EOS & sterEOS

Innovative imaging system and 3D workstation for advanced orthopedic care

EOS imaging

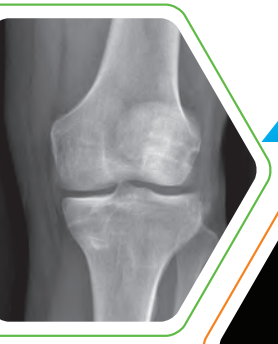
CONNECTING IMAGING TO CARE

EOS

What is EOS?

EOS is a dedicated modality that specifically addresses the unique needs of the orthopedic industry. The EOS system simultaneously captures full-body, frontal and lateral images. The X-rays are weight-bearing, giving radiologists and surgeons a global assessment of their patient in a functional position.

Low dose EOS exams provide accurate 2D images and valuable anatomical 3D information throughout the patient care pathway. The Micro Dose option further reduces radiation exposure without compromising the ability to generate 3D models. Using Micro Dose for follow-up, pediatric exams is another important step towards the ALARA principle (As Low As Reasonably Achievable) and is particularly important for patients with conditions that require frequent scans over the course of their treatment.



BENEFITS OF THE EOS SYSTEM

Dose reduction

- Radiation dose reduced by 50% compared to a DR system[1], 85% compared to a CR system[2]
- Substitution of specific CT exams with an EOS exam to reduce the patient's radiation dose by 95%[3]
- Micro Dose protocol for a full spine exam (frontal and lateral) at a dose that's equivalent to only a week's worth of natural radiation[4]

Other clinical outcomes

- Comprehend compensation mechanisms between the spine, hips and knees thanks to full body, weight bearing images
- Calculate precise 2D and 3D measurements, free from magnification and stitching bias
- Improve diagnostic capabilities thanks to high image quality with over 65,000 grey levels and excellent contrast

Facility-wide efficiency

- Capture frontal and lateral, full-body images in less than 20 seconds for adults and 15 seconds for children
- Complete an exam in under 4 minutes, even for complex spine or full body[1]

sterEOS

What is sterEOS?

The sterEOS workstation enables you to create patient-specific, 3D models of the spine and/or lower limbs from weight-bearing low dose or Micro Dose EOS exams. Once the models are generated, you have access to over 100 automatically calculated clinical parameters. A DICOM patient report featuring the 2D images, 3D model and relevant clinical data can then be produced and shared with the patient and medical team.

The 3D information generated by sterEOS workstation is used by surgeons throughout the patient care pathway from diagnosis to follow-up. Whether you're interested in understanding your patient's condition by visualizing the anatomy from numerous perspectives, comparing 3D measurements to reference values, planning a surgery in 3D, evaluating outcomes or monitoring your patient's progression over time; the sterEOS workstation provides the 3D information you need.

