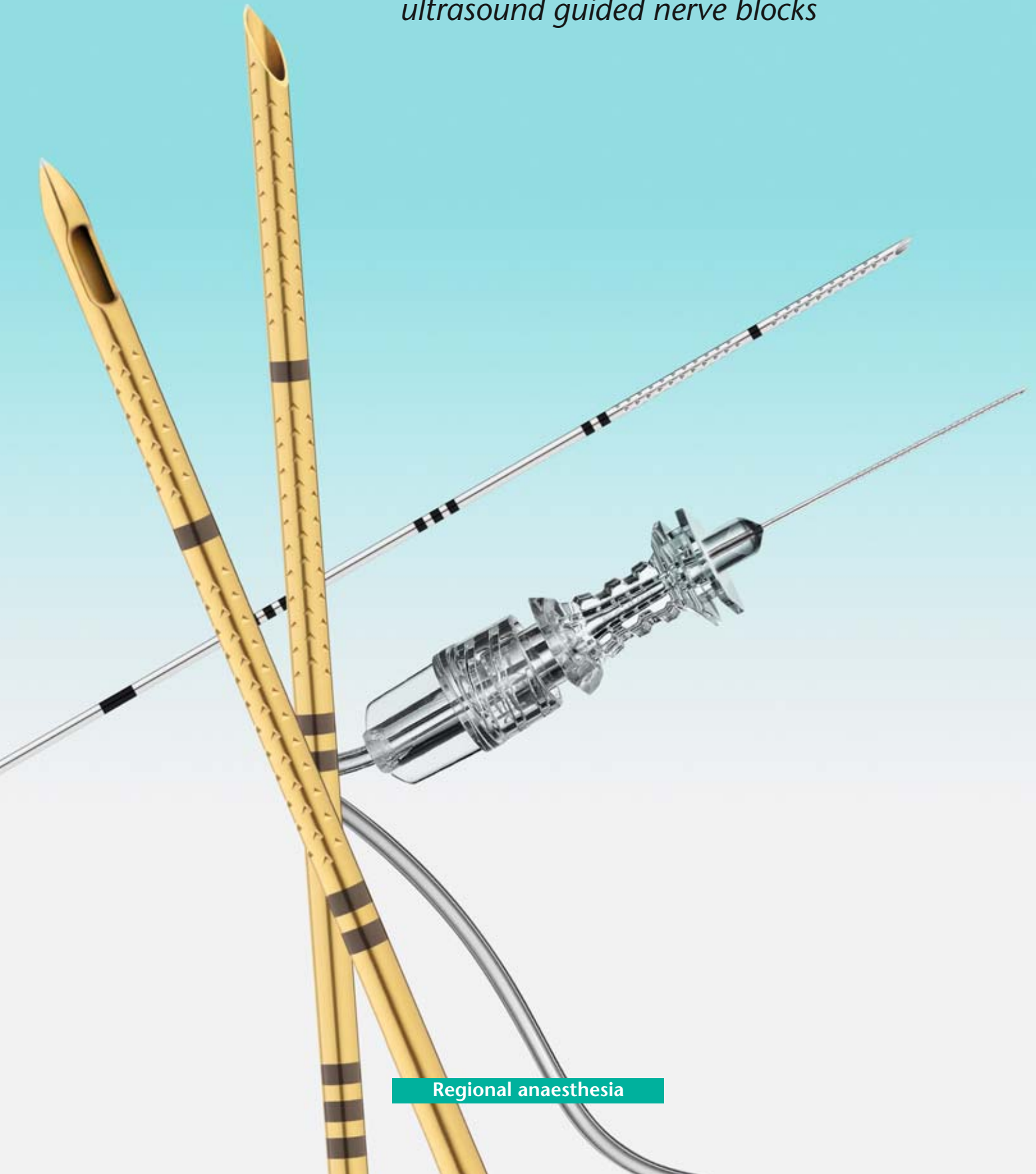


**PAJUNK®**

## *Sono Cannulas*

*Cannulas for single shot  
ultrasound guided nerve blocks*



Regional anaesthesia

## “Cornerstone” reflectors

# More visibility under ultrasound

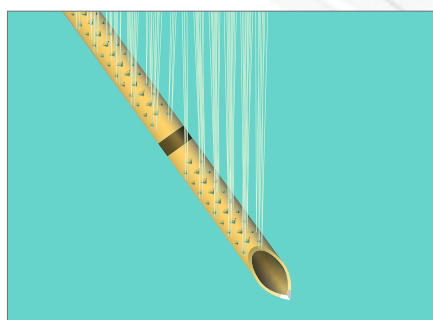
Ultrasound guided regional anaesthesia has become the dominant technique. Today even the finest anatomical structures including peripheral nerves can be identified in detail and anaesthetised selectively under viewing using modern high-resolution ultrasound scanners. This method supports the traditional procedure by means of nerve stimulation. But daily practice has shown, that it is not at all that easy to identify the cannula tip definitely and clearly on the viewing screen of the ultrasonic device. Before this background, PAJUNK® has developed the “Cornerstone” reflectors in cooperation with Dr Chris Mitchell and has thereby launched a new cannula generation, with a 100%-reflection-guarantee under ultrasound monitoring.\*



### Guaranteed cannula tip visibility

The distal end has two embossed sections of 10mm length each.

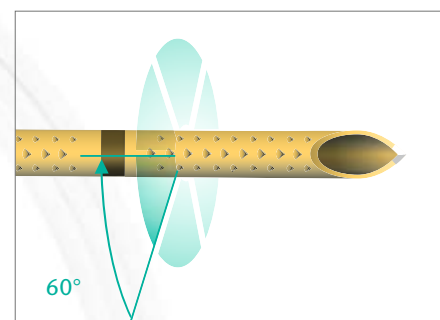
