

**PAJUNK®**

## *EpiSpin Lock*

*Puncture set for combined spinal  
and epidural anaesthesia*

The image displays the EpiSpin Lock puncture set against a pink background with faint anatomical diagrams. The set includes a white plastic hub with a purple handle, a clear plastic sheath, a clear plastic needle, and a long, thin metal needle. The components are arranged in a way that shows their assembly and use.

CSE

## *Precision – down to the smallest detail*

# ***EpiSpin Lock in Application***

The method of Combined Spinal – Epidural Anaesthesia (CSE), which is very common in the USA, is also gaining increasing popularity in Europe. It permits regional anaesthesia in the vicinity of the spinal cord, which is mainly applied in obstetrics and orthopaedics. Waiting times in the operating

theatre are avoided, thanks to the fast onset of the spinal anaesthesia. And an effective motor block is ensured at the same time. By the utilization of epidural catheters, the anaesthesia can be maintained for as long as may be required.



With EpiSpin Lock, PAJUNK® has developed a puncture set which combines two techniques and cannula systems in one product:

- the safe, one-time / single shot spinal anaesthesia with the SPROTTE® puncture cannula
- the placement of a catheter in the epidural space for continuous applications

And this is what you'll get with EpiSpin Lock:

- a fast and safe effect through spinal anaesthesia
- a minimization of post-spinal headache by using the original SPROTTE® Spinal Puncture Cannula
- the visual indication of the puncture depth, and with that, a precise puncture thanks to the markings on the cannula shaft
- even more safety, thanks to the newly designed fixation system, which not only provides the spinal cannula with a secure anchoring, but will also hold it in place exactly in the desired position
- a prolonged block through epidural anaesthesia

The PAJUNK® EpiSpin Lock Puncture Set provides for a perfect sequential course of the CSE, right down to the smallest detail.

## The perfect tip

# Puncture of the epidural space

First, the puncture is performed at the level of lumbar vertebrae L2/3 or L3/4 using a Tuohy cannula, followed by identification of the epidural space.

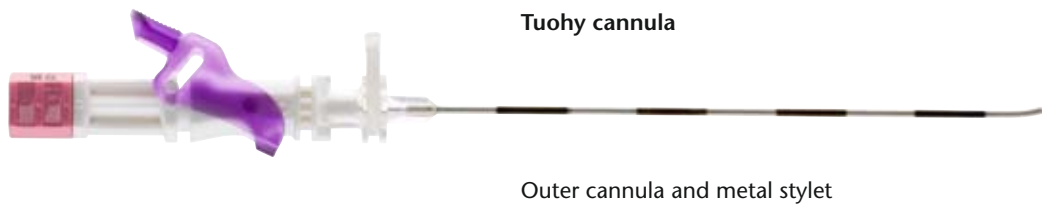
The PAJUNK® Tuohy cannula guarantees for maximum stability and precision in the puncture of the epidural space:

### Extreme stability, thanks to the metal stylet

The Tuohy cannula is generally equipped with a metal stylet as a standard. This provides for more stability, particularly in cases of special lengths.

### Precise tip

The outer cannula and the metal stylet are moreover produced and sharpened together. This ensures that the metal stylet ends flush with the cannula. It can therefore be almost ruled out with virtual certainty, that tissue fragments are introduced into the epidural space during the injection.

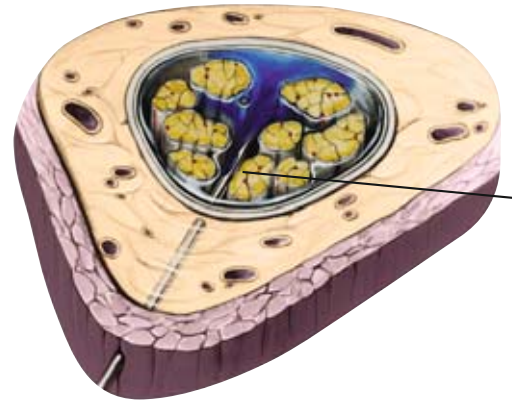


Stainless steel stylet ends flush with the cannula

## Atraumatic intervention

# Puncture of the spinal space

In the second step, a SPROTTE® spinal puncture cannula is introduced through the Tuohy cannula. This cannula is used to puncture the subarachnoidal space and to perform spinal anaesthesia by administering a local anaesthetic.

