

Smart**Doc**

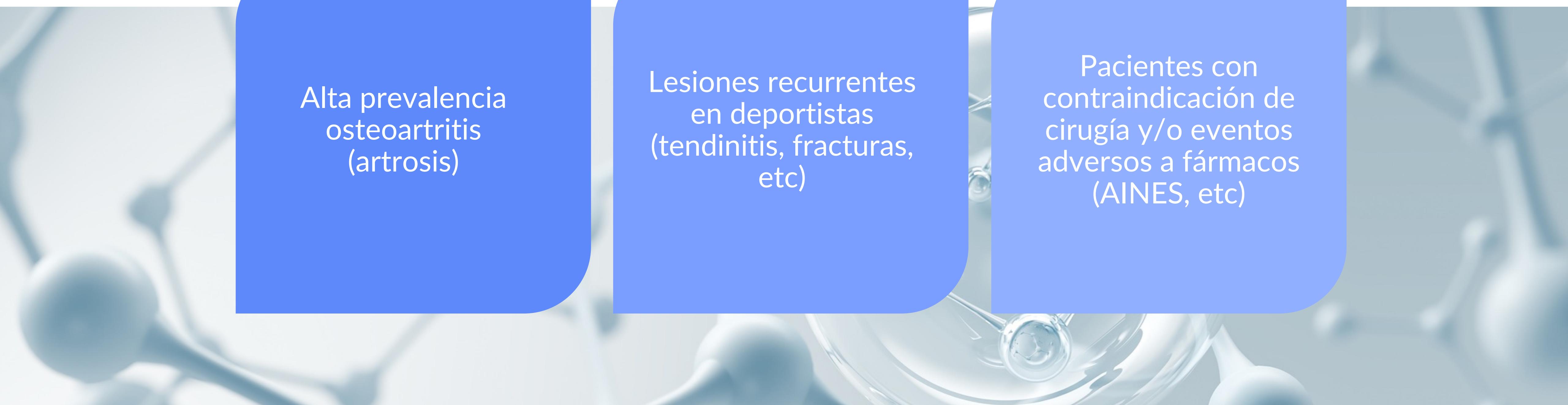
Propuesta



Nueva Opción
Terapéutica
en Patologías
Degenerativas
Osteoarticulares



Desafío

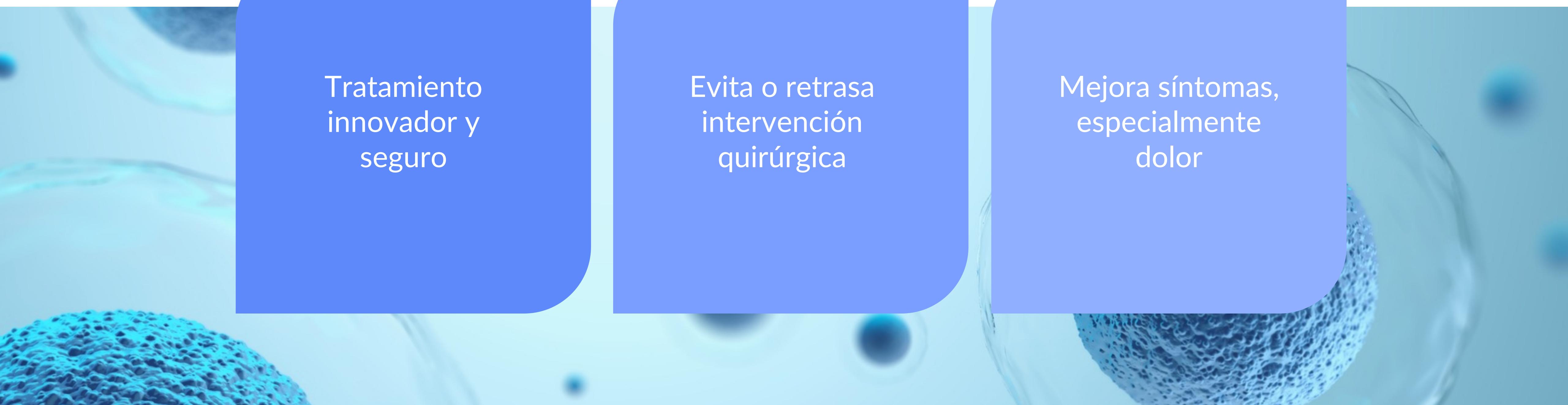


Alta prevalencia
osteoarthritis
(artrosis)

