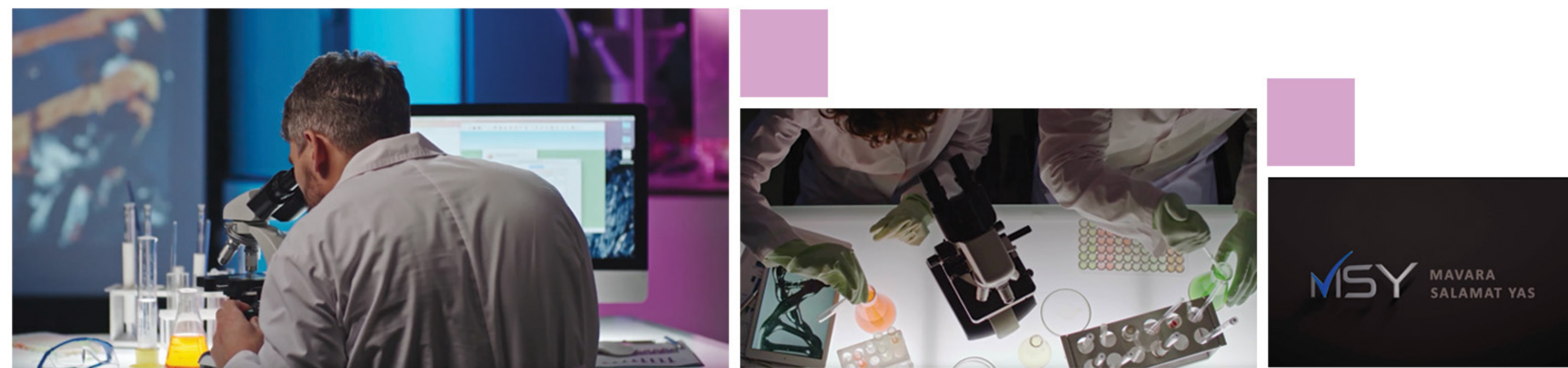


MSY® is a knowledge-based company that was established on 2019/12/7 and started its activity as a pharmaceutical company. Based on creativity, literature and specialists opinion, a profound understanding of upgradeable points of products in our people demand, the R&D team of Mavara Salamat Yas company conducted a great number of designs to manufacture the products according to the needs of domestic consumers. After three years of round-the-clock efforts, our team have succeeded in acquiring the technical knowledge of producing cross-linked hyaluronic acid by BDDE molecule, as well as the company has produced biological molecules-based mesotherapy products - namely vitamins, amino acids, biomimetic peptides, and growth factors - that are effective in improving skin quality.

Also, this company has been planning to manufacture and supply clinically efficient oral supplements in different therapeutic areas including dermatology and orthopedics.



Reference:

1- Radiol Clin North Am. 2004 Jan;9-1:(1)42, v. doi: 10.1016/S1-00161(03)8389-0033. 2- Dent Clin North Am. 2014 Oct;814-797:(4)58. doi: 10.1016/j.cden.2014.07.005. Epub 2014 Aug 7 3- BMC Musculoskelet Disord. 2019 Jun 29;3(1)20;18. doi: 10.1186/s0-2667-019-12891. 4- BMC Musculoskelet Disord. 2017 May 22;:(1)18;26. doi: 10.1186/s2-1585-017-12891. 5- Am J Med. 1998 Jul 105;27(1B):31S-38S. doi: 10.1016/S2-00072(98)9343-0002. 6- Am J Med. 1998 Mar 104;30(3A):23S-29S; discussion 41S-42S. doi: 10.1016/S6-00207(97)9343-0002. 7- Polymers (Basel). 2020 Aug; 1800 ;(8)12. Published online 2020 Aug 11. doi: 10.3390/polym12081800 8- ACS Biomater Sci Eng. 2015 July 493-481 ;(7)1 ;13. doi:10.1021/acsbio-materials.5b00181. 9- Meta-Analysis Cartilage. 2021 Dec;13(1_suppl):169S-184S. doi: 19476035211021903/10.1177. Epub 2021 Jun 10. 10- https://www.drugs.com/mtm/sodium-hyaluro-nate-injection.html 11- Biomacromolecules 4354-4345 ,10 ,21 ,2020. https://doi.org/10.1021/acs-bio-mac.0c01151 12- BMC Musculoskelet Disord. 321 :16 ;2015. Published online 2015 Oct 26. doi: 10.1186/s0775-015-12891-z 13- Arthritis Res Ther. 67-54 :(2)5 ;2003. Published online 2003 Jan 14. doi: 10.1186/ar623 14- J-STAGE home/Archives of Histology and Cyto .../Volume (1998) 61 Issue 2. https://doi.org/10.1679/aohc.61.125 2006 15- Osteoarthritis Research Society International. Published by Elsevier Ltd. All rights reserved. doi:10.1016/j.joca.2006.11.001



