

**CROSPON™**

**2009 European Gastroenterology  
Technology Implementation of the Year Award**



*"We accelerate growth"*

## 2009 European Gastroenterology Technology Implementation of the Year Award

### Award Description

Frost & Sullivan's Technology Implementation Award is bestowed upon a company, which makes effective and an innovative use of an existing technology, which has resulted in innovation(s) that have brought or are expected to bring significant contributions to the industry in terms of adoption, change, and competitive posture. This award recognizes the quality and depth of a company's research and development program as well as the vision and risk-taking that enabled it to undertake such an endeavor.

### Research Methodology

To choose the award recipient, Frost & Sullivan's analyst team tracks innovation in key hi-tech markets. The selection process includes primary participant interviews and extensive primary and secondary research via the bottom-up approach. The analyst team shortlists candidates on the basis of a set of qualitative and quantitative measurements. The analysts also consider the pace of research and technology innovation, and the significance or potential relevance of the innovation to the overall industry. The ultimate award recipient is chosen after a thorough evaluation of this research.

### Measurement Criteria

In addition to the methodology described above, there are specific criteria used to determine the final rankings. The recipient of this award has excelled based on one or more of the following criteria:

- Significance of the creation of a new opportunity in the industry, and across industries (if applicable).
- Potential of the opportunity created.
- Competitive advantage of innovation vis-à-vis other related innovations.
- Impact (or potential impact) of implementation of the technology on company or industry mind share and/or company bottom line.
- Robustness and scalability of the innovative implementation.



The Frost & Sullivan “2009 European Gastroenterology Technology Implementation of the Year Award” goes to Ireland-based Crospon in recognition of its successful implementation of the impedance planimetry technique for its novel EndoFLIP® (endoluminal functional lumen imaging probe) imaging system. [www.endoflip.com](http://www.endoflip.com)

Using a simple technique called impedance planimetry that can transform an impedance measurement into an area measurement, Crospon has designed the EndoFLIP® tool, to provide a more physiologically relevant diagnostic test for gastroesophageal reflux disease (GERD). The EndoFLIP® system also assists surgeons in the assessment of the degree of surgical tightening of the top of the stomach (sphincter region) during surgery. This combination of EndoFLIP® evaluation of the gastroesophageal junction in tandem with direct endoscopic visualization heralds the availability of a novel paradigm of diagnostic assessment known as functional endoscopy.

### **Company Background**

Established in 2006, the medical device company develops advanced, minimally invasive devices for diagnosis, and therapy in the Gastroenterology market. Separately it also has a licensing arrangement with Hewlett-Packard to create a first-in-industry skin patch for smart drug-delivery. The company is led by a high-caliber senior management team with extensive experience in medical device design and quality management.

### **Technology Relevance in the Market Place**

Chronic GERD is a prevalent disorder reaching epidemic proportions worldwide, that manifests itself as severe heartburn caused by the stomach acid refluxing up into the esophagus. In instances where GERD cannot be controlled with drugs, patients undergo a minimally invasive surgical procedure to fix the faulty junction between the stomach and the esophagus. However, many currently available diagnostic tools aren't effective in assessing the dysfunction of the valve found in between the stomach and esophagus. Thus, there is significant potential for a clinically acceptable imaging technology that helps facilitate better diagnosis and treatment for GERD.

### **How the Technology Works**

Crospon has addressed the need for a GERD-focussed diagnostic platform by developing an integrated solution which facilitates real-time imaging of the lower esophageal sphincter in less than 10 minutes. The EndoFLIP® system constitutes a set of 16 electrodes that sit within a balloon catheter which is attached to a data recorder with a touch screen. This series of electrodes is capable of measuring resistance or impedance to calculate cross-sectional areas at different points along the balloon. At the commencement of the procedure, the deflated balloon catheter is attached to a prefilled syringe, which is inserted into the syringe pump on the front of the EndoFLIP® tool. Subsequently, the deflated balloon is then passed trans-orally or trans-nasally to the gastroesophageal junction whereby it permits a challenge test to the lower esophageal sphincter to determine its functionality.

The scientific principle behind EndoFLIP®'s implementation is impedance planimetry. This is a technique that can measure cross-sectional area electrically which in turn enables 16-slice display images. This display shows the changes in the estimated diameters of sphincteric regions in the body in real time, thereby permitting a real time image of the geometry in vivo of the human esophagus to be obtained. Crospon has submitted an application to the FDA for EndoFLIP®'s clearance in the US market. The company has already received CE mark certification from the National Standards Authority of Ireland.

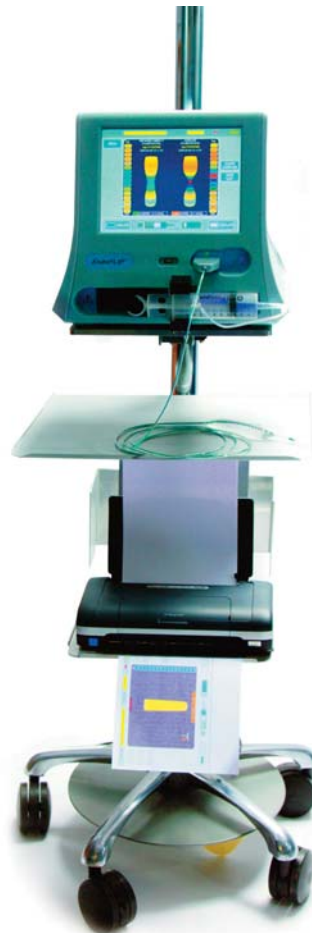
### **Business, Patents, & Partnerships**

Crospon is in the process of conducting more advanced trials on the probe. The company aims to demonstrate the important role the EndoFLIP® tool could play in determining biomechanical properties of the gastroesophageal junction in GERD patients. Crospon has also filed 6-7 patents covering different applications of the EndoFLIP® platform.

Crospon is engaged in an active partnership with Northwestern University for conducting clinical studies related to EndoFLIP®'s applicability. Not only is Crospon's solution easy to deploy, it is also cost-effective, thereby giving gastroenterologists an indispensable tool to enable accurate measurement of the distensibility and functional diameter of the sphincter region.

### **Conclusion**

In recognition of its successful implementation of the impedance planimetry technique for its novel EndoFLIP® imaging system, Frost & Sullivan is pleased to present Crospon with the "2009 European Gastroenterology Technology Implementation of the Year Award".



## About Best Practices

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research in order to identify best practices in the industry.



## About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, partners with clients to accelerate their growth. The company's TEAM Research, Growth Consulting and Growth Team Membership empower clients to create a growth-focused culture that generates, evaluates and implements effective growth strategies. Frost & Sullivan employs over 45 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 30 offices on six continents. For more information about Frost & Sullivan's Growth Partnerships, visit <http://www.frost.com>.

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