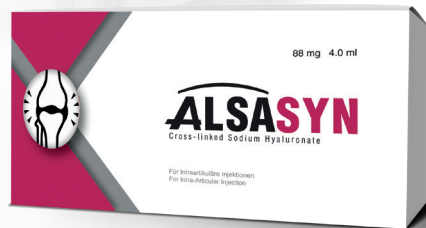


ALSASYN[®]
Cross-linked Sodium Hyaluronate

Unlock Effortless Movement with a Single Injection

LIGHTLY CROSS-LINKED SODIUM HYALURONATE
WITH DUAL OPERATIONAL DESIGN

DOD
DUAL OPERATIONAL
DESIGN



ALSANZA
Medizintechnik und Pharma GmbH

Alsasyn Cross-linked offers prolonged relief from osteoarthritis pain with a single, high-concentration injection, ensuring safety and effectiveness. Packaged in a convenient 4 mL volume for physician ease and patient comfort, this unique sodium hyaluronate solution stands out for its swift onset and lasting effectiveness. With its distinctive Dual Operational Design, **Alsasyn Cross-linked**, made from non-avian hyaluronic acid, serves as a trustworthy supplement or replacement for synovial fluid in human joints. Experience early and durable knee pain relief for at least 6 months with just one intra-articular injection of Alsasyn.



- ✓ LIGHTLY CROSS-LINKED
- ✓ NON-AVIAN, HIGH PURITY
- ✓ HIGH HA CONCENTRATION
- ✓ EARLY AND DURABLE PAIN RELIEF



ACTION MECHANISM:

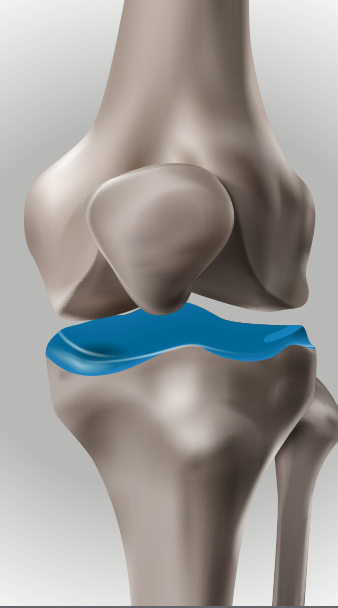
Hyaluronic acid is a natural component of synovial fluid. In patients with degenerative joint disease (osteoarthritis), the viscoelasticity of the synovial fluid is significantly impaired, causing mechanical stress on the joint and the breakdown of the articular cartilage to greatly increase resulting in limited and painful joint movement.

Intraarticular administration of high-purity sodium hyaluronate, which has very good viscoelastic properties, can improve the quality of the joint's lubrication. The lubrication and shock-absorbing properties of this product help reduce friction between the bones, potentially alleviating pain and improving joint function. This effect lasts at least 6 months after the injection.

- Non-surgical treatment options for knee and hip osteoarthritis(OA)
- Treatment of symptoms associated with Temporomandibular Joint Dysfunctions (TMJ).
- For the treatment of chronic shoulder pain associated with osteoarthritis or rotator cuff damage.
- Intra and postoperative intraarticular injection in patients undergoing wrist arthroscopy.

HA concentration (mg/ml)	22 mg/ml
Total HA content (mg/syringe)	88 mg
Level of cross-linking	Lightly cross-linked
Package	1×4 mL
Origin	Bacterial Fermentation
Molecular weight	Approx. 1,000,000 Da

Introducing **Alsasyn** – a next level of joint care solution. An innovation with a **Dual Operational Design** that combines both cross-linked and linear hyaluronic acid. This innovative approach delivers a unique set of properties, offering the benefits of both elements.



The cohesive properties of cross-linked sodium hyaluronate in Alsasyn provide:

1. Improved Shock Absorption:

The cohesive properties of the gel formed by cross-linked sodium hyaluronate in Alsasyn contribute to better shock absorption within the joint. This is particularly beneficial for weight-bearing joints, as it helps distribute forces more evenly, reducing impact on the cartilage and minimizing wear and tear.

