The colonic FTRD® is an instrument for flexible endoscopy for full-thickness resection and diagnostic tissue acquisition through resection of suitable lesions in the colon and rectum.

For a better mobilization of tissue in submucosal findings (especially in the stomach) a specially modified anchor is available (not included in the FTRD® Set).

Details and components

The respective FTRD® Sets (colonic, diagnostic, gastroduodenal) are delivered as procedural set and consist of the following products:

- FTRD® cap with preloaded clip and thread
- snare integrated into the distal end of the cap
- FTRD® hand wheel
- thread retriever
- endoscope sleeve with fixation tapes
- FTRD® Marking Probe
- FTRD® Grasper
- insertion balloon (only gastroduodenal FTRD®)
- guide wire (only gastroduodenal FTRD®)

HF coagulation probe for marking the target lesion before using the FTRD® system. Marking will facilitate both finding the lesion and verify complete resection of the target tissue.

Gripping forceps for proper grip on the target tissue and precise retrieval of the sample into the FTRD® application cap. The FTRD® Grasper is also available separately (5 items per package, ref. no. 200.73).

The FTRD® prOVE Cap is a cap with the same dimensions as the cap of the respective FTRD® Set in order to test the possible application of the FTRD® Set in advance. The FTRD® prOVE Cap is not included in the respective FTRD® Set.

Application aid

For easier mobilization of tissue in submucosal findings (especially in the stomach) a specially modified anchor is available (not included in the FTRD® Set).

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**FTRD® System**

Full-Thickness Resection Device for flexible endoscopy

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Ovesco Endoscopy AG is a medical device company specializing in the fields of flexible endoscopy and endoluminal surgery. Ovesco develops, manufactures, and markets innovative products for the treatment of gastrointestinal disease. Ovesco products stand for therapeutic efficacy and efficient application.
The colonic FTRD® is an instrument for flexible endoscopy for full-thickness resection and diagnostic tissue acquisition through resection of suitable lesions in the colon and rectum.

The colonic FTRD® can find application in:
- not pretreated non-lifting adenoma
- non-lifting recurrent adenoma
- adenoma at the base of the appendix
- adenoma at/in diverticula
- small subepithelial tumors
- early carcinoma

Endoscopic full-thickness resection in the colon

Source: Prof. Dr. K. Caca, Klinikum Ludwigsburg, Germany

Upper row: De novo resection after incomplete polypectomy in the descending colon (early carcinoma).
Lower row: Resection of a recurrent adenoma (HGIEN) in the descending colon (non-lifting sign).

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Details and components
The respective FTRD® Sets (colonic, diagnostic, gastroduodenal) are delivered as procedural set and consist of the following products:
- FTRD® cap with preloaded clip and thread
- snare integrated into the distal end of the cap
- FTRD® hand wheel
- thread retriever
- endoscope sleeve with fixation tapes
- FTRD® Marking Probe
- FTRD® Grasper
- FTRD® proOVE Cap (only gastroduodenal FTRD®)
- guide wire (only gastroduodenal FTRD®)

HF coagulation probe for marking the target lesion before using the FTRD® System. Marking will facilitate both finding the lesion and verify complete resection of the target tissue.

Grasping forceps for proper grip on the target tissue and precise retrieval of the sample into the FTRD® application cap. The FTRD® Grasper is also available separately (5 items per package, ref. no. 201.73).

The FTRD® prOVE Cap is a cap with the same dimensions as the cap of the respective FTRD® Set in order to test the possible application of the FTRD® Set in advance. The FTRD® prOVE Cap is not included in the respective FTRD® Set.

(2 items/package; colonic FTRD® prOVE Cap ref. no. 200.71; gastroduodenal FTRD® prOVE Cap ref. no. 200.77).

Application aid
FTRD® ANCHOR
For better mobilization of tissue in submucosal findings (especially in the stomach) a specially modified anchor is available (not included in the FTRD® Set).

