

Sinovial® (Sodium Hyaluronate)

- Sinovial® is a medical device constituted by a physiological solution of sodium hyaluronate (NaHA) in sterile syringe for intra-articular injections ready to use.⁵
- Sodium hyaluronate is obtained by bio-fermentation (Streptococcus of Lancefields group A and C) throughout high purification processes.⁵
- Sinovial® is totally free from the animal proteins.⁵
- The administration of Sinovial® results in a marked pain reduction, improvement of the articular mobility and decreased use of rescue medication.⁵⁻⁸

Technical Data

Sodium Hyaluronate	1.6 % (32 mg HA in 2 ml)
Molecular Weight	1200 K.d
Storage	2-25 °C
Volume	2 ml

Indications:

Replacement and/or complementing of synovial fluid damaged following degenerative or traumatic origin diseases of knee joints.⁸⁻⁵

IBSA About IBSA Company

IBSA Institut Biochimique SA is a pharmaceutical company headquartered in Lugano, Switzerland. Founded in 1945 by a group of Swiss biologists, IBSA started its activities at a national level but rapidly became a consolidated company worldwide. Currently IBSA has a head count of 1800 employees and sells its products covering 7 main therapeutic areas in 4 continents and more than 70 countries.



References:

- 1- Arthritis Rheum 1915-1905:(9)43;2000
- 2- Ann Rheum Dis 1155-62:1145;2003
- 3- IBSA Institut Biochimique S.A.Unpublished data.
- 4- Drugs Exptl Clin Res 73-67:(2);2004.
- 5- Rheumatology International 2010;DOI 10.1007/s6-1660-010-00296
- 6- Osteoporosis International 1) 21 ;2010);S387 (abstract P 902).
- 7- Current Medical Research Opinion 1733-1727 :(11)21 ,2005.
- 8- Osteoporosis International 1)17 ,2004): S103 (abstract P363).

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نماینده انحصاری محصولات Sinovial® در ایران
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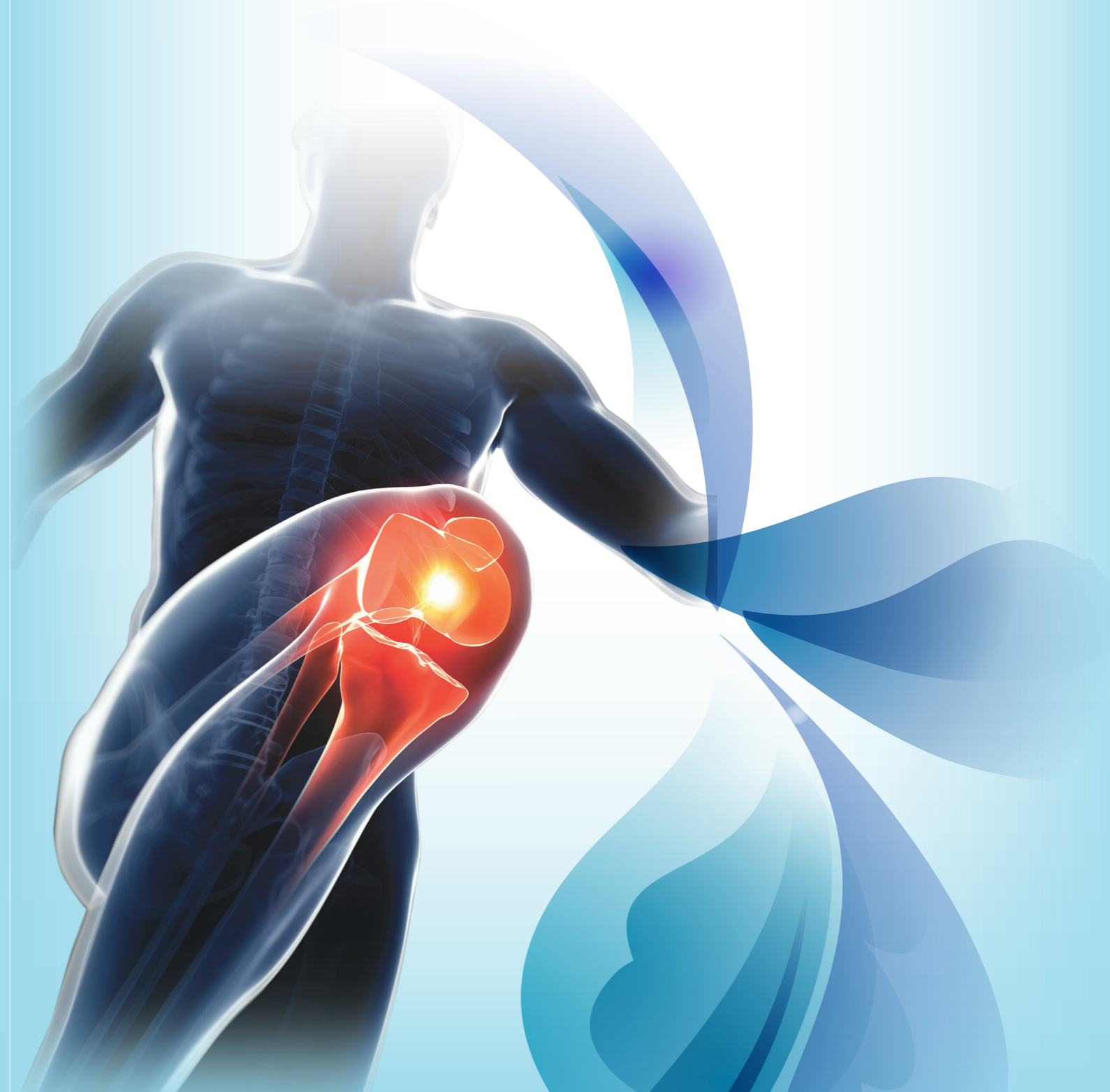


