

NOMBRE ESTUDIO	DISPOSITIVO	TIPO DE ESTUDIO (Nivel Evidencia Científica)	Follow-up	REPORTS / PUBLICACION	AÑO DE PUBLICACION
Efficacy of Marrow-Stimulating Technique in Arthroscopic Rotator Cuff Repair: A Prospective Randomized Study.	Pleuristik Nano FX	Estudio Clínico Multicéntrico Prospectivo Randomizado (I)	1 año	KSSTA / Ruiz Iban et al.	Pendiente 2020
Subchondral bone remodelling: comparing nano fracture with microfracture. An ovine in vivo study	Pleuristik Nano FX	Estudio comparativo randomizado	1 año	Joints / Zedde et al	2016
The Effect of Different Bone Marrow Stimulation Techniques on Human Talar Subchondral Bone: A MicroComputed Tomography Evaluation.	Pleuristik Nano FX	Estudio comparativo controlado laboratorio cadaver		The Journal of Arthroscopy and Related Surgery / Arianna et al	2016
Rotator Cuff Repair with Nanofracture Augmentation	Pleuristik Nano FX	Revisión bibliográfica y Nota Técnica (V)		Publicación Arthroscopy / Sigman et al.	2015
Small Subchondral Drill Holes Improve Marrow Stimulation of Articular Cartilage Defects	Pleuristik Nano FX	Estudio comparativo controlado laboratorio animal	1 año	Am.J. Sports Med / Eldracher et al.	2014
Efficacy of Marrow-Stimulating Technique in Arthroscopic Rotator Cuff Repair: A Prospective Randomized Study.	Pleuristik Nano FX	Estudio Clínico Prospectivo Randomizado (I)	> 2 años	The Journal of Arthroscopy and Related Surgery / Milano et al.	2013
A new technique for improved and Systematic deep Marrow Stimulation and Subchondral Bone Protection	Pleuristik Nano FX	Nota Técnica (V)		Publicación Arthroscopy / Behrens et al	2012
Depth of Subchondral Perforation Influences the Outcome of Bone Marrow Stimulation Cartilage Repair.	Pleuristik Nano FX	Estudio comparativo controlado laboratorio animal	1 año	J. Of Orthopaedic Research / Chen et al	2011
Characterization of Subchondral Bone Repair for Marrow-Stimulated Chondral Defects and Its Relationship to Articular Cartilage Resurfacing	Pleuristik Nano FX	Estudio comparativo controlado laboratorio animal		Am J Sports Med / Chen et al.	2011
PUBLICACIONES ESTUDIOS PRE - CLÍNICOS					
Growth Factor Delivery to a Cartilage-Cartilage Interface Using Platelet-Rich Concentrates on a Hyaluronic Acid Scaffold	Hyalofast	Estudio Pre-Clínico		The Journal of Arthroscopy and Related Surgery / Ashley Titan et. al., Michael Schär et. Al	2020
Chondrogenic differentiation of bone marrow concentrate grown onto a hylauronan scaffold: Rationale for its use in the treatment of cartilage lesions.	Hyalofast	Estudio Pre-Clínico		J Biomed Mater Res A. / Cavallo C. et. al., Desando G. et. al.,	2012
Osteoarthritis treated with mesenchymal stem cells on hyaluronan-based scaffold in rabbit	Hyalofast	Estudio Pre-Clínico		TISSUE ENG PART/ Grigolo B. et. al., Lisignoli G. et. al ,	2009
Osteogenic and chondrogenic differentiation: comparison of human and rat bone marrow mesenchymal stem cells cultured into polymeric scaffolds	Hyalofast	Estudio Pre-Clínico		European Journal of Hystochemistry/Zavan B. et. al., Giorgi C. et. al., Bagnara G.P et. al.	2007
Hyaluronan-based polymer scaffold modulates the expression of inflammatory and degradative factors in mesenchymal stem cells: involvement of Cd44 and Cd54	Hyalofast	Estudio Pre-Clínico		Journal of cellular Physiology/ Lisignoli G. et. al, Cristino S., et. al.	2006
Chondrogenic differentiation of murine and human mesenchymal stromal cells in a hyaluronic acid scaffold: differences in gene expression and cell morphology	Hyalofast	Estudio Pre-Clínico		J BIOMED MATER RES A. / Lisignoli G.et. al., Cristino S. et. al., Piacentini A, et. al.	2006
Human chondrocytes and mesenchymal stem cells grown onto engineered scaffold.	Hyalofast	Estudio Pre-Clínico		Biorheology/ Facchini A.et. al., Lisignoli G. et. al.	2006
Cellular and molecular events during chondrogenesis of human mesenchymal stromal cells grown in a three-dimensional hyaluronan based scaffold	Hyalofast	Estudio Pre-Clínico		BIOMATERIALS / Lisignoli G. et. al., Cristino S. et. al	2005
