

GE Healthcare

Lunar Prodigy Primo™

Simplicity and dedication



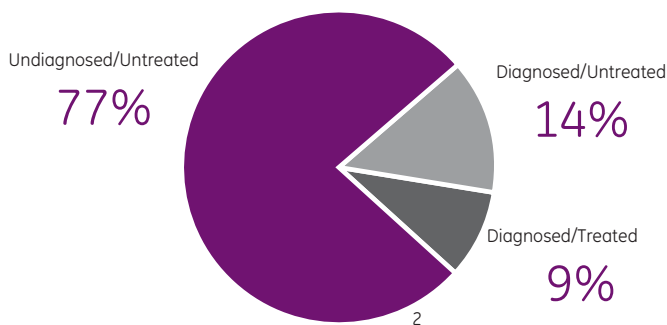
Seamless osteoporosis

As a bone health specialist, you want to offer your patient the best care possible: state-of-the-art diagnosis and follow-up. GE Healthcare is dedicated to osteoporosis management and, as the proven #1 bone densitometry partner worldwide, we deliver.

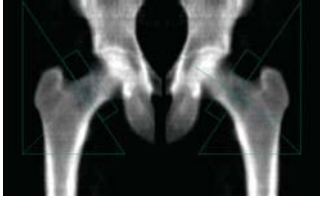
Lunar Prodigy Primo™ is the latest direct-digital narrow-angle fan-beam densitometer in the world-renowned Lunar Prodigy series. From standard AP Spine and DualFemur capabilities to advanced Vertebral Fracture Assessment studies, you can assess your patient's bone health in less than 5 minutes with a seamless 6-click computer-driven operation.

The enCORE Windows XP® software driven platform optimizes automation, saving you time, yet providing consistent results.

Approximately 40% of 50-year-old women will experience at least one osteoporotic fracture during their remaining lifetime.¹



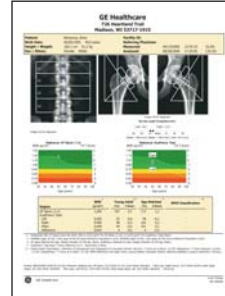
management



Confident

The DualFemur feature automatically measures both the left and right femurs in one fast scan.

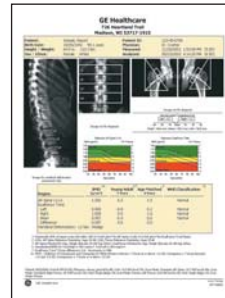
DualFemur improves accuracy by identifying the femur with the lowest density. The 30% improvement in precision³ seen with the combined left and right BMD enhances the ability to monitor response to therapy at this critical fracture site. In addition, a complete femur strength measurement can be done with the Advanced Hip Assessment (AHA) feature.



Efficient

With OneVision you and your referring physicians receive a single, consolidated report that combines the complete risk assessment analysis rather than receiving multiple assessment reports.

The OneScan feature adds further time savings and convenience, by automatically combining AP Spine and DualFemur scans into one acquisition.



Seamless

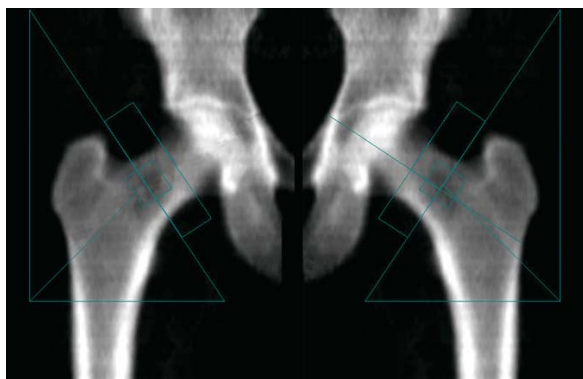
The Lunar Prodigy Primo™ patient report displays T- and Z-scores along with the fracture risk assessment graph, based on the World Health Organization (WHO) criteria to define Osteoporosis prevalence, and key diagnostic information. This makes interpretation of results and fracture risk assessment seamless.