2. Enhanced Viscosity and Lubrication:

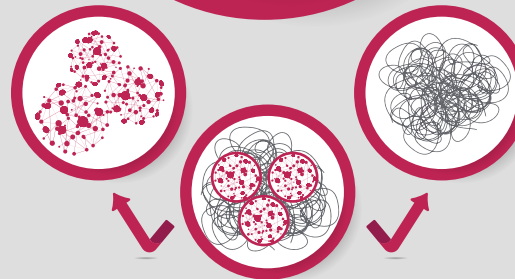
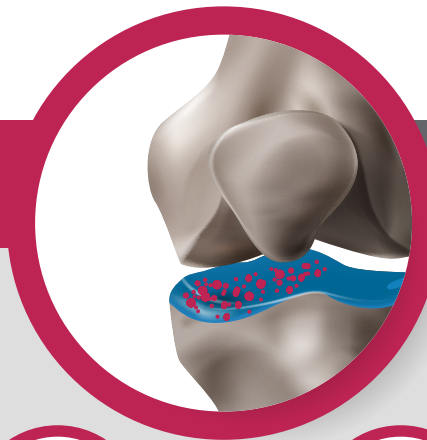
The cross-linked structure of sodium hyaluronate in Alsasyn increases its viscosity, allowing it to form a more stable and durable gel-like substance. This gel provides enhanced lubrication within the joint, reducing friction between cartilage surfaces. This, in turn, helps to alleviate pain and discomfort associated with joint movement.

3. Extended Duration of Action:

Cross-linking sodium hyaluronate in Alsasyn extends its duration of action within the joint. This means that a single injection can provide prolonged benefits, reducing the frequency of injections required for sustained relief. Patients experience longer-lasting joint lubrication and pain relief, contributing to improved quality of life.

4. Stabilization of the Synovial Fluid:

The cross-linked structure enhances the stability of the injected sodium hyaluronate within the synovial fluid. This stability ensures a more sustained presence of the therapeutic substance, promoting consistent joint lubrication and cushioning over time.



The dispersive properties of linear sodium hyaluronate in Alsasyn provide:

1. Better Coating:

Non-cross-linked sodium hyaluronate has excellent dispersive properties, allowing it to evenly distribute within the synovial fluid. This even distribution facilitates broad coverage of the joint surfaces, ensuring that the lubricating and cushioning effects extend throughout the entire joint space.

2. Improved Joint Functionality:

The homogeneous dispersion of non-cross-linked sodium hyaluronate contributes to improved joint functionality. By evenly coating the joint surfaces, it helps enhance the gliding motion between cartilage, reducing friction and promoting smoother joint movement. This can result in increased joint flexibility and range of motion.

3. Quick Onset of Action:

Non-cross-linked hyaluronate injections often have a rapid onset of action. The dispersive nature allows quick integration into the synovial fluid, providing prompt relief from joint discomfort. Patients may experience faster alleviation of pain and improved joint function shortly after the injection.

4. Reduction of Inflammation:

The dispersive gel formed by the non-cross-linked sodium hyaluronate displays anti-inflammatory properties, contributing to the reduction of inflammation within the joint. This can further alleviate pain and swelling associated with conditions such as osteoarthritis.

INDICATIONS:

Alsasyn is indicated as a viscoelastic supplement or a replacement for synovial fluid in human joints. Alsasyn is well suited for treatment of the symptoms of human joint dysfunctions such as osteoarthritis;

- Non-surgical treatment options for knee and hip osteoarthritis(OA)
- Treatment of symptoms associated with Temporomandibular Joint Dysfunctions (TMJ).
- For the treatment of chronic shoulder pain associated with osteoarthritis or rotator cuff damage.
- Intra-and postoperative intraarticular injection in patients undergoing wrist arthroscopy.

The actions of Alsasyn are lubrication and mechanical support.

CONTRAINDICATIONS:

Do not administer to patients with known hypersensitivity to any of the materials contained in Alsasyn.

Intraarticular injections are contraindicated in cases of present infections or skin diseases in the area of the injection site to reduce the potential for developing septic arthritis.

Directions for use:

FOR INTRAARTICULAR INJECTION. FOR SINGLE USE ONLY.

Only medical professionals trained in accepted injection techniques for delivering agents to joint spaces should inject sodium hyaluronate for this application. The required amount of product is injected into the joint space to be treated by using the appropriate size and length of the needle. Common needle gauges for injections into the knee are 18-22 gauge. The physician decides the final needle selection for all indications.

In order to avoid intraarticular infection strict aseptic injection technique has to be applied. It is recommended that an ice--pack be placed on the joint undergoing treatment for 5 -10 minutes in order to prevent pain and swelling. In the case of effusion accompanied by severe pain, the fluid must be removed from the affected joint.

Storage:

Store Alsasyn between 2 °C and 25 °C. Protect from light and shocks.
Do not freeze.



1 Twist and pull out



2 Insert and twist the cannula



3 WRONG!
(Backstop opening at front)



4 CORRECT!
(Backstop opening at back)

