

## A Growing awareness of **OSTEOPOROSIS**

Osteoporosis is a silent disease. You might not know you have it until you break a bone. A bone mineral density test is the best way to check your bone health.

- National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Osteoporosis is a disease of the bones which leads to bone loss and reduced bone mineral density. The consequence of this is associated with an increased risk of fractures. It progressively develops over many years, often unnoticed, with no symptoms or discomfort until a fracture occurs.

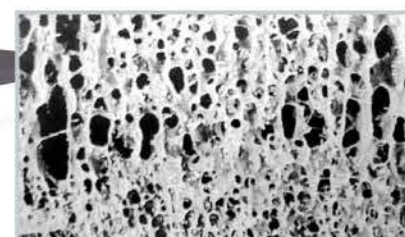
The disease is seen more often in women than in men. This is because women generally have a lower peak bone mass than men, live longer and take in less calcium. A further factor is that they require the hormone estrogen to keep bones strong. When estrogen levels fall in women after menopause, the rate of bone loss speeds up increasing the risk of osteoporosis. Since the ovaries make estrogen, faster bone loss may also occur if both ovaries are removed by surgery.

Males and females both reach peak bone mass around the age of 35 after this time all adults start to lose bone mass, therefore men like women are also at risk of getting osteoporosis later in life. Other factors which may also affect osteoporosis risk for both sexes including genetic, lifestyle, diet, exercise and clinical causes.

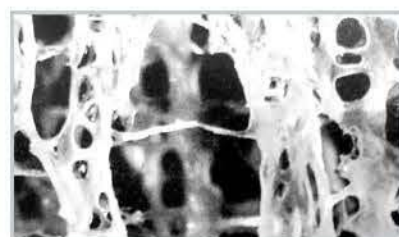
Screening for all people, but especially for women who are older than age 65, postmenopausal and who have a vertebral abnormality is recommended by the International Osteoporosis Foundation.

The diagnosis of osteoporosis is typically made by your doctor using a combination of the patients medical history, a physical examination, skeletal x-rays, bone densitometry, and other specialized laboratory tests.

Clinicians today use Central DEXA for BMD (Bone Mineral Density) testing which provides a report that gives information on the patients bone mineralization and determines their Future Fracture Risk. The increased use of BMD testing and osteoporosis treatment is related to a decrease in fracture incidence. The scanning procedure is quick, simple and above all provides reliable, accurate results.