➔ The ultrasound waves are reflected along a total length of 20mm and as a result the cannula tip can be identified with absolute certainty.



### Visibility regardless of the puncture angle

The nature of the “Cornerstone” reflectors guarantees ideal reflection behaviour, independent of the puncture angle.

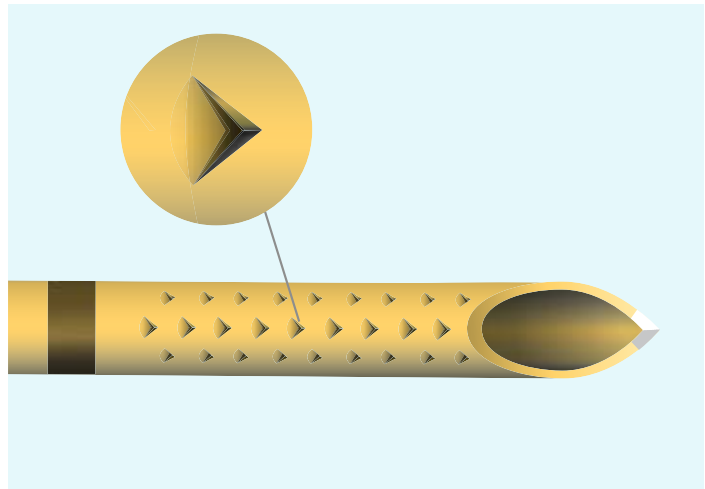
➔ The ultrasound waves are reflected even at very steep puncture angles.



### Sophisticated layout

Each cannula segment is graduated all-around with “Cornerstone” reflectors that are offset 60°.

➔ Perfect cannula identification is guaranteed in every position.



The "Cornerstone" reflectors (patent pending) are structured so that ultrasound waves are reflected without limitation. That makes the cannula tips visible and permits clear identification.



Facet tip



- ➔ "Cornerstone" reflectors for optimum visibility under ultrasonic monitoring
- ➔ Reflection of ultrasound waves over a 20 mm length
- ➔ Reflection even for steep insertion angles
- ➔ 360° graduation for identification in every position
- ➔ Precise stimulation and perfect gliding qualities with NanoLine