PUBLICACIONES ESTUDIOS CLÍNICOS					
Biological resurfacing of grade IV articular cartilage ulcers in knee joint with Hyalofast	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	1,5 años	Journal of Orthopaedic Surgery / Shijie Ian Tan et al	2020
Osteochondral Lesions of the Femoral Condyles: Are the Results of the One-Step Repair Technique Still Satisfactory at Longterm?	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	8 años	Abstract ISAKOS congress/ Buda R et al.	2019
A useful combination for the treatment of patellofemoral chondral lesions: realignment procedure plus mesenchymal stem cell -retrospective analysis and clinical results at 48 months of follow up	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	4 años	European Journal of Orthopaedic Surgery & Traumatology / Buda et al.	2019
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.	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	8 años	The American Journal of Sports Medicine / Gobbi et al.	2019
One step surgery with multipotent stem cells and Hyaluronan based scaffold for the treatment of full thickness chondral defects of the knee in patients older than 45 years	Hyalofast	Estudio Clínico Prospectivo Randomizado y Estudio Biopsias (II)	4 años	Knee Surg Sports Traumatol Arthrosc / Gobbi et al.	2017
Results of Hyaluronic Acide Based Cell-Free Scaffold Application in Combination with Microfracture for the Treatment of Osteochondral Lesions of the Knee: 2- Year Comparative Study.	Hyalofast	Estudio Clínico Comparativo Retrospectivo (III)	2 años	Arthroscopy / Sofu A. et al	2017
Arthroscopic treatment of osteochondral lesions of the talus: nanofracture vs Hyaluronic acid-based cell-free scaffold with concentration of autologous bone marrow aspirate.	Hyalofast	Estudio Clínico Comparativo Retrospectivo (III)	3 años	J Orthop Surg / Tahta M., et al.	2017
One-Stage Cartilage Repair Using a Hyaluronic Acid-Based Scaffold With Activated Bone Marrow-Derived Mesenchymal Stem Cells Compared With Microfracture. Five-Year Follow-up	Hyalofast	Estudio Clínico Prospectivo Randomizado (II)	5 años	The American Journal of Sport Medicine / Gobbi et al.	2016
"One-step" bone marrow-derived cells transplantation and joint debridement for osteochondral lesions of the talus in ankle osteoarthritis: clinical and radiological outcomes at 36 months.	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	3 años	Arch Orthop Trauma Surg /Buda et al.	2015
Regenerative treatment in osteochondral lesions of the talus: autologous chondrocyte implantation versus one-step bone marrow derived cells transplantation.	Hyalofast	Estudio Comparativo Retrospectivo (III)	4 años	International Orthopaedics / Buda et al.	2015
One-step bone marrow-derived cell transplantation in talarosteochondral lesions: mid-term results.	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	4 años	Joints / Buda et al	2014
Matrix-Induced Autologous Chondrocyte Implantation versus Multipotent Stem Cells for the treatment of large patellofemoral chondral lesions: a non-randomized prospective trial.	Hyalofast	Estudio Clínico Comparativo Retrospectivo y Estudio Biopsias + Second look (III)	3 años	Cartilage / Gobbi et al.	2014
Knee Cartilage Repair with Hyalofast® (Hyaft-11 Scaffold with Seeded Autologous Chondrocytes)	Hyalofast	Nota Técnica (V)		Techniques in Cartilage Repair Surgery / Mats Brittberg	2014
One-step arthroscopic technique for the treatment of osteochondral lesions of the knee with bone-marrow-derived cells: three years results.	Hyalofast	Estudio Clínico Prospectivo Observacional y Biopsias (IV)	3 años	Musculosket Surg. / Buda et al.	2013
Chondrogenic differentiation of bone marrow concentrate grown onto a hylauronan scaffold: rationale for its use in the treatment of cartilage lesions	Hyalofast	Estudio In Vitro diferenciación celulas médula ósea en Hyalofast	-	J Biol Mat Res. / Cavallo et al.	2013
