



CROSSLINK 2% BIOPORT

Intra-articular injection for symptomatic treatment of OA
and joint cartilage repair 1 injection per treatment

UNIQUE COMBINATION
OF *NATURALLY CROSS-LINKED*
HYLAURONIC ACID + CHONDROITIN
SULFATE



BIOPORT CROSSLINK 2%

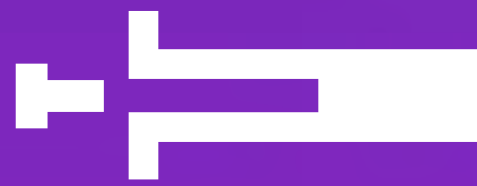
It is a sterile viscoelastic solution for intra-articular injection involving two cross-linked biological polymers, sodium hyaluronate and chondroitin sodium sulfate.



60 mg hyaluronic acid
 per syringe (20 mg / ml)
 90 mg chondroitin sodium
 sulfate (30 mg / ml)
 3 ml pre-filled syringe

Composition	Sodium hyaluronate, Chondroitin sodium sulfate
Concentration	60 mg/90 mg/3ml 2%/3%
Administration total	1 syringe at 6 months
Average molecular weight	3MDa
Elasticity mode G' in rest 0,5 Hz / running 2,5 Hz.	242 Pa / 468 Pa
Viscosity mode G" at rest/running	180 Pa/220 Pa

BIOPORT CROSSLINK 2% | PROPERTIES



Only one injection per treatment



Highly concentrated: 60mg hyaluronic acid per syringe with chondroitin for cartilage tissue



Delivered in pre-filled glass syringe Becton Dickinson



BIOPORT CROSSLINK 2%

CHONDROITIN SULFATE

Protects the cartilage and decreases inflammatory activity in the region affected by osteoarthritis (OA).Contributes to physical cross-linking of the hyaluronate chains being binded thereto in a 1:1 ration, increasing in this way the properties of sodium hyaluronate.

INDICATION

- As a viscoelastic supplement or as a replacement for the synovial fluid in the knee joint
- For the symptomatic treatment of mild to severe knee osteoarthritis

EFFECTS

- Pain relief
- Improvement of joint mobility
- Protection of the cartilage

APPLICATION

A single injection of the product restores the protection of the joint through good lubrication and shock absorption and leads to a significant improvement in symptoms.



NATURALLY CROSS-LINKED HYALURONATE

- The medical device BIOPORT CROSSLINK is not chemically or irradiation cross-linked. In the case of BIOPORT CROSSLINK, there is a physical self-association through hydrogen bonds between the two components, sodium hyaluronate (NaHA) and chondroitin sulfate sodium (CS), so the network of hydrogel is stabilized by hydrogen bonds and hydrophobic interactions type forming a stable complex in aqueous solution.
- Using Chondroitin sulfate as a natural cross-linking agent increases bio-compatibility and bio-degradability of the native polymer, creates the premises for delaying cartilage degeneration and supports regeneration.
- Cross-linked hyaluronic acid contributes to the product greater stability and resistance to degradation by hyaluronidases, prolonging the duration of the treatment compared to those based on linear hyaluronic acid.
- The absence of chemical/irradiation cross-linking decreases chances of post-administration adverse reactions including pain at the site of injection, local skin reactions, pseudoseptic reactions, septic arthritis, and local joint pain and swelling.

UNIQUE COMBINATION OF NATURALLY CROSS-LINKED
HYALURONIC ACIDE + CHONDROITIN SULFATE

ADDITIONAL ACTIVE INGREDIENT CHONDROITIN SULFATE

- Chondroitin sulfate is a molecule that occurs naturally in the body, it is also important component in the cartilage – the tough connective tissue that cushions the joint.
- Chondroitin sulfate stimulates the growth of new joint cartilage, it also inhibits pro-inflammatory factors secretion.
- The adjunction of Chondroitin sulfate provides not only pain relief, mobility improvement and cartilage protection but also cartilage regeneration, which is particularly useful in severe OA (grade III and IV)

UNIQUE COMBINATION OF NATURALLY CROSS-LINKED
HYALURONIC ACIDE + CHONDROITIN SULFATE

	Durolane	Ostenil Plus	Synvisc One	Synoz One	
HA Source	Bacterial (cross-linked)	Bacterial (linear)	Avian (cross-linked)	Bacterial (cross-linked)	Bacterial (cross-linked)
Cross-linking type	cross-linking agent	N/A	cross-linking agent	cross-linking agent	natural cross-linking
Molecular Weight (daltons)	10 ¹³ M	1-2 mil Daltons	6 mil Daltons	not known	3 mil Daltons
Total Volume (per syringe)	3 ml	2ml	6ml	3ml	3 ml
HA Concentration	2,0 %	2,0 %	0,8 %	2,0 %	2,0 %
Additional active ingredient	NO	NO	NO	NO	Chondroitin sulfate
Active Ingredient (per treatment)	60mg HA	40mg HA	48mg HA	60mg HA	60mg HA and 90mg chondroitin sulfate

BIOPORT



NIKOVARI BIO TECH OY

RETKEILIJÄNKATU 5

00980 HELSINKI

WWW.BIOPORT.FI

+358452148840

KATJA.VANHANEN@BIOPORT.FI