### Perfect gliding qualities

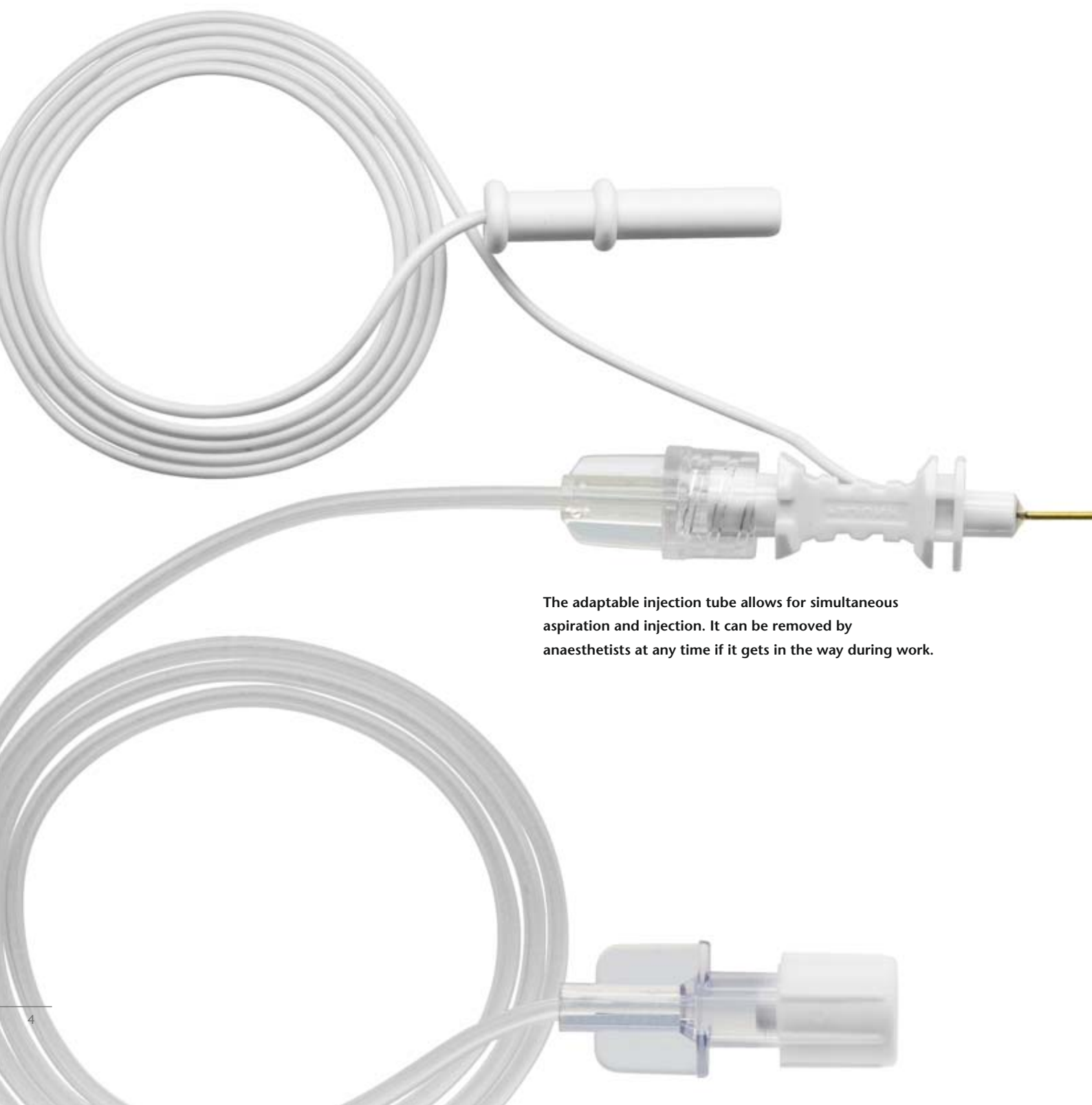
The SonoPlex Stim cannulas are coated using the innovative NanoLine technology.

➔ This has excellent gliding qualities, increases visibility under ultrasound monitoring and stimulates exclusively through the non-insulated tip.

## SonoPlex Stim cannulas

# Double safety as a result of simulation and ultrasound

*SonoPlex Stim cannulas were developed by PAJUNK® especially for single shot applications to be used in peripheral block anaesthesia. They are available with a SPROTTE® tip or facet tip. The standard design with NanoLine coating and “Cornerstone” reflectors provides the user with the combination of ultrasound and stimulation for double safety.*



**The adaptable injection tube allows for simultaneous aspiration and injection. It can be removed by anaesthetists at any time if it gets in the way during work.**

