

SPINE PORTFOLIO

A COMPLETE RANGE OF SOLUTIONS



Brochure

Joint

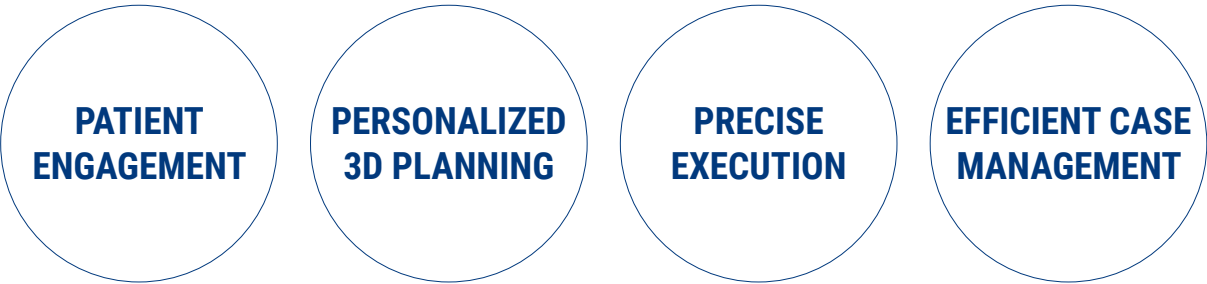
Spine

Sports Med

MYSOLUTIONS PERSONALIZED ECOSYSTEM

Every patient is different. At Medacta we look beyond the ordinary, and this has led us to design an advanced network of digital solutions to improve patient outcomes and healthcare efficiency – the MySolutions Personalized Ecosystem.

In a world where technology advances very fast, MySolutions Personalized Ecosystem embodies our vision to never stop improving the experience for patients, surgeons and care facilities. This platform is constantly evolving and is based on cutting-edge technologies fine-tuned in collaboration with an international network of expert surgeons. Patient engagement, personalized 3D planning, precise execution and efficient case management are the pillars which guide us in building and improving this advanced platform.



MySolutions Personalized Ecosystem is designed around the patient needs and expectations, with the aim to delivering value throughout the entire patient journey. This platform is based on patient-matched surgical guides, advanced planning and verification tools, augmented reality-based personalized execution, patient optimized pathway and clinical data collection and analysis.

PRE-OP

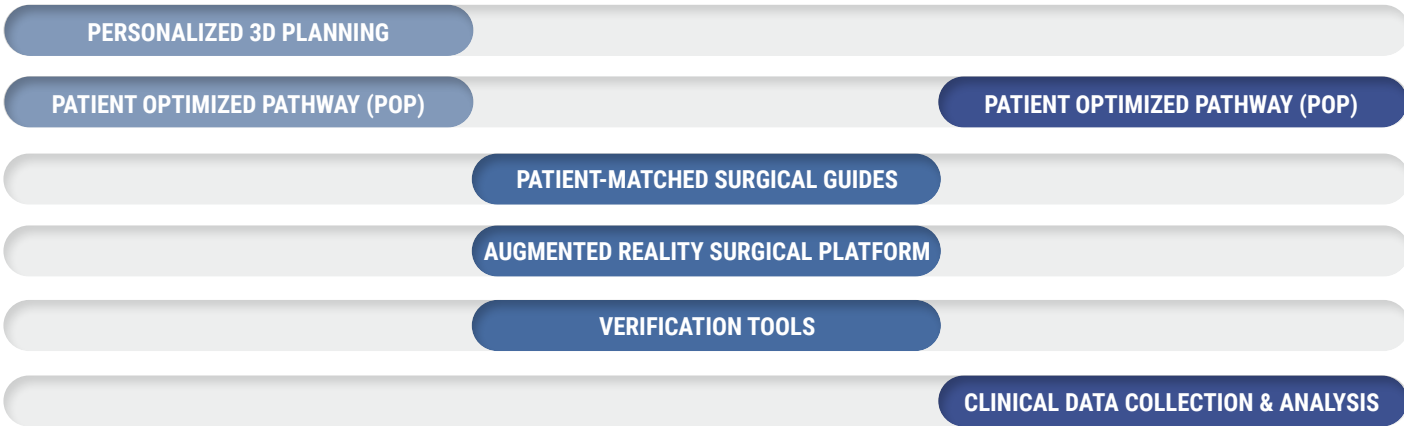
Engage and educate your patients, create tailored plans based on advanced 3D analysis and collaborate dynamically with medical teams.

