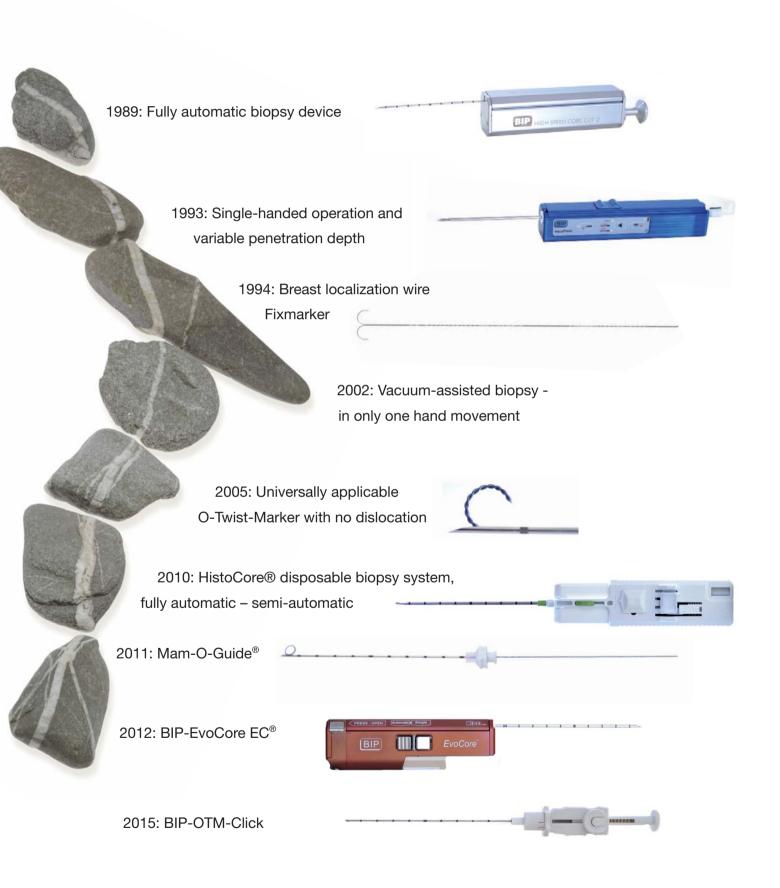
# AAEDICAL TECHNOLOGY



# **OUR MILESTONES**



# **BIP - THE IDEA-MAKERS IN MEDICAL TECHNOLOGY**

# Biopsy in pefection.

For more than 25 years, BIP has been dedicated to the development of biopsy and tissue marking devices. While in the past, biopsies were complicated and a uniform sample quality was difficult to achieve, the innovative biopsy systems of BIP and their further development have revolutionized tissue sampling.

### With goals such as

- universal application
- · ease of use
- safety
- maximum results

we develop the world's leading biopsy products.

### Made in Germany

BIP stands for innovation, reliability and optimal results. Our products are developed and manufactured exclusively in the Federal Republic of Germany.

### Contents

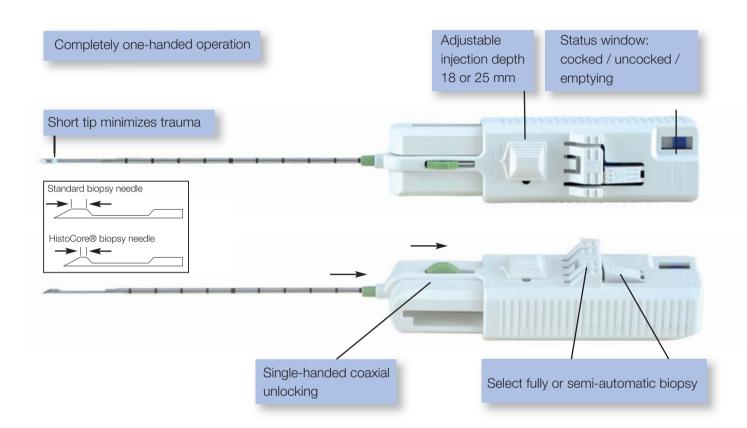
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# **BIP-HISTOCORE® HC/BIP-HISTOCORE® HC-X**

# disposable biopsy system

Sterile biopsy device for histological soft tissue removal.