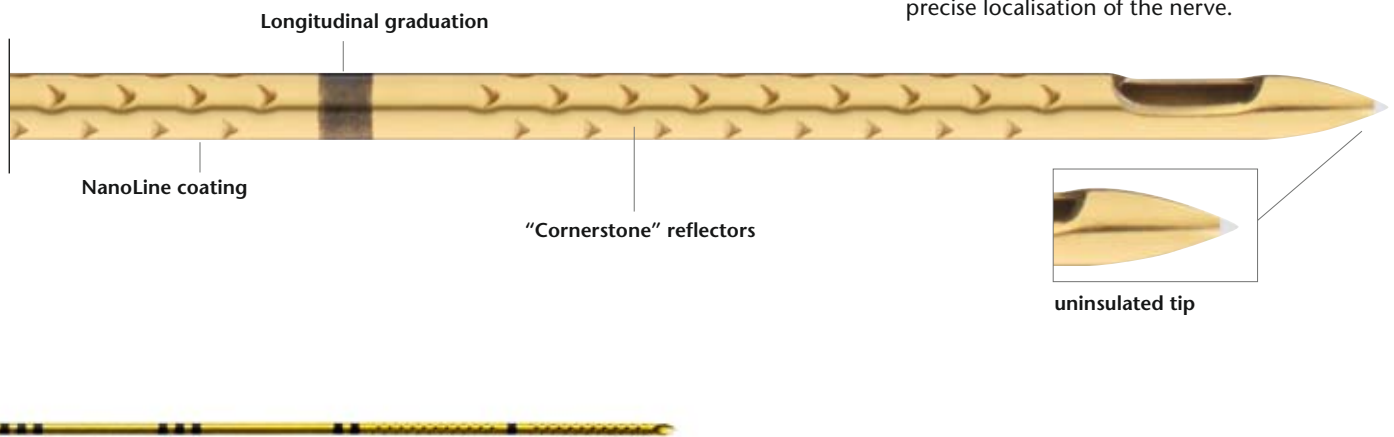


Optimum visibility of the cannula with "Cornerstone" reflectors under ultrasonic monitoring.

There are two different tip geometries available for the user to choose from:

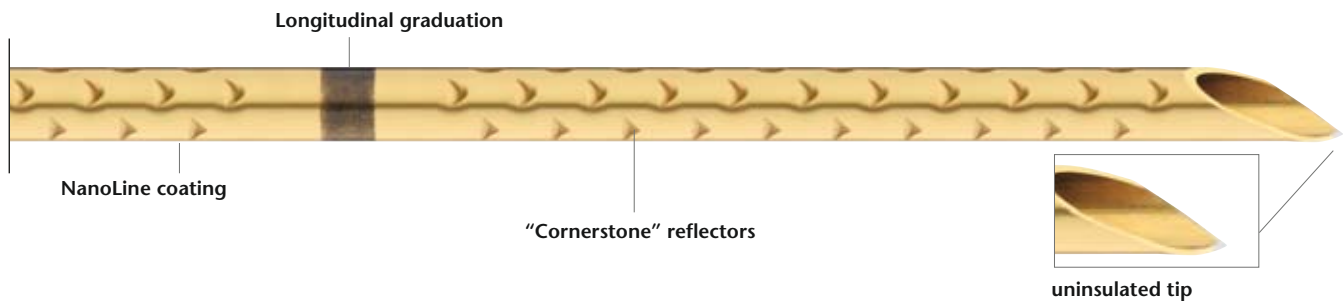
### The SonoPlex Stim cannula with SPROTTE® tip

The closed tip of this cannula assists the anaesthetist in the atraumatically precise localisation of the nerve.



### The SonoPlex Stim cannula with Facet tip

In comparison with conventional sharp cannulas, this special facet tip reduces the risk of injury to a minimum, and it ensures for an excellent quality of the puncture.

