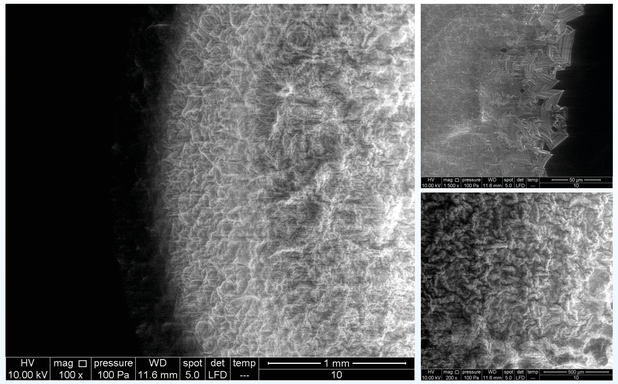


3D imaging under ESM (electron scanning microscope) of **Crespine Gel** shows a clear outer layer that is in contact with the surrounding physiological fluids, and an inner core that is protected, which can explain the efficacy of the product in vivo:

- Outer core provides the HA to the joint
- Inner core acts as a reservoir protected from enzymatic action on HA strands, thus extending the effect in physiological environment.



The manufacturing process of Crespine Gel provides a unique 3D shaped molecule that provides its proven clinical effectiveness over the treatment times. This 3D topographic imaging under scanning electron microscope clearly shows how the HA is layered, which may explain the long duration of action of the product (as the compact cross linked HA in the core acts as a reservoir of HA for the free HA strands on the surface of the gel that are in contact with the physiological fluids in the knee).

Al-Khateeb R, Prpic J, Eliezer M (2021) Hyaluronic Acid Unique Identification Prints in Perspective of its 3D Microscopical Structure as a Carbohydrate Hydrogel with Various Physiochemical and Biological Functions. Archives Oral Maxillofac Surg 4(1):105-117

CRESPINE® GEL

COMPOSITION

Each 1 ml of Crespine Gel contains:

Hyaluronic acid		**1.0 mg**
Hyaluronic acid cross-linked		**14.0 mg**
Sodium Chloride		**6.9 mg**
Water for injection	ad	**1.0 ml**



TECHNOLOGY THAT SETS **NEW STANDARDS**

Crespine Gel is a double cross linked, stabilized hyaluronic acid. The cross linking is a process that ensures the body breaks down **Crespine Gel** slowly, resulting in a long lasting effect.

STEP 1 Hyaluronic acid is synthesized from non-animal sources

STEP 2 The first cross-linking of the hyaluronic acid solution is completed

STEP 3 Washing and stabilization of the hyaluronic acid gel takes place

STEP 4 The second cross-linking is completed, with the addition of hyaluronic acid coil-linked solution. This is followed by terminal purification.

SINGLE INJECTION TREATMENT	VS	**MULTIPLE INJECTION TREATMENT**
One clinic visit		Multiple follow-up visits
Reduced risk of infection		Higher risk of infection
Cost effective		Higher cost
Better patient compliance		Poor patient compliance

BioPolymer GmbH

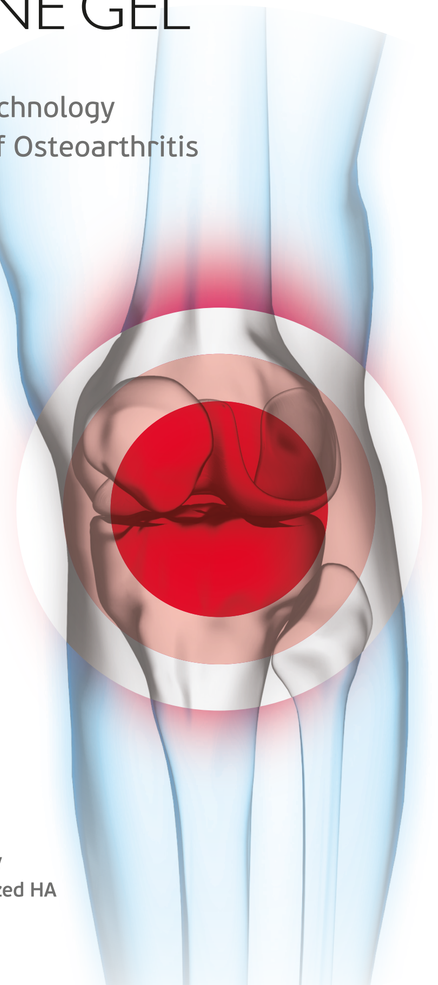
BioPolymer GmbH & Co KG
Walsmühler Strasse 18
D-19073 Dümmer
Tel: +49 (0) 2602 83868-0
Fax: +49 (0) 2602 83868-20