A look at the advantages



### **Product numbers:**

Ø Length	100 mm	130 mm	160 mm	200 mm	250 mm	Color code	Packaging unit (pcs.)
20G/0,95 mm	HC20100	HC20130	HC20160	HC20200	HC20250		5
18G/1,25 mm	HC18100	HC18130	HC18160	HC18200	HC18250		5
16G/1,65 mm	HC16100	HC16130	HC16160	HC16200	HC16250		5
14G/2,10 mm	HC14100	HC14130	HC14160	HC14200	HC14250		5
12G/2,76 mm	HC12100	HC12130	HC12160	HC12200			5

(Also available as a set with pre-installed coaxial cannulas: Add "X" to product number, e.g. HC14100X)

The devices are color-coded according to diameter.

### Technical specifications:

Material: stainless steel/plastic

Device length: 123 mm Weight: approx. 45 g



# **BIP-HISTOCORE® HC/BIP-HISTOCORE® HC-X**

### Better tissue results:

The powerful energy-saving, spring-loaded system enables optimal biopsy results, such as those previously only possible with reusable devices. In addition, the option to perform a semi-automatic biopsy considerably increases tissue yield for a few applications. In difficult biopsy situations, the semi-automatic delay function allows for tissue sampling without forward penetration of the needle, increasing patient safety (e.g. for lymph node biopsy). Due to the adjustable penetration depth (18 or 25 mm), the BIP-HistoCore® biopsy device can be optimally adjusted to its area of application.

### Fewer side effects:

The shorter needle tip markedly reduces trauma to the tissue behind the biopsy area. Due to very low manufacturing tolerances in device production, we have been able to considerably shorten the area between the sample collection notch and the beginning of the needle tip bevel.

### Safe use:

The status of the device (cocked, partially cocked or uncocked) is shown in the status window. Protectors next to the trigger guard against accidental triggering. The BIP-HistoCore® HC biopsy device can be fully operated with just one hand. A variety of needle sizes covers all areas of soft tissue biopsy.

### Coaxial cannula (one-step technology):

The coaxial cannula is pre-installed in the model BIP-HistoCore® HC-X. The coaxial cannula and biopsy needle are positioned at the biopsy site simultaneously (in one step). There is no need for a separate positioning of the coaxial cannula.

Alternatively, you can use the BIP coaxial cannula HCC, consisting of a coaxial introducer sheath and stylet with an extremely sharp trocar tip.



# **BIP-HISTOCORE® HC-T/BIP-HISTOCORE® HC-TX**

Disposable biopsy system with optimized trocar edge (BIP-Wing-Tip-Trocar)

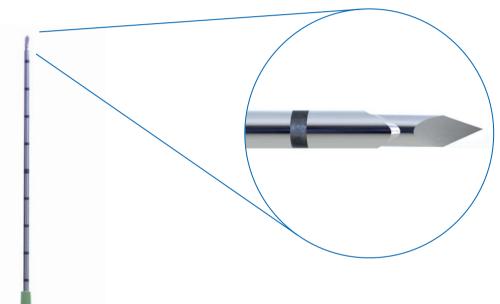
# Sterile biopsy device for histological soft tissue removal.

The advantages are the same as those of the BIP-HistoCore® HC

### Trocar tip:

The optimized trocar tip (BIP-Wing-Tip-Trocar) facilitates penetration into the tissue and greatly increases target precision, while maintaining the same tissue specimen quality. The best results are achieved using the semi-automatic mode.

The coaxial cannula is pre-installed in the model BIP-HistoCore® HC-TX.



### Product numbers for HistoCore® HC-T:

Ø Length	100 mm	130 mm	160 mm	200 mm	Color code	Packaging unit (pcs.)
18G/1,25 mm			HC18160T	HC18200T		5
16G/1,65 mm		HC16130T		HC16200T		5
14G/2,10 mm	HC14100T	HC14130T		HC14200T		5
12G/2,76 mm	HC12100T	HC12130T				5

### Product numbers for HistoCore® HC-TX:

Ø Length	100 mm	130 mm	160 mm	200 mm	Color code	Packaging unit (pcs.)
14G/2,10 mm	HC14100TX					5
12G/2,76 mm	HC12100TX	HC12130TX				5

The devices are color-coded according to diameter.