Sinovial® Forte

(Sodium Hyaluronate)

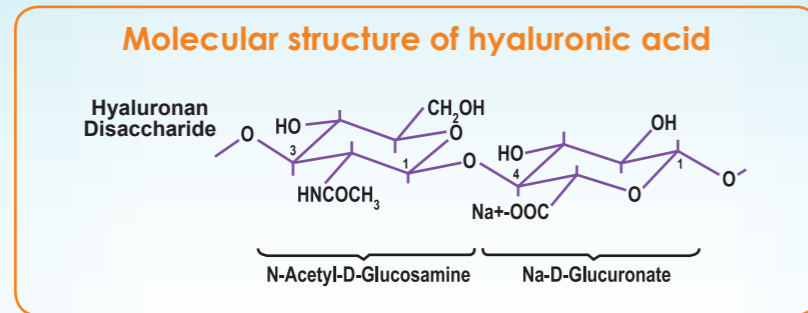
1,6% 32mg/2ml

*Sinovial in the treatment of patients with knee osteoarthritis
(three weeks intra articular injection)*



Hyaluronic acid physiology

Hyaluronic acid is an integral component of the extracellular matrix within cartilage and the main constituent of the synovial fluid, providing the joints with nutrition, as well as imparting the joint fluid with its cushioning and lubricating properties.



Characteristics of hyaluronan in a healthy and an osteoarthritic knee joint

	Healthy	Osteoarthritic
Molecular Weight (MDa)	4-5	<1
Concentration (mg/mL)	2-4	<2

The decrease in molecular weight and concentration of Hyaluronic Acid in osteoarthritic joints leads to a reduction of the viscoelastic properties of the synovial fluid and extracellular matrix with subsequent alteration of the joint functionality. In the absence of a proper lubricating and protective effect on the matrix, shear force stresses resulting from the movement of the joint can cause damage of the cartilage surface. Furthermore, the pain receptors (nociceptors) in the capsule are sensitized because of the loss of the protective matrix surrounding them.

The American College of Rheumatology (ACR):

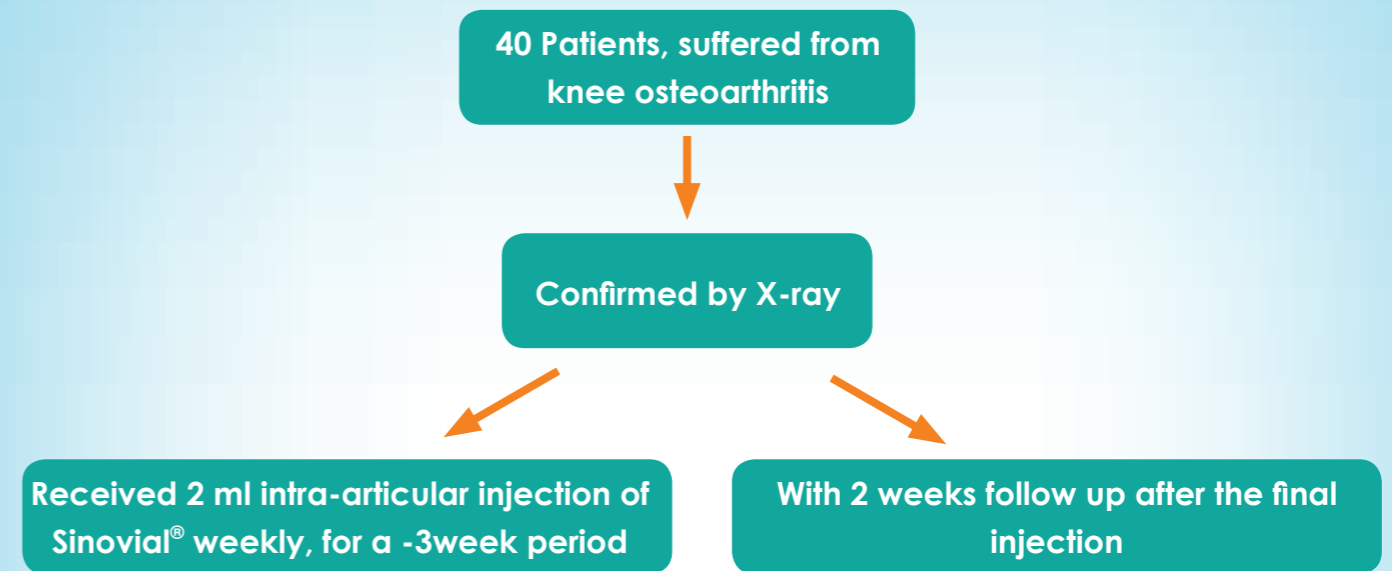
Recommends intra-articular injection of hyaluronan in patients who have not responded to a program of non-pharmacologic therapy and simple analgesics, or in whom non-selective non-steroidal anti-inflammatory drugs (NSAIDs) and cyclooxygenase-2-specific inhibitors are contraindicated or have been associated with lack of efficacy or adverse events. [1]

The European League Against Rheumatism (EULAR):

EULAR, recommendations for the management of knee osteoarthritis also recognize the role of hyaluronic acid intra-articular injections as a valid symptoms modifying treatment tool. [2] protective effect on the matrix, shear force stresses resulting from the movement of the joint can cause damage of the cartilage surface. Furthermore, the pain receptors (nociceptors) in the capsule are sensitized because of the loss of the protective matrix surrounding them



Effects of Injectable Hyaluronic Acid (Sinovial®) in the Treatment of Knee OA:^[4]



Intra-articular Hyaluronic Acid (Sinovial®) In the Treatment of Patients with Knee Osteoarthritis^[3]