FTRD® versions

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Endoscopy full-thickness resection in the colon

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The FTRD® System

Full-Thickness Resection Device for flexible endoscopy

FTRD® System

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Ovesco Endoscopy AG is a medical device company specializing in the fields of flexible endoscopy and endoluminal surgery. Ovesco develops, manufactures, and markets innovative products for the treatment of gastrointestinal disease. Ovesco products stand for therapeutic efficacy and efficient application.
The FTRD® System enables endoscopic full-thickness resection (EFTR) of lesions and diagnostic tissue acquisition in the colon and rectum (gastroduodenal FTRD®) respectively in the stomach and duodenum (gastroduodenal FTRD®).

- Transluminal and minimally invasive technique
- Proven OTSC® technology for safe closure
- Good histological evaluation of an en bloc specimen with minimal thermal damage
- Complete set for endoscopic full-thickness resection procedure

**FTRD® System**

**Full-Thickness Resection Device for flexible endoscopy**

It is based on the well-established OTSC® System and enables the removal of suitable lesions with all layers of the wall in- including the serosa. The design of the FTRD® System ensures that the transection of the organ wall occurs only after the target site has been safely closed. The organ lumen is therefore never opened during the procedure.

The FTRD® application cap is mounted on the tip of the endoscope with the snare running along the outside of the endoscope protected by the endoscope sleeve. By turning the hand wheel the thread is tensioned and the clip released. Subsequently, the tissue above the clip is resected with the integrated HF snare.

**FTRD® Gastroduodenal**

The gastroduodenal FTRD® is a smaller FTRD® System for endoscopic full-thickness respectively deep partial-wall resection (especially in the stomach) and diagnostic tissue acquisition in the stomach and duodenum.

- Transluminal and minimally invasive technique
- Proven OTSC® technology for safe closure
- Good histological evaluation of en bloc specimen with minimal thermal damage
- Complete set for endoscopic full-thickness resection procedure

The diagnostic FTRD® is a smaller FTRD® System for full-thickness biopsy in the colon and rectum e.g. for diagnostic purposes.

It enables histology in functional diseases in the colon e.g. for neuro-gastroenterological examination. Full-thickness biopsies allow accurate histological presentation of enteric neurons and can provide important insights into the diagnosis of motility disorders.

**Diagnostic full-thickness biopsy in the colon**

For an easier and safer insertion of the system into the upper GI tract (esophageal/pyloric passage) the gastroduodenal FTRD® Set is delivered with an insertion balloon and guide wire. The clip of the gastroduodenal FTRD® has been modified especially for the application in the duodenum and stomach.

The diagnostic FTRD® can find application in:
- Non-pretreated non-lifting adenomas
- Non-lifting recurrent adenomas
- Small subepithelial tumors
- Early carcinoma
- Not pretreated non-lifting adenoma
- Non-lifting recurrent adenoma
- Small subepithelial tumors
- Early carcinoma

**Application**

Endoscopic full-thickness resection

- Marking/excision with the OTSC® Marking Probe
- Grasping/mobilizing the lesion with the FTRD® Grasper
- Closing and releasing the clip with the OTSC® Hand Wheel

Endoscopic full-thickness resection in the stomach

- Marking and targeting the lesion with the FTRD® Marking Probe
- Grasping and mobilizing the lesion with the FTRD® Grasper
- Clip application and subsequent resection of the lesion

Diagnostic full-thickness biopsy in the colon

- Upper row: Diagnostic FTRD® to exclude a primary neurodegenerative motility disorder. Source: Prof. Dr. P. Bauerfeind, Stadtspital Triemli, Zurich, Switzerland
- Lower row: FTRD® for diagnosis of peptic ulcer disease. Source: Prof. D. Reanders, St. Antonius Hospital, Enzich, Switzerland
- Source: Prof. Dr. C. de Bray, Hepatobiliary Surgical Unit, Erasme Hospital, Brussels, Belgium
- Source: PD Dr. R. Gruys, Department of Surgery, University Hospital Leuven, Belgium

Ensuring that the tissue is completely within the FTRD® application cap – releasing clip with hand wheel.

Closing and releasing the clip with the OTSC® Hand Wheel.

Marking and targeting the lesion with the FTRD® Grasper.

Grasping and mobilizing the lesion with the FTRD® Grasper.

Clip application and subsequent resection of the lesion.