Normal



Osteoporosis

The Evolution of X-ray Absorptiometry

### OsteoSys

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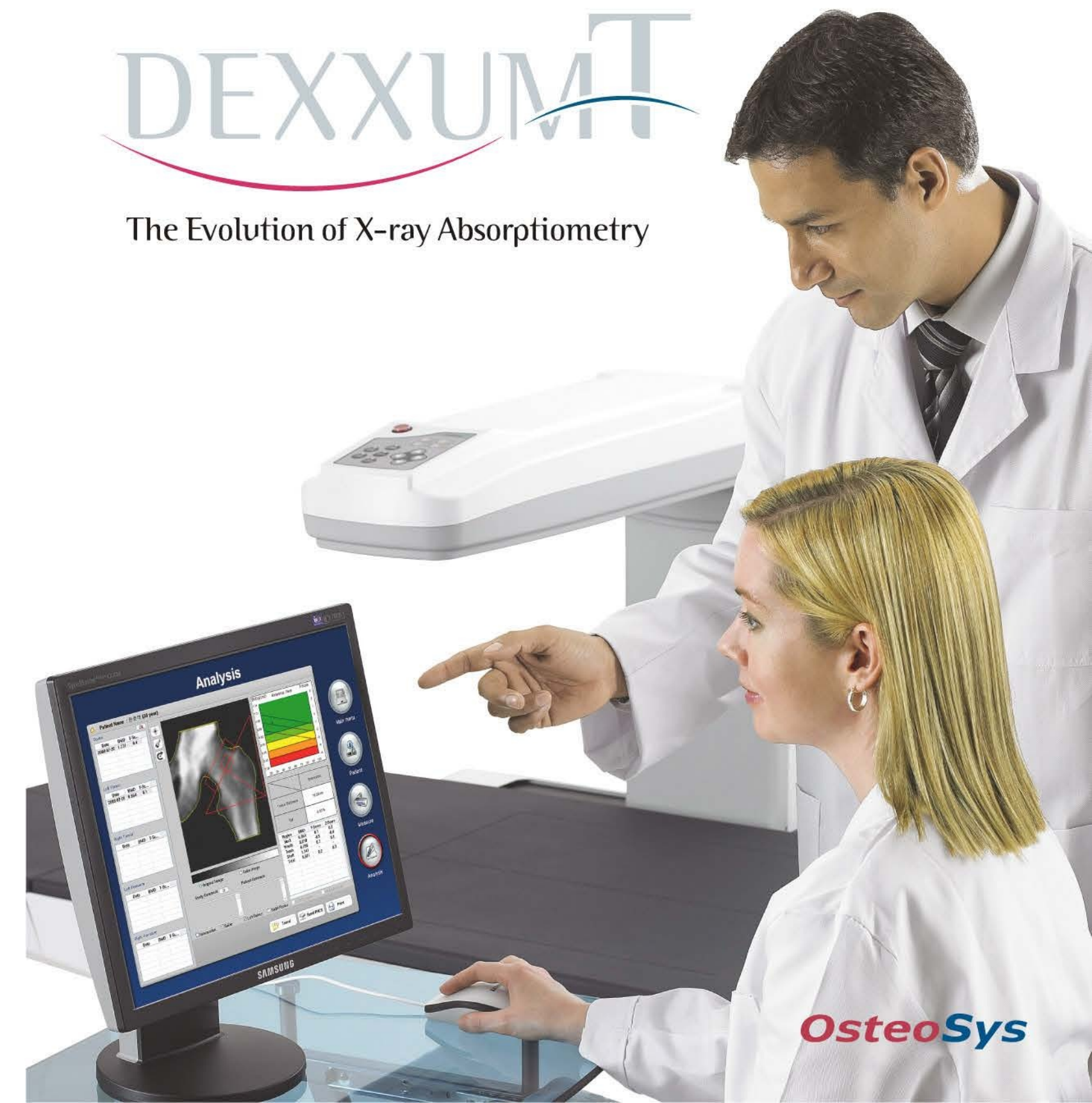
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# DEXXUM T

The Evolution of X-ray Absorptiometry



OsteoSys

# DEXXUMT

## The Evolution of X-ray Absorptiometry

The latest BMD from Osteosys, DexxumT is a Gold-Standard, versatile solution for evaluating the risk of osteoporotic fracture. For evaluating BMD, DexxumT is easier and simpler to operate and the most accurate way to measure.

DexxumT design is low height suitable for all ages and sizes of patients. Most BMD measurements are on older people and many BMD devices can be difficult to reach and lie down on. Dexxum T couch is only 64.2 cm from the floor, the easiest way to start the measurement.



## Innovative Functions

### Special Advantages

The fastest scan time Pencil beam DXA Scan system, just 85 sec for an AP Spine and 65 sec for Femur. The patients feel more comfortable with short scan times and operators have rapid result for immediate explanation. The speed of scan comes with Non-Stop Scan System, means up to 3 areas (AP Spine Et Dual Femur) can be made in a single scan operation.