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SYFLEXX® B with Lidocaine

Biphasic stabilized sodium hyaluronate sterile gel (90mg/3ml)

Modified Release


For mild to severe osteoarthritis


- Modified release
- Biostimulant Visco-supplement
- Synovial fluid supply
- Good long lasting
- Reduce wear and tear
- Anti-inflammatory
- Pain relief
- Increase joint range of motion



STEADY STEPS

Osteoarthritis is a progressive, biomechanical and degenerative joint disease that leads to joint pain and movement limitation, and in more severe cases to complete disability. In the pathology of osteoarthritis, the role of immunity, metabolic changes, inflammation and cartilage destruction can be mentioned.¹

654.1M 
people over 40 years are
suffered from KOA Globally

6.4M 
people over 40 years are
suffered from KOA in Iran

1.69 
Female/Men
Prevalence Ratios

Arthritic joints

- Have progressive damage without treatment.
- Repair is difficult due to anatomy and circulation.
- Have significantly reduction of the endogenous production of sodium hyaluronate.²⁻³

Why visco-supplements injection?

- Exogenous sodium hyaluronate increases cartilage volume and type II collagen conversion.³
- Reduction of serum levels of a specific biomarker of cartilage degradation (Coll1-2) by hyaluronic acid.⁴
- Injection of visco-supplements has a significant effect in reducing pain and inflammation and increasing joint range of motion.³⁻⁴
- Systemic and oral drugs have high ADR.²⁻¹⁵
- People with OA are 2.5 to 5.5 times more likely than the general population to suffer gastrointestinal complications and be hospitalized due to the use of NSAIDs.⁵⁻⁶

What is SYFLEXX®B?

- SYFLEXX® B is a intra articular visco-supplement formulated from Biphasic (cross-linked & linear) Hyaluronic Acid Gel and suitable for injection in joints suffering from osteoarthritis. (90mg/3ml)
- SYFLEXX® B is a single-use prefilled glass syringe (PFS) containing a sterile, non-pyrogenic, clear, viscoelastic, biocompatible, and biodegradable gel for intra-articular injection, produced biosynthetically.

	Active ingredients	MWs	HA (%)	Lidocaine %	Volume
Syflectx B	Medium molecular weight (MMW)	700-1100 KD	27 mg HA (0.9%)	9 mg (0.3%)	3 ml
	Cross-link	Mix	63 mg HA (2.1%)		



Why SYFLEXX® B?

- SYFLEXX® B is a stabilized biphasic hyaluronic acid gel that slowly leaks sodium hyaluronate MMW after injection into the joint.
- Cross-linked hyaluronic acid has a highest resistance to the hyaluronidase.
- Sodium hyaluronate MMW highest adhesion to cell surface receptors compared to HMW and LMW.¹³
- Anti-inflammatory properties of exogenous sodium hyaluronate MMW.³⁻⁴
 - Prevent wear & tear on the joint surface due to coating.
 - Increases hyaluronan synthesis of chondrocytes and proteoglycan.
 - Reduction of pro-inflammatory mediators and matrix metalloproteinases.
 - Modulates the behavior of immune cells.
- Biological stimulation.⁷⁻⁸⁻⁹
 - Increased proliferation of fibroblasts.
 - Increased collagen production.
 - Accelerating the cartilage regeneration process.
- Restore viscosity and elasticity can improve joint range of motion.

Who & How can benefit from SYFLEXX® B?

Symptomatic mild to severe osteoarthritis (OA) of the knee, hip, and shoulder.