Lesiones recurrentes
en deportistas
(tendinitis, fracturas,
etc)

Pacientes con
contraindicación de
cirugía y/o eventos
adversos a fármacos
(AINEs, etc)

Solución



Tratamiento innovador y seguro

Evita o retrasa intervención quirúrgica

Mejora síntomas, especialmente dolor

Producto **Células Madre** derivadas del **Tejido Adiposo**

MEDICINA REGENERATIVA

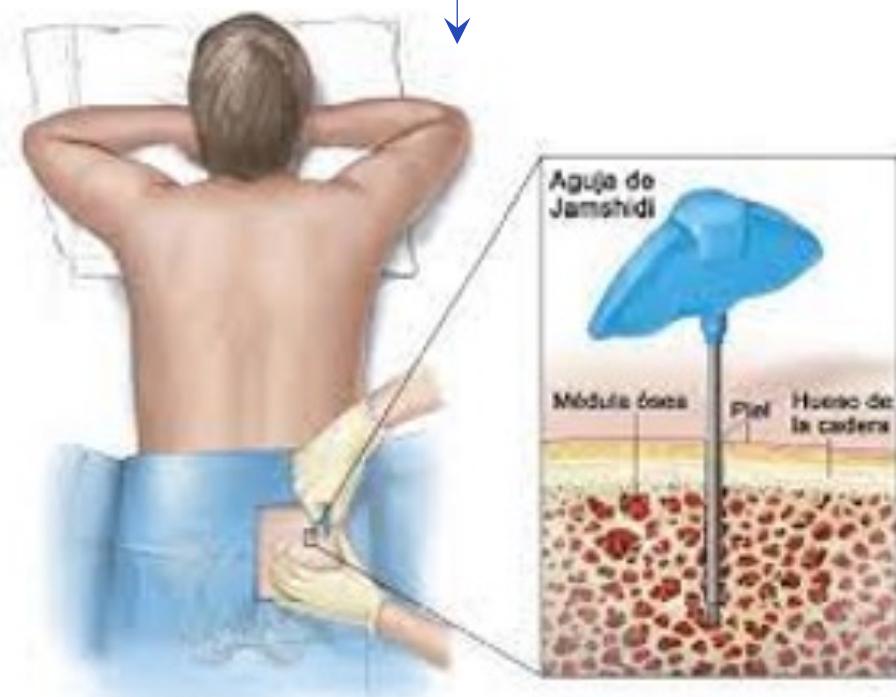
- ✓ Nuevo campo de la medicina
- ✓ Terapia a partir de recursos biológicos autólogos o alogénicos
- ✓ Mínimamente invasiva
- ✓ Promueve cicatrización de huesos, cartílagos, tendones y ligamentos