BENEFITS OF THE sterEOS WORKSTATION

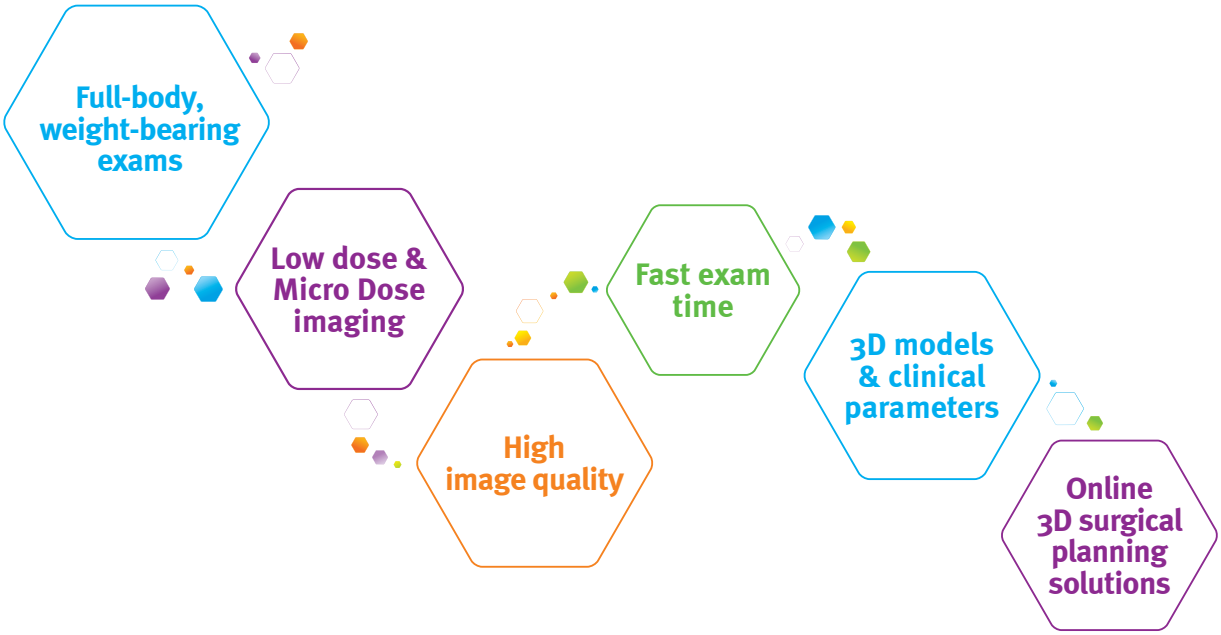
Improved clinical outcomes

- Visualize and understand the position, rotation and orientation of the bones in 3D within the global skeletal system from a weight-bearing position
- Improve diagnosis and clinical research capabilities with over 100+ automatically calculated, accurate 2D and 3D measurements that are free from bias and taken in a functional position
- Perform a post-operative assessment of a total hip replacement through a dedicated and precise workflow that automatically calculates the position of the prosthetic components
- Visualize 3D models and calculate 2D/3D clinical parameters even from pediatric Micro Dose exams and seated exams with the EOS radiolucent chair

Facility-wide efficiency

- Simple, straightforward 3D workflows dedicated to postural assessment, spine, lower limbs and Total Hip Arthroplasty (THA)
- Powerful patient database with user access management and data sharing with internal and external referring physicians
- Auto-routing to PACS and webPACS of images, patient reports and 3D models
- Direct link to the online EOS 3DServices and to the EOSapps, 3D surgical planning solutions*

Why choose EOS?



About EOS imaging

EOS imaging is a med-tech company based in Paris, France that designs, develops and markets EOS, an innovative medical imaging system dedicated to orthopaedics and osteoarticular pathologies. A low dose or Micro Dose EOS exam provides full body, stereo-radiographic images in weight-bearing positions. The frontal and lateral images are acquired simultaneously in less than 20 seconds without magnification.

The accompanying sterEOS workstation enables you to create patient-specific 3D models, calculate over 100 clinical parameters automatically and generate customizable patient reports. EOS imaging also offers online 3DServices and EOSapps*, cloud-based 3D surgical planning software solutions. The EOS platform adds value throughout the patient care pathway and truly connects imaging to care.

1. Comparison of radiation dose, workflow, patient comfort and financial break-even of standard digital radiography and a novel biplanar low-dose X-ray system for upright full-length lower limb and whole spine radiography. Dietrich TJ et al. Skeletal Radiol. 2013.

2. Diagnostic imaging of spinal deformities: reducing patients radiation dose with a new slot-scanning X-ray imager. Deschenes S et al. Spine (Phila Pa 1976)2010 Apr.

3. Ionizing radiation doses during lower limb torsion and anteversion measurements by EOS stereoradiography and computed tomography. Delin C et al. Eur J Radiol. 2014

4. EOS microdose protocol for the radiological follow-up of adolescent idiopathic scoliosis. Ilharreborde B. et al. Eur Spine J. 2015

Please read carefully the labeling provided with the device.
Caution: US Federal law restricts this device to sale by or on the order of a physician.
*Check with your local EOS imaging representative for availability in your region.

EOS imaging SA | 10 rue Mercoeur | 75011 Paris France | +33 (0) 155 25 60 60
EOS imaging, Inc. | 185 Alewife Brook Parkway #205 | Cambridge, MA 02138 USA | +1 (678) 564 5400

www.eos-imaging.com

© 2016 EOS imaging. All rights reserved.

R22-BRO-012-G-EN / Nov 2016