Objective means of diagnosing GERD and motility disorders
Our diagnostic tools offer a range of solutions to assist in the early detection of GI disorders. These solutions allow healthcare professionals to make complete GI tract assessments of conditions such as dysphagia, reflux, and motility disorders.

We are committed to partnering with the GI community as we pursue the shared objective of better patient outcomes. Let’s move GI care Further, Together.

**Digitrapper™ pH-Z testing system**
- Determines adequacy of acid control in patients on medication with complicated GERD.¹
- Allows assessment of non-acidic reflux for patients previously diagnosed with GERD.¹
- Enables evaluation of persistent symptoms in patients with documented GERD using combined impedance pH testing on PPI therapy.¹

**Bravo™ calibration-free reflux testing system**
- Ambulatory pH monitoring for objective GERD diagnosis.
- Capsule-based pH testing for up to 96 hours that provides improved diagnostic yield compared to catheter based-tests.²
- Greater sensitivity than endoscopy and higher specificity than therapeutic trials with PPIs.²
- Ability to place at the time of a negative endoscopy without disrupting workflow.
- Patients maintain regular diet and activities so testing is done under normal physiologic conditions.²
DYSPHAGIA AND MOTILITY DISORDERS

**ManoScan™ high-resolution manometry system**
- The ManoScan™ ESO high resolution manometry system enables full evaluation of the motor functions of the esophagus. It provides useful information to support diagnosis of conditions like dysphagia, achalasia, and hiatal hernia.
- The ManoScan™ AR high resolution manometry system allows a comprehensive assessment of pressure activity in the rectum and anal sphincter with a single catheter placement.
- It allows for the evaluation of patients with pelvic floor defecation disorders, including fecal incontinence and constipation.

**Endoflip™ impedance planimetry system**
- Adds meaningful information that helps identify motility disorders during endoscopy to aid physicians in patient management decisions.
- Reduces challenges in dysphagia diagnosis.
- Offers a patient-friendly solution that measures pressure and dimensions in the GI tract.

**SmartPill™ motility testing system**
- Ambulatory technique that assesses regional (gastric, small bowel, colonic) and Whole Gut Transit Time without radiation.
- Complete transit profile of the GI tract and differentiation between motor and sensory disorders.
- Simultaneous assessment for regional, multiregional, or generalized motility disorders in a single study.

*These images do not represent all components of the system.

References:
ManoScan™ high-resolution manometry system

Indications for use
The ManoScan™ high-resolution manometry system provides mapping of pressures and, optionally, impedance within organs of the human gastrointestinal tract. These include the pharynx, upper esophageal sphincter (UES), esophagus, lower esophageal sphincter (LES), stomach, sphincter of Oddi, small bowel, colon, duodenum, and anorectal organs. It is used in a medical clinical setting to acquire pressures and then store the corresponding data for visualization and analysis. The real-time data as well as the analysis information can be viewed by medically-trained personnel for diagnostic and analytic purposes. The ManoScan™ HRM modules provide high-resolution and/ or 3D (three dimensional) display of the pressure and impedance data. The ManoScan™ CLT module provides conventional line trace mapping of the pressure data and can be used as a stand-alone system or as a module of the ManoScan™ high-resolution manometry system.

Contraindications for use
The use of the ManoScan™ high-resolution manometry system for pharyngeal/esophageal motility study and proximal gut (gastric/duodenal) manometry is contraindicated for the following:
- Patients with an inability to tolerate nasal intubation
- Patients with significant bleeding disorders for whom nasal intubation is contraindicated
- Patients with a known esophageal obstruction preventing passage of the instrument

The use of the ManoScan™ high-resolution manometry system for anorectal manometry is contraindicated for patients with known anorectal stricture/obstruction preventing insertion of the instrument.

Endoflip™ impedance planimetry system

Indications for use
The Endoflip™ impedance planimetry system is indicated for use in a clinical setting to measure pressure and dimensions in the esophagus, pylorus, and anal sphincters. It is intended to be used as an adjunct to other diagnostic methods as part of a comprehensive evaluation of patients with symptoms consistent with gastrointestinal motility disorders. The EF-325 series of catheters can make pressure and dimensional measurements in the esophagus, pylorus, and anal sphincters. Other indications for use include:
- To estimate the size of a stoma produced by a gastric band (all Endoflip™ catheters).
- For use as an adjunct to a bougie for measuring the size of a gastric sleeve created during bariatric surgery, where it is suitable for diameter measurements for 22 to 60Fr sleeves (EF-620 catheter).

Contraindications for use
The Endoflip™ impedance planimetry system is contraindicated:
- Where endoscopy is contraindicated
- In patients with actively bleeding varices in the esophagus.

Bravo™ calibration-free reflux testing system

Indications for use
The Bravo™ reflux testing system is intended to be used for gastroesophageal pH measurement and monitoring of gastric reflux in adults and children from 4 years of age. The Bravo™ calibration-free reflux capsule can be attached following either endoscopy or manometry. The Reflux™/Accuview™ software application is intended to record, store, view, and analyze gastroesophageal pH data.

Contraindications for use
- Patients with bleeding diathesis, strictures, severe esophagitis, varices or obstructions
- Patients with pacemakers or implantable cardiac defibrillators

Digitrapper™ pH-Z impedance testing system

Indications for use
The Digitrapper™ recorder obtains measurement of pH levels and impedance levels within the pharynx, upper esophageal sphincter (UES), esophagus, lower esophageal sphincter (LES), and stomach. It is used to acquire pH and impedance levels and to store the corresponding data. The data can be uploaded to the AccuView™ analysis software, where the information can be viewed for diagnostic and analytic purposes.

Contraindications for use
- Patients with an inability to tolerate nasal intubation.
- Patients with significant bleeding disorders for whom nasal intubation is contraindicated.
- Patients with a known esophageal obstruction preventing passage of the instrument

SmartPill™ motility testing system

Indications for use
The SmartPill™ motility monitoring system measures whole gut and regional gut (stomach, small bowel and colon) transit times. Measurements of gastrointestinal tract transit times are used for evaluating motility disorders. Gastric transit time (or gastric emptying time, GET) is indicated for the evaluation of patients with suspected gastroparesis. Delayed gastric emptying is suggested in such disorders as idiopathic and diabetic gastroparesis and functional non-ulcer dyspepsia. Colonic transit time (CTT) is indicated for the evaluation of colonic transit in patients with chronic constipation and used to aid in differentiating slow and normal transit constipation. Combined small and large bowel transit time (SLBTT) is used as a surrogate measure of colonic transit in patients with chronic constipation when colonic transit time alone cannot be determined. The system measures pH, pressure and temperature throughout the entire GI tract. Pressure contraction data from the antrum and duodenum can be used to calculate motility indices.

Not for use in pediatric patients (children under the age of 18 years).

Contraindications for use
Contraindications for the SmartPill™ motility monitoring system include patients with:
- A history of gastric bezoars
- Swallowing disorders
- Suspected or known strictures, fistulas, or physiological/mechanical GI obstruction
- History of gastrointestinal surgery within the past 3 months
- Severe dysphagia to food or pills
- Crohn’s disease or diverticulitis
- Implanted or portable electro-mechanical medical device such as a cardiac pacemaker, defibrillator or infusion pump
- Patients younger than 18 years old

Caution: Federal law restricts this device to sale by or on the order of a licensed healthcare practitioner. Rx only.

Risk Information: The products featured here have inherent procedure risks associated. Please refer to the individual product user manuals for detailed information.

Join us in advancing the development of meaningful innovations in reflux and GI functional diagnostic care. Contact your Medtronic representative for more information.