

smHArtfix™

For **mild** to **moderate** Osteoarthritis¹



Science Behind smHArtfix

Hyaluronic acid in smHArtfix products:

- based on clinically proven molecular weight to be efficient in counteracting osteoarthritis symptoms²
- **has dedicated concentration for its clinical use**, which has a significant effect on elasticity and viscosity parameters of the product^{3,4,5}
- is clinically **effective in pain reduction**^{6,7,8}
- has more prolonged clinical effects of **pain relief** after HA intra-articular injection than corticosteroids injections^{9,10}
- has **bacterial fermentation** origin

Viscosupplementation with smHArtfix Multi

smHArtfix Multi can provide patient with long-term pain relief.^{6,7}

3 intra-articular injections, administered at weekly intervals -

Product Information

- A content: 44mg in 2ml (2.2%)
- Molecular weight: above 1.2 MDa
- Viscosity: 150-380 [Pa·s]
- Osmolarity: 270-400 mOsm/kg
- Needle size: 21G

Viscosupplementation with smHArtfix One

SmHArtfix ONE enables long-lasting pain relief.⁸

Single intra-articular injection

Product Information

- HA content: 120mg in 4.8ml (2.5%)
- Molecular weight: above 1.5 MDa
- Viscosity: 300-650 [Pa·s]
- Osmolality: 270-400 mOsm/kg
- Needle size: 19G

smHArtfix Order Information

Packed in a pre-filled glass syringe within a blister and an outer carton. smHArtfix ONE and smHArtfix MULTI are sterilised using aseptic processing techniques. The final product in the carton is terminally sterilized using ethylene oxide ensuring that the outer surface of the syringe is sterile.

Description	Part Number
smHArtfix One 4.8ml	110047748
smHArtfix Multi 2ml	110047750



References

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3. KOBAYASHI *et al.* Viscoelasticity of hyaluronic acid with different molecular weights. *Biorheology*. 1994;31:235-44.
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5. David Rebenda *et al.* On the Dependence of Rheology of Hyaluronic Acid Solutions and Frictional Behavior of Articular Cartilage. Published online 2020 Jun 11. doi: 10.3390/ma13112659 PMID: PMC7321645 PMID: 32545213
6. Brandt *et al.* Efficacy and safety of intraarticular sodium hyaluronate in knee osteoarthritis. Orthovisc Study Group. *Clin Ortop Relat Res*. 2001;385:130-43] *Orthovisc®
7. Li *et al.* Arthroscopic debridement of the osteoarthritic knee combined with hyaluronic acid (Orthovisc®) treatment: a case series and review of the literature. *J Orthop Surg*. 2008;3:43.] *Orthovisc®
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Hutnicza 15 B
81-061 Gdynia
Poland



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