2 cm full-thickness specimen from the stomach.
The FTRD® System enables endoscopic full-thickness resection (EFTR) of lesions and diagnostic tissue acquisition in the colon and rectum (colonic FTRD®/diagnostic FTRD®) respectively in the stomach and duodenum (gastroduodenal FTRD®).

### Key Features
- **Transluminal and minimally invasive technique**
- **Proven OTSC® technology for safe closure**
- **Good histological evaluation of en bloc specimen with minimal thermal damage**
- **Complete set for endoscopic full-thickness resection procedure**

#### FTRD® System

**Full-Thickness Resection Device for flexible endoscopy**

It is based on the well-established OTSC® System and enables the removal of suitable lesions with all layers of the wall including the serosa. The design of the FTRD® System ensures that the transection of the organ wall occurs only after the target site has been safely closed. The organ lumen is therefore never opened during the procedure.

The FTRD® application cap is mounted on the tip of the endoscope with the snare running along the outside of the endoscope protected by the endoscope sleeve. By turning the hand wheel the thread is tensioned and the clip released. Subsequently, the tissue above the clip is resected with the integrated HF snare.

#### Application

**Endoscopic full-thickness resection**

1. **Marking the lesion with the OTSC® Marking Probe.**
2. **Shaping and mobilizing the lesion with the OTSC® Grasper.**
3. **Closing clip and resecting tissue.**
4. **Retrieving specimen and inspecting resection site.**

**Endoscopic full-thickness resection in the stomach**

1. **Marking and targeting the lesion with the FTRD® Grasper.**
2. **Grasping and mobilizing the lesion with the Anchor.**
3. **Clip application and subsequent resection of the lesion.**

**Diagnostic full-thickness biopsy in the colon**

1. **Upper row: Diagnostic EFTR to exclude a primary neurodegenerative motility disorder.**
2. **Lower row: EFTR for diagnosis of Hirschsprung’s disease.**

#### GASTRODUODENAL

The gastrooduodenal FTRD® is a smaller FTRD® System for endoscopic full-thickness respectively deep partial-wall resection (especially in the stomach) and diagnostic tissue acquisition in the stomach and duodenum.

For an easier and safer insertion of the system into the upper GI tract (esophageal/pyloric passage) the gastroduodenal FTRD® Set is delivered with an insertion balloon and guide wire. The clip of the gastroduodenal FTRD® has been modified especially for the application in the duodenum and stomach wall.

The gastrooduodenal FTRD® can find application in:
- not pretreated non-lifting adenomas
- non-lifting recurrent adenomas
- small subepithelial lesions
- early carcinoma

For submucosal lesions (especially for GIST indications) the utilization of the Anchor instead of the Grasper can represent a good alternative.

#### GASTROINTESTINAL

The diagnostic FTRD® is a smaller FTRD® System for full-thickness biopsy in the colon and rectum e.g. for diagnostic purposes.

It enables histology in functional diseases in the colon e.g. for neuro-gastroenterological examination. Full-thickness biopsies allow accurate histological presentation of enteric neurons and can provide important insights into the diagnosis of motility disorders.

Full-thickness biopsy finds application in:
- Hypo- and aganglionosis (e.g. Hirschsprung’s disease)
- Enteric ganglioneuroma
- Visceral neuritis and neuropathy (e.g. in chronic constipation)
- Gastrointestinal amyloidosis
- Enteric manifestation of neurological diseases (e.g. Parkinson’s disease)

The gastroduodenal FTRD® is a smaller FTRD® System for endoscopic full-thickness respectively deep partial-wall resection (especially in the stomach) and diagnostic tissue acquisition in the stomach and duodenum.

For an easier and safer insertion of the system into the upper GI tract (esophageal/pyloric passage) the gastroduodenal FTRD® Set is delivered with an insertion balloon and guide wire. The clip of the gastroduodenal FTRD® has been modified especially for the application in the duodenum and stomach wall.

The gastroduodenal FTRD® can find application in:
- not pretreated non-lifting adenoma
- non-lifting recurrent adenoma
- small subepithelial tumors
- early carcinoma

For submucosal lesions (especially for GIST indications) the utilization of the Anchor instead of the Grasper can represent a good alternative.
The FTRD® System enables endoscopic full-thickness resection (EFTR) of lesions and diagnostic tissue acquisition in the colon and rectum (colonic FTRD®) respectively in the stomach and duodenum (gastroduodenal FTRD®).