### Technical specifications:

Material: stainless steel/plastic

Device length: 123 mm Weight: approx. 45 g

# **BIP COAXIAL CANNULA HCC**

# for HistoCore® HC

# Supports the diagnostic removal of soft tissue samples during histological examinations of anomalies.

The BIP coaxial cannula HCC serves as a guide cannula for performing several biopsies on the same organ with minimal trauma. It consists of two parts, an outer cannula with a plastic grip and an inner mandrin with an extremely sharp, symmetrical trocar tip. The BIP coaxial cannula HCC is especially designed for use with the BIP-HistoCore® System and offers the following advantages:

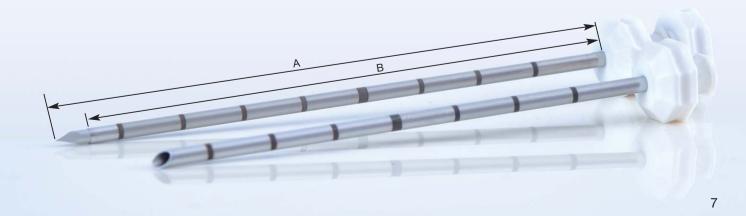
- Minimal trauma.
- Quick recovery of a lesion.
- Minimized risk of cell displacement.
- Easy penetration of dense tissue via a special edge.

### **Product numbers:**

stainless steel/plastic

Titanium/plastic

Item no. Standard version	Item no. MR-compatible	Ø [G]	Ø [mm]	≺→A [mm]	<b>→</b> B [mm]	Compatible BIP for HistoCore®	Packaging unit (pcs.)
HCC12100	HCC12100MR	11	3,06	63,0	57,5	HC12100	5
HCC12130	HCC12130MR	11	3,06	93,0	87,5	HC12130	5
HCC12160	HCC12160MR	11	3,06	123,0	117,5	HC12160	5
HCC12200	HCC12200MR	11	3,06	163,0	157,5	HC12200	5
HCC14100	HCC14100MR	13	2,47	62,0	57,5	HC14100	5
HCC14130	HCC14130MR	13	2,47	92,0	87,5	HC14130	5
HCC14160	HCC14160MR	13	2,47	122,0	117,5	HC14160	5
HCC14200	HCC14200MR	13	2,47	162,0	157,5	HC14200	5
HCC14250	HCC14250MR	13	2,47	212,0	207,5	HC14250	5
HCC16100	HCC16100MR	14	2,10	61,5	57,5	HC16100	5
HCC16130	HCC16130MR	14	2,10	91,5	87,5	HC16130	5
HCC16160	HCC16160MR	14	2,10	121,5	117,5	HC16160	5
HCC16200	HCC16200MR	14	2,10	161,5	157,5	HC16200	5
HCC16250	HCC16250MR	14	2,10	211,5	207,5	HC16250	5
HCC18100	HCC18100MR	16	1,65	61,0	57,5	HC18100	5
HCC18130	HCC18130MR	16	1,65	91,0	87,5	HC18130	5
HCC18160	HCC18160MR	16	1,65	121,0	117,5	HC18160	5
HCC18200	HCC18200MR	16	1,65	161,0	157,5	HC18200	5
HCC18250	HCC18250MR	16	1,65	211,0	207,5	HC18250	5
HCC20100	HCC20100MR	18	1,25	60,5	57,5	HC20100	5
HCC20130	HCC20130MR	18	1,25	90,5	87,5	HC20130	5
HCC20160	HCC20160MR	18	1,25	120,5	117,5	HC20160	5
HCC20200	HCC20200MR	18	1,25	160,5	157,5	HC20200	5
HCC20250	HCC20250MR	18	1,25	210,5	207,5	HC20250	5
Material:	Material:						