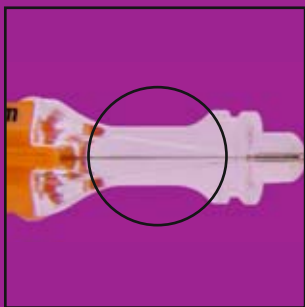
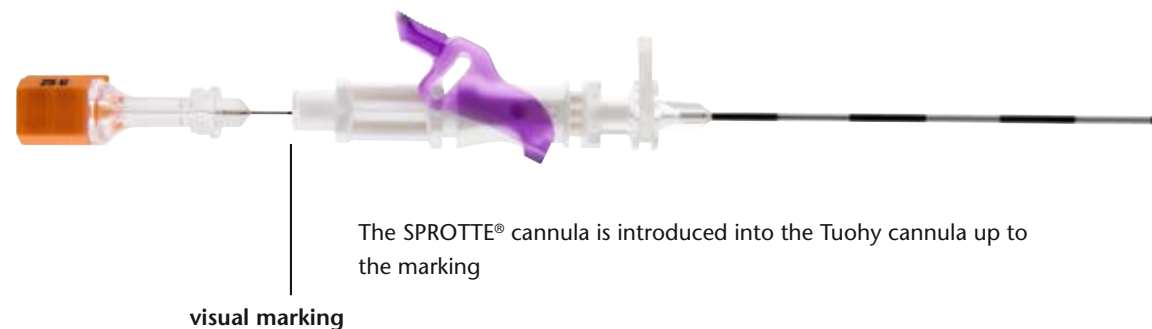


PAJUNK® ensures for perfect placement and maximum safety in the atraumatic puncture, and also for the fast onset of the block.

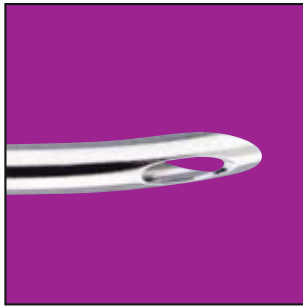
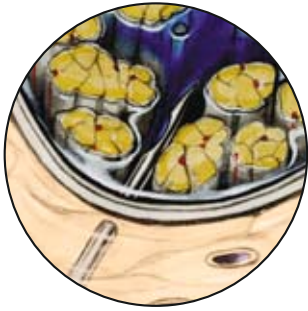
Tuohy cannula with removable handle plate



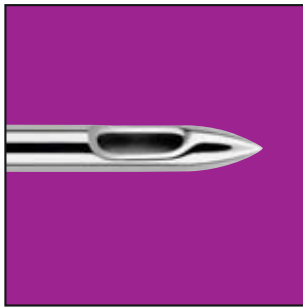
SPROTTE® cannula with magnifying effect



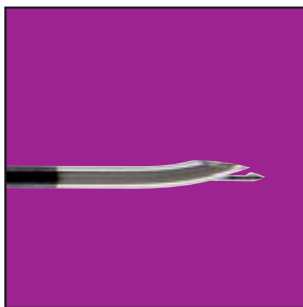
Even the smallest quantities of cerebrospinal fluid can be clearly detected by way of a viewing chamber (with magnifying effect) in the hub of the cannula. The period of time between the puncture of the spinal space and the injection of the anaesthetic can therefore be reduced substantially



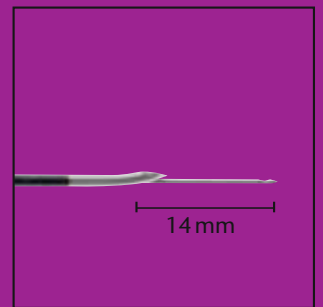
An additional distal opening in the tip geometry of the Tuohy cannula, the so-called "back-eye", ensures the optimal positioning of the SPROTTE® cannula.



The use of the original SPROTTE® cannula permits the performance of an atraumatic spinal anaesthesia.



The proximal cannula shaft of the SPROTTE® cannula has been provided with a marking to visually indicate the protrusion of the spinal cannula. As soon as the marking on the SPROTTE® cannula is concealed by the fixation system, then the spinal puncture cannula with its special working length will be protruding beyond the opening of the back-eye by up to 14 mm. This visual indication makes the placement of the SPROTTE® cannula considerably easier. Because this practice-oriented harmonization of lengths of the cannulae facilitates the safe and sure puncture of the dura for spinal anaesthesia.



*A maximum of safety*

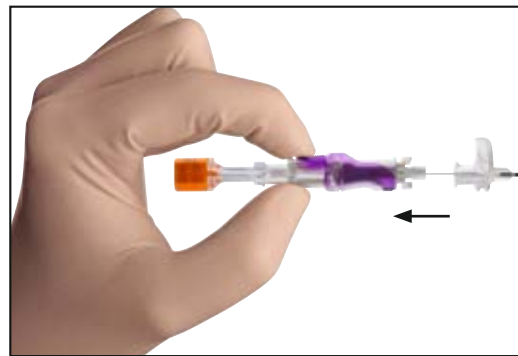
## *The innovative Locking system*

The SPROTTE® cannula can be locked in place completely with the new Locking system. The spinal cannula is thereby anchored in exactly the desired position in the Tuohy cannula.

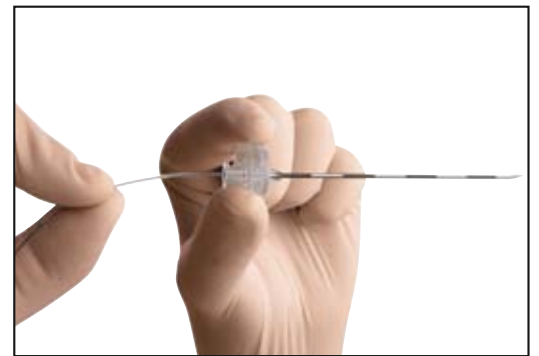
As soon as the SPROTTE® cannula is fixated, the steel stylet is retracted and the anaesthetic can be administered.



