

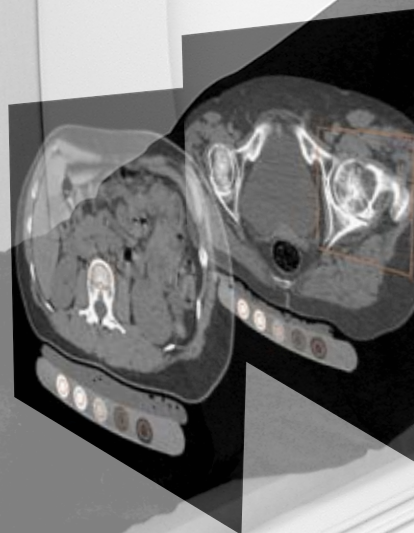
# QCT PRO™

*If you need a bone densitometer and have a CT scanner with 5 mins per patient capacity, a desire for the best technology and, at the same time, the most cost-effective solution, QCT PRO is for you.*

*With QCT PRO your CT scanner is transformed into the ultimate bone densitometer with the best of both worlds: (1) QCT trabecular spine BMD for sensitive treatment monitoring and early detection of low bone mass, and (2) DXA-equivalent hip BMD for use in diagnosis of osteoporosis and low bone mass, and fracture risk assessment.*

*QCT PRO is the sensible financial investment in addition to the performance choice. DXA simply cannot compare with QCT PRO. With a low purchase price, no site, personnel, or high recurring maintenance costs, the cost of QCT PRO is a small fraction of DXA.*

*QCT PRO is the first system to exploit CT's inherent advantage for true 3-dimensional densitometry with volumetric BMD of the spine and hip. Volumetric BMD is faster, easier, clinically superior, and enables new densitometric capabilities not within the reach of DXA.*



## **Volumetric Trabecular Spine BMD**

- Measure only trabecular bone
- Earliest detection of bone loss
- Earliest detection of therapeutic response
- Measure patients with scoliosis and other degenerative conditions that are impossible with other methods

## **DXA Equivalent Hip BMD**

- Clinically interchangeable with DXA
- Same areal ( $\text{g}/\text{cm}^2$ ) measurements and ROIs
- Comparable T-scores
- 0.7% precision

## **Fast & Simple**

- Helical scans in <60 seconds
- Highly automated analysis in 1–2 minutes

## **Cost-Effective**

- Add-on to your CT scanner increases equipment utilization
- Incremental revenue from a fixed-cost asset
- DXA replacement at a fraction of the cost
- No special siting, room, high maintenance, or personnel costs
- Compatible with any DICOM CT scanner
- Compatible with the Siemens OSTEOPHANT phantom
- Permanent—buy once, use indefinitely; survives scanner changes/upgrades

Transform your CT scanner into the ultimate spine and hip bone densitometer

# QCT PRO™ at a glance

Modular, Extensible, Upgradeable  
Application Framework



Database



Programmable Report  
Generator

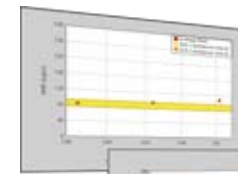
PACS



Vertebral Fracture Assessment



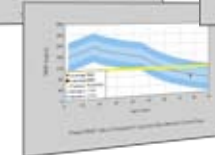
Serial Comparisons



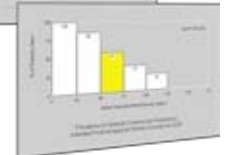
T- and Z-scores

Site	Reference	Mean	SD	Z-score	T-score
Lumbar	1000	1000	100	0.00	0.00
Thoracic	1000	1000	100	0.00	0.00
Femoral Neck	1000	1000	100	0.00	0.00

Normal Data Comparison



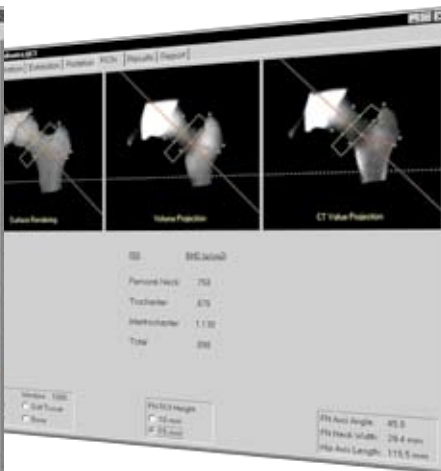
Fracture Prevalence



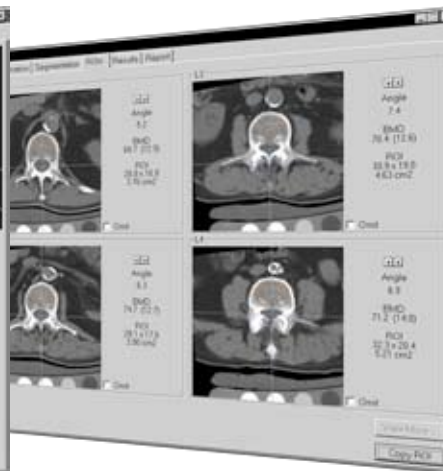
3D Volumetric Spine



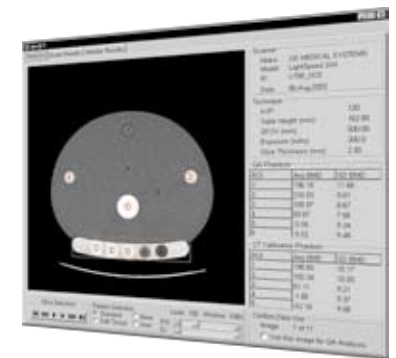
DXA Equivalent Hip



2D Conventional Spine



QCT Quality Control

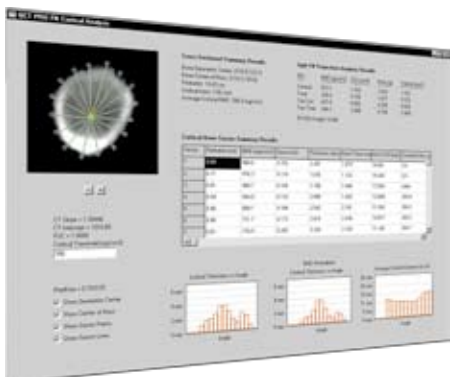


DICOM C-Store Server



CD Reader

Femoral Neck Cortical Analysis



Femoral Neck Cross Sectional Analysis  
and Data Export



DICOM Export to Third Party Applications



Database Export

SlicePick Extraction Utility



Support Utilities



Structural Analysis  
image courtesy of Dr. Thomas Beck

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