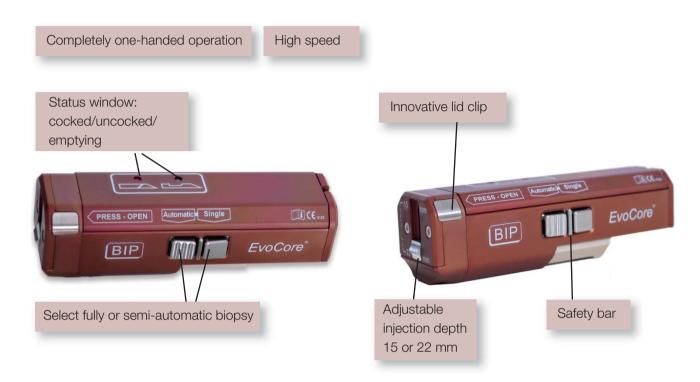
# Biopsy system

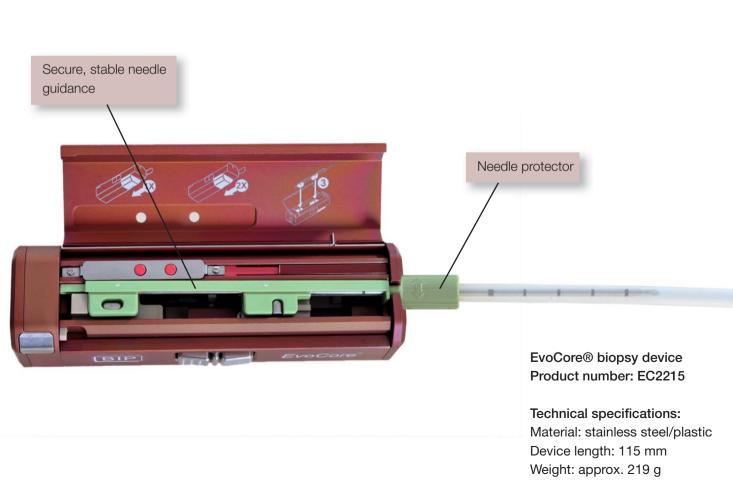
# Reusable biopsy device for histological tissue sampling.

This fourth-generation biopsy device for histological tissue sampling is the result of the latest technological developments from the BIP Development Center – Made in Germany.



### A look at the advantages





# Biopsy system

# Reusable biopsy device for histological tissue sampling.

### Advantages:

### Single-handed use

The easy cocking of the lever enables a completely single-handed use of the device. A lock position allows the opening of the tissue window and thus tissue retrieval without the need of removing the needle from the device. The other hand can, for instance, remain free to manipulate an ultrasound transducer.

### Selection of fully or semi-automatic mode

The BIP-EvoCore EC2215 is the first and, to date, only reusable biopsy device with which you can select fully or semi-automatic operation. For a fully-automatic biopsy, the stylet first shoots forward (15 or 22 mm, depending on the set penetration depth), the outer cannula then follows the stylet approximately 30 ms later and captures the sample core. The semi-automatic biopsy procedure can also be advantageous. First, by pressing on the front trigger, only the stylet shoots forth. Via ultrasound, the position of the tissue collection notch can then be precisely determined and documented or readjusted. Furthermore, some pressure can be applied to the sample collection notch from the grip. This causes more tissue to be actively pressed into the collection notch. The second shot, triggered by pressing the "rear" trigger button, cuts off the core biopsy specimen and closes the sample collection notch. Experiments have shown that, depending on the tissue type, up to 20% more tissue material can be retrieved using the semi-automatic mode.

Tissue retrieval without forward throw – for tissue retrieval from body regions difficult
to biopsy, such as the lymph nodes, with blood vessels running behind them. Using the
semi-automatic biopsy mode, tissue can be captured WITHOUT the need of firing the
inner needle. Only the second cutting action of the intersecting cannula is triggered.
This offers considerably more safety.

### Innovative lid clip

Accidental opening during the biopsy procedure is prevented by a firmly-locking lid clip. With the push of a button, the lid opens automatically.

### Automatic safety

The integrated safety bar ensures maximum safety and eliminates the need to manually unlock the device.

### New biopsy needle

The introducer of the EvoCore® biopsy needle makes it easier to load and ensures a firm hold in the EvoCore® biopsy device.

### Hygiene/safety

A unique needle protector prevents possible contamination between the device and the biopsy cannula. The latter can no longer come into contact with the housing.

Patented needle protection

Sterile loading of the needle – protective tube remains on the needle.

- No danger of injury when loading the needle
- Optimized needle guidance --> better protection from blood entering the device.
- Optimized sound insulation, thus very quiet.
- Convenient cocking, easier to manipulate.
- Optimal sterilization of the biopsy device through the use of new, more durable materials.
- Adjustable penetration depth (15/22 mm)

Normally, the preset penetration depth of 22 mm is preferred, because it enables the most tissue to be collected. The penetration depth of the EvoCore® biopsy device can also be reduced to 15 mm in order to protect the area behind the lesion, e.g. large blood vessels, thorax wall, etc.