Células madre

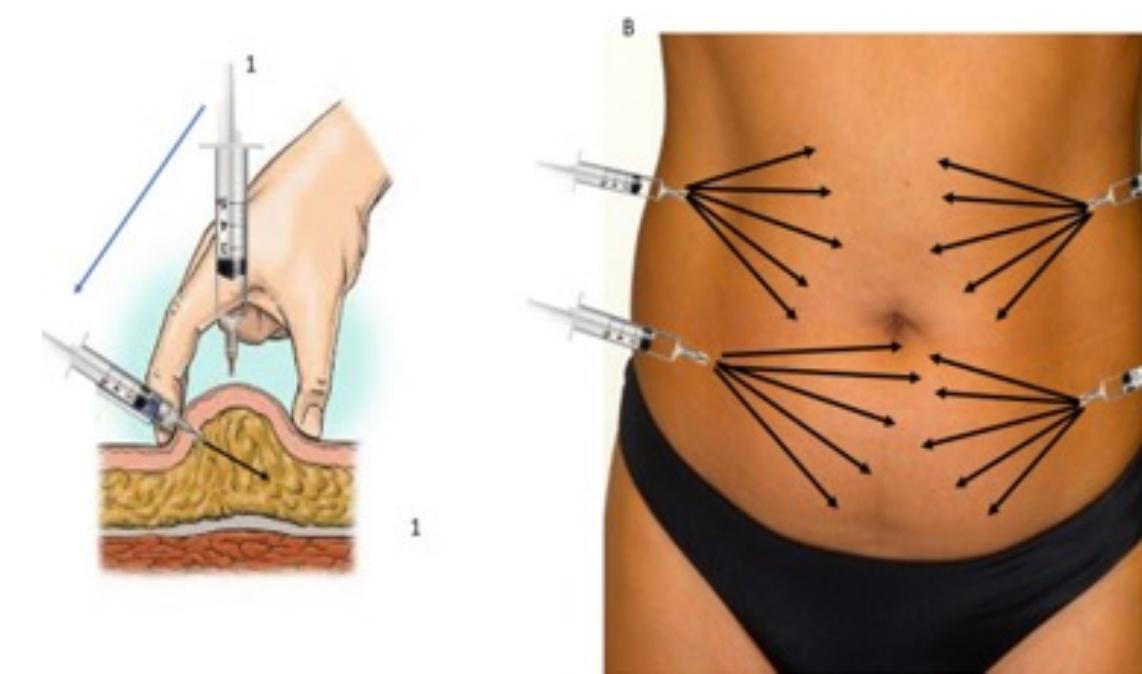
Células madre adultas

Células Mesenquimales
derivadas de médula
ósea

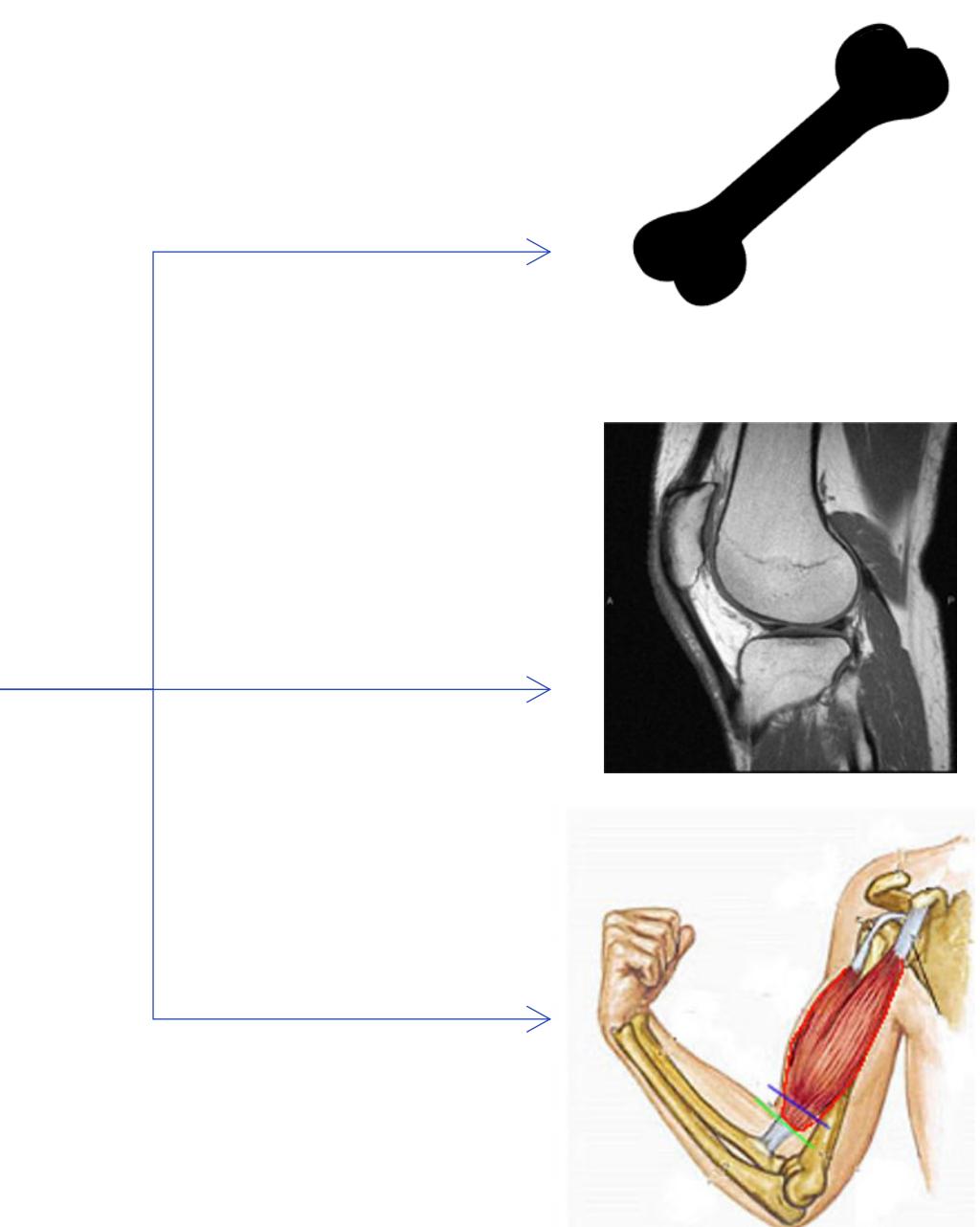


Células madre embrionaria

Células Mesenquimales
