

3D Surgical Planning For Spine Surgery

spineEOS

Optimize your spine surgical strategy

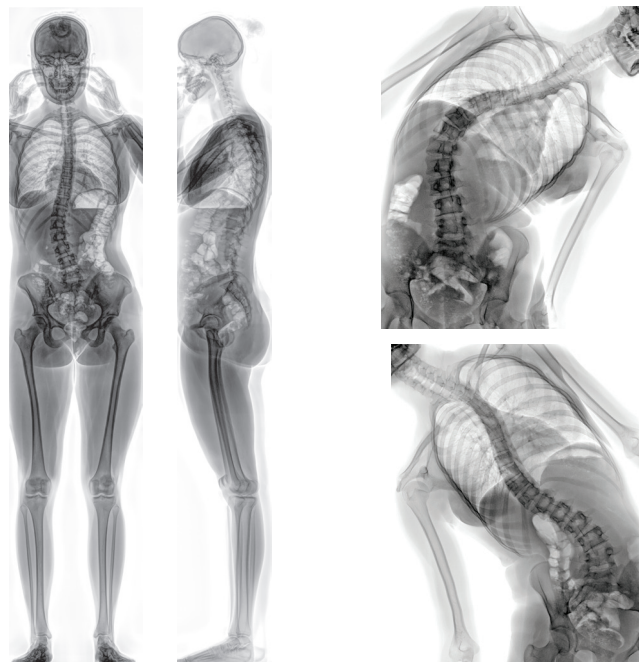
spineEOS offers the unique ability to plan spine surgeries based on patient-specific 3D models that increase the understanding¹ of 3D frontal, sagittal alignments and axial rotations of the patient's spine, pelvis and compensatory mechanisms in the lower limbs.

The online platform provides surgeons with access to EOS full body, standing and bending images, 3D models and 3D clinical parameters for a new level of information to plan surgery and assess sagittal alignment.

Now with spineEOS, surgeons can confidently identify surgical target(s) with real-time automatic feedback at each step of the planning process. The result is a defined surgical strategy that enables the entire team to enter the OR with an understanding of how to achieve optimal sagittal alignment and the components needed in surgery – such as accurate rod shape, diameter and length.



Powered by weight-bearing EOS images



Biplanar full body acquisition

Bending acquisition

Key features

Age-based normative data: Determine the correct sagittal balance target based on age-based reference values

Alignment planning: Optimize pelvic tilt, lordosis and kyphosis alignment specifically for each patient

Cage planning: Plan cage position and size with the help of direct feedback about how they will affect the patient's spine





Osteotomy planning: Make adjustments in real-time to simulate the impact on spinal alignment

Rod planning: Determine accurate rod shape and length to achieve surgical target(s)

Open platform: spineEOS is not specific to any implant vendor

Software for more confident
orthopedic surgical planning

Key Benefits

-  Osteotomy, cage and rod planning
-  Frontal and sagittal balance assessment and correction
-  Cage and rod planning
-  Web-based and cost-effective solution

Sagittal Balance Assessment*

Sagittal balance assessment and correction, including lower limb compensatory mechanisms, are key when correcting spinal pathologies in order to avoid complications and misalignment.²



The spineEOS online surgical planning tool enables surgeons to accurately plan the ideal 3D spinal alignment target—and the associated rod shape and length—to restore proper frontal and sagittal balance.

Workflow Process

Our products and services work together to provide a complete solution from imaging to surgery, postoperative assessment and follow up.



1 Imaging Center acquires EOS images



2 2D data is uploaded to our compliant server
EOS 3DServices team prepares the 3D model and 3D dataset



3 Surgeon uses 3D data for online, surgical planning in 3D with spineEOS



4 Surgeon performs spine surgery with accuracy and confidence



5 Post-operative EOS images are acquired for confirmation of surgical success

*EOS Sagittal alignment in adult spine patients white paper (ref. MKT10384-B-EN)



1. Relationships Between the Axial Derotation of the Lower Instrumented Vertebra and Uninstrumented Lumbar Curve Correction: Radiographic Outcome in Lenke 1 Adolescent Idiopathic Scoliosis With a Minimum 2-Year Follow-up - Pasha S, Cahill PJ, Flynn JM, Sponseller P, Newton P. J Pediatr Orthop, 2018



2. An international consensus on the appropriate evaluation and treatment for adults with spinal deformity- Berven SH, Kamper SJ, Germscheid NM, Dahl B, Shaffrey CI, Lenke LG, Lewis SJ, Cheung KM, Alanay A, Ito M, Polly DW, Qiu Y, de Kleuver M, AOSpine Knowledge Forum Deformity Eur Spine J, 2017

If you are interested in utilizing spineEOS, please contact us at contact@eos-imaging.com

EOS 3DServices uses the FDA cleared sterEOS Workstation and does not provide diagnostic or treatment recommendations. The 3D information proposed by EOS 3DServices is limited to the intended use of the sterEOS Workstation.

Caution: US Federal law restricts these devices to sale by or on the order of a physician. Please read carefully the labeling provided with the devices.

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