

AOT Orthogeriatrics Program—clinical practice tools

## Dual energy x-ray absorptiometry (DXA, DEXA)

- Gold standard for osteoporosis screening, diagnosis and monitoring of therapy
- Monitors changes over time and predicts risk of future fractures
- Quick and acceptable to patients and relatively inexpensive
- Very low dose of radiation (similar to daily background radiation exposure)

Measures bone mineral content (BMC, in grams) and bone area (BA, in square centimeters) used to calculate BMD by dividing BMC/BA or gm/cc<sup>2</sup>.

T-scores BMD pt – BMD young-adult population

SD of young-adult population

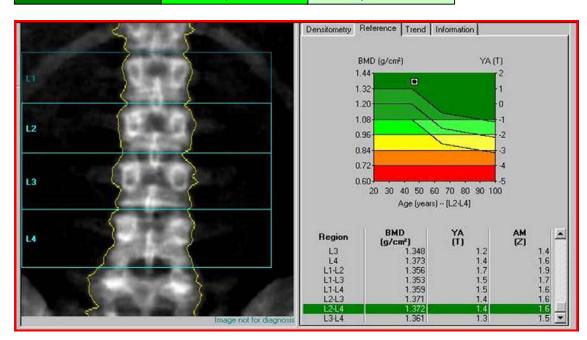
SD=Standard deviation pt=patient

Z-scores BMD pt – BMD age- and sex matched population SD of age- and sex-matched population

World Health Organization definitions based on BMD as measured by DXA:

T-score of – 1.0 and > -1.0 to -2.5 -2.5 or less

Normal Osteopenia Osteoporosis



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