40% better precision

Patient BMD changes slowly, and smaller precision errors lead to shorter patient monitoring intervals. The Lunar Prodigy series has shown to have up to 40% better clinical precision when compared to other systems.⁴

Lunar Prodigy Primo™ is a narrow-angle fan-beam platform providing direct-digital scanning and clinical utility. You get measurements of the two most vital clinical sites — AP Spine and Femur — at a low radiation dose. With best precision & accuracy, Lunar Prodigy Primo™ enables you to monitor evolution and therapy in the shortest interval possible. The highly automated enCORE software platform, based in Windows XP®, optimizes productivity and ensures consistent results with unprecedented ease of use.



DualFemur



AP Spine

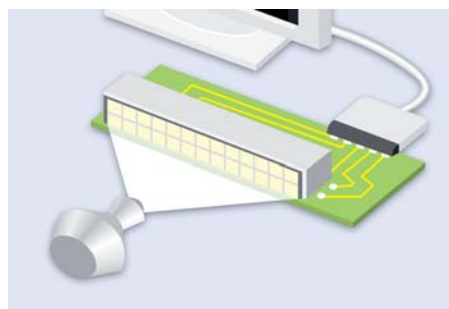


DVA: lateral and AP view of the entire spine

Tomorrow's technology today

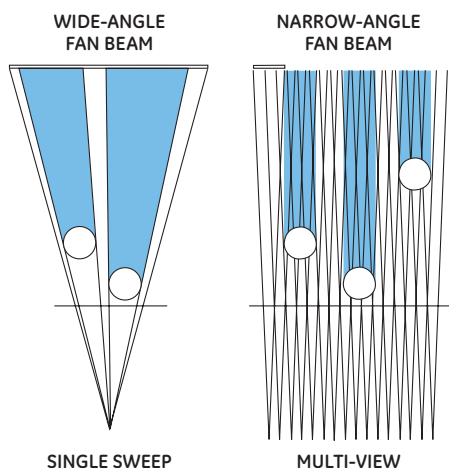
Direct-digital detection

Lunar Prodigy Primo™ uses the proven narrow-angle fan beam direct-digital technology for high image quality and confident measurement at low dose. The precision & accuracy of bone and body composition measurements are ensured by a complete daily quality assurance including multi-point calibration test.



True "no magnification" measurement

TruView eliminates the magnification and distortion effects (parallax errors) inherent to wide-angle fan-beam densitometry. As such area, BMD, and geometric measurement are always accurate.



Dual-energy Vertebral Fracture Assessment

Diagnose and assess vertebral fracture with your densitometer

Dual-energy Vertebral Assessment (DVA) expands the clinical applications available for the Lunar Prodigy Primo™ bone densitometer. DVA provides a rapid, dual-energy image of the AP and lateral spine allowing clinicians to visually assess the presence of vertebral fractures. Experts and radiologists agree; dual-energy is the preferred method for imaging the lateral spine,⁵ early detection and monitoring of osteoporosis.

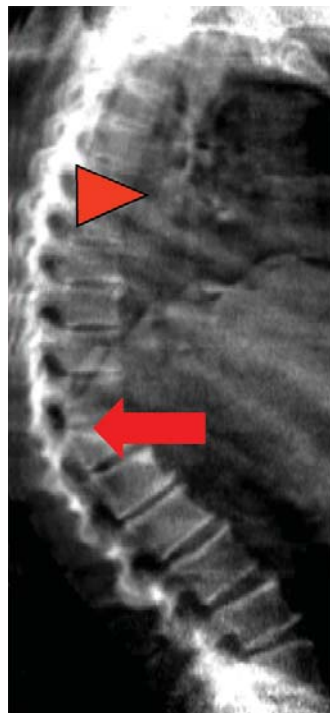
Severe osteoporosis often presents clinically as a low-trauma fracture of the spine, hip, forearm or ribs. Once an osteoporotic fracture occurs, the risk for subsequent fracture increases dramatically.