INTRA-OP

Improve the efficiency and accuracy of surgery with 3D printed patient-matched guides and unique augmented reality real-time surgical guidance.

POST-OP

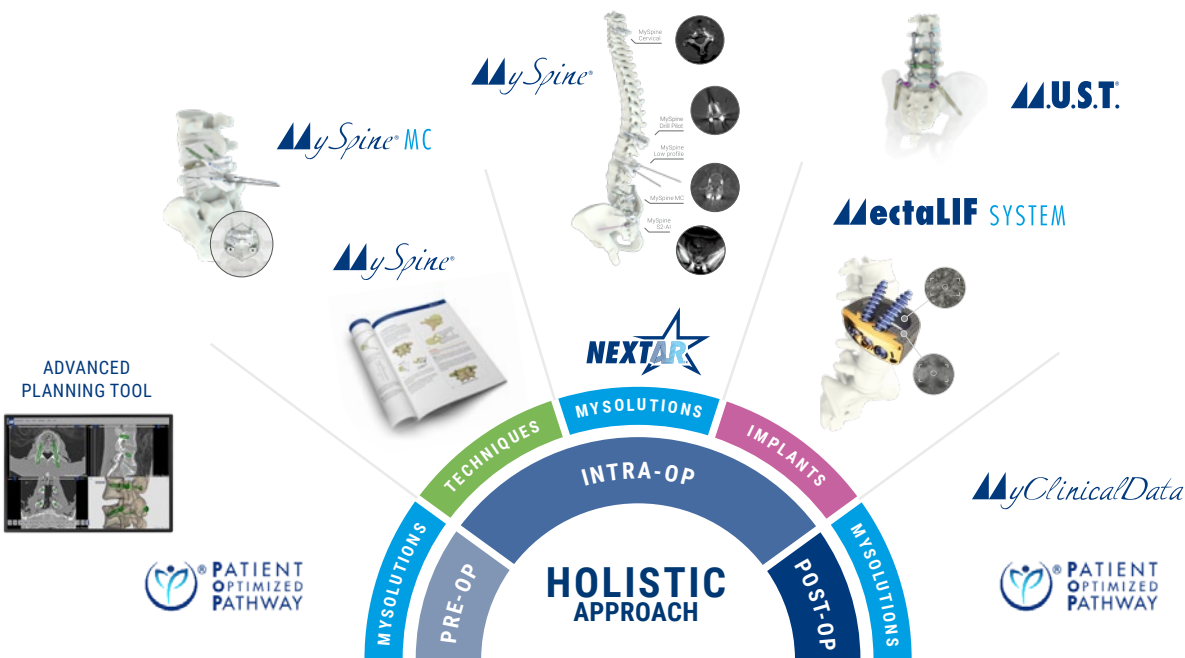
Communicate and stay connected with your patients, with advanced education and monitoring tools, and record and analyze clinical outcomes.



MYSOLUTIONS.MEDACTA.COM



Together with our comprehensive implant portfolio and uniquely refined surgical techniques, the MySolutions Personalized Ecosystem empowers Medacta’s holistic approach to personalized medicine.



SPINE PORTFOLIO

NEXTAR SPINE

The NextAR, Augmented Reality Surgical Platform, assists the surgeon in precisely locating the anatomical structures in either open, mini-open, or percutaneous spine procedures for the safe placement of spine implants. The system tracks the patient's anatomy, continuously updating its position on patient-specific 3D x-ray images, such as 3D C-Arm or 3D CT scan. The surgeon can accurately plan and execute spine surgeries by selecting among real-time (3D Direct) and preoperative planning (3D-3D) approaches.

