

# A synergistic solution for the treatment of chondral and osteochondral lesions

*Inspired by Nature, Perfected by Science*



Hyaluronic acid-based scaffold used with mesenchymal stem cells (MSCs) for one-step cartilage regeneration treatments

- VERSATILE
- FAST
- EFFECTIVE



Advanced marrow stimulation procedure to maximise MSCs recruitment and minimise subchondral bone damage

- SMALLER
- DEEPER
- BETTER

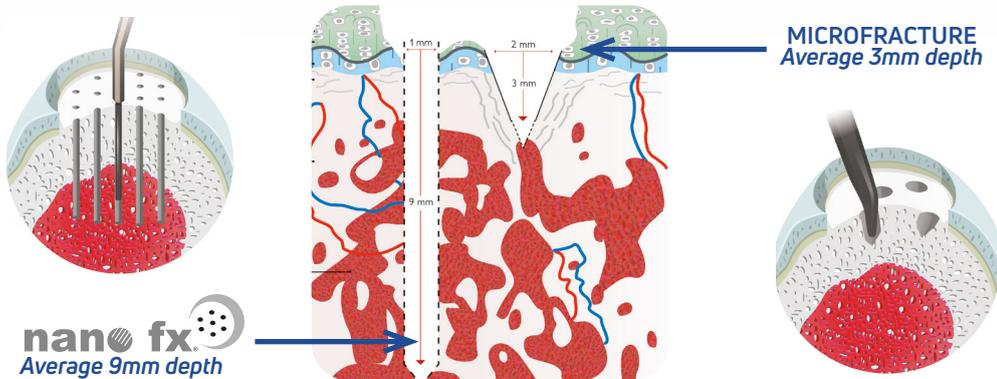


*One-step cartilage regeneration treatment based on the combination of the most efficient bone marrow stimulation technique and the only 100% HA-based scaffold*

**OFFERS A "SMALLER, DEEPER, BETTER" SOLUTION COMPARED TO A STANDARD MICROFRACTURE PROCEDURE**

1. **SMALLER** holes for more cell channels
2. **DEEPER** holes for increased cell quantity
3. **BETTER** cell recruitment for a better repair

Compared to microfracture and k-wire stimulation, NanoFx® showed superior bone marrow access with multiple trabecular access channels extending 9mm into subchondral bone<sup>1</sup>.



## Hyalofast®

**UNIQUE CHARACTERISTICS PUT HYALOFAST CARTILAGE REPAIR ONE STEP AHEAD**

Excellent clinical and MRI results in the treatment of chondral and osteochondral defects of ankle and knee. Hyaline-like cartilage confirmed by MRI T2 mapping<sup>2,3,4</sup>.

### UNIQUE HANDLING

1. No fixation required in most cases
2. Can be applied either side up
3. Easily adaptable to any lesion shape
4. Easily and quickly implanted via arthroscopy



1. Behrens et al., Bone Marrow Access in Cartilage Repair: Comparison of Microfracture, Nanofracture, K-wire, and Drill in the Adult Ovine Model., e-Poster: P87 Congress: ICRS 2013  
 2. Buda R., et al. Regenerative treatment in osteochondral lesions of the talus: autologous chondrocyte implantation versus one-step bone marrow derived cells transplantation. International Orthopaedics (SICOT). 2015.  
 3. Gobbi A. et al. Long-term Clinical Outcomes of One-Stage Cartilage Repair in the Knee with Hyaluronic Acid-Based Scaffold Embedded with Mesenchymal Stem Cells Sourced From Bone Marrow Aspirate Concentrate. The American Journal of Sports Medicine 2019 June  
 4. Battaglia M., et al. Validity of T2 mapping in characterization of the regeneration tissue by bone marrow derived cell transplantation in osteochondral lesions of the ankle. Eur J Radiol. 2010 Aug.