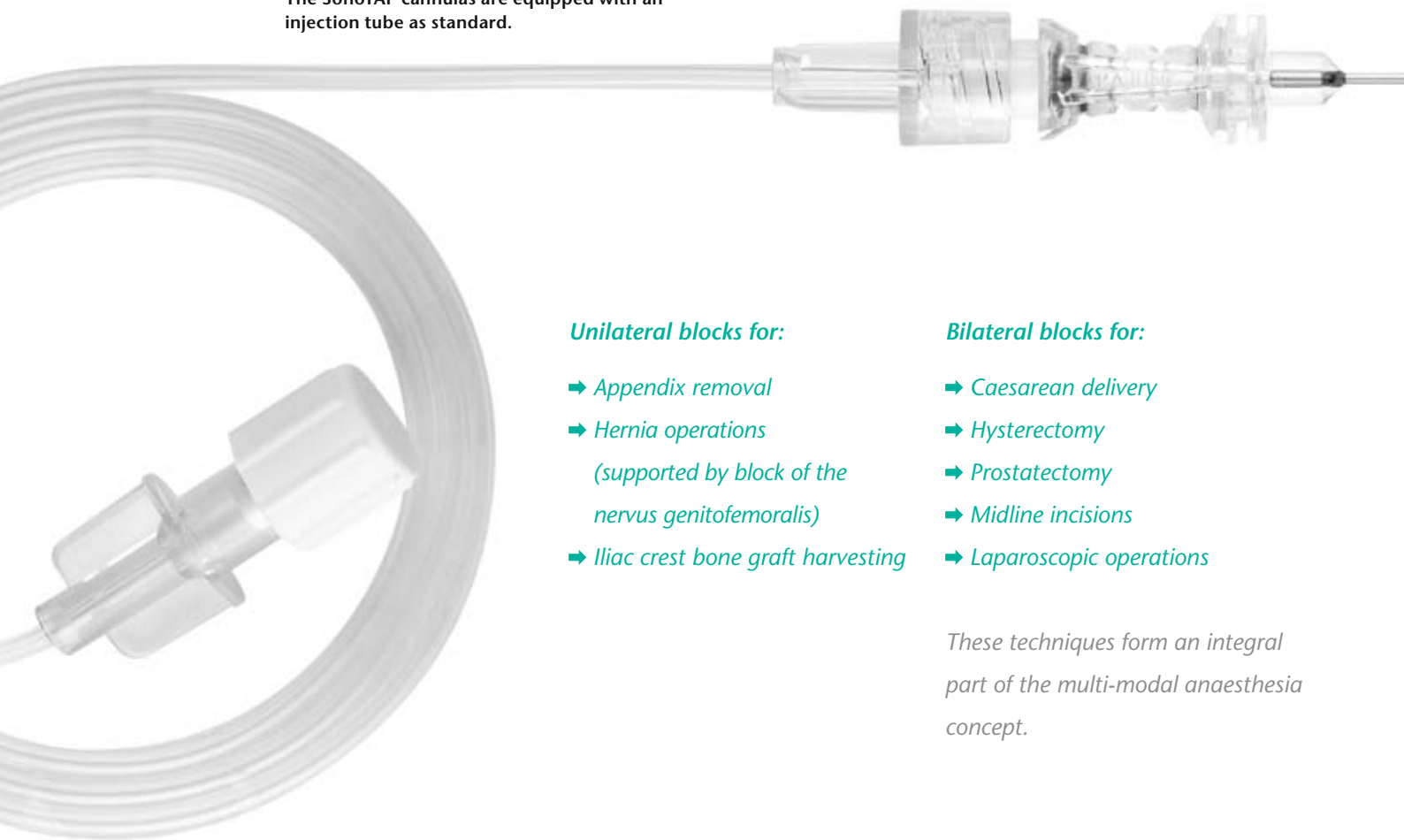


## SonoTAP cannulas

# Precision for abdominal blocks

Abdominal blocks, in particular TAP blocks (transverse abdominis plane blocks) and rectus sheath blocks, are increasingly being used for the management of postoperative pain from abdominal surgery. They are applicable to day surgery, have a low side effect profile and offer an alternative to epidural anaesthesia for abdominal surgery. Ultrasound guidance has improved the accuracy of abdominal blocks but the visibility of the cannula tip remains a problem. As a pioneer in regional anaesthesia, PAJUNK® has developed the SonoTAP cannula that focuses on the optimization of visibility of the cannula tip for safe and reliable pain relief.

The SonoTAP cannulas are equipped with an injection tube as standard.