- Transluminal and minimally invasive technique
- Proven OTSC® technology for safe closure
- Good histological evaluation of en bloc specimen with minimal thermal damage
- Complete set for endoscopic full-thickness resection procedure

The FTRD® System
Full-Thickness Resection Device for flexible endoscopy

It is based on the well-established OTSC® System and enables the removal of suitable lesions with all layers of the wall including the serosa. The design of the FTRD® System ensures that the transection of the organ wall occurs only after the target site has been safely closed. The organ lumen is therefore never opened during the procedure.

The FTRD® application cap is mounted on the tip of the endoscope with the snare running along the outside of the endoscope protected by the endoscope sleeve. By turning the hand wheel the thread is tensioned and the clip released. Subsequently, the tissue above the clip is resected with the integrated HF snare.

Application
Endoscopic full-thickness resection

- Marking and targeting the lesion with the FTRD® Marking Probe.
- Grasping and mobilizing the lesion with the FTRD® Grasper.

Endoscopic full-thickness resection in the stomach

- Marking and targeting the lesion with the FTRD® Marking Probe.
- Grasping and mobilizing the lesion with the FTRD® Grasper.

Diagnostic full-thickness biopsy in the colon

- Upper row: EFTR for diagnosis of Hirschsprung's disease.
- Lower row: EFTR for diagnosis of motility disorders.

The gastroduodenal FTRD® is a smaller FTRD® System for endoscopic full-thickness respectively deep partial-wall resection (especially in the stomach) and diagnostic tissue acquisition in the stomach and duodenum.

For an easier and safer insertion of the system into the upper GI tract (esophageal/pyloric passage) the gastroduodenal FTRD® System is delivered with an insertion balloon and guide wire. The clip of the gastroduodenal FTRD® has been modified especially for the application in the duodenum and stomach.

The gastroduodenal FTRD® can find application in:
- not pretreated non-lifting adenomas
- non-lifting recurrent adenomas
- small subepithelial tumors
- early carcinomas

For submucosal lesions (especially for GIST indications) the utilization of the Anchor instead of the Grasper can represent a good alternative.

The diagnostic FTRD® is a smaller FTRD® System for full-thickness biopsy in the colon and rectum e.g. for diagnostic purposes.

It enables histology in functional diseases in the colon wall e.g. for neuro-gastroenterological examination. Full-thickness biopsies allow accurate histopathological examination of enteric neurons and can provide important insights into the diagnosis of motility disorders.

Full-thickness biopsy finds application in:
- Hypo- and aganglionosis (e.g. Hirschsprung's disease)
- Enteric gangliosis
- Visceral neuro- and myopathy (e.g. in chronic constipation)
- Gastrointestinal amyloidosis
- Enteric manifestation of neurological diseases (e.g. Parkinson's disease)

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- Enteric manifestation of neurological diseases (e.g. Parkinson's disease)
The colonic FTRD® is an instrument for flexible endoscopy for full-thickness resection and diagnostic tissue acquisition through resection of suitable lesions in the colon and rectum.

The colonic FTRD® can find application in:
• not pretreated non-lifting adenoma
• non-lifting recurrent adenoma
• adenoma at the base of the appendix
• adenoma at/in diverticula
• small subepithelial tumors
• early carcinoma

Endoscopic full-thickness resection in the colon

The respective FTRD® sets (colonic, diagnostic, gastroduodenal) are delivered as procedural set and consist of the following products:
• FTRD® cap with preloaded clip and thread
• snare integrated into the distal end of the cap
• FTRD® hand wheel
• thread retriever
• endoscope sleeve with fixation tapes
• FTRD® marking probe
• FTRD® grasper
• insertion balloon (only gastroduodenal FTRD®)
• guide wire (only gastroduodenal FTRD®)

HF coagulation probe for marking the target lesion before using the FTRD® system. Marking will facilitate both finding the lesion and verify complete resection of the target tissue.

FTRD® versions

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Applicaiton aid

For better mobilization of tissue in submucosal findings (especially in the stomach) an anchor is available (not included in the FTRD® set).

Application aid