

# Implant and implant applicator for endoscopic and customizable anastomosis

Reference No: B80080

## CHALLENGE

After the resection of pathological bowel sections, for example to treat a colon carcinoma, there are various ways to reconnect the lumen margins, all of which still show significant risks of complication and require highly invasive surgery. Guidelines for an ideal anastomosis are already well-known, however the respective technology is still missing. Inverting arrangement allows for a favorable healing process and end-to-end configuration assembles the native shape of the intestine, saving time and costs. Once healing is completed, the implant should be expelled to restore bowel function and motility and endoscopic application enables minimization of the intraoperative trauma allowing faster convalescence of the patient.

## INNOVATION

The invention provides an innovative endoscopic approach to create inverting end-to-end anastomosis, regardless of the site in the colon, using a degradable implant, which leaves the anastomosis site foreign body-free after healing to reduce the risk of scarring and stenosis.

The system can be adapted to the anatomical conditions of the patient, facilitating a customized surgical anastomosis. These advantages are achieved by the use of two expandable implant components which are interconnected by joining sections. The two implant components are inserted endoluminally via a respective two-component applicator system, in-situ scaled to the colon diameter and then connected in order to restore patency. It is conceivable to transfer this approach to other minimally invasive technologies to perform endoscopic surgery in the future.

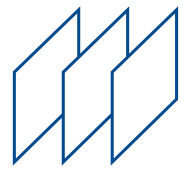


## COMMERCIAL OPPORTUNITIES

- System for endoluminal anastomosis
- Adjustable to the lumen size of the patient's intestine
- Force application mechanism at flexible endoscope tip for arbitrary shapes

## DEVELOPMENT STATUS

Proof of principle was shown with an existing prototype.



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