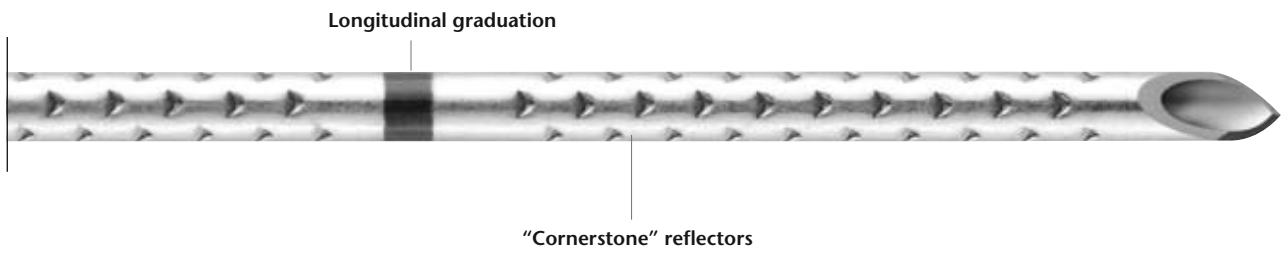
### Unilateral blocks for:

- ➔ Appendix removal
- ➔ Hernia operations  
(supported by block of the nervus genitofemoralis)
- ➔ Iliac crest bone graft harvesting

### Bilateral blocks for:

- ➔ Caesarean delivery
- ➔ Hysterectomy
- ➔ Prostatectomy
- ➔ Midline incisions
- ➔ Laparoscopic operations

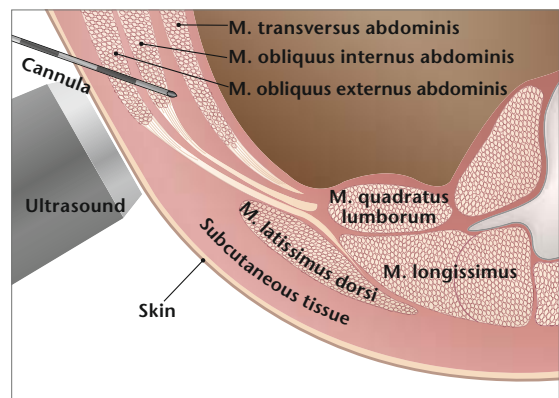
These techniques form an integral part of the multi-modal anaesthesia concept.



### SonoTAP cannula with facet tip

The injection space for the TAP block is limited and lies relatively deep.

➔ The facet tip of the SonoTAP cannula provides double security: On the one hand, it guarantees clear identification under ultrasound and on the other hand, precise tactile localisation.



