EOS

Ultra-low dose X-ray for whole body front and lateral images

EOS is an advanced 2D and 3D imaging system that specifically addresses the unique needs of healthcare professionals in the field of orthopaedics - capturing full-body, frontal & lateral images particularly spine, hips and knees.

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LOW DOSE IMAGING

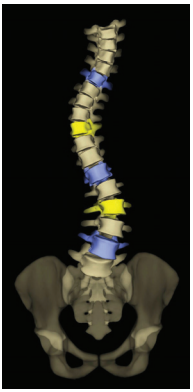
- Radiation dose reduced by 50% compared to DR system[1], 85% compared to CR system[2] and 95% less than basic CT scans[3]
- The system is designed to minimise scattered radiation and improve the signal to noise ratio and dynamic range making it possible to obtain very high quality images at a lower radiation dose
- An entire body scan takes approximately 20 seconds for an adult and about 15 seconds for a child
- Micro-dose is used for follow up and offers patients the peace of mind for conditions requiring repeated scans for progress and monitoring such as Scoliosis and lower limb orthopaedic conditions

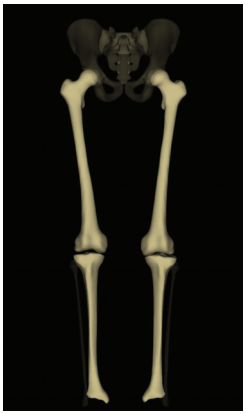
UNIQUE FULL BODY IMAGING

- Full body for improved diagnosis and global view of patients skeleton providing true size images on a 1:1 scale for accurate measurements and surgical planning
- The full skeletal view provides a global assessment of the patient's skeletal system for a better understanding of the patient's joint conditions, alignments and posture
- No magnification and no stitching for accurate measurements

LIFE-SIZED NATURALLY WEIGHT BEARING 3D

- The standing up natural position of the body shows the complex interactions between all parts of the skeleton
- 3D reconstruction of the patients anatomy provides healthcare professionals with views and parameters that are not available with 2D X-rays, such as torsion, anteversion and rotation
- Assists in diagnosis, treatment plan development (including surgery planning when required), to monitor conditions and post-operative follow up
- A 3D rendering of specific skeletal anatomy can be made and provide very accurate clinical parameters that should lead to enhanced therapy decision making and improved patient outcomes
- EOS is able to perform images of the whole body in a very simple and repeatable way. Frontal and lateral digital images up to a maximum of 175cm may be obtained simultaneously with an outstanding image quality





CLINICAL APPLICATIONS

Spine

- Research shows that spinal alignment is impacted by the pelvic and lower limb positions. Full body imaging enables physicians to consider the global musculoskeletal alignment for a more accurate diagnosis and surgical plan[4]
- Complex spinal deformities, such as Scoliosis, are three dimensional and require correction across three planes of the body. EOS 3D models provide a more complete picture of the deformity to help plan complicated surgical treatments[5]

Lower limbs (Hip/Knee)

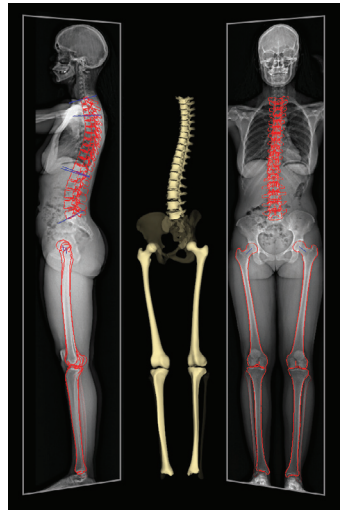
- Planning for hip, knee and other lower limb surgeries involves careful assessment of musculoskeletal alignment. If the orientation of the joint prosthesis is not ideal, it could lead to a greater risk of complications or even implant failure. Research shows 3D modeling with the EOS system can provide more accurate measurements of several key parameters used to evaluate lower limb alignment, such as tibial and femoral length or frontal and lateral knee angulations[6,7]

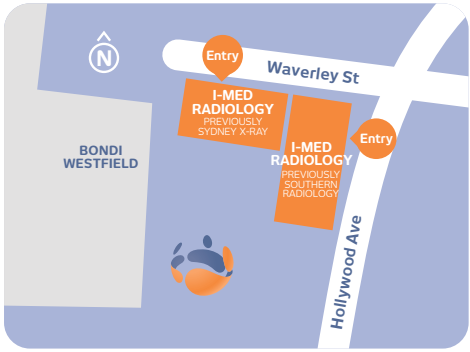
Other Clinical Applications include:

- Whole body examination
- Low-dose chest X-rays
- Unequal leg length/knees
- Torsion of lower limbs
- Assessment of the position of acetabular implants

What is EOS?

EOS is an imaging device that combines a Nobel prize-winning particle detector and an innovative linear scanning technique. With these two technologies, EOS allows for whole body, frontal and lateral images to be acquired simultaneously with significant reduction compared to conventional radiography[8].





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