- A status window shows the current state of the device (cocked, uncokked, emptying).
- High speed

The powerful spring-loaded system allows rapid needle movement. This results in excellent sample core results.

Even small and difficult lesions can be precisely punctured.

High spring preload in the fired state

This ensures that the cutting cannula has enough power to cleanly close off the tissue sample notch at the end of the biopsy procedure and completely cut off the tissue.

- 3D rotation loop of the cannulas for optimal biopsy quality.
- Trocar tip (for BIP EvoCore® EC-T)

The optimized trocar tip (BIP-Win-Tip-Trocar) facilitates penetration of the tissue and considerably increases target precision while preserving biopsy quality. Excellent results are achieved using the semi-automatic mode.



# **BIP EVOCORE® EC BIOPSY NEEDLES**

# including guide cannula

### **Product numbers:**

EvoCore® biopsy needle EC with standard bevel edge incl. guide cannula for secure loading of the needle.



Ø length	100 mm	130 mm	160 mm	200 mm	250 mm	Color code	Packaging unit (pcs.)
20G/0,95 mm	EC20100	EC20130	EC20160	EC20200	EC20250		10
18G/1,25 mm	EC18100	EC18130					10
16G/1,65 mm	EC16100	EC16130	EC16160	EC16200	EC16250		10
14G/2,10 mm	EC14100	EC14130	EC14160	EC14200	EC14250		10
12G/2,76 mm	EC12100	EC12130	EC12160	EC12200			10

EvoCore® biopsy needle EC-T with optimized trocar tip (BIP-WingTip-Trocar) incl. guide cannula for secure loading of the needle.



Ø length	100 mm	130 mm	160 mm	200 mm	Color code	Packaging unit (pcs.)
18G/1,25 mm	EC18100T	EC18130T				10
16G/1,65 mm	EC16100T	EC16130T	EC16160T	EC16200T		10
14G/2,10 mm	EC14100T	EC14130T	EC14160T	EC14200T		10
12G/2,76 mm	EC12100T	EC12130T				10

The EvoCore® biopsy needles are color-coded according to diameter.



# **BIP-EVOCORE® ECC COAXIAL CANNULA**

# for EvoCore® EC

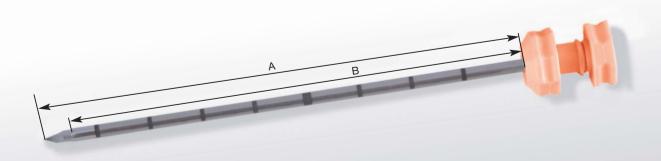
# Supports diagnostic retrieval of soft tissue samples for the histological examination of anomalies.

The BIP EvoCore® ECC coaxial cannula serves as a guide cannula for multiple biopsies in the same organ with minimal trauma. It consists of two parts, an outer cannula with a plastic grip and an inner stylet with an extremely sharp, symmetrical trocar tip. The BIP coaxial cannula ECC is especially designed for use with the BIP-EvoCore® System, and offers the following advantages:

- Minimal trauma.
- Quick relocation of a lesion.
- Minimal risk of cell displacement.
- Easy penetration of dense tissue due to the special edge.

### Product numbers:

Coaxial cannula Standard version	Coaxial cannula MR-compatible	Ø [G]	Ø [mm]	A [mm]	B [mm]	Compatible with EvoCore®-needle	Packaging unit (pcs.)
ECC12100		11	3,06	64,5	59	EC12100	10
ECC12130		11	3,06	94,5	89	EC12130	10
ECC12160	ECC12160MR	11	3,06	124,5	119	EC12160	10
	ECC12200MR	11	3,06	164,5	159	EC12200	10
ECC14100		13	2,47	63,5	59	EC14100	10
ECC14130	ECC14130MR	13	2,47	93,5	89	EC14130	10
ECC14160	ECC14160MR	13	2,47	123,5	119	EC14160	10
ECC14200	ECC14200MR	13	2,47	163,5	159	EC14200	10
ECC16100		14	2,10	63,0	59	EC16100	10
ECC16130	ECC16130MR	14	2,10	93,0	89	EC16130	10
ECC16160		14	2,10	123,0	119	EC16160	10
	ECC16200MR	14	2,10	163,0	159	EC16200	10
ECC18100		16	1,65	62,5	59	EC18100	10
ECC18130		16	1,65	92,5	89	EC18130	10
ECC20100		18	1,25	62,0	59	EC20100	10
ECC20130		18	1,25	92,0	89	EC20130	10
ECC20160		18	1,25	122,0	119	EC20160	10
ECC20200		18	1,25	162,0	159	EC20200	10
Material:	Material:		1 .,==	1	1 .55		10



