

# ALBOGEL: Highly Biocompatible and Injectable hydrogel for prevention of post-surgical adhesions

## APPLICATION

The hydrogel formulation is effective against surgical wounds and cuts, ballistic wounds, accidental wounds, burn injuries, etc.

COMPANY NAME	TECHNOLOGY READINESS LEVEL (TRL)	INTELLECTUAL PROPERTY
Envisage Medtech Pvt Ltd	<b>TRL: 5 (The hydrogel formulation and the applicator has been designed and ready. In vitro testing is over and currently under In vivo testing)</b>	<b>Indian Patent</b> App No: 202131036067
FOUNDER'S NAME		
Pijush Giri		

## PROBLEM ADDRESSED

According to a report 232 million surgeries were done. Studies shows that 85 out of 90 patients suffer from adhesion i.e. the chances of getting adhesion after surgery is 94 percent. Post-operative adhesion of the tissue with the other tissue or organ because of the injury or cut made by the medical procedure to the patients. The adhesion not only cause body complication but also increases the therapeutic cost. Interceed ® and Seprafilm ® are are two FDA approved anti-adhesive solutions. Interceed ® is effective only in absence of blood contamination and Seprafilm ® has low mechanical properties, is brittle and difficult to handle.

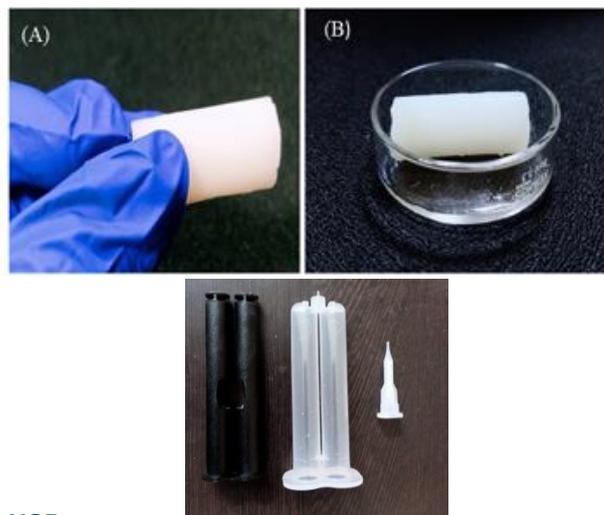
## ABOUT THE TECHNOLOGY

Envisage Medtech has ve built up a hydrogel to prevent adhesion. With time the surgical wounds heals and the hydrogel degrade reducing the possibilities of any post toxic effect. ur product is in liquid form which can without much of a stretch be infused through a syringe no more injuries and wounds to the patient. The liquid moves toward becoming gel simply after around 10-20 minutes which likewise that a specialist surgeon can motivate enough time to apply it in the patients body. The hydrogel product is consist of a protein and polysaccharide. Both are biocompatible and degradable material. The residues of the degraded hydrogel can be used for the metabolic process by the body itself and hence cause no harm to the body.

## FUNDS RAISED/ACHIEVEMENTS

- Received INR 49.66 lakhs grant-in-aid from BIRAC BIG scheme.

## PRODUCT IMAGE



## USP

- The hydrogel is highly biocompatible.
- The hydrogel is injectable, so it can be used for laparoscopic surgeries.
- The hydrogel is stable in aqueous condition up to 11 days
- Tissue adhesive strength of modified albumin-based hydrogel is 4.4 kPa
- Self healing properties of modified albumin-based hydrogel is within 4 hours

## END USERS/CUSTOMERS

- Private and Govt Hospitals and Clinics, Pharmaceutical Retailers