Arthritic Calcification
Female, Age 80



Normal
Female, Age 79



Severe Wedge
Female, Age 65

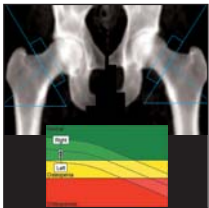


Severe Compression
Female, Age 75

More than 40% of women with normal or osteopenic BMD had a moderate or severe vertebral deformation seen with DVA.⁶

One upgradeable

GE Healthcare's enCORE software platform, based on Windows XP®, brings speed and automation to today's bone densitometry and beyond. The Lunar Prodigy Primo™ provides you with comprehensive applications covering all of your clinical needs:



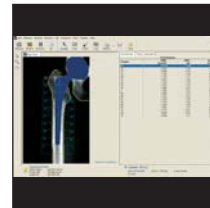
DualFemur

One process, without repositioning, to obtain the lowest BMD value for optimal assessment



Advanced Hip Assessment

Colour Bone Mapping, Cortical Thickness Measurement, FSI, HAL & CSMI for assessment of geometry and strength



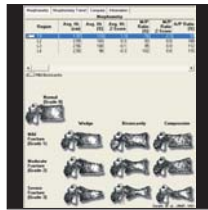
Orthopedic – Hip Implant

Measure the delicate region around the hip implant and visualize up to 19 Gruen zones



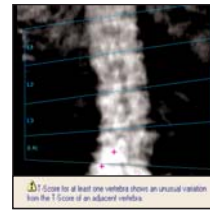
Dual-energy Vertebral Assessment (DVA)

Visualize T4-L5 vertebral bodies with soft tissue equalization



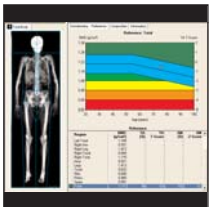
Semi-Quantitative Analysis and Fully Automated Morphometry

Analyze and evaluate vertebral deformations



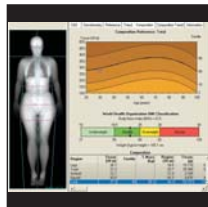
CAD

Expert over-read flags common errors



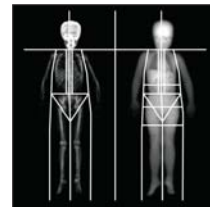
Total Body BMD

Assessment of the global skeleton



Body Composition

Total and regional tissue assessment for wellness programs, sports medicine and metabolic disease



Pediatrics

Advanced clinical assessment tools with enhanced pediatric reference data



Composer

Flexible tool for customized physician reports



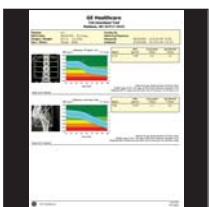
Fracture Risk

Individual 10-year Fracture Risk assessment calculator



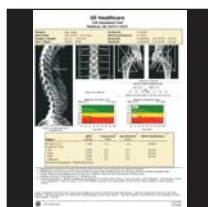
Forearm

Bone evaluation of the forearm



OneScan

Combine AP Spine and DualFemur in one acquisition



OneVision

Consolidated single page report



Full network and remote connectivity

DICOM, HL7, TeleDensitometry and MUDBA

platform

Technical specifications

Available Applications and Options⁷

- AP Spine
- Femur
- DualFemur
- Advanced Hip Assessment with HAL, CSMI, Femur Strength Index, Colour Bone Mapping and Cortical Thickness Measurement
- Total Body
- Body Composition (with fat/lean assessment)
- Dual-energy Vertebral Assessment (DVA)
- Forearm
- Orthopaedic – Hip implant
- Pediatric
- OneVision
- OneScan
- Composer
- Practice Management Report
- Computer Assisted Densitometry (CAD)
- TeleDensitometry⁸
- DICOM (Worklist -Color Print and Store)⁸
- Multi User Data Base Access (3/10)⁸
- HL7 Bidirectional interface⁸

enCORE Software Platform

- Advanced intuitive graphical interface
- Multiple Patient directories with Microsoft Access[®] database
- SmartFan for scan window optimization and dose reduction
- Automated Scan mode selection
- AutoAnalysis for a better precision
- Customized Analysis for clinical flexibility

- Exam Comparison process
- BMD or sBMD results (BMC and Area)
- Extensive Reference Data
- > 12,000 subjects – NHANES and several Regional GE Healthcare Reference Data
- User defined Reference Population
- T-score, Z-score, % Young-Adults and % Age-Match
- Automated WHO Background evaluation
- Patient trending with previous exam importation
- Multiple languages available
- Multimedia Online Help

Typical Scan Time and Radiation Dose at the Best Precision

- AP Spine : 60 sec : 42 µGy (< 1%CV)
- Femur : 60 sec : 42 µGy (< 1%CV)
- Total Body/ Body Comp. : 6 min : 0.4 µGy (< 1%CV)