# **BIP-MAM-O-GUIDE®**

# for preoperative breast marking

### Advantages:

- Optimal anchoring in the tissue.
- Repositionable.
- Completely echogenic due to multireflection markings on the double helix right up to the tip.
- MR-compatible versions available.
- Optimized cannula tip facilitates penetration into the tissue.
- Minimal danger of injury.
- Controllable deployment direction of the marking wire (direction correction)
- Silicone stopper enables precise setting of the injection depth and also serves as anchorage.

### **Product numbers:**

Product no.	Ø [G] / [mm]	Cannula length [mm]	MR-compatible	Packaging unit (pcs.)
MOG057	20 / 0,95	57		10
MOG077	20 / 0,95	77		10
MOG107	20 / 0,95	107		10
MOG137	20 / 0,95	137		10
MOG057MR	18 / 1,25	57	ja	10
MOG077MR	18 / 1,25	77	ja	10
MOG107MR	18 / 1,25	107	ja	10
MOG137MR	18 / 1,25	137	ja	10



# **BIP-MAM-O-GUIDE®**

The BIP-Mam-O-Guide® consists of an application cannula and marking wire, and serves in the preoperative marking of malignant regions in the female breast. It is ultrasound-guided and is positioned either stereotactically (mammography) or using MR diagnostics.

### Ring anchor

When the marking wire is pushed out of the cannula, a ring-shaped anchor element emerges which allows optimal anchoring in the tissue.

### Position stability in the tissue

The ring anchor also prevents the marking wire from accidentally slipping too deeply into the tissue.

### Double helix design

The marking wire is designed as a double helix (including the ring element). This enables optimal visibility of the entire wire using ultrasound. The twisted construction safeguards against accidental cutting of the wire.

Palpable markings in front of the ring anchor enable the operator to promptly expand the incision.

### Minimal danger of injury

When applying the marking wire (sliding it out of the cannula), the anchor element takes on a ring shape, with the wire tip touching the ring. This means there are no sharp edges in the tissue that might otherwise lead to accidental injury of the operator.

### Repositioning

In the event of incorrect positioning, the marking wire can be pulled back into the cannula and the BIP-Mam-O-Guide® can be repositioned.

### **Direction correction**

By turning the application cannula for fine adjustment, the direction of the ring element can be determined before the wire is pushed out.



# **BIP-O-TWIST-MARKER**

# for breast tissue marking

# Universal and precise tissue marking.

### Advantages:

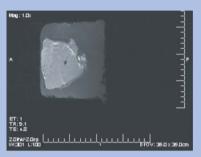
Universal application



Mammography



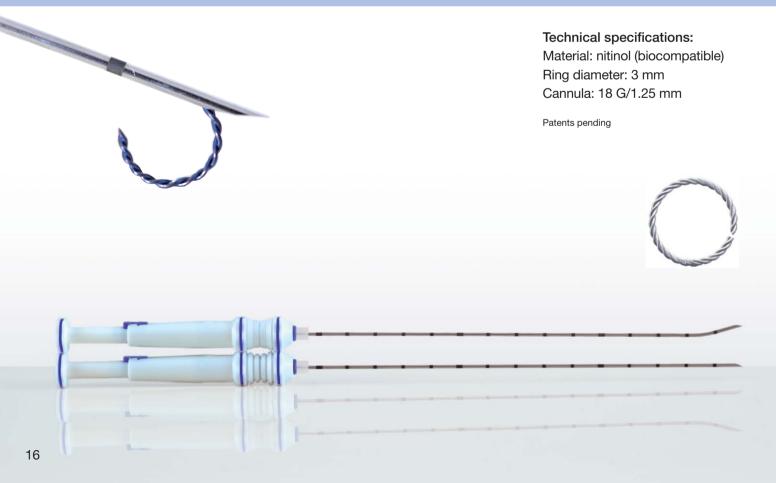
Ultrasound



MRI

- Independent of biopsy system
- Direct application possible (chemotherapy
- Minimal dislocation
- Two variants available





# **BIP-O-TWIST-MARKER**

Applicable for all diagnostic procedures – mammography, ultrasound, MRT, and computer tomography. The twisted, ring-shaped clip element enables favorable reflection and visibility using ultrasound.

