

**PAJUNK®**

**SPROTTE® Standard**  
**SPROTTE® Standard 2.G**  
**SPROTTE® Standard Tapered**  
**Sprotte® Sono**  
**Sprotte® 2.G Sono**  
**NRFit®**

Regional Anesthesia



## Instructions for Use

### Special notice



*Please read the following information and operating instructions carefully!*



*Caution: Federal law restricts this device to sale by or on the order of a physician. The device may only be used by qualified medical staff in accordance with these user instructions.*

PAJUNK® does not recommend any particular treatment method. Professional medical staff are responsible for the way in which the device is used and for patient selection.

In addition to these instruction for use, the relevant information also applies according to the corresponding specialist literature and current state of the art and knowledge.

Failure to comply with the user instructions invalidates the warranty and puts patient safety at risk.

If used in combination with other products, it is essential that the compatibility information and user instructions for these other products are taken into account. A decision regarding the combined use of devices from different manufacturers (where they do not constitute treatment units) is the responsibility of the user.



*The device must not be used under any circumstances if there are good reasons to suspect incompleteness, damage or loss of sterility.*



*Only devices in perfect condition, which are within the sterile expiry date marked on the label, in undamaged packaging, may be used.*

### Product specification / compatibility



*Please see the current declaration of conformity for product numbers and the scope of these instructions for use.*

Cannula (also: tapered cannula) with SPROTTE® tip (ogive-shaped tip geometry; lateral eye with rounded edge), incl. stylet.

Stylet

Optional: Introducer

Optional: Cornerstone reflectors

Hub connectivity: NRFit®




*Caution!*  
*Only products with NRFit® 80369-6 connector are compatible with each other.*





*Caution!*  
*Do not try to connect such NRFit® 80369-6 connectors with other connectors.*

## Intended use

Puncture, access to the target area, aspiration, injection.

 PAJUNK® cannulas can also be introduced into the body under ultrasound, fluoroscopic or CT guidance.

 **Warning:**  
The cannula is not suitable for MRI use!

 This cannula is not suitable for inserting a catheter!


## Indications

Single-shot spinal anesthesia, analgesia (postoperative).

Interventional pain management in spine: epidural steroid injections, selective nerve root injections (periradicular therapy), facet joint injections (intra-articular, medial branch), sacroiliac joint injections.

## Contraindications

### Device-specific complications

 Under no circumstances is the device to be used in the event of known material incompatibilities and/or known interactions!

### Clinical complications

#### *Absolute contraindications:*

- Patient refusal
- Poorly controlled bleeding diathesis or anticoagulation (coagulation disorders)
- Systemic infection (sepsis/ bacteremia)
- Local infection at the site of injection
- Local malignancy at the site of injection
- Weakened immune system
- Strong, de-compensated hypovolemia, shock
- Uncontrolled diabetes mellitus

#### *Relative contraindications:*

- Specific neurological disorders
- Specific cardiovascular disorders
- Allergic reaction/ hypersensitivity to the administered agents (contrast, anesthetic or corticosteroid)
- Severe deformations of the spine, arthritis, osteoporosis, spinal disc herniation or condition after spinal disc surgery
- Condition after spinal fusion, spinal metastasis
- Recent consumption of non-steroidal anti-inflammatory medications
- Unexperienced user

*Special contraindications regarding subarachnoidal cannula placement:*

- No free backflow of cerebrospinal fluid (neither after rotating the cannula in different plains and after repeated aspiration)
- Liquor mixed with blood (which is not clear even after repeated aspiration)

## Complication

### Device-specific complications


Cannula bending, breakage, occlusion, leak at the cannula hub


### Procedure-specific complications

Undesirable positioning of the cannula (e.g. intravascular, intraneural, etc.), repeated puncture/redirection of the cannula, failed procedure.

### Clinical complications

- Local and systemic infections
- Neuronal damage (during cannula placement, which may result in temporary increase in pain, temporary motor weakness, transient back or extremity pain, numbness and/ or tingling, paraplegia)
- Accidental vascular punctures with corresponding complications (vascular lesions, bleeding/ bruising, hematoma, vasovagal reactions, intravascular injection etc.)
- Intra-arterial injection (direct injection into the spinal cord, vertebral artery or radicular artery include spinal cord infarct, epidural hematoma and brainstem hemorrhage, neurological events, vascular complications, thrombosis or thromboembolism)
- (Accidental) puncture of the dura with corresponding complications
  - *Dura puncture and liquor loss:* post-spinal head or back ache, nausea, vomitus, neurological damage, epidural abscess
  - *Anaesthetic in the subarachnoid space:* Circulatory disorders, decrease of the body temperature, urinary retention, respiratory side effects and complications, extremities weakness, total spinal anaesthesia, cauda-equina syndrome
- Multiple complications related to the pharmacology of steroids (transient hot flushes, adrenocortical suppression, fluid retention, elevated blood sugars and mood swings, HPA axis suppression (typically self-limiting), osteoporosis, necrosis of bone, steroid myopathy, weight gain)
- Reactions on contrast agent (if applied)
- Toxicity of local anesthetic (if applied)


 *Users must inform patients of complications typically associated with the procedure.*

-  *If complications occur while using the device, follow the protocols of your organisation. If this does not resolve the complications, or if they are regarded as serious or untreatable, carefully stop the procedure and remove invasive device components from the patient.*

## Warnings

 *for sterile product:*


This is a disposable medical device for use with only one patient!

 *This device must not be re-used under any circumstances!*


 *This device must not be re-sterilised under any circumstances!*

The materials used in the manufacture of this device are not suitable for reprocessing or re-sterilisation.