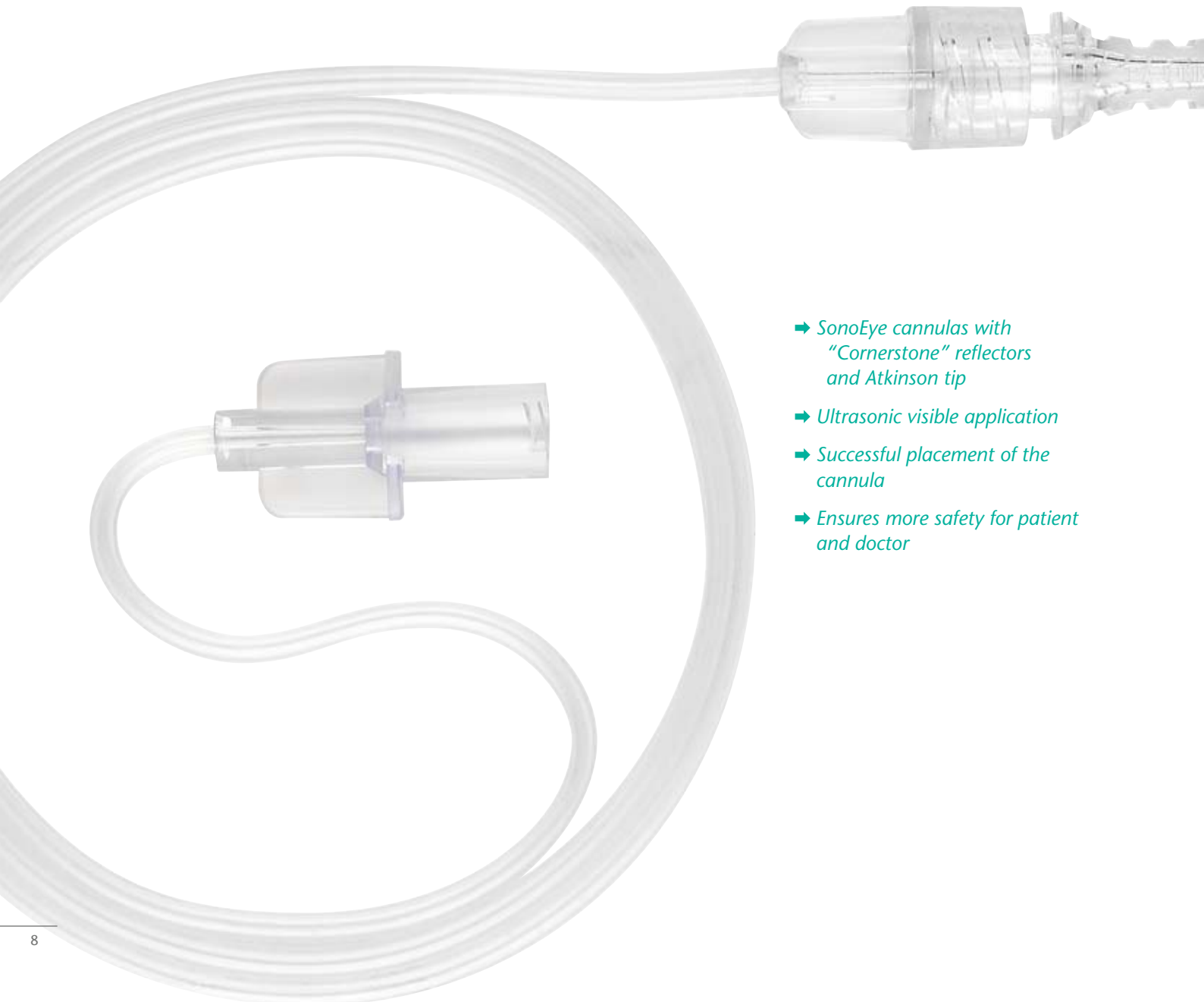
CHU ST. ANTOINE, PARIS

Performance of an ultrasound-guided TAP block (subcostal, anterior access)

## SonoEye cannulas

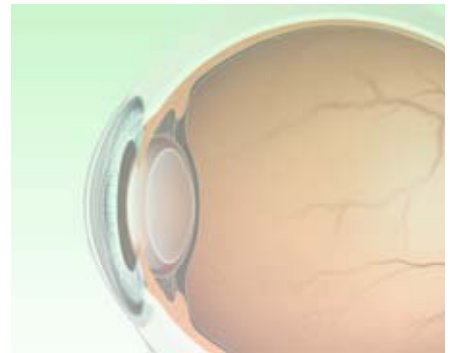
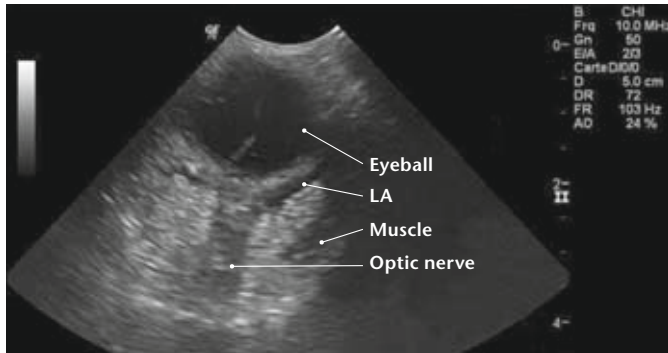
# Peribulbar and retrobulbar blocks under ultrasonic monitoring

Eye blocks ensure excellent anesthesia with a high success rate for ophthalmologic surgery. SonoEye combines the proven Atkinson tip with the innovative „Cornerstone“ reflectors for optimum visibility under ultrasonic monitoring in one cannula. The best requirements for safe placement of the cannula for peribulbar and retrobulbar blocks.



- ➔ SonoEye cannulas with „Cornerstone“ reflectors and Atkinson tip
- ➔ Ultrasonic visible application
- ➔ Successful placement of the cannula
- ➔ Ensures more safety for patient and doctor





**SonoEye cannula with Atkinson tip**

The Atkinson tip guarantees a good skin penetration capability but is blunt enough to exclude to a large extent injuries to the sclera, blood vessels and nerves in the region of the eye socket.