AUGMENTED REALITY Enhanced visualization to optimize surgery	ADVANCED PLANNING Data driven personalization	SMART DELIVERY TOOLS Compact and integrated system	HEALTHCARE SUSTAINABILITY Efficient and cost-effective
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EMPOWER YOUR VISION

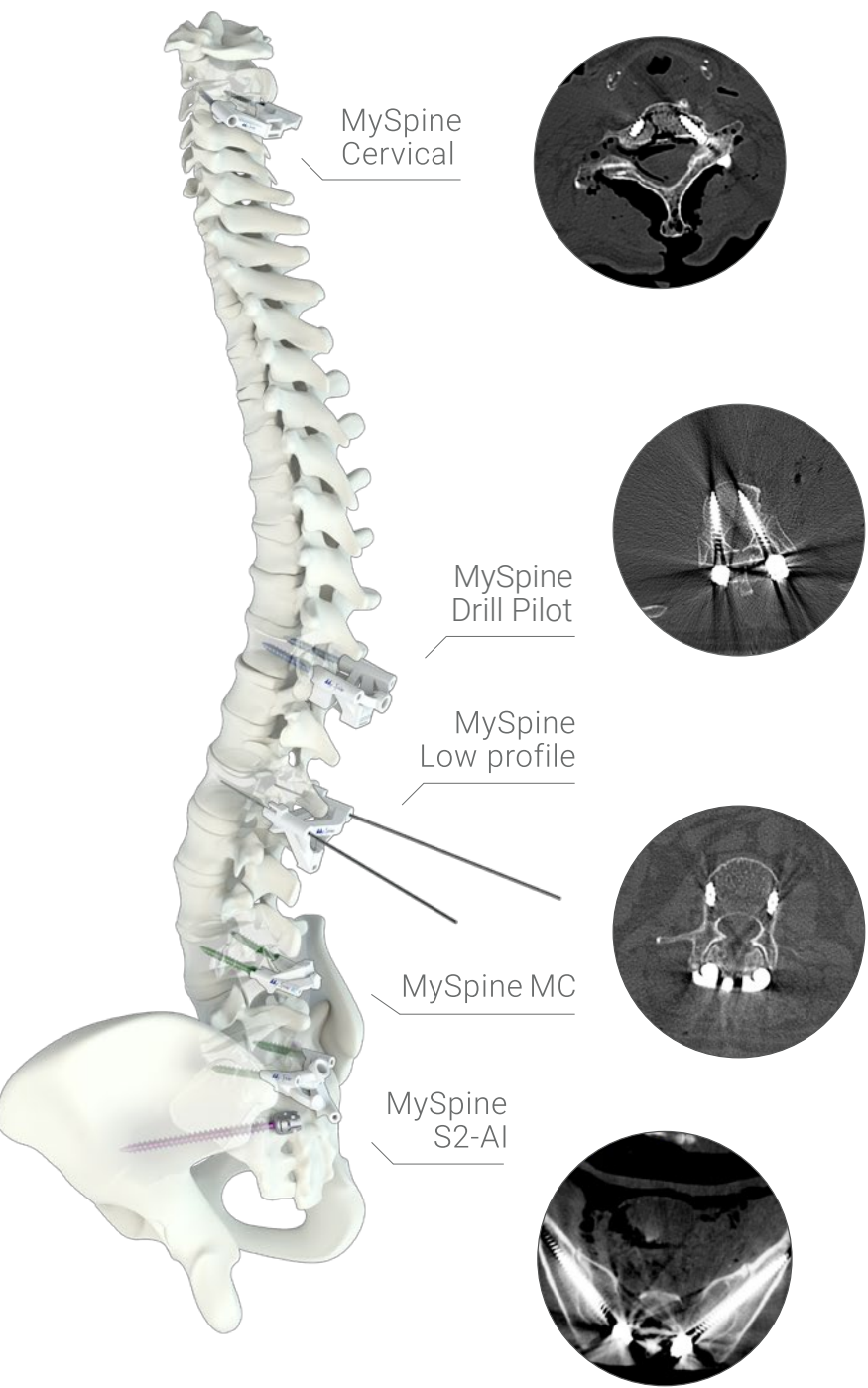


A COMPLETE RANGE OF SOLUTIONS

MYSPINE PATIENT-MATCHED SURGICAL GUIDES

The MySpine offers a complete and comprehensive system of 3D printed patient-matched guiding tools and preoperative planning allowing for posterior spine fixation from thoracic to lumbar-sacral and pelvic fixation. The MySpine technology allows for substantial reduction of both radiation exposure^[5] and costs.