This device is not designed to be reprocessed or re-sterilised.

 **Unauthorised re-use or reprocessing**

- can cause the device to lose the essential performance properties intended by the manufacturer.
- leads to a significant risk of cross-infection/ contamination as a result of potentially inadequate processing methods.
- may cause the device to lose functional properties.
- may cause materials to break down and lead to endotoxic reactions caused by the residues.


 *for puncture:*

1. Take care to use devices of suitable dimensions (diameter, length), especially when treating obese patients and children.
2. Use an introducer to insert the SPROTTE® cannula and/or make a stab incision beforehand at the intended puncture site (lancet, etc.).
3. Only perform the puncture (even when removing the cannula) with the stylet in place.
4. To avoid bending or breaking of the cannula, never apply excessive force to the cannula.
5. If you unexpectedly come into contact with bone, change the direction of the cannula. Do not try to overcome bone resistance. Failure to adhere to these rules could cause the cannula to bend or break.
6. Repeated bone contact will damage the tip. On no account you should continue to use a cannula damaged in this manner. In case of previous bone contact remove the cannula (with introduced stylet) and introducer in one step.


 *for injection:*


1. Always ensure that the injection site is aseptic.
2. Do not administer drugs that are not indicated for the intended use.

3. Aspirate before the injection of medication. If you observe blood in the cylinder of the syringe, then the cannula has been introduced improperly. **TERMINATE THE PROCEDURE.**

 *for use with other compatible products:*

When using multiple components, familiarise yourself with their operation before use by checking connections and passages (cannulas, adapters).

 *further warning indications:*

1.  **Caution!** Sharp object warning The device or device components may, depending on the type of tip, have sharp edges or tips. Various infectious pathogens can be transmitted if a stab wound occurs. For practical purposes, the most important of these are the human immunodeficiency virus (HIV), the hepatitis B virus (HBV) and the hepatitis C virus (HCV).
2. You must routinely take general precautions for handling blood and bodily fluids when using and disposing of the device, due to the risk of contact with blood-borne pathogens.
3. Please note that the continued use of a device of the same type must be assessed cumulatively as described in the legislation on medical devices, even after the device has been exchanged or replaced.

## Sequence of use





### *Single-shot spinal anesthesia*

1. Perform skin disinfection and cover area to be punctured with a sterile fenestrated surgical drape (aperture drape).
2. Administer a local anaesthetic.
3. If necessary, make a stab incision at the intended puncture site (lancet, etc.).
4. Advance the introducer into the intervertebral ligaments.
5. Introduce the spinal cannula through the introducer and push it up to the subarachnoid space.
6. Retract the stylet from the cannula.
7. After positive identification of the subarachnoid space (by the respective return flow of cerebrospinal fluid), inject the anaesthetic (depending on age and weight of the patient, as well as on the type of the intervention and the composition of the anaesthetic).

## Procedures of pain management


1. Perform skin disinfection and cover puncture area with a sterile fenestrated surgical drape (aperture drape), local anesthesia.
2. If necessary, perform a perforating incision of the area to be punctured (lancet, or similar).
3. Puncture by means of cannula.
4. Identification of the target area (optionally by administration of the contrast agent).
5. Administration of analgesia.
6. Further procedure in accordance with the individual indication.


## Operating and storage conditions


|                                                                                  |                         |                  |
|----------------------------------------------------------------------------------|-------------------------|------------------|
|  | Temperature limit       | +10 °C to +30 °C |
|  | Humidity limitation     | 20 % to 65 %     |
|  | Keep away from sunlight |                  |
|  | Keep dry                |                  |

## General information

The devices are manufactured in accordance with globally applicable guidelines for hazardous substances.

 Non-pyrogenic

 *Any serious incident that has occurred while using the device should be reported to the manufacturer and the corresponding authorities of the country the user and/or patient are residing in.*

 PAJUNK® GmbH Medizintechnologie, Karl-Hall-Strasse 1, 78187 Geisingen, Germany.

## Key to symbols used in labelling

|  |                                  |
|--|----------------------------------|
|  | Manufacturer                     |
|  | Use-by date                      |
|  | Catalogue number                 |
|  | Sterilized using ethylene oxide  |
|  | Do not resterilize               |
|  | Do not use if package is damaged |
|  | Keep dry                         |
|  | Humidity limitation              |
|  | Do not re-use                    |
|  | Caution                          |
|  | Date of manufacture              |
|  | Batch code                       |
|  | Keep away from sunlight          |
|  | Temperature limit                |
|  | Consult instructions for use     |

|  |                                                                                                                                              |
|--|----------------------------------------------------------------------------------------------------------------------------------------------|
|  | Non-pyrogenic                                                                                                                                |
|  | Caution: Federal law restricts this device to sale by or on the order of a physician                                                         |
|  | MR unsafe                                                                                                                                    |
|  | Advice                                                                                                                                       |
|  | Information                                                                                                                                  |
|  | Product is in conformity with the applicable requirements set out in Community harmonization legislation and is monitored by a notified body |
|  | Sharp object warning                                                                                                                         |
|  | Does not contain Phthalates (acc. to sec.)                                                                                                   |
|  | Natural rubber latex has not been used as a component in the manufacture of this product                                                     |
|  | Quantity                                                                                                                                     |
|  | Hub connection: NRFit® according to ISO 80369-6                                                                                              |
|  | Translation                                                                                                                                  |
|  | Medical device                                                                                                                               |

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NRFit®  
is a trademark of GEDSA, used with  
their permission



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