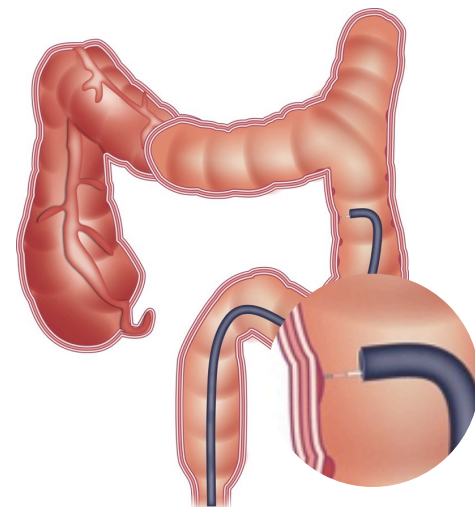


# Inflammatory Bowel Disease Surveillance

## Guiding Disease Characterization

Cellvizio®



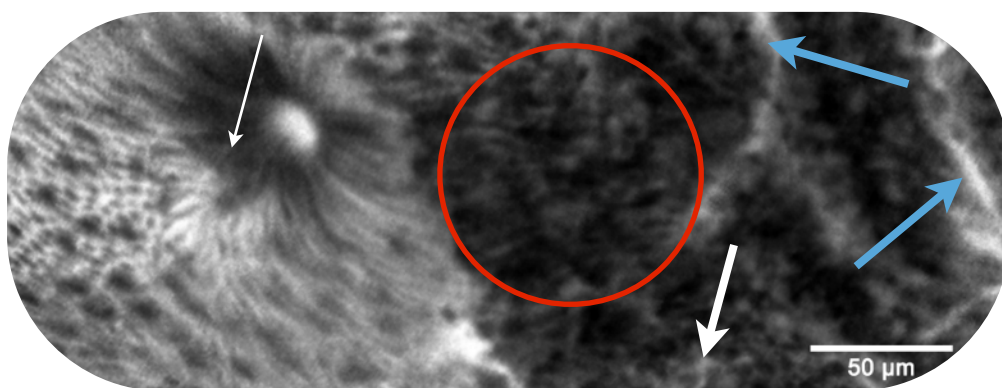
### Problem statement

- Risk of digestive cancer increases from 0,5 to 1% every year after 8 years of chronic disease
- Patients need to undergo strict surveillance

### Current solution and limitations<sup>1,2</sup>

- Differentiation of Dysplasia-Associated Lesional Mass (DALM) and Adenoma Like Mass (ALM) is not reliable with conventional endoscopy<sup>7</sup>.
- Systematic biopsy sampling is recommended to detect malignant changes, however
  - Adherence to guidelines is limited leading to inefficient cancer detection
  - Treatment is delayed until next colonoscopy procedure.
  - Repeat biopsies can alter treatment (fibrosis)

### Cellvizio images<sup>5</sup>



Normal crypt architecture is represented by ordered and regular crypt orifices covered by a homogeneous epithelial layer with visible “black-hole” goblet cells within the subcellular matrix (white long thin arrow).

Inflamed mucosa showing irregular arrangement of crypts, crypt fusion (red circle) and capillaries alterations (blue arrows) and inflammatory cells (lymphocytes: white arrow).

### Cellvizio advantages

Clinical studies have demonstrated that CLE can facilitate<sup>3-7</sup> **a comprehensive disease characterization<sup>3,4</sup>, with a short learning curve and high agreement between pCLE and histopathological findings.<sup>6</sup>**

***In vivo* differentiation between DALM and ALM can be achieved with an accuracy up to 97%<sup>5,7</sup>**



Designed to combine the most advanced imaging technology with ergonomics for ease of use and patient comfort.

Better patient care is our aim

## References

1. American Society Gastrointestinal Endoscopy. Guideline: endoscopy in the diagnosis and treatment of inflammatory bowel disease, 2006.
2. M. Barthelet, G. Gay, D. Sautereau, et al. Guidelines from the Société Française d'Endoscopie Digestive, Surveillance endoscopique des maladies inflammatoires chroniques de l'intestin, 2004.
3. R.Kiesslich, M.Goetz, K.Lammersdorf, et al. Chromoscopy-Guided Endomicroscopy Increases the Diagnostic Yield of Intraepithelial Neoplasia in Ulcerative Colitis, Gastroenterology 2007;132:874-882
4. F.J.C. van den Broek, J.A.van Es, S.van Eeden, P.C.F.Stokkers, et al. Pilot study of probe-based confocal laser endomicroscopy during colonoscopic surveillance of patients with longstanding ulcerative colitis, Endoscopy. 2011 Feb;43(2):116-22
5. G.D. De Palma, S.Staibano, S.Siciliano, et al., In-vivo characterization of DALM in ulcerative colitis with high-resolution probe-based confocal laser endomicroscopy, World J Gastroenterol 2011 February 7; 17(5): 1-0000
6. H. Neumann, M.Vieth, R. Atreya, et al., Prospective evaluation of the learning curve of confocal laser endomicroscopy in patients with IBD, Histol Histopathol (2011) 26:867-872
7. H. Neumann, M.Vieth, C. Langer et al., Cancer risk in IBD: How to diagnose and how to manage DALM and ALM. World J Gastroenterol 2011 July 21; 17(27):3184-3191

*The Cellvizio System with Confocal Miniprobes is a confocal laser system with fiber optic probes that is intended to allow imaging of the internal microstructure of tissues in gastrointestinal tracts, accessed by an endoscope or endoscopic accessories.*

*The Cellvizio System is a regulated Medical Device CE marked (Class IIa - NB : LNE/G-MED) and FDA cleared. Please consult labels and instructions for use.*