Manual fixation of the SPROTTE® cannula in the Tuohy cannula using one hand.



Thanks to the new Locking system, the SPROTTE® cannula can be retracted after the puncture has been performed, without having to open the Locking system.



The epidural catheter can now be introduced into the Tuohy cannula, which remains in position.

## Safe and unobstructed flow

# Placement of the catheter in the epidural space



High requirements are imposed upon the quality of the catheters used in epidural anaesthesia. Because maximal flexibility is just as important in the course of introduction, positioning and for the duration of placement, as is the absolute resistivity against buckling and creasing. An additional aspect is, that the tip of the epidural catheter has to be correspondingly soft because of the risk of injury, but it should also be robust at the same time.

PAJUNK® addresses these requirements with 2 catheter versions:

### 1. EpiLong catheter



Standard version:

- closed tip and lateral openings

### 2. EpiLong Soft catheter



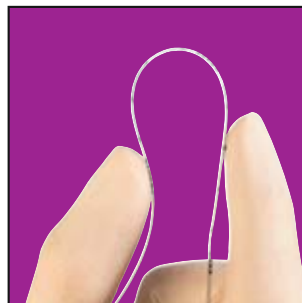
Special epidural catheter, with:

- integrated metal spiral
- depth graduation
- soft tip

The EpiLong Soft stands out due to the following features:

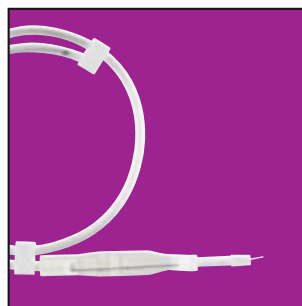
#### Unhindered flow

The integrated metal spiral provides this catheter with a maximum of movability and resistivity against buckling and creasing. The particularly great inner lumen permits an undisturbed flow of the anaesthetic, also and particularly over a longer period of time. The soft catheter ensures for optimal placement in the epidural space.



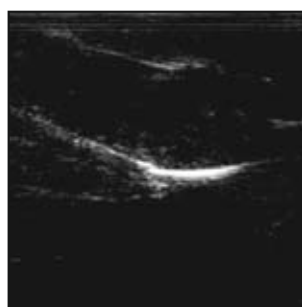
#### Memory effect and tearing resistance / tensile strength

The annoying memory effect, caused by rolling the catheter up in the packing, is eliminated through the integrated metal spiral. The robust nylon material has a high tearing resistance, as well as excellent tissue compatibility.



#### Exact localization

The provision with an ascending depth graduation up to a length of 30 cm in intervals of 5 cm, as well as the attachment of radiographic contrast strips ensure, that the EpiLong Soft catheter can be localized at any time. The integrated metal spiral furthermore guarantees for 100-per-cent ultrasonic visibility – an important prerequisite for optimal catheter placement.



The catheter of the PAJUNK® Epidural Sets is positioned in the desired direction, thanks to the special tip-design of the Tuohy cannula. The risk of a rupture of the catheter is evidently reduced thanks to the special tip geometry.

# EpiSpin Lock

## All the information at a glance



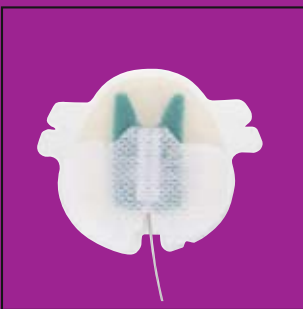
### EpiSpin Lock

Tuohy cannula with back-eye	Catheter	SPROTTE® cannula with magnif. effect	EpiSpin Locking System Filter	Clamping Adapter LOR-syringe 10 ml FixoLong	Item no.	PU
16 G x 90 mm	19 G x 90 cm	25 G	• • • • •		0021351-17	10
18 G x 90 mm	20 G x 90 cm	25 G	• • • • •		0021351-18	10
18 G x 90 mm	20 G x 90 cm	27 G	• • • • •		0021351-30	10
18 G x 135 mm	20 G x 90 cm	25 G	• • • • •		0121351-18	10
17 G x 90 mm	–	25 G	•		0011351-20	10
18 G x 90 mm	20 G x 90 cm	25 G	• • •		0001351-18	10
18 G x 90 mm	20 G x 90 cm	27 G	• • •		0001351-30	10

### EpiSpin Lock Soft

Both sets include an EpiLong Soft catheter 20 G x 90 cm with a flexible integrated metal spiral, packed in the catheter container.

Product	Size	SPROTTE® cannula with magnifying effect	EpiSpin Locking System Filter	Clamping adapter LOR-syringe 10 ml Catheter container	Item no.	PU
Tuohy cannula with back-eye	18 G x 90 mm	25 G	• • • • •		0021352-18	10
Tuohy cannula with back-eye	18 G x 90 mm	27 G	• • • • •		0021352-30	10



Product	Item no.	PU
FixoCath	001151-37Z	10

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