

## Dexa bone density axial (spine and hip)

Status: Final result

### All Patient Images

Show images for GABRIEL, GINGER

### Exam Images

Show images for Dexa bone density axial (spine and hip)

### Study Result

HISTORY: Patient with history of breast carcinoma

COMPARISON : 01/02/18 bone density

#### FULL RESULT:

Dual photon x-ray absorptiometry of the following areas were performed: AP lumbar spine, Left hip, and Right hip.

Change	Bone Den.		T-score		Z-score	
	(gm/cm2)	(in SD)	(in SD)	%		
2019 AP spine (L1 - L4)	1.014	-1.4	0.0	11.4*		
Left hip	0.846	-1.3	0.2	1.4		
L Fem.Neck	0.806	-1.7	0.0	-1.5		
Right hip	0.825	-1.4	0.0	3.3		

R Fem.Neck 0.782 -1.8 -0.2 0.0

(\*Indicates statistically significant change in spine and bilateral hips)

COMMENTS: Low-resolution planar images demonstrate sclerotic changes of L2-L3 vertebral body endplates, which are increased/more prominent compared to prior study. This probably represent degenerative changes. This may also artificially elevate measured bone density of lumbar spine. The T-Score compares the patient's BMD to that of normal young adults, and is expressed in standard deviations from the mean. The World Health Organization defines the normal range as all values above -1 SD below the mean for normal young adults (age: 25-30); osteopenia is -1 to -2.5 SD below the mean; osteoporosis is more than -2.5 SD below the mean. Each SD below the mean is associated with an approximate two-fold increase in risk for fracture compared to normal young adults: 1SD=2X risk; 2SD=4X; 3SD=8X risk, etc.

The Z-Score compares the patient's BMD to that of her/his age, sex and ethnicity matched cohort. This is expressed in SD from the expected mean for the cohort and describes the degree of relative bone mineral deficit. Each SD below the expected mean is associated with a two-fold increased risk for fracture when compared to the patient's cohort: 1 SD=2X risk; 2SD=4X risk; 3SD=8X risk, etc. However, since this score is specifically cohort-related, it is not nearly as meaningful as the T-score.

#### IMPRESSION:

1. The lowest bone mineral density is measured in the right femoral neck, and indicates low bone mass/osteopenia as defined by the WHO.
2. There is statistically significant increase in measured bone density of lumbar spine compared to prior study