derivadas de tejido
adiposo



Células madre pluripotentes
Inducidas (iPSC)





Evidencia Relevante

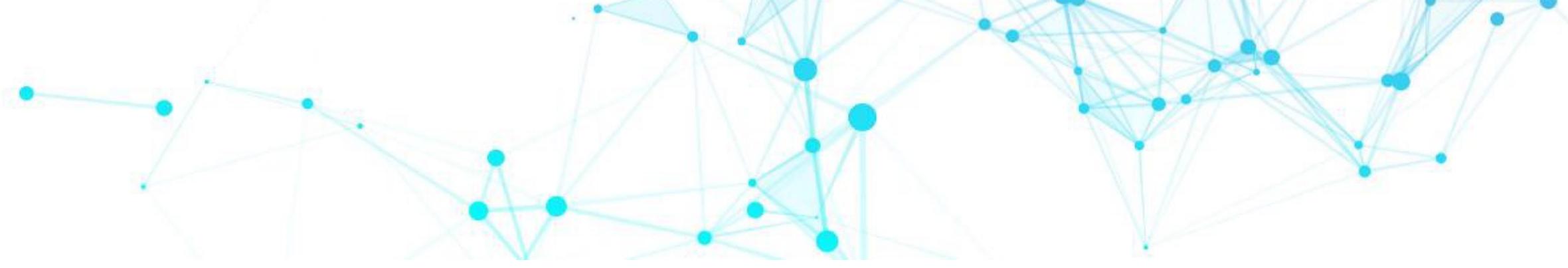
Table 3 Evidence from human clinical studies for the use of ADSC

