



\* "The overriding finding of the present study is that small subchondral drill holes reflecting the physiological subchondral trabecular distance significantly improve osteochondral repair."

Eldracher M, et. al. Small subchondral drill holes improve marrow stimulation of articular cartilage defects. AJSM 2014 Nov;42(11):2741-50.



I ntra- Op 1.5 x 1.5 cm Full Thickness Defect

Pre-Op MRI

6 Month Post-Op MRI after NanoFx





\*"Significant enhancements were observed at the level of individual parameters and of overall histological articular cartilage repair, together with improved immunoreactivity to type II and type I collagen of the cartilaginous repair tissue. Second, the microarchitecture of both the subchondral bone plate and the subarticular spongiosa was better reconstituted."

Eldracher M, Orth P, Cucchiarini M, Pape D, Madry H. Small subchondral drill holes improve marrow stimulation of articular cartilage defects. Am J Sports Med. 2014 Nov;42(11):2741-50.



3mm Channels M icrofrac ture



1mm Channels NanoFx



The standardised 9mm perforation depth provides improved access to the targeted marrow cells.

\*"Deeper versus shallower elicited greater fill of the cartilage defect with a more hyaline character in the repair matrix."

Chen H, Hoemann CD, Sun J, Chevrier A, McKee MD, Shive MS, Hurtig M, Buschmann MD. Depth of subchondral perforation influences the outcome of bone marrow stimulation cartilage repair. J Orthop Res. 2011 Aug;29(8):1178-84.





Microfracture

1mm K-Wire



## BETTER

★ Figures: △ open trabecular channels;
▲ closed trabecular channels, microCT comparison: Axial (top), Sagittal (bottom).

## Nanofracture

Speak to your local Business Development Manager, for further information using the details below:

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