Unique Anatomies Patient-Matched Solutions



MySpine® CERVICAL

MySpine Cervical guides are custom-made devices intended to be used as anatomical perforating guides, to assist intra-operatively in the positioning of pedicle screws from C2 to C7.

MySpine®

MySpine Pedicle Screw Placement guides are specifically developed for each individual patient. Different screw placement configurations are available for screw position with conventional trajectory.

They are suitable for treating challenging deformities and long constructs as well as lower lumbar regions and degenerative cases.

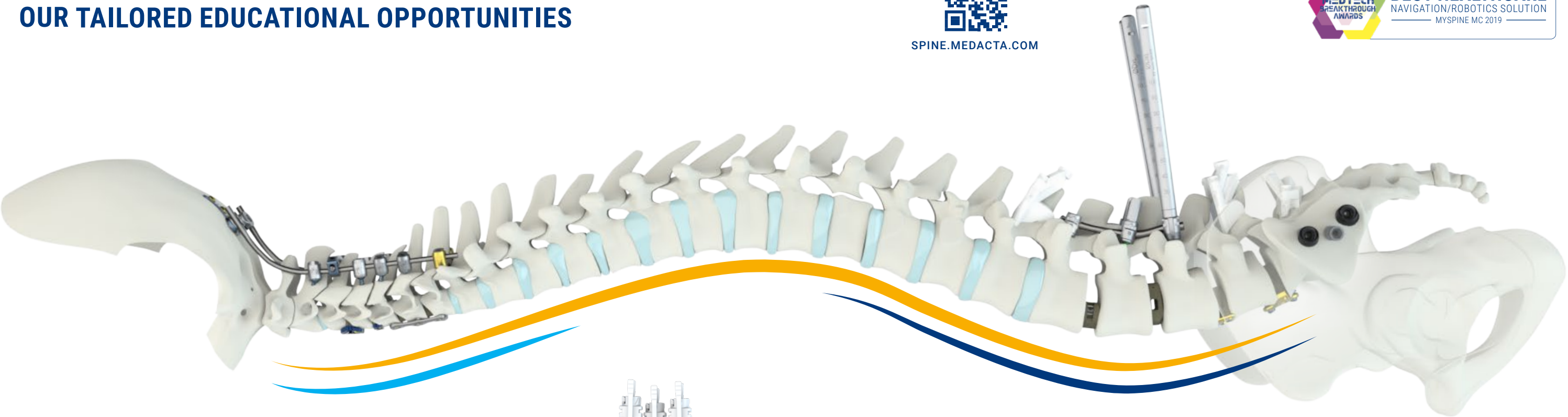
MySpine® MC

MySpine MC is a 3D printed patient matched solution in the midline cortical approach. Posterior lumbar fusion is driven in a minimally invasive,^[1] muscle sparing way ^[3,6], allowing for shorter operating times.^[2,3]

MySpine® S2AI

MySpine S2AI is a minimally invasive solution in the surgeon's hands for long constructs, designed to overcome the limits of a potentially insufficient lower spine fixation.

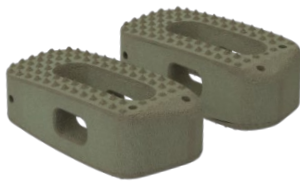
DISCOVER OUR VERSATILE SPINE PORTFOLIO AND OUR TAILORED EDUCATIONAL OPPORTUNITIES



MIS SOLUTIONS



MectaLIF Anterior



MectaLIF System



M.U.S.T. LT



M.U.S.T. SI



M.U.S.T. MC



MySpine MC

CERVICAL



M.U.S.T. Mini



Mecta-C Stand Alone



Mecta-C System

DEFORMITY



M.U.S.T.