	Study design	Subjects	Location	Comparison	Results	Conclusion
Tendinopathy						
Usuelli et al. [93]	RCT	44	Achilles	ADSC + PRP vs. PRP alone	Early VAS pain, AOFAS, and VISA-A score benefits	PRP and SVF safe and effective; SVF may provide faster results
Striano et al. [94]	Case Series	18	Rotator Cuff	None	Improvements in National Pain Scale and American Shoulder and Elbow Surgeons Score (ASES)	Use of ADSCs resulted in significant improvements in pain, function and quality of life at 12 months
Osteoarthritis						
Pers et al. [95]	Case Series	18	Knee	None	Improvements in KOOS, SAS, WOMAC VAS Pain	ADSCs are safe and well tolerated in patients with knee osteoarthritis
Panchal et al. [96]	Case Series	17	Knee	None	Improvements in numerical pain rating scale, knee society score, and lower extremity activity scale	The injection of autologous, micro-fractured, minimally manipulated adipose tissue appears to be a safe and effective treatment option for patients with refractory, severe (grade 3 or 4) knee OA.
Cattaneo et al. [97]	Case Series	38	Knee	None	Improvements in KOOS and WOMAC scores	Micro-fragmented adipose tissue injection associated with arthroscopic procedures is a safe and beneficial adjunct for symptomatic knee OA
Dall’Oca et al. [98]	Case Series	6	Hip	None	Improvements in HHS and WOMAC scores	MSC Lipogems is a fairly easy technique and no adverse effects were observed. Preliminary results showed a positive outcome.
Hudetz et al. [99]	Case Series	17	Knee	None	Increases in contents of cartilage glycosaminoglycans; improved VAS pain scores; no differences in N-glycan or IgG synovial concentrations	The use of autologous and microfragmented adipose tissue in patients with knee OA (measured by dGEMRIC MRI) increased glycosaminoglycan (GAG) content in hyaline cartilage, which is in line with observed clinical results
Russo et al. [100]	Case Series	22	Knee	None	Improvements in KOOS Lysholm, VAS Pain, and IKDC scores	Autologous and micro-fragmented adipose tissue injection is an innovative and safe approach for the management of diffuse knee OA in the mid-term.
Panni et al. [101]	Case Series	52	Knee	None	Improvements in IKS and VAS pain scores	Injection of ADSCs during arthroscopic debridement increased clinical and functional scores in patients with early knee OA at a mid-term follow-up, especially those with higher pre-operative VAS scores.
Jo et al. 2014 [20]	Case Series	18	Knee	None	Improvement in WOMAC score; size of cartilage defect decrease; volume of cartilage increase; thick, hyaline-like cartilage regeneration.	ADSC improved function and pain of the knee joint without causing adverse events; reduced cartilage defects
Koh et al. 2013 [19]	Case Series	18	Knee	None	Improvement in WOMAC and Lysholm scores; decrease in VAS pain; improved cartilage whole-organ MRI score	ADSC effective and safe for improving function, reducing pain
Kim et al. 2015 [102]	Cohort	20	Knee	ADSC+PRP injection vs. ADSC implantation alone	Improved IKDC, Tegner scores in implantation group	



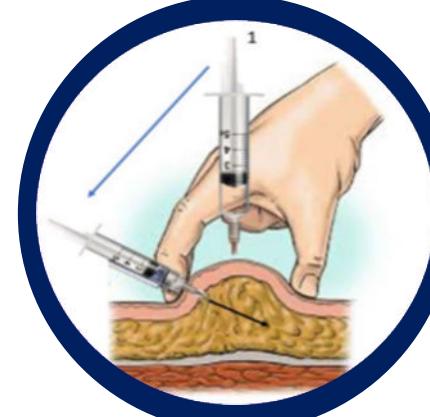
Evidencia Relevante

Study design	Subjects	Location	Comparison	Results	Conclusion
OCD					
Kim et al. [18]	Case Series	55	Knee	None	Improved IKDC, Tegner scores
Kim et al. [103]	Cohort	49	Talus	Marrow stimulation alone	Improved VAS pain, AOFAS, and Tegner, cartilage restoration
Kim et al. [104]	Case Series	24	Knee	None	Improved IKDC, Tegner scores; improved cartilage lesion grade on MRI
Koh et al. [21]	RCT	80	Knee	Microfracture alone	Improved KOOS, cartilage signal intensity; 65% in ADSC group with complete cartilage coverage vs. 45% in control group
Freitag et al. [105]	Case Report	1	Knee	None	Improvement in NPRS pain score, Global WOMAC score, and all components of the KOOS; MRI showed complete filling of the chondral defect; modified ICRS score improved from Grade 3 to Grade 0.
D'Ambrosi et al. [106]	Case Series	4	Talus	None	Improvements in the American Orthopedic Foot and Ankle Society score and VAS pain score; no complications.
ADSC implantation for knee OA resulted in better clinical and second-look arthroscopic outcomes than an ADSC injection.					
Encouraging clinical outcomes					
Encouraging results, even in setting of poor prognostic factors					
ADSC useful for repairing cartilage lesions					
ADSC provided radiologic, KOOS pain and symptom subscore improvements; no differences in activity, sports, or quality-of-life					
The use of injection of autologous ADSCs following a traumatic chondral defect of the patella resulted in significant pain and functional improvements and complete regeneration of hyaline-like cartilage within the defect.					
Autologous microfractured, purified adipose tissue is safe and effective for osteochondral lesions of the talus.					

