



Closing the gap between endoscopy and surgery

FTRD® combines full-thickness resection and secure closure using the proven OTSC® technique in a single step. Since its introduction in 2014, numerous studies have demonstrated the potential of the technology for minimally invasive full-thickness resection. In recent years, further indications have emerged, such as for T1 carcinomas, Hybrid-FTRD® for the resection of larger lesions, and also the use in the upper gastrointestinal tract.



FTRD® in the colon and rectum

FTRD® is a proven procedure with very good clinical data, as shown in different meta-analyses.

- » R0 resection rate between 77.8%¹ and 81.8%²
- » Technical success between 87.1%² and 90%¹
- » Rate of complications requiring surgery between 1%¹ and 2.5%²



EFTR for T1 carcinoma

FTRD® offers a minimally invasive alternative to surgical resection for T1 carcinomas. The current evidence from clinical studies suggests that FTRD® could become a standard treatment for early carcinoma due to its high success rate.

- » High R0 resection rate between 71.8%³ and 85.6%⁴
- » Risk stratification of the tumors was possible in 99.3% of all cases^{3,4}
- » First long term analyses are promising with low recurrence rate after 39.5 months⁵



Hybrid-FTRD®

Hybrid-FTRD®, the combination of EMR and FTRD®, enables the resection of larger lesions and thus expands the spectrum of complex findings that can be resected endoscopically.

- » Median size of the lesions in the studies between 36.5 mm⁶ and 39 mm⁷, with resection of lesions of up to 70 mm⁷
- » Macroscopically complete resection between 97.3% und 81%



FTRD® in the stomach and duodenum

FTRD® is also increasingly becoming an alternative to surgery in the duodenum, with promising initial studies, particularly for duodenal NETs. In the stomach, the technique offers a high diagnostic benefit.

- » R0 resection rate in the duodenum between 75% and 83.7%
- » Median time for the procedure in the duodenum between 439 and 70.38 minutes
- » R0 resection rate in the stomach 76%. In all cases an exact diagnosis of the findings was possible.¹⁰





Summary

FTRD® shows a high R0 and clinical success rate as an alternative to surgical intervention. The good clinical basis for the colon, the promising results with regard to new indications such as T1 carcinoma and duodenal NETs, as well as the expansion of the application spectrum with the help of the hybrid technique for larger lesions, make FTRD® a valuable tool in modern interventional endoscopy.

Webinars





Tips & Tricks





- 1 Wannhoff A, Meier B, Caca K. Metaanalyse zur endoskopischen Vollwandresektion im Kolon. Z Gastroenterol. Published online 2021, September 29.
- 2 Nabi Z, Samanta J, Dhar J, Mohan BP, Facciorusso A, Reddy DN. Device-assisted endoscopic full-thick-ness resection in colorectum: Systematic review and meta-analysis. Dig Endosc. 2024;36(2):116–28.
- 3 Kuellmer A, Mueller J, Caca K, Aepli P, Albers D, Schumacher B, Glitsch A, Schäfer C, Wallstabe I, Hofmann C, Erhardt A, Meier B, Bettinger D, Thimme R, Schmidt AR. Endoscopic full-thickness resection for early colorectal cancer. Gastrointest Endosc. 2019;89(6):1180-1189.e1.
- 4 Zwager LW, Bastiaansen BAJ, van der Spek BW, Heine DN, Schreuder RM, Perk LE, Weusten BLAM, Boonstra JJ, van der Sluis H, Wolters HJ, Bekkering FC, Rietdijk ST, Schwartz MP, Nagengast WB, Hove WR ten, Terhaar Sive Droste JS, Rando Munoz FJ, Vlug MS, Beaumont H, Houben MHMG, Seerden TCJ, Wijkerslooth TR de, Gielisse EAR, Hazewinkel Y, Ridder R de, Straathof J-WA, van der Vlugt M, Koens L, Fockens P, Dekker E. Endoscopic full-thickness resection of T1 colorectal cancers: a retrospective analysis from a multicenter Dutch eFTR registry. Endoscopy. Published online 2021, September 06.
- 5 Albers et.al., Dutch eFTR Study Group. Medium-term oncological outcomes following endoscopic full-thickness resection for T1 colorectal cancer: results from the Dutch prospective eFTR registry. Abstract Session "Advanced endoscopy for early CRC: The final answer?" 0P034. UEG Week 2023 (October 14-17), Copenhagen, Denmark.

- 6 Meier B, Elsayed I, Seitz N, Wannhoff A, Caca K. Efficacy and safety of combined EMR and endoscopic full-thickness resection (hybrid EFTR) for large nonlifting colorectal adenomas. Gastrointest Endosc. 2023 Sep;98(3):405-411.
- 7 Mahadev S, Vareedayah AA, Yuen S, Yuen W, Koller KA, Haber GB. Outcomes of a hybrid technique using EMR and endoscopic full-thickness resection for polyps not amenable to standard techniques (with video). Gastrointest Endosc. 2021;94(2):358-367.e1.
- 8 Nabi Z, Pradev I, Basha J, Reddy DN, Darishetty S. Exposed versus non-exposed endoscopic full thickness resection for duodenal sub-epithelial lesions: A tertiary care center experience. Endoscopy. 2023;55[S 02]:eP586.
- 9 Wannhoff et. al.: Endoscopic full-thickness resection of duodenal neuroendocrine tumors using the Full-Thickness-Resection Device (FTRD): Results from a large, retrospective, multicenter study ESGE Days 2024 (25-27 April), Berlin, Germany.
- 10 Meier, B., Schmidt A., Glaser N., Meining A., Walter B., Wannhoff A., Riecken B., Caca K. Endoscopic full-thickness resection of gastric subepithelial tumors with the gFTRD-sytem: a prospective pilot study (RESET trial). Surg Endosc 2019.

More information on FTRD®