MySpine S2AI



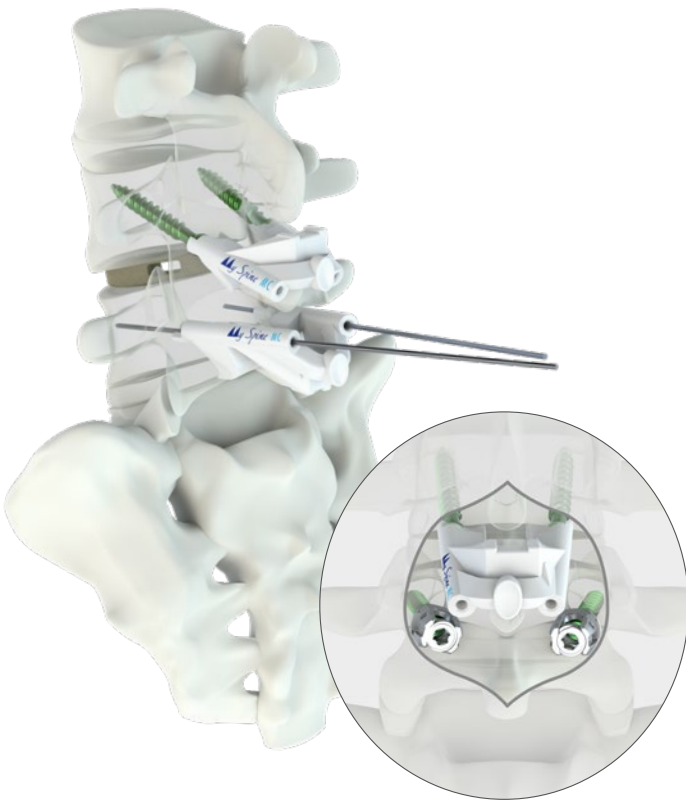
MySpine

SPINE PORTFOLIO

A COMPLETE RANGE OF SOLUTIONS

A COMPLETE RANGE OF MIS SOLUTIONS

The Medacta portfolio offers minimally invasive solutions and innovative implants and instruments. Keeping the patient in mind, products are specifically designed with the muscle sparing approach offering fast patient recovery after a spinal fusion surgery.



MySpine MC is a 3D printed patient-matched solution in the midline cortical approach.

Posterior lumbar fusion is performed in a minimally invasive, muscle sparing way, allowing for shorter operating times and a substantial reduction of both radiation exposure and costs.

- MINIMALLY INVASIVE
- EXCELLENT CLINICAL OUTCOMES
- HIGH EFFICIENCY
- LOW RADIATION DOSE

The goal of MySpine MC is to combine an excellent fusion rate with greater predictability of the clinical outcomes.

EXCELLENT CLINICAL OUTCOMES

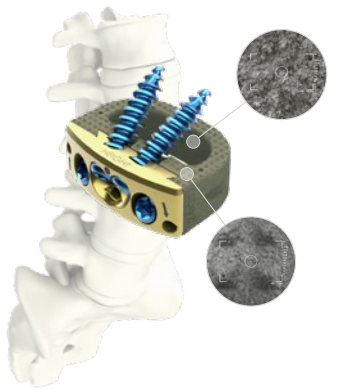
MySpine MC provides highly precise implant positioning which:

- allows accurate positioning of entry points in the pars interarticularis with favorable cortical bone purchase^[1]
- may enable the use of longer screws and larger diameters than CBT free hand^[2]
- may lead to uncompromised fusion rate^[3]

Moreover, the pre-operative trajectory management may reduce the risk of nerve root injury.^[4]

MectaLIF® TIPEEK

Medacta's TiPEEK cages represent the next generation of plasma-sprayed Ti-Coated interbody fusion device. TiPEEK maintains the radiolucency accustomed to with PEEK polymer and provides improved stability. The TiPEEK lumbar posterior and anterior cages, as well as cervical devices, are available in numerous footprints, heights, and sagittal profiles to accommodate various patients anatomies.



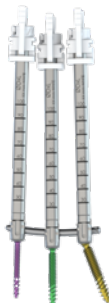
MectaLIF® SYSTEM

A complete system of cages for solid initial fixation and long term spine stabilization. Versatile interbody fusion devices platform with various anatomic shapes to address each patient's need. Indicated for the treatment of degenerative disc disease (DDD) at one or two contiguous levels from L2 to S1.



M.U.S.T.® LT

The M.U.S.T. LT Long Tab screw system is designed to provide the surgeon with a sleek minimally-invasive solution for spinal thoracolumbar fixation in degenerative, deformity, tumor and trauma cases.



