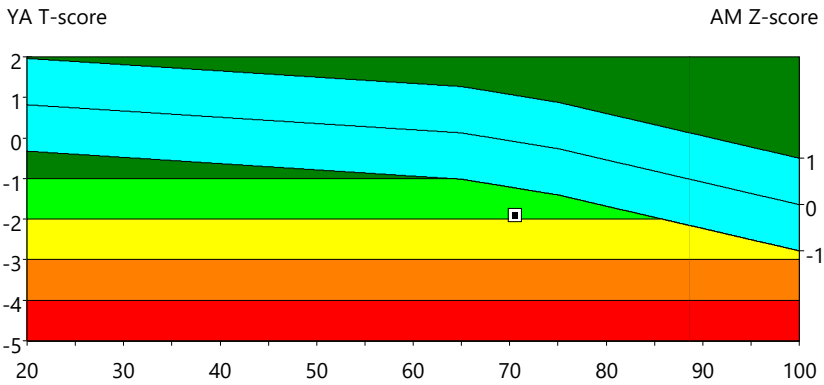


HAL chart results unavailable

(Right = 116.4 mm)

Right=116.4 mm Mean=N/A mm

Right Femur: Total (BMD)



USA (Combined NHANES/Lunar)

Densitometry: USA (Combined NHANES/Lunar)

Region	BMD (g/cm^2)	YA (%)	YA T-score	AM (%)	AM Z-score
Neck Right	0.793	76	-1.8	87	-0.9
Total Right	0.774	77	-1.9	78	-1.5

COMMENTS:

Statistically 68% of repeat scans fall within 1SD (± 0.020 g/cm^2 for Right Femur Total BMD); T-score: USA (Combined NHANES (ages 20-30) / Lunar (ages 20-40)) Femur, Female, White Reference Population (v113); Z-score: Matched for Age, Sex, Ethnicity; World Health Organization - Definition of Osteoporosis and Osteopenia for Caucasian Women: Normal = T-score at or above -1.0 SD; Osteopenia = T-score between -1.0 and -2.5 SD; Osteoporosis = T-score at or below -2.5 SD; (WHO definitions only apply when a young healthy Caucasian Women reference database is used to determine T-scores.)
Date created: 04/17/2023 2:42:33 PM 18 [SP 3]; Filename: gz1xsr7i6g.dfx; Right Femur; 76,0.75:50.03:12.0 0.00:10.26 0.60x1.05 15.0:%Fat=9.9%; 0.00:0.00 0.00:0.00; Neck Angle (deg)= 58; Scan Mode: Thin; 9.0 µGy; 0.23 $cGy*cm^2$

Exercise & Physical Activity Resource Center (EPARC)

University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093
Phone: (858) 534-9315

Patient:	Glassner, Leonard			**Referring Physician:**	Dr. Carpuic
Birth Date:	09/09/1952	**Age:**	70.5 years	**Patient ID:**	(not specified)
Height:	68.8 in.	**Weight:**	123.8 lbs.	**Measured:**	04/10/2023 1:29:52 PM (18 [SP 3])
Sex:	Male	**Ethnicity:**	White	**Analyzed:**	04/14/2023 3:44:20 PM (18 [SP 3])

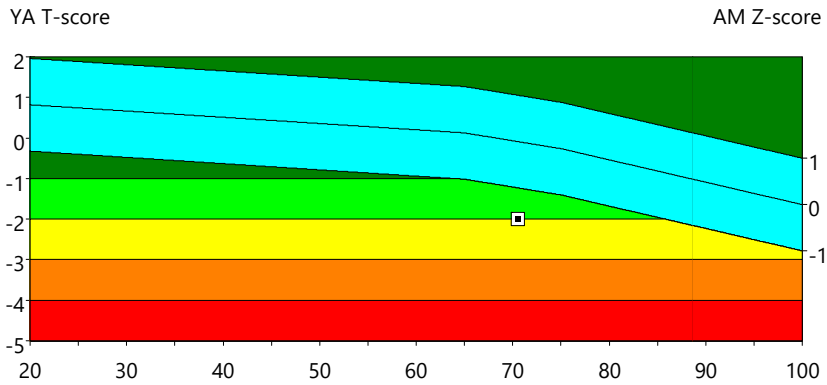
DualFemur Bone Density

HAL chart results unavailable

(Left = 115.1 mm)

Left=115.1 mm Mean=N/A mm

Left Femur: Total (BMD)



USA (Combined NHANES/Lunar)

Densitometry: USA (Combined NHANES/Lunar)

Region	BMD (g/cm^2)	YA (%)	YA T-score	AM (%)	AM Z-score
Neck Left	0.791	76	-1.8	87	-0.9
Total Left	0.751	75	-2.0	75	-1.7

COMMENTS:

Statistically 68% of repeat scans fall within 1SD (± 0.020 g/cm^2 for Left Femur Total BMD); T-score: USA (Combined NHANES (ages 20-30) / Lunar (ages 20-40)) Femur, Female, White Reference Population (v113); Z-score: Matched for Age, Sex, Ethnicity; World Health Organization - Definition of Osteoporosis and Osteopenia for Caucasian Women: Normal = T-score at or above -1.0 SD; Osteopenia = T-score between -1.0 and -2.5 SD; Osteoporosis = T-score at or below -2.5 SD; (WHO definitions only apply when a young healthy Caucasian Women reference database is used to determine T-scores.)
Date created: 04/17/2023 2:42:29 PM 18 [SP 3]; Filename: gz1xsr7i6g.dfx; Left Femur; 76,0.75:50.03:12.0 0.00:10.08 0.60x1.05 15.1:%Fat=10.7%; 0.00:0.00 0.00:0.00; Neck Angle (deg)= 60; Scan Mode: Thin; 9.0 µGy; 0.26 $cGy*cm^2$