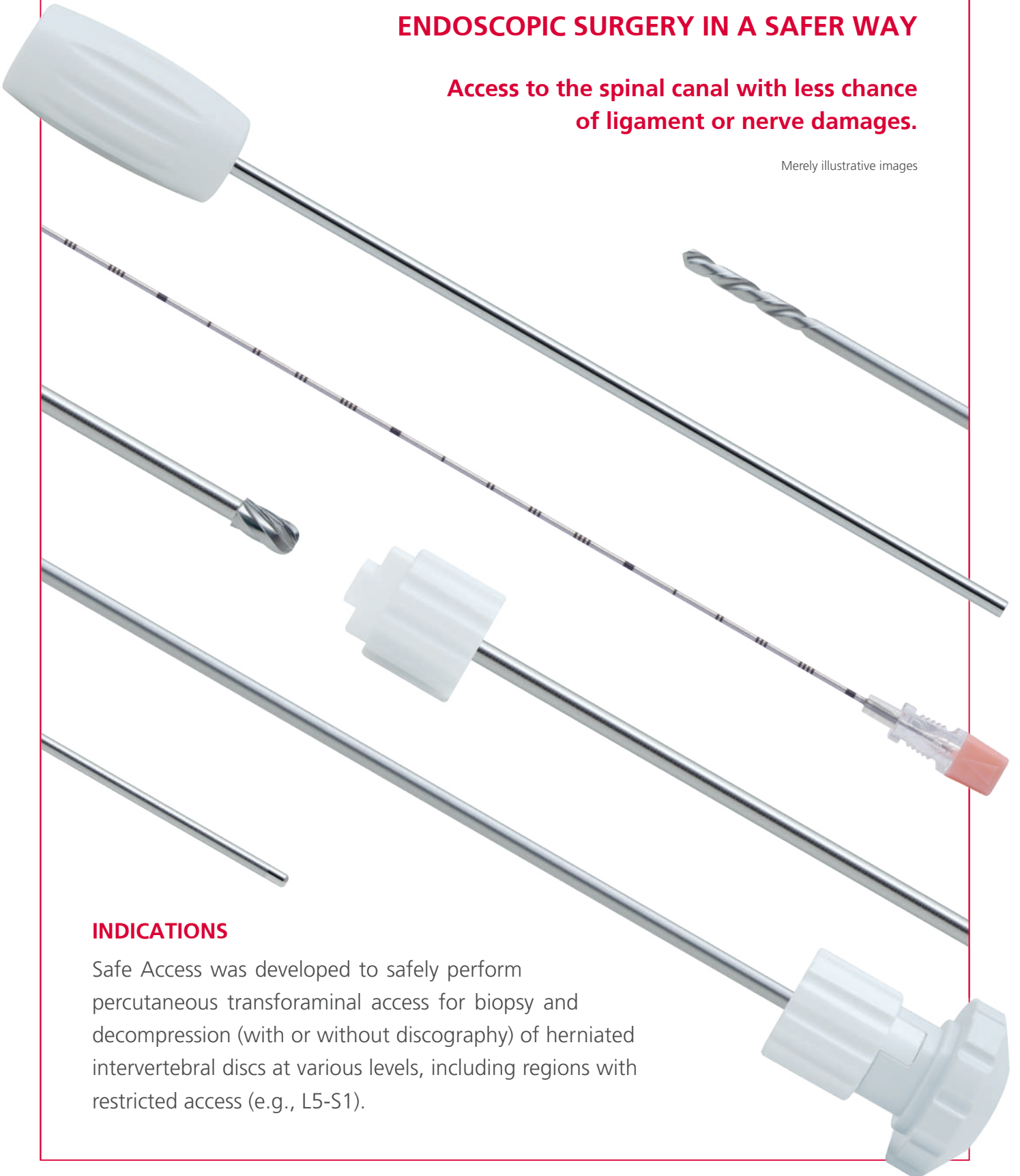


## Safe Access

### ENDOSCOPIC SURGERY IN A SAFER WAY