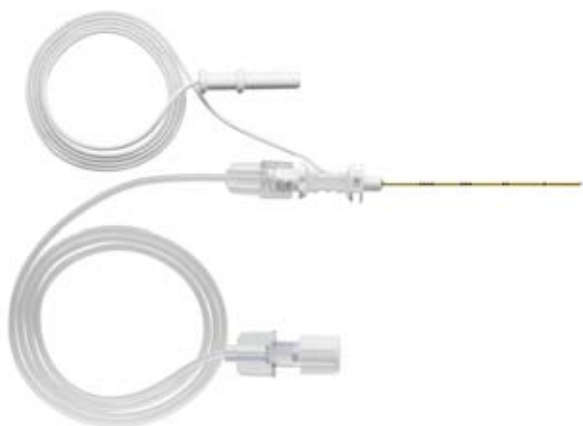


"Cornerstone" reflectors

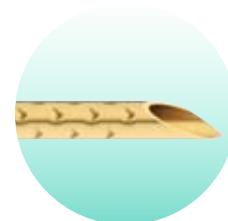
# Single shot anaesthesia

## All the information at a glance

### SonoPlex Stim cannulas



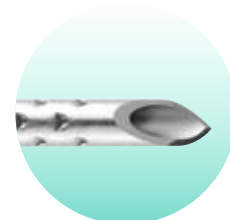
SonoPlex Stim cannula with SPROTTE® tip



SonoPlex Stim cannula with Facet tip

Product	Size	Item No.	PU
<b>SonoPlex Stim cannula</b>			
Facet tip and "Cornerstone" reflectors	24 G x 25 mm	001185-75	10
	22 G x 40 mm	001185-70	10
	22 G x 50 mm	001185-74	10
	22 G x 80 mm	001185-71	10
	21 G x 100 mm	001185-77	10
	20 G x 120 mm	001185-72	10
	20 G x 150 mm	001185-76	10
SPROTTE® tip and "Cornerstone" reflectors	24 G x 40 mm	001185-30G	10
	22 G x 50 mm	001185-31G	10
	22 G x 70 mm	001185-31H	10
	22 G x 90 mm	001185-31J	10

### SonoTAP cannulas



SonoTAP cannula with Facet tip

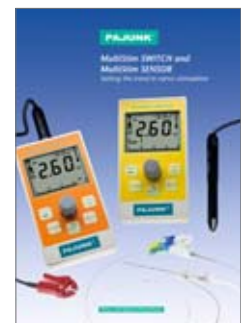
Product	Size	Item No.	PU
<b>SonoTAP cannula</b>			
Facet tip and "Cornerstone" reflectors	24 G x 40 mm	1185-3Y040	10
	22 G x 50 mm	1185-3E050	10
	22 G x 80 mm	1185-3E080	10
	21 G x 110 mm	1185-3F110	10
	21 G x 150 mm	1185-3F150	10

## SonoEye cannulas



SonoEye cannula with Atkinson tip

Product	Size	Item No.	PU
SonoEye cannula Atkinson tip and "Cornerstone" reflectors	24 G x 30 mm	1187-7000	10



# \*Studien

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S. Omrani\*, M. Lefevre\*\*, P.Y. Petit\*\*, J. Gauthier\*\*, C. Macabeo\*\*, V. Piriou\*\*, D. Cabelguenne\*  
\*Service de pharmacie, département des dispositifs médicaux stériles \*\*Service d'anesthésie réanimation médicale et chirurgicale  
Centre hospitalier Lyon Sud, Hospices Civils de Lyon, EUROPHARMAT LILLE 2012

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Ultrasound-guided retrobulbar nerve block in horses: a cadaveric study. © 2012 The Authors. *Veterinary Anaesthesia and Analgesia*. © 2012 Association of Verterinary Anaesthetists and the American College of Verterinary Anesthesiologists.

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- **Ute Morath, Cédric Luyet, Claudia Spadavecchia, Michael H Stoffel, Garry M Hatch** Ultrasound-guided retrobulbar nerve block in horses: a cadaveric study, *Veterinary Anaesthesia and Analgesia*, Volume 40, 2013, pages: 205-2011

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- **Compound Imaging Technology and Echogenic Needle Design,**  
Effects on Needle Visibility and Tissue Imaging  
Thomas Wiesmann, MD, Andreas Borntträger, MD, Martin Zoremba, MD, Martin Neff ,MD, Hinnerk Wulf, MD, and Thorsten Steinfeldt, MD, *Regional Anesthesia and Pain Medicine*, Volume 00, Number 00, Month-Month 2013

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