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Spinal Monitoring

APPLICATION FIELD

Spinal Column Surgery

Posterior cervical interbody fusions

Posterior lumbar interbody fusions and lateral approaches

C2 Xplore

One step ahead in IONM

C2 Xplore

inomed

Neuromonitoring in Spinal Column Surgery

User-friendly meets high signal quality

With its special C2 Spine Software, colour-coded accessories and needle positioning instructions, the C2 Xplore helps to ensure efficient neuromonitoring during spinal column surgery in posterior cervical and lumbar interbody fusions and lateral approaches.
Due to its high signal quality and user-friendly operation, the C2 Xplore is already being used in a large number of surgical disciplines. Whether open or minimally invasive procedures, with the C2 Spine System, surgical preparation is quick and easy. The wizard-based Spine Software provides intuitive user guidance.

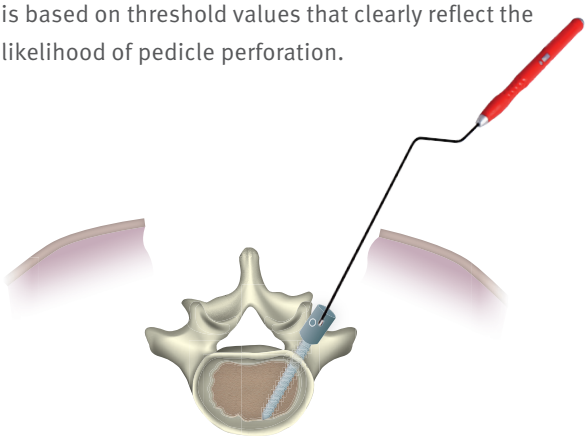
Features

- Easy-to-use
- Clear view of EMG signals
- Specially developed C2 Spine Software
- Automated relaxation control
- Continuous and automated impedance monitoring for the measuring electrodes
- 2D LED scanner for patient data
- Integrated database
- Colour-coded accessories

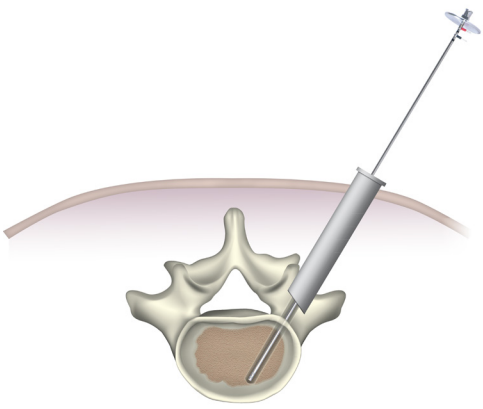
PEDICLE SCREW PLACEMENT

Positioning of pedicle screws can lead to perforation of the pedicle wall, which jeopardises the integrity of the surrounding spinal nerves. Therefore the C2 Spine Software is based on threshold values that clearly reflect the likelihood of pedicle perforation.

The Spine Software has been specially designed for the monitoring of spinal nerves during the positioning of pedicle screws.



Open approach: Stimulation either directly in the drill hole or by electrification of the pedicle screw in order to monitor the integrity of the pedicle. A hand-held stimulation probe is used for stimulation.



Minimally invasive approach: The pedicle stimulation probe is inserted directly via the Kirschner wire. Stimulation takes place directly in the drill hole or by electrification of the pedicle screw in order to monitor the integrity of the pedicle.

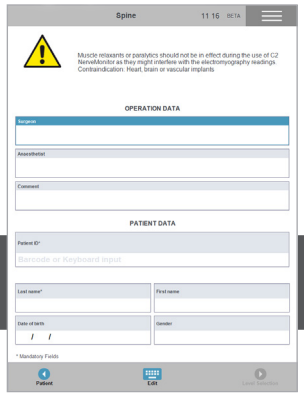
Spine Software application

The user is guided through the intraoperative monitoring process step by step, beginning with entering the patient's data and ending with the final record for the patient's file.