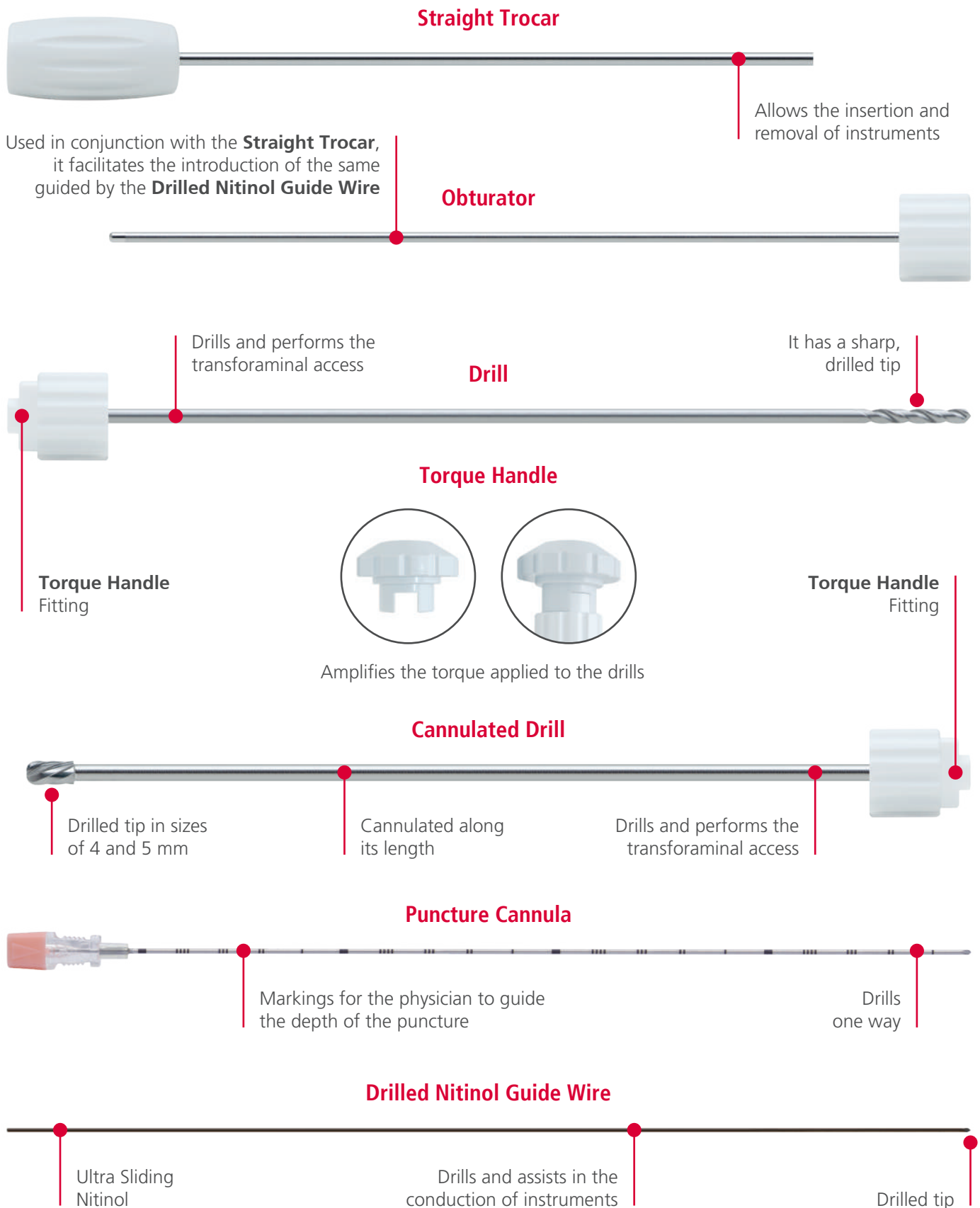
Access to the spinal canal with less chance  
of ligament or nerve damages.