One step Bone Marrow-derived cell Transplantation in Talar Osteochondral Lesions.	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	3 años	Clin Orthop Relat Res. / Giannini S. et al.	2012
Validity of T2 mapping in characterization of the regeneration tissue by bone marrow derived cell transplattation in osteochondral lesions of the ankle.	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	2 años	Eur J Radiol. / Battaglia M., et al.	2011
Cartilage repair evolution in post-traumatic osteochondral lesions of the talus: From open field autologous chondrocyte to bone-marrow-derived cells transplantation.	Hyalofast	Estudio Clínico Prospectivo Observacional y Biopsias (IV)	1 año	Injury/ Giannini S, et al.	2010
Cartilage repair evolution in post-traumatic osteochondral lesions of the talus: From open field autologous chondrocyte to bone-marrow-derived cells transplantation	Hyalofast	Estudio Clínico Comparativo Retrospectivo y Estudio Biopsias + Second look (III)	2 años	Injury / Giannini S et al.	2010
Osteochondral lesions of the knee: a new one-step repair technique with bone-marrow-derived cells.	Hyalofast	Estudio Clínico Prospectivo Observacional y Biopsias (IV)	2 años	J Bone Joint Surg Am. / Buda R, et al.	2010
Chondrogenesis in a hyaluronic acid scaffold: Comparison between chondrocytes and MSC from bone marrow and adipose tissue	Hyalofast	Estudio In Vitro comparativo Hyalofast+ Cel. édula Ósea vs Hyalofast+ Cel adipic	-	Knee Surg Sports Traumatol Arthrosc / Jakobsen et al	2009
Cellular and molecular events during chondrogenesis of human mesenchymal stromal cells grown in a three-dimensional hyaluronan based scaffold.	Hyalofast	Estudio In Vitro diferenciación celulas médula ósea en Hyalofast	-	Biomaterials / Lisignoli et al.	2005
Hyaluronan-based scaffolds (Hyalograft C) in the treatment of knee cartilage defects: preliminary clinical findings	Hyalofast	Estudio Clínico Prospectivo Observacional (IV)	1,5 años	Novartis Found Symp / Marccacci et al	2003
Evidence for redifferentiation of human chondrocytes grown on a hyaluronan-based biomaterial (HYaff 11): molecular, immunohistochemical and ultrastructural analysis	Hyalofast	Estudio In Vitro diferenciación celulas médula ósea en Hyalofast		Biomaterials /Grigolo et al.	2002
Transplantation of chondrocytes seeded on a hyaluronan derivative (hyaft-11) into cartilage defects in rabbits	Hyalofast	Estudio Clínico (en modelo animal) Prospectivo Observacional (IV)		Biomaterials/ Grigolo et al.	2001
PUBLICACIONES ESTUDIOS CLÍNICOS					
A randomized controlled trial demonstrating sustained benefit of Autologous Matrix-Induced Chondrogenesis over micro fracture at five years	Implante Membrana Colágeno I/III/elastina y Pleuristik Nano FX (Cartimaix + Nano FX)	Nota Técnica (IV)		Arthroscopy Techniques / Peñalver et al	Pendiente 2020
Systematic review on the use of autologous matrix-induced chondrogenesis for the repair of articular cartilage defects in patients	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Clínico Prospectivo Randomizado (II)	5 años	Int Ortho / Volz M, Andres S et al.	2017
One-step cartilage repair technique as a Next Generation of Cell Therapy for Cartilage Defects: Biological Characteristics, Preclinical Application, Surgical Techniques and Clinical Developments.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Metalálisis (I)		World J Orthop / N Shaikh et al	2017
Clinical Results 10 years after AMIC in the knee Entrar aquí (pagina 44)	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Revisión bibliográfica (IV) Incluye revisión estudios nivel (II y IV)		Arthroscopy / Zhang et al	2016
Nanofractured autologous matrixinduced chondrogenesis (NAMIC©) – Further development of collagen membrane aided chondrogenesis combined with subchondral needling	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Clínico Prospectivo Observacional (IV)	10 años	ESSKA 2016 / N.Kaiser et al.	2016