Complete Quality Assurance

- Automated test program with complete mechanicals and electronics tests and including also calibration and quality control measurement
- Automated QA Trending with complete storage

Scanning Method

- Narrow-angle Fan-Beam (4,5° angle) with SmartFan, MVIR and TruView

X-ray Characteristics

- Constant potential source at 76kV
- Dose efficient K-edge filter

Detector Technology

- Direct-digital CZT (Cadmium Zinc Telluride) detector
- Energy sensitive solid-state array

Magnification

- None - Object plane measured

Dimensions (L x H x W) and Weight

- 262.5cm x 109.5cm x 128.5cm 272 kg (Full)
- 202.0cm x 109.5cm x 128.5cm 254 kg (Compact)
- Washable vinyl table pad

External Shielding

- Not required: X-ray safety requirements may vary upon destination. Please inquire with local regulatory authorities. GE Healthcare recommends consulting your local regulatory agency to comply with local ordinances.

Environmental requirements

- Ambient temperature: 18-27°C
- Power: 100-120 VAC 60Hz 20A dedicated circuit or 220-240 VAC 50Hz 10A dedicated circuit ± 10%
- Humidity: 20% - 80%, non-condensing

Computer Workstation

- Windows XP[®] Professional
- Intel processor computer, printer and monitor

Contact GE Healthcare or our local distributor for the detailed current configuration and optional hardware.

References:

1. Melton LJ III, Lane AW, Cooper C, Eastell R, O'Fallon WM, Riggs BL, 1993 Prevalence and incidence of vertebral fractures. *Osteoporosis Int* 3:113-119.
2. Source: US Dept. Commerce, M/A,R,C 1996
3. Bonnick SL, Nichols DL, Sanborn CF, Payne SG, Moen SM, Heiss CJ (1996) Right and left proximal femur analyses: Is there a need to do both? *Calcif Tissue Int* 58:307-310.
4. *JBMR* 2003; 18 (Suppl 2): S201
5. Rea JA, Li J, Blake GM, Steiger P, Genant HK, Fogelman I, 2000 Visual Assessment of vertebral deformity by X-ray absorptiometry: a highly predictive method to exclude vertebral deformity. *Osteoporosis Int* 11:660-668.
6. Patrick K. Burke, M.D. – Osteoporosis Diagnostic and Treatment Center, Retreat Hospital, Richmond, Virginia
7. Depending on product configuration and availability
8. Networking is under the user's responsibility

© 2006 General Electric Company - All rights reserved.
GE, GE Monogram, Lunar and Lunar Prodigy Primo™
are registered trademarks of General Electric Company.

General Electric Company reserves the right to make
changes in specifications and features shown herein, or
discontinue the product described at any time without
notice or obligation. Contact your GE representative for
the most current information.

GE Lunar, a General Electric company,
doing business as GE Healthcare.

Lunar Product Division Americas

GE Healthcare
726 Heartland Trail
Madison, WI 53717
T: +1-608-826-7050
F: +1-608-826-7106
www.gehealthcare.com

Lunar Product Division Europe, Middle-East and Africa

GE Medical Systems Benelux NV/SA
Kouterveldstraat 20
B-1831 DIEGEM, Belgium
T: +3227197203
F: +3227197205
www.gehealthcare.com
info.lunar@med.ge.com

Lunar Product Division Asia and Pacific

GE Healthcare Ultrasound & PCD Asia
Units 1101, 11th Floor, Shanghai Maxdo Centre
No. 8 Xing Yi Road, Shanghai 200336, P.R. China
T: +86-21-52574640 (Ext. 64045 or 64128)
F: +86-21-52080064
www.gehealthcare.com

Healthcare Re-imagined

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world discover new ways to predict, diagnose and treat disease earlier. We call this model of care "Early Health." The goal: to help clinicians detect disease earlier, access more information and intervene earlier with more targeted treatments, so they can help their patients live their lives to the fullest. Re-think, Re-discover, Re-invent, Re-imagine.

To receive Lunar News online, please register for SmartMail. Go to www.gehealthcare.com and click on the SmartMail icon and complete the registration form. Select online newsletter, select BMD, click submit and you will automatically receive the newsletter.



GE imagination at work