M.U.S.T.® SI

The M.U.S.T. Sacro Iliac System is designed for the sacroiliac joint fusion for patients suffering from degenerative sacroiliitis and sacroiliac joint disruptions.



M.U.S.T.® MC

The M.U.S.T. MC Screw system allows for optimized cortico-cancellous bone purchase and potential excellent long-term clinical outcomes. Together with the Retractor and Distractor the M.U.S.T. MC offers a complete solution for MIS in the middle cortical approach.



SPINE PORTFOLIO

DEFORMITY PLATFORM

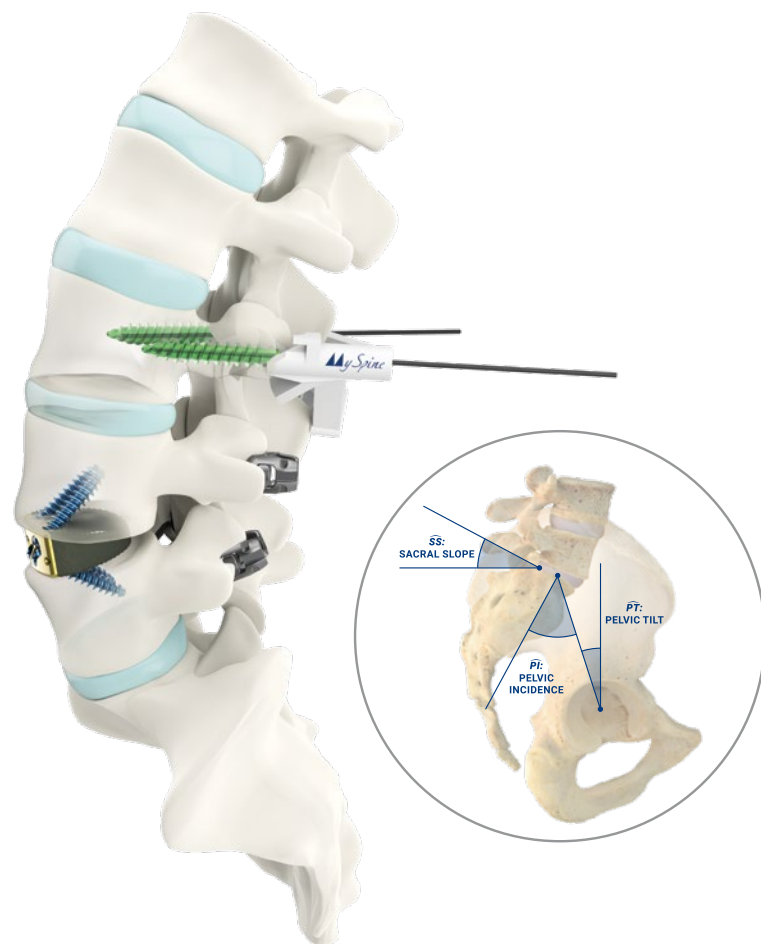
The Medacta deformity platform is designed to assist the surgeon in all the steps of a deformity surgery with different techniques.

SAGITTAL BALANCE TREATMENT AT 360°

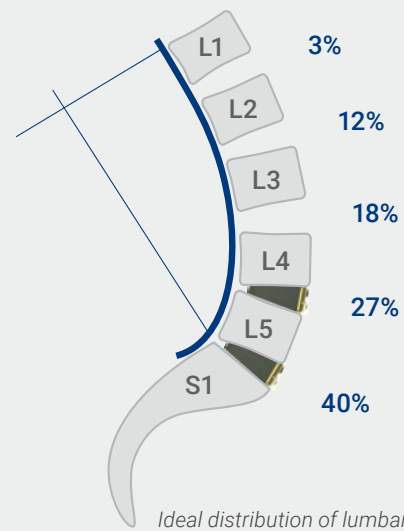
MySpine & MectaLIF Anterior offer an unique synergy to promote sagittal balance restoration.

- Proper sagittal and coronal alignment thanks to hyperlordotic anterior cages in combination with posterior fixation
- Restoration of sagittal balance
- Decreased complications than traditional pedicle subtraction osteotomies (PSO)

A **unique platform** to restore spino pelvic harmony



A UNIQUE SYNERGY



The addition of the 20° degree hyper-lordotic cages provides surgeons the chance to recover effective alignment between L4 and S1, where 70% of lumbar lordosis is located.