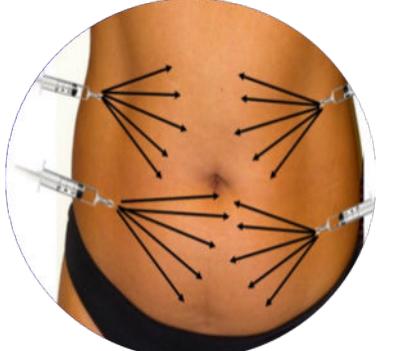


Procedimiento

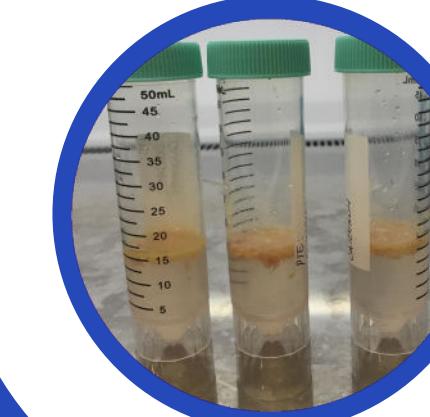
Extracción de muestra
por punción de grasa
abdominal



Muestra de grasa
abdominal obtenida



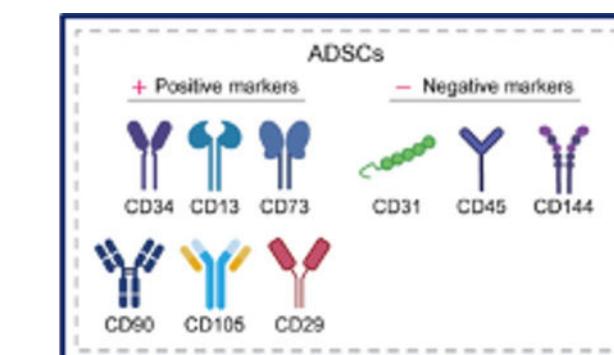
Procesado y cultivo
primario de células
madre/estromales



Confluencia Células
Mesenquimales



Controles
microbiológico y
biomarcadores



4-6 Semanas

- Producto listo para administrar
 - Trazable



Criterios de Recomendación

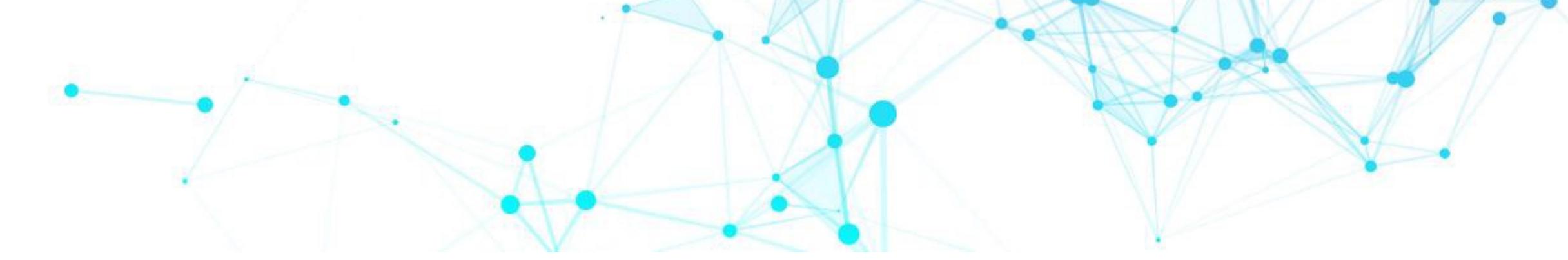
✓ EDAD > 18 años

✓ Diagnóstico

- Artrosis rodilla
- Artrosis cadera
- MMSS y Mano (manguito rotador, tendinopatías, rizartrosis)
- Discopatía vertebral
- Fracturas no consolidadas

