Revolutionizing Musculoskeletal Health Diagnostics: A Comprehensive Full-Body Skeletal Assessment Approach

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Technology

Bone's QCT Max is an AI-driven diagnostic software transforming CT scans into comprehensive skeletal health reports using proprietary phantom-less QCT technology. It features a unique self-calibration mechanism based on patient muscle and fat tissues, eliminating the need for phantoms and enabling precise volumetric bone mineral density (vBMD) analysis with >99% accuracy.

Key innovations include AI-powered 3D segmentation for 90% faster workflows and the patented "Bone Void" indicator, which identifies localized bone weaknesses. The system supports osteoporosis management, surgical planning, and post-operative monitoring, addressing critical gaps in musculoskeletal healthcare.

Stage of Development

R&D: Secured ***NMPA Class II certification*** for bone quality assessment in the spinal and hip regions.

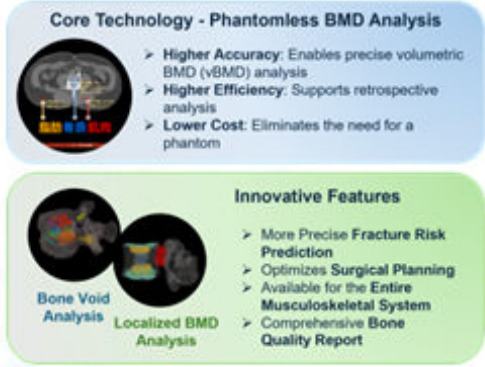
Commercialization: The ***2025 Clinical Guidelines for Bone Quality Assessment and Management in Orthopedic Surgery Patients*** recognize 3D bone quality a ssessment as a superior alternative to conventional DXA scans, positioning Bone's QCT Max as a key tool for widespread adoption in osteoporosis diagnosis and surgical planning.

Key Advantages

- **Empowering Orthopedic Surgical Planning:** Provides precise pre- and post-operative bone quality assessments, optimizing surgical plans and monitoring osseointegration to reduce complication risks.
- **Guiding Osteoporosis Management:** Delivers accurate vBMD measurements and identifies structural weaknesses with the "Bone Void" feature to prevent implant failures.
- **Benefits for Patients & Health Systems:** Maximizes the diagnostic value of CT scans, enabling early detection of skeletal diseases without additional cost, time, or radiation.

Opportunities

- Provides the first comprehensive musculoskeletal analysis with localized bone quality reports, including advanced features like the patented 'Bone Void' indicator.
- Enhances accuracy and efficiency in bone quality assessment and surgical planning through AI-powered 3D segmentation and artifact-free peri-prosthetic density analysis.



Intellectual Property (10+)

- CN Patent no.: ZL 2023 1 0120351.5
- CN Patent no.: ZL 2023 1 0425719.9
- CN Patent no.: ZL 2023 1 1198367.4 ....

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