Merely illustrative images



#### INDICATIONS

Safe Access was developed to safely perform percutaneous transforaminal access for biopsy and decompression (with or without discography) of herniated intervertebral discs at various levels, including regions with restricted access (e.g., L5-S1).



## TECHNICAL SPECIFICATIONS

- Sterilization: gamma ray;
- Validity of sterilization: 3 years;
- Single-use product.

## MODELS

- **Safe Access 4 (Code: 921220000)**
- **Safe Access 5 (Code: 921220100)**

# Simulation of Use

## Percutaneous Transforaminal Access

During endoscopic transforaminal spinal surgeries, access to the disc often poses risks to nearby neural structures. In some situations, bone debridement of the foramen is necessary to facilitate access to the disc.

The **Safe Access** kit, through a sequential insertion of disposable instruments with different diameters, allows safe access in regions with restricted access.

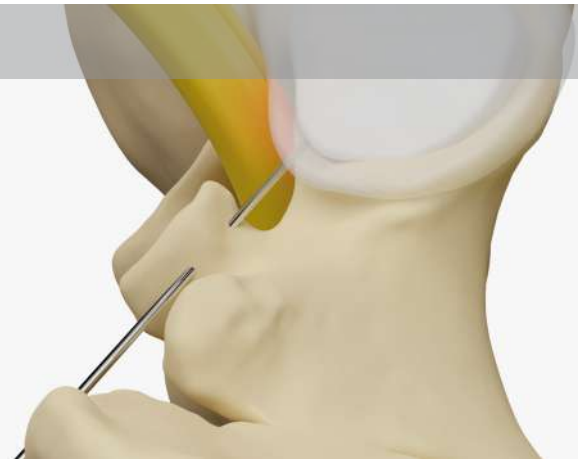
### Step 01

Through a posterolateral approach to the foramen, the **Puncture Cannula** is guided and infiltrated using local anesthetic.



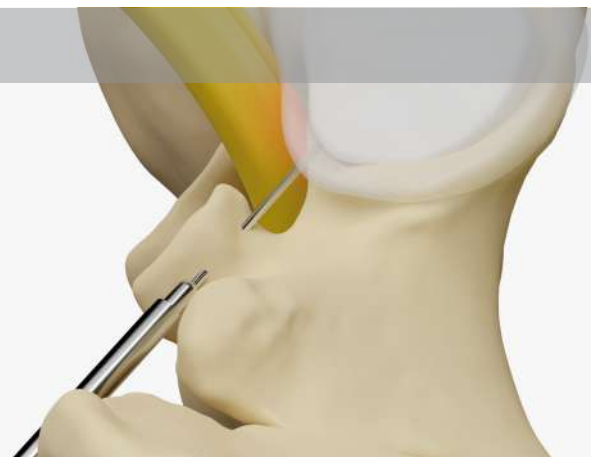
### Step 02

The **Drilled Nitinol Guide Wire** is inserted through the Puncture Cannula until it reaches the disc. Then the Puncture Cannula is removed.



### Step 03

With a path previously defined by the Drilled Nitinol Guide Wire, insert the **Straight Trocar + Obturator** assembly until it reaches the bone structure to be pierced.



## Step 04

Remove the Obturator and Drilled Nitinol Guide Wire. Insert the **Drill** and perform the first enlargement of the transforaminal access. This action can be facilitated with the use of the **Torque Handle**.



## Step 05

Remove the Drill, reinsert the Drilled Nitinol Guide Wire. With the wire properly positioned on the disc, remove the trocar and insert the **4 or 5 mm Cannulated Drill**. Perform the final widening of the bone structure. This action can be facilitated with the use of the Torque Handle. Remove the Cannulated Drill and Drilled Nitinol Guide Wire.



## Note 01

Based on the bone tunnel that was made, different techniques can be used to perform the disc decompression.



## Note 02

Razek has a set of permanent instruments - **Instruments for Endoscopic Spine Surgery** - that remove parts of the injured disc, as well as herniated fragments, decompressing and relieving pressure on the nerve and within the disc.

