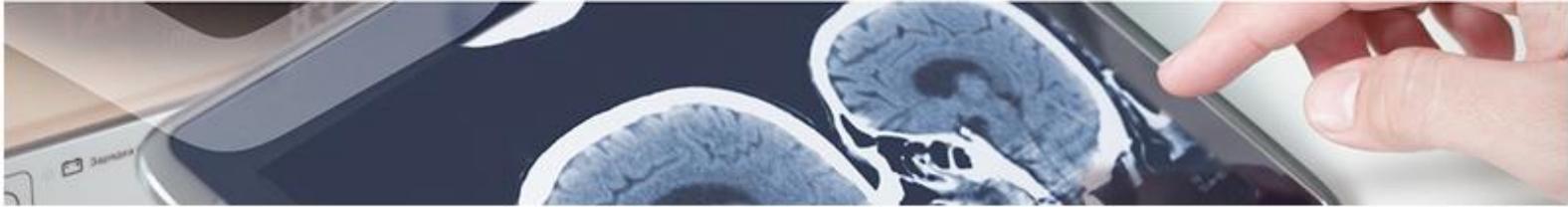


## Medical Devices

### Biomaterial comprising alginate

A research group of the Andalusian Public Health System, in collaboration with the University of Seville, has developed a biomaterial that comprises alginate which is very useful for tissue regeneration and replacement.



### Description

Morbi-mortality associated to wound dehiscence along the suture remains at high levels, although there is a bigger knowledge about pre and postsurgical care, the development of Intensive Care Units and the progress of the surgical techniques.

The aetiology of the anastomotic leak is multifactorial. Identified risk factors can be associated with the own patient and /or with the surgical technique and the specific conditions in which the intervention is performed. Currently, only the fibrin sealant, the use of omentum and hyaluronic acid combined with carboxymethylcellulose (HA/CMC) have been tested in human beings to reinforce colon anastomosis. The use of fibrin has obtained favourable results but without statistically significant differences. Omentoplasty can be safely performed, although without clinical benefits and the (HA/CMC) membrane increases the risk of dehiscence around of the anastomosis.

As a consequence, there is a clear need of developing a product and method which allow the construction of an intestinal anastomosis or of reinforcement mechanisms.

5. Good protocolled and cheap manufacturing process. Easy scaled-up production.
6. Scaffold size and design suitable for different applications.
7. Biomaterial can be sterilized without losing its physical and chemical characteristics.
8. Easily stocked



### Intellectual Property

This technology is covered by a Spanish patent application with the possibility of international extension.



### Aims

We are looking for a partner interested in a license and/or a collaboration agreement to further develop and exploit this innovative technology.



### Advantages

1. Biomaterials, due to its natural origin, are the most similar structures to the extracellular matrix, since it is a construction of porous structure in solid state.
2. Allows generating 3D scaffolds that can be designed with the desired morphology and shape, boosting the morphogenesis theory.
3. Allows getting different configurations obtainable from a block that can be wore away or carved.
4. The scaffold can be coated or even made up with drugs and/or integrated growth factors.



### Classification

Area: Biotech/ Pharma

Technology: Biomaterials/ Tissue Engineering/ Cell Therapy

Pathology: Digestive system, women health, musculoskeletal disorders and odontology.