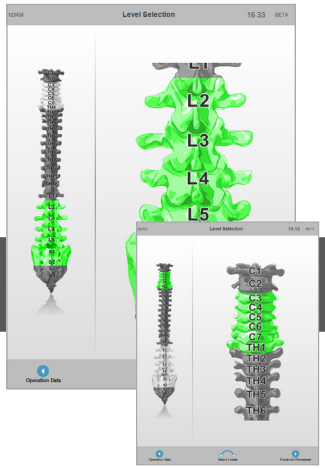
WIZARD

STRUCTURE

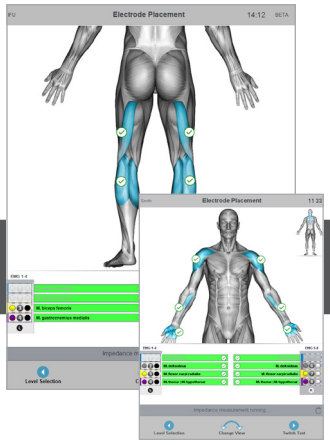
1 **Entry of patient data**



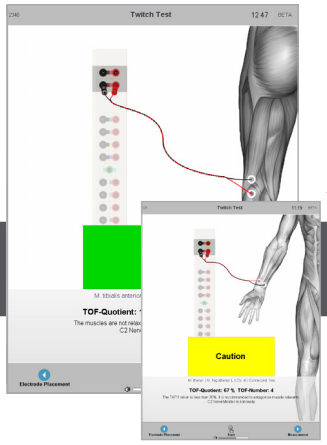
2 **Level selection**



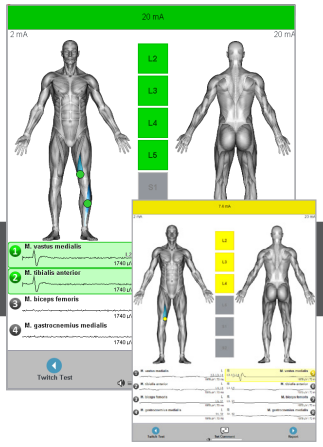
3 **Electrode Placement**



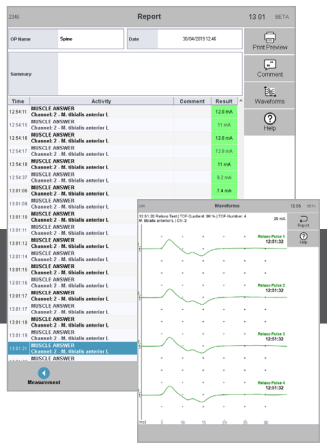
4 **Relaxation control (TOF test)**



5 **Testing**



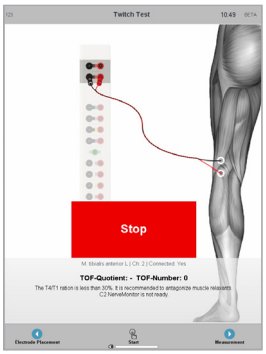
6 **Documentation**

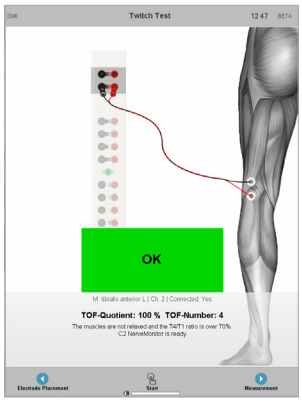


7 **Report**

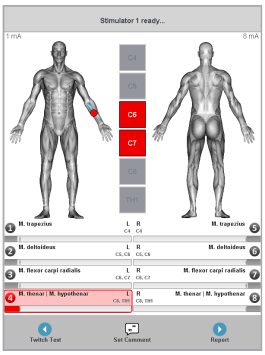
Relaxation control

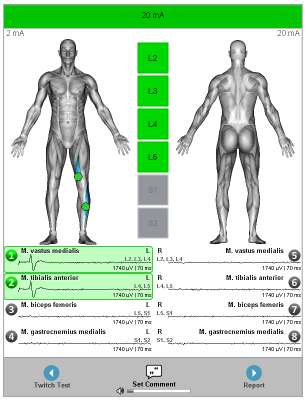
To check the pharmacological relaxation status of the patient's muscles an **integrated Twitch Test (TOF test)** is applied. This is crucial for ensuring the perfect recording of signals during spinal surgery.