M.U.S.T. Pedicle screwS combined with MectaLIF Anterior

A 360° surgery may combine anterior fusion with efficient posterior correction.

A COMPLETE RANGE OF SOLUTIONS



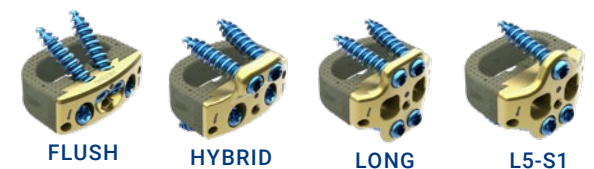
MySpine is a patient specific pedicle screw placement guide, allowing the surgeon to determine his pre-operative 3D planning, based on low dose CT images of the patient's spine. This innovative concept combines several different features to offer potential benefits to both the surgeon and the patient.



S2-alar-iliac (S2AI) screw fixation technique was developed recently to provide increased fixation with a lower profile screw and rod construct. The MySpine S2AI patient-specific drill guide might further support complex thoracolumbar fixation with minimal radiation exposure and high accuracy.



Modular cage and plate design provides the surgeon with intra-operative freedom of choice. Multiple configurations to cover different patient anatomy and surgical needs. It is indicated for the treatment of degenerative disc disease (DDD) at one or two contiguous levels from L2 to S1.



The M.U.S.T. (Medacta Universal Screw Technology) is an unconstrained polyaxial screw, rod & connector design applicable to degenerative, deformity and trauma indications. M.U.S.T. family offers a complete range of instruments that can assist during deformity surgeries while challenging screw positioning is facilitated by the MySpine patient-specific technology, the multi segmental spine derotation is performed with the Locking Tower. The M.U.S.T. EnBloc further enriches the platform when rigid enbloc derotation is preferred.



CERVICAL SOLUTIONS

Medacta offers an end-to-end 360° cervical platform featuring flexibility, stability and accuracy for posterior fixation and anterior cervical discectomy and fusion (ACDF).

U.S.T.® MINI

A simple and flexible solution for posterior cervical spine fixation that allows the surgeon to assemble the desired construct according to the anatomy of the patient.



Medacta®-C STAND ALONE

This modular design incorporates the benefits of an anterior plate and a separate radiolucent titanium coated interbody spacer. Eight different plate designs are available and the construct can be fixed with lag or locking screws, according to the patient's individual anatomy.



Medacta®-C SYSTEM

A comprehensive system of cervical interbody fusion cages and anterior plates for cases of degenerative disease, trauma, tumor and deformity. Large range of implant sizes and lordosis options.



REFERENCES

- [1] Gautschi O. et al., Maximal access surgery for posterior lumbar inter body fusion (PLIF) with divergent, cortical bone trajectory (CBT) pedicle-screws: a good option for minimize spine access and maximize the field for nerve decompression, Journal of neurosurgical sciences, 2015
- [2] Matsukawa -2nd MORE Japan MySpine cortical Bone Trajectory 2017. <https://mysurgeon.medacta.com/uploads/presentation/attachments/d33a45ed-c550-438b-96b8-5e3fb1696725.mp4>
- [3] Matsukawa - Biomechanics of CBT (internal file)
- [4] Regev G et al., Nerve injury to the posterior rami medial branch during the insertion of pedicle screws: comparison of mini-open versus percutaneous pedicle screw insertion techniques. Spine. 2009;34(11):239-42
- [5] Farshad M. et al., Accuracy of patient-specific template-guided vs. free-hand fluoroscopically controlled pedicle screw placement in the thoracic and lumbar spine: a randomized cadaveric study, European Spine Journal, 2017
- [6] Marengo N. et al., Cortical Bone Trajectory Screws in Posterior Lumbar Interbody Fusion: Minimally Invasive Surgery for Maximal Muscle Sparing—A Prospective Comparative Study with the Traditional Open Technique, Clinical Study, 2018



The surgeon is never alone
when discovering new technologies





**REDEFINING BETTER
IN ORTHOPAEDICS
AND SPINE SURGERY**

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Spine Portfolio

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