

# Biogel to treat mucosal lesions

Biocompatible, biodegradable and bioactive hydrogel for the treatment of mucosal lesions and ulcers in the gastrointestinal tract

## Project Overview

Sector	Gastroenterology; Endoscopy
R&D directions	<ul style="list-style-type: none"> <li>Prevent complications after therapeutic colonoscopy</li> <li>Local treatment of mucosal lesions (CRC/IBD)</li> </ul>
Project stage	TRL 3-4 Validated in laboratory
Patents	EU and US granted
Inventors	Dr. Vicente Lorenzo-Zuñiga Dr. Ramón Bartoli
Market size	€3.355M

## Product Profile

Clinical Indication	<ul style="list-style-type: none"> <li>Complications after EMR/ESD</li> <li>Mucosal lesions (CRC/IBD)</li> </ul>
MoA	<ul style="list-style-type: none"> <li>Shielding technique</li> <li>Drug-eluting platform</li> <li>Increases healing process by 40%.</li> </ul>
Efficacy	<ul style="list-style-type: none"> <li>CDC, induces tumoral necrosis and reduces tumour size by 35%.</li> <li>IBD, reduces necrosis and fibrosis by 75%</li> </ul>
Safety	Biocompatible, Biodegradable and Bioactive.

## The Need

Colonoscopy procedures have become a standard practice worldwide. Nowadays there is a rising demand for endoscopic procedures secondary to the screening programs due to colorectal cancer and inflammatory bowel disease becoming increasing prevalent disorders. The growing use of therapeutic endoscopy is the reason to an increasing number of adverse events (delayed bleeding or delayed perforation) that take place in 15% of the cases, several approaches for avoiding the post-operative complications such as clips have been described with seldom success.

## The solution

After years of research, we have invented a novel hydrogel to be directly applied through the endoscope onto the mucosal layer or as submucosal injection to manage therapeutic colonoscopies adverse events. The CoverGel is a Class III Medical Device that has demonstrated robust healing properties in preclinical models, is biocompatible, biodegradable and bioactive; has appropriate viscosity/adhesion capacity, can be easily applied through the endoscope and strongly promotes physiologic reepithelization. Furthermore, the CoverGel has the potential to be used as a drug eluting platform for Colorectal cancer (CCR) and Inflammatory bowel disease (IBD), validated in in-vivo preclinical models with great success.

## The opportunity

- Easy to apply and cost/effective
- Minimize the morbidity and mortality associated with therapeutic endoscopy
- Composition promotes mucosal reepithelization instead of cicatrization
- Potential drug-delivery platform for mucosal lesions

## Looking for

- License out
- Investment
- Co-development
- Spin-off generation

## Contact Details

**Marc Cusachs, Innovation and Technology Transfer Manager**

mcusachs@igtp.cat | www.germanstrias.org

Institut d'Investigació en Ciències de la Salut Germans Trias i Pujol (IGTP)

Ctra. de Can Ruti. Camí de les Escoles, s/n, 08916 Badalona, Spain