✓ Status clínico

- Dolor crónico
- EA relacionados a AINES
- Impotencia funcional
- Deseo de postergar cirugía (ej. Paciente joven)



Criterios de Exclusión

✓ Absolutos

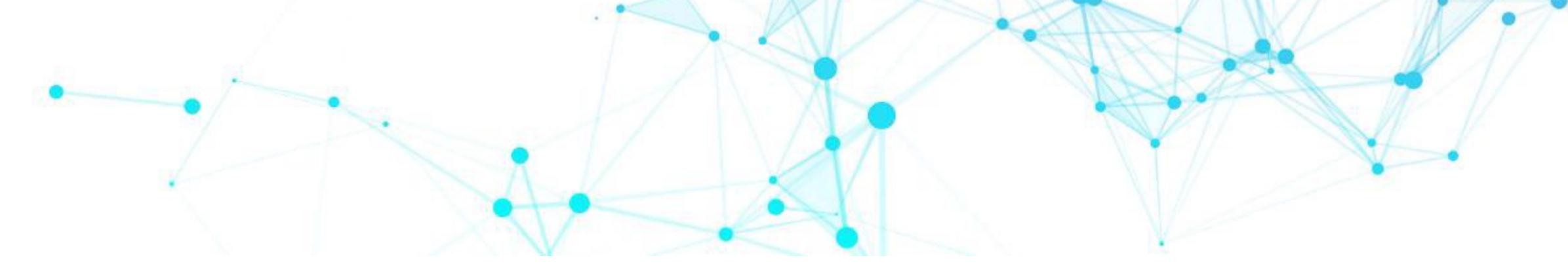
- Embarazo
- Enfermedad Oncológica activa

✓ Relativos

- Anticoagulación (evaluación previa con hematólogo de cabecera)

Modalidad Operativa





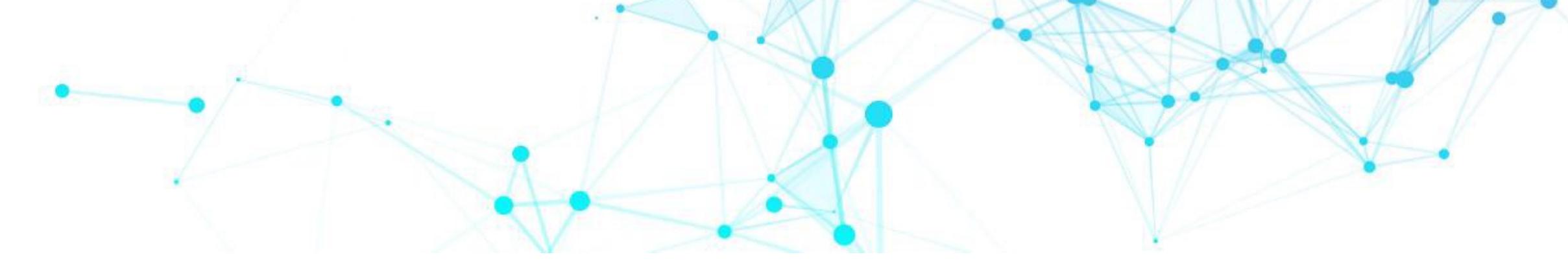
Profesionales

**Dr. Gonzalo Garate**

- ✓ Jefe del Servicio de Hematología del Hospital Alemán (Buenos Aires, Argentina)
- ✓ Especialista Certificado en Hematología (Sociedad Argentina de Hematología y Asociación Médica Argentina).
- ✓ Miembro titular de la Asociación Europea de Hematología (EHA).
- ✓ Fundador del laboratorio de coagulopatías del Hospital Alemán (Buenos Aires, Argentina)
- ✓ Visitor Fellowship en Hematología, University of California (San Diego, EE.UU.)

Dr. Roger Torga Spak

- ✓ Jefe de Departamento de Cirugía del Centro de Estudios Médicos e Investigaciones Clínicas (CEMIC).