Sustained five-year benefit of autologous matrix-induced chondrogenesis for femoral acetabular impingement-induced chondral lesions compared with microfracture treatment.	Implante Membrana Colágeno I/III/elastina y Pleuristik Nano FX (Cartimaix + Nano FX)	Nota Técnica y Estudio Prospectivo (IV)	1 año	The Knee / J.P. Benthien, P. Behrens	2015
Matrix-Applied Characterized Autologous Cultured Chondrocytes Versus Microfracture: Two-Year Follow-up of a Prospective Randomized Trial.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Prospectivo Randomizado (III)	5 años	Bone Joint J. / Fontana et al.	2015
Clinical and radiological long-term outcomes after matrix-induced autologous chondrocyte transplantation: a prospective follow-up at a minimum of 10 years.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Clínico Prospectivo Randomizado (I)	10 años	Am.J. Sports Med / Saris et al.	2014
One-step surgery with multipoint stem cells for the treatment of large full-thickness chondral defects of the knee	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Clínico Prospectivo Observacional (IV)	10 años	Am.J. Sports Med /Aldrian et al.	2014
Autologous Matrix-Induced Chondrogenesis in the Knee: A Review.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Prospectivo Observacional (IV)	3 años	Am J Sports Med / Gobbi et al.	2014
Outcome of Autologous Matrix Induced Chondrogenesis (AMIC) in cartilage knee surgery: data of the AMIC Registry	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Prospectivo Observacional (IV)	2 años	Cartilage / Lee et al.	2014
Reconstruction of osteochondral lesions of the talus with autologous spongiosa grafts and autologous matrix-induced chondrogenesis.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Prospectivo Observacional (IV)	2 años	Arch Orthop Trauma Surg. / Gille J, Behrens P et al.	2013
Minimum ten-year results of a prospective randomised study of autologous chondrocyte implantation versus mosaicplasty for symptomatic articular cartilage lesions of the knee.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Prospectivo Observacional (IV)	2 años	Am J Sports Med / Valderrabano et al.	2013
All-arthroscopic AMIC procedure for repair of cartilage defects of the knee	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Clínico Prospectivo Randomizado (I)	10 años	J Bone Joint Surg Br. / Bentley G, Giant LC et al.	2012
The treatment of chondral and osteochondral defects of the knee with autologous matrix-induced chondrogenesis (AMIC): method description and recent developments	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Nota Técnica (V)		Knee Surg. Sports Traumatol. Arthrosc. / Piontek et al.	2012
Use of collagen scaffold and autologous bone marrow concentrate as a one-step cartilage repair in the knee: histological results of second-look biopsies.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Nota Técnica y Estudio Prospectivo (IV)	1 año	Knee Surg. Sports Traumatol. Arthrosc. / Benthien et al	2011
Cell carriers as the next generation of cell therapy for cartilage repair: a review of the matrix-induced autologous chondrocyte implantation procedure	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Prospectivo Observacional (IV)	1 año	Int. J. Immunopathol Pharmacol / Gigante et al.	2011
Use of a type I/III bilayer collagen membrane decreases reapportion rates for symptomatic hypertrophy after autologous chondrocyte implantation.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Metalálisis (I)		Am J Sports Med / Brittberg et al.	2010
Use of a type I/III bilayer collagen membrane decreases reapportion rates for symptomatic hypertrophy after autologous chondrocyte implantation.	Implante Membrana Colágeno I/III y elastina (Cartimaix)	Estudio Clínico Multicéntrico estudio cohorte (III)	1 año	Am.J. Sports Med / Gomoll et al.	2009