Can be used in combination with all conventional biopsy systems. Can also be used following vacuum and punch biopsy procedures.

The applicator of the O-Twist-Marker consists of a sharp cannula (diameter: 18 G/1.25 mm). This makes it suitable for direct application of the marker (ring) in the breast (e.g. to mark lesions before neoadjuvant chemotherapy).

Anchors securely in tissue. The design of the O-Twist-Marker minimizes dislocation.

Ergonomic grip.

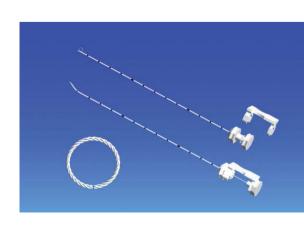
### Product numbers:

O-Twist-Marker with straight cannula tip Item no.:	Length in [mm]	Packaging unit (pcs.)
OTM3.0SA077	77	5
OTM3.0SA107	107	5
OTM3.0SA157	157	5

O-Twist-Marker with curved cannula tip Item no.:	Length in [mm]	Packaging unit (pcs.)
OTM3.0RA157	157	5

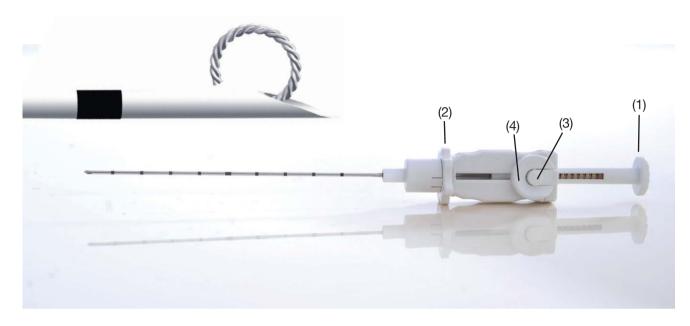
MR-compatible OTM	Length in	Packaging
with curved and straight	[mm]	unit (pcs.)
cannula tip Item no.:		
OTM3.0R137MR	137	5
OTM3.0S137MR	137	5





# **BIP-OTM-CLICK**

# BIP-O-Twist-Marker with a click



The time-tested OTM-Marker is now available with precise automatic positioning in the tissue. At the push of a button, a spring-loaded mechanism pushes the OTM-Marker into its end position.

No displacement of the needle tip

Variable positioning of the OTM-Marker via rotation setting

### How it works:

By pressing the spring-loaded trigger (1), the OTM-CLICK is cocked.

The implantation cannula is introduced for diagnostic analysis.

The ejection direction is preset using a rotary transmitter.

By pressing the trigger (3), the OTM-Marker descends into its preset position.

The control depression (4) indicates the completed ejection motion of the marker. If necessary, for very hard tissue, the marker can be manually brought into position using the control depression.

### **Product numbers:**

OTM-Click with straight cannula tip Item no.:	Length in [mm]	Diameter in G/[mm]	Packaging unit (pcs.)
OTM3.0S077 Click	77	18G/1,25 mm	5
OTM3.0S107 Click	107	18G/1,25 mm	5
OTM3.0S157 Click	157	18G/1,25 mm	5

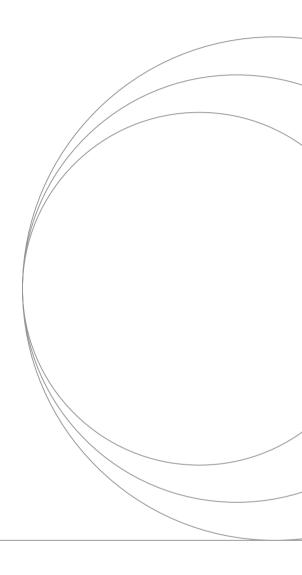
OTM-Click with curved cannula tip Item no.:	Length in [mm]	Diameter in G/[mm]	Packaging unit (pcs.)
OTM3.0R137 Click	137	18G/1,25 mm	5
OTM3.0R157 Click	157	18G/1,25 mm	5



## Technical specifications:

Material: nitinol (biocompatible) Ring diameter: 3.8 mm Cannula: 18 G/1.25 mm

# MEDICAL TECHNOLOGY





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