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GE Healthcare

Lunar DXA pediatric application

About GE Healthcare

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Our **healthmagination** vision for the future invites the world to join us on our journey as we continuously develop innovations focused on reducing costs, increasing access and improving quality and efficiency around the world. Headquartered in the United Kingdom, GE Healthcare is a \$17 billion unit of General Electric Company (NYSE: GE). Worldwide, GE Healthcare employs more than 46,000 people committed to serving healthcare professionals and their patients in more than 100 countries. For more information about GE Healthcare, visit our website at www.gehealthcare.com

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imagination at work



BMD-0175-01.08-EN-US



Watching children grow: Pediatric analysis tools

Innovation and dedication

Now you can use one powerful set of tools to get valuable clinical information about growth and development in children. The Lunar DXA pediatric application measures more than BMD. It analyzes all three tissue types – lean mass, fat mass, and bone – to help you monitor growth and development in children. The Lunar DXA pediatric application comes to you from GE Healthcare, the world's leading provider of densitometry solutions.¹

Accurate assessment, reliable trending

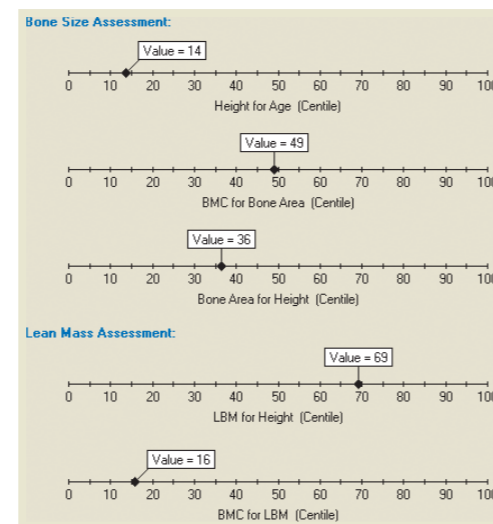
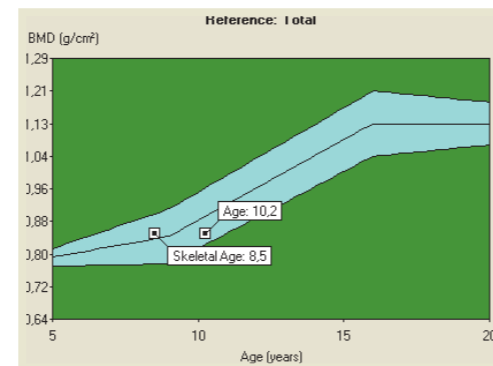
Children grow at unique rates. Our advanced pediatric analysis tools let you compare skeletal and chronological age analyses and BMD results against gender-specific reference populations. Age-specific standard deviations for each patient allow for enhanced diagnostic confidence.^{2,3}

*"Children with growth abnormalities often show deficient BMD for chronological age, but this deficit might be a reflection of growth irregularities rather than poor bone mineralization."*⁴

The Lunar DXA pediatric application provides a complete measurement of bone, fat and lean tissue composition. These measurements enable enhanced assessments of growth and development that include:

- Height for age⁵
- BMC for bone area⁵
- Bone area for height⁵
- Lean body mass for height (muscle development)^{6,7}
- BMC for lean body mass (muscle-bone balance)^{6,7}

Exam results provide excellent diagnostic quality information and a comprehensive trending tool, coupled with full reporting and connectivity options. All Lunar DXA equipment is also based on the easy-to-use enCORE platform.



Tomorrow's technology today⁸

Lunar densitometers bring you the latest diagnostic innovations in bone densitometry. They are precise, accurate and fast with low patient dose, all made possible by the exclusive direct-digital technology. The Lunar narrow-angle fan-beam technology ensures precise measurement of bone, lean tissue, fat mass and area, without the magnification error inherent in other densitometers using wide-angle fan-beam technology.

Lunar technology means:

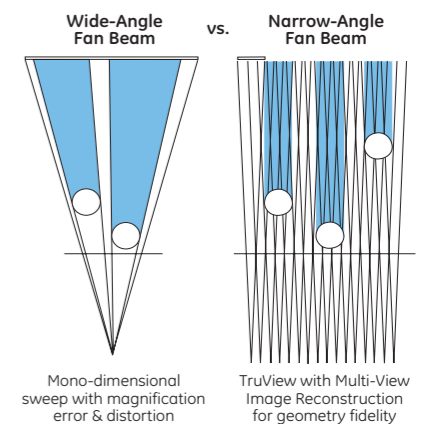
- High precision, crucial to ensuring diagnostic confidence in both today's exam and repeated measurements^{9,10}
- High-resolution image quality, enabling crisp bone edge detection even in the smallest children

The Lunar DXA pediatric application is a complete package providing a solid clinical solution including AP spine, proximal femur, total body and BMD exams, as well as pediatric body composition assessments.

Find out how these powerful tools can help you deliver high-quality pediatric care. Contact your GE Healthcare representative today.

"Growth and illnesses in children do not always follow a standard path. Analyzing a child's body status with skeletal and lean mass parameters enhances our ability to confidently assess bone and lean tissue."

- Hans Fors (MD), GP-GRC, Sahlgrenska Academy of Göteborg University, Göteborg (SE)



References:

1. Based on global revenues in 2005 versus competition.
2. Fors H, Valdimarsson S, Wikland KA, Vandenbulcke K (2005) Improved assessment of bone status in children with Lunar pediatric total body software. *J Bone Miner Res* 20(Suppl 1):S301.
3. Barden HS, Wacker WK, Faulkner KG (2005) Pediatric DXA enhancements: Variable standard deviations, total body skull exclusion. *J Clin Densitometry* 8:232.
4. Landoll JD, Barden HS, Wacker WK, King W, Kissel JT, Faulkner KG, Matkovic V (2004) Skeletal assessment in Duchenne muscular dystrophy using new DXA pediatric tools. *J Bone Miner Res* 19 (Suppl 1):S470.
5. Molgaard C, Thomsen BL, Prentice A, Cole TJ, Michaelsen KF (1997) *Arch Dis Child* 76:9-15.
6. Crabtree NJ, Kibirge MS, Fordham JN, Banks LM, Muntoni F, Chinn D, Boivin CM, Shaw NJ (2004) The relationship between lean body mass and bone mineral content in paediatric health and disease. *Bone* 35:965-972.
7. Schoenau E, Neu CM, Beck B, Manz F, Rauch F (2002) Bone mineral content per muscle cross-sectional area as an index of the functional muscle-bone unit. *J Bone Miner Res* 17:1095-1101.
8. Depending on product configuration and availability
9. Cole JH, Scerifella TA, van der Meulen MCH (2005) Fan-beam densitometry of the growing skeleton. Are we measuring what we think we are? *J Clin Densitometry* 8:57-64.
10. Wu XP, Liao RE, Cao XZ, Tang S, Sheng ZF, Dai R (2006) Precision and accuracy comparison of bone densitometers: Prodigy Advance and Delphi A. *Osteoporos Int* 17 (Suppl 2):S168.