



## Chatswood Densitometry Centre

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### DXA Bone Densitometry: Friday, 12 August 2016

Dear Dr,

Thank you for referring Michael for bone mineral density scans. The results below are from scans performed on 12/08/2016 using a Lunar Prodigy DXA scanner (s/ware14.10).

#### Patient Details:

**Name:** Michael **Height:** 169.0 cm **Date of Birth:**  
**Gender:** Male **Weight:** 55.8 kg  
**Risk factor:** Fractures  
**Treatment:** N

#### Bone Densitometry Results:

Skeletal Site	Region	BMD	T-Score	Z-Score	Change vs. Baseline (%)
AP Spine	L2-L4	0.83 g/cm <sup>2</sup>	-3.4	-2.3	baseline
DualFemur	Neck Left	0.88 g/cm <sup>2</sup>	-1.5	0.1	baseline
DualFemur	Neck Right	0.94 g/cm <sup>2</sup>	-1.0	0.5	baseline
DualFemur	Total Left	0.92 g/cm <sup>2</sup>	-1.3	-0.1	baseline
DualFemur	Total Right	0.94 g/cm <sup>2</sup>	-1.1	0.1	baseline

Mild degenerative changes are spuriously elevating lumbar BMD (L1-L2 – least affected).

#### 10 Year Absolute Fracture Risk (World Health Organization: FRAX - Australian Reference).

Major Osteoporotic Fracture	Hip Fracture
3.1% (7.8 *)	0.8% (3.0 *)
Risk Factors: History of Fracture (Adult)	

Based on Femur (Left) Neck BMD. FRAX does not reflect lumbar spine BMD.

\*Absolute fracture risk (not an eligible criterion for PBS therapy) corresponding to PBS criteria for access to subsidised therapy in the absence of a fracture ( $T \leq -2.5$  in over 70s).

#### Trabecular Bone Score

The TBS (L1-L4) is 1.35 (normal > 1.30, intermediate 1.20 - 1.30, low < 1.20).

#### Conclusions

With a Z-Score of -2.3, this patient's BMD is below the normal range for their age, weight and sex. Further investigation to exclude secondary causes of increased bone loss is suggested.

The lumbar spine BMD is also in the osteoporotic range.

The TBS indicates no significant microarchitecture degradation.

Fracture risk is high.

Specific therapy for osteoporosis, in addition to weight bearing exercise and adequate dietary calcium and Vitamin D intake, is suggested.

A progress scan in 1 year may be of assistance to monitor bone mass.

Yours sincerely,

Prof Judith Freund

Report electronically validated and signed.