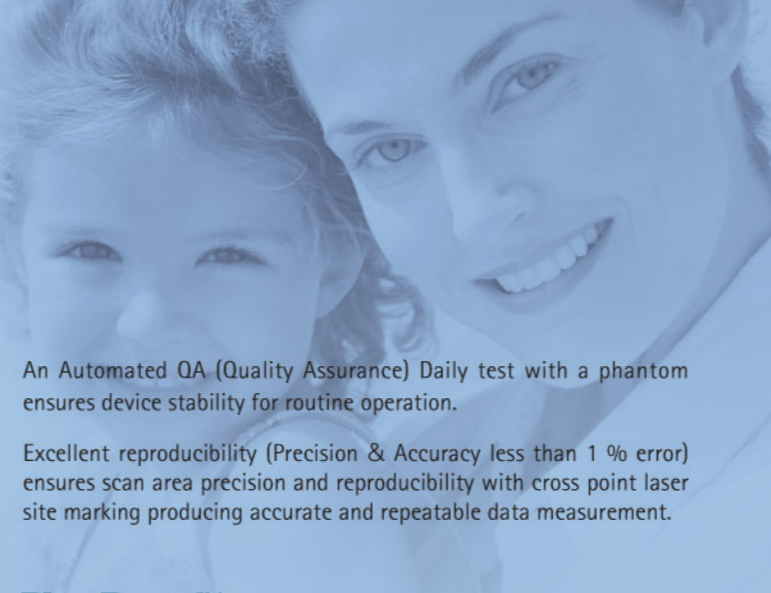
The comprehensive report shows tabular values, images and a graphical display of patient results compared with young normal (T-Score) and age-matched (Z-Score) reference populations that is clearer and more informative than reports from other systems. In addition multiple database reports can be generated for example by date of measurement, analysis date and average thickness information. The data system also enables multi scan comparisons.

### Key Characteristics

The automatic ROI (Region Of Interest) system displays images and calculates the BMD value for each area immediately after measurement.

The trending function provides a history of the patient's BMD value, showing the steps in a patient's bone age.

The Point edit Delete/Add function enables operators to divide the Bone and Tissue area to reduce BMD calculation error (as a result of fracture, implant or surgery part, etc.).



An Automated QA (Quality Assurance) Daily test with a phantom ensures device stability for routine operation.

Excellent reproducibility (Precision & Accuracy less than 1 % error) ensures scan area precision and reproducibility with cross point laser site marking producing accurate and repeatable data measurement.

### Plus Benefits

Auto Tube current setting is optimized for patients size (calculated from their height and weight)

Data entry and management of patient records and results is easy with simple registration and editing of patient details and BMD measurements

Automatic Data Base Back-up of system every Friday

Color image support

Multiple language support (Korean, English, German, Spanish, Russian, Chinese)

Personalize reports with the option to integrate Hospital name / Logo

The low X-ray dose for the patient removes need to have a special X-ray room.

## Provides information on Bone Mineral Density & Fracture Risk

DEXXUMT measures BMD(Bone Mineral Density) and applies it to calculate T-score and Z-score



S/W Main View

S/W Analysis View

AP Spine & Dual Femur Report

### T-score, Z-score, Represent

- Young adult mean standard variation (T-score)
- Age-matched mean standard variation (Z-score)

## Technical Specifications

### System

X-Ray System	DEXA (Dual Energy X-ray Absorptiometry)
Scanning Method	Pencil Beam

### Performance

Scan Site	AP Spine, Femur (Dual Femur)
Scan Type	Non-Stop Scan (AP Spine, Dual Femur)
Scan Time	(Fast) AP Spine : 1 min. 25 sec. Femur : 1 min. 5 sec.
	(Normal) AP Spine : 3 min. 7 sec. Femur : 2 min.
Precision / Accuracy	≤ 1.0%
Measured Parameters	BMD, BMC, Area, Tissue Thickness
Calibration System	Automatic Calibration, Daily QC Phantom
Patient Positioning	Laser Aid Positioning (Plus Shape Type)
Image Transmission	DICOM System

### X-Ray Characteristic

Enviornmental requirements (Self protection for source temperature)	Ambient temperature : 17~30°C
	Humidity : 20~80% (Non-Condensing)
	Power : 100~120 VAC. 50 Hz, 60 Hz/220~240 VAC. 50 Hz, 60 Hz

### Required Computer Workstation

Operating System	Windows XP, Windows Vista
Monitor	LCD Monitor (1280 × 1024 pixel)
Printer	Color ink jet with 300 × 300 dpi resolution

### Dimensions and Weight

Dimensions	Full Size: 2000 × 800 × 1221 (mm)
	Medium Size : 1900 × 800 × 1221 (mm)
	Compact Size : 1850 × 800 × 1221 (mm)
Weight	130.5 kg



### Color



※ Specifications and color of product may vary without prior notice.