Elaf Medical Supplies
إيلاف للتجهيزات الطبية

EMEA Headquarters
P.O.Box 1348 Amman 11941 Jordan
Tel. +962 (06) 5549896
Fax +962 (06) 5549897
www.elaf-me.com

CRESPINE® GEL

Breakthrough Technology For The Treatment Of Osteoarthritis



- Single injection
- Good tolerability
- Cost-effective
- Long-lasting relief
- Delays the need for surgery
- Double cross-linked Stabilized HA
- Non-animal origin

CRESPINE® GEL

OPTIMALLY USED IN THE **EARLY STAGES** OF OSTEOARTHRITIS

Crespine Gel is indicated for use in the treatment of patients suffering from osteoarthritis pain in the Joints who do not respond to other treatments.

- Recommended for patients with mild to moderate osteoarthritis
- To be used as an alternative to NSAIDs and other pain relief medications
- Ideal for patients who experience allergic reactions or other side- effects from the use of NSAIDs and other pain relief medications
- Suitable for patients who require a quick return to normal activity

In-clinic treatment, Crespine Gel comes ready-to-use and takes 10-20 minutes to administer in a single injection.



Crespine Gel © is a certified product under the essential requirements of Annex I of the Council Directive 93/42/EEC.

THE CRESPINE **ADVANTAGE**

SINGLE INJECTION

Crespine Gel is a single injection treatment that takes only 10-20 minutes to administer and lasts up to 9 months. This reduces the risk of infection and increases patient compliance and joint lubrication.

NO SIDE-EFFECTS

To date Crespine Gel have shown good tolerability with its use.

COST EFFECTIVE

crespine gel is an intraarticular osteoarthritis treatment that requires only a single injection to achieve effectivness. This makes it cost-effective for patients and healthcare providers.

NON-ANIMAL ORIGIN

Crespine Gel is a hyaluronan- based intraarticular injection that is not derived from animal sources. This removes ethical concerns and eliminates the danger of allergic reactions.

BIOCOMPATIBLE

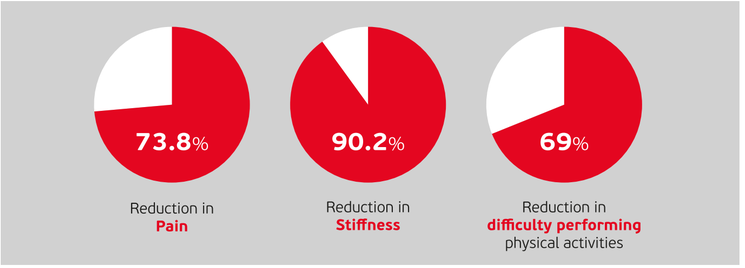
Crespine Gel is 100% hyaluronic acid, a naturally-occurring substance in the body that is an important component of articular cartilage.

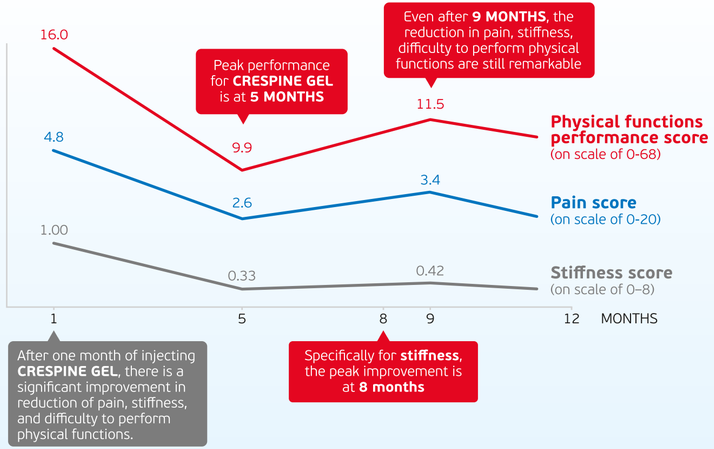
DELAYS THE NEED FOR SURGERY

In cases of osteoarthritis the goal is to reduce pain in the first instance and at second stage to undertake further countermeasures to maintain joint function. To use Crespine Gel is therefore the first step to maintain the natural function of the joints as long as possible.



Efficacy and safety of cross-linked hyaluronic acid single injection on osteoarthritis of the knee: a post-marketing phase IV study





Bashaireh, K., Sorour, S., Al Hawadya, K., Naser, Z. and Al-khateeb, R., 2015. Efficacy and safety of cross-linked hyaluronic acid single injection on osteoarthritis of the knee: a post-marketing phase IV study. Drug Design, Development and Therapy, 9:2063-2072. http://doi.org/10.2147/DDDT.S81524.