Measurement mode





While the software is in measurement mode, the patient's muscles are **continuously monitored for activity.**
If a relevant activity occurs, such as through direct mechanical manipulation of a nerve, the surgeon is immediately notified visually and acoustically.
In addition, pedicle screw stimulation allows for **automatic detection** of the respective stimulation threshold value, thereby providing **information on the integrity of the pedicle**. This crucial information for spinal column surgery is provided and displayed quickly and easily.

Documentation

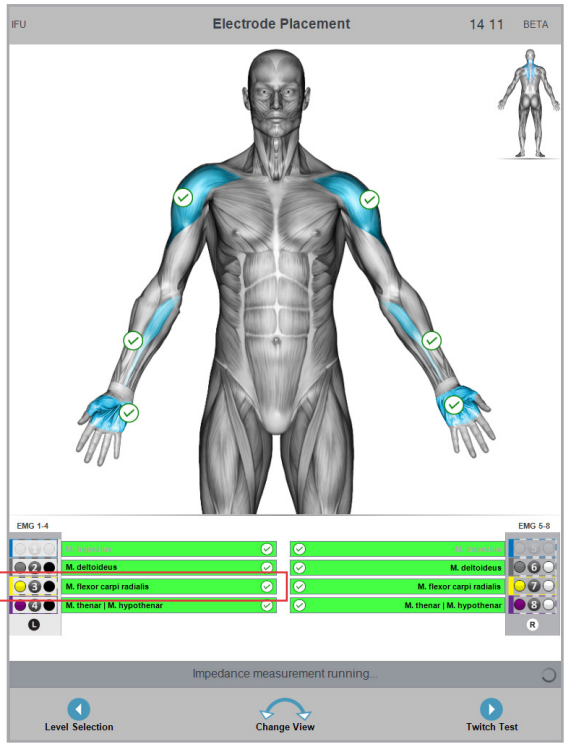
The C2 Spine Software **automatically stores all events**, commenting and listing them in the report. Users can therefore review each individual stimulation response at any time.

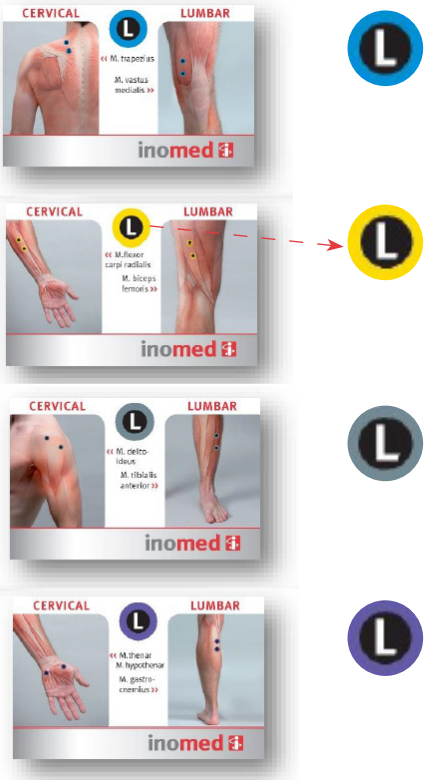
SPINE
Colour coding

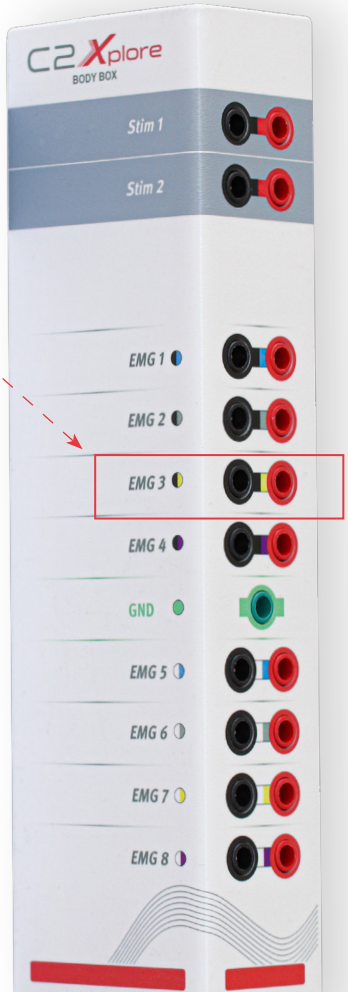
APPLICATION FIELD
Spinal Column Surgery

Colour coding

The software and accessories have **consistent colour coding** as well as information for the positioning of the measuring electrodes; facilitating needle positioning and wiring. With this needle positioning and wiring assistance, neuromonitoring is a simple standard procedure in spinal column surgery.

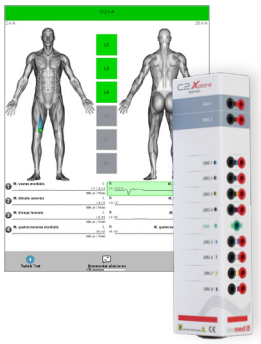






SPINE
Accessories

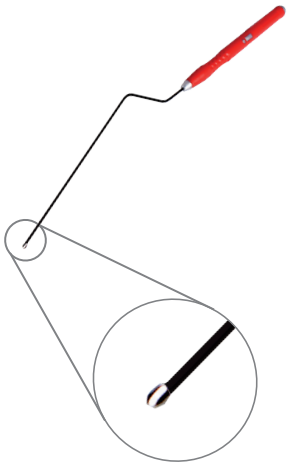
Art. No. 508 288
C2 Xplore
for intraoperative nerve monitoring. Easy to use Neuromonitor with two integrated stimulation channels, loudspeaker, footswitch and mains lead



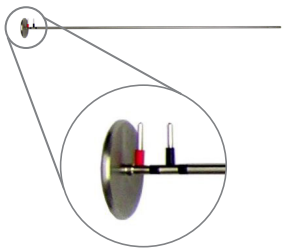
Art. No. 508 544
Application package Spine
consisting of software license "Spine", Body Box and license for 8-Channel recording

Art. No. 510 025
Mute Sensor for suppression of HF noise
for use with C2 and ISIS IOM
› Delivered non-sterile
› Disinfectable

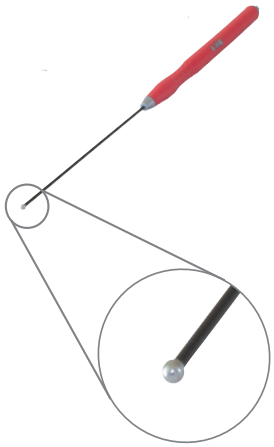
Art. No. 535 640
Spine Surgery Set for EMG Recording posterior approach
Colour-coded needle electrode set, 1.5 mm touchproof connector, pair of electrodes red/black, blue/black, blue/white, yellow/black, yellow/white, violet/black, violet/white, grey/black, grey/white, green ground needle,
› Single use
› EO sterilized



Art. No. 525 615
Stimulation probe 130 mm monopolar, bayonet, ball tip
1.5 mm touchproof connector, bayonet, ball diameter 2.5 mm, working length 130 mm, Total length with handle 245 mm, with neutral electrode black, cable length 3 m
› Single use
› EO sterilized



Art. No. 522 130
Bipolar pedicle simulation probe
L=30 cm, with 1,5mm connections red and black, ID=1.67 mm (compatible with 1.6 mm diameter Kirschner wire),
› Delivered non-sterile
› Autoclavable
› Applicable with Art. No. 520 070 and 520 027



Art. No. 525 616
Stimulation probe 85 mm monopolar, straight, ball tip
1.5 mm touchproof connector, straight shaft, ball diameter 2.3 mm, working length 85 mm, with neutral SDN electrode black, cable length 3 m
› Single use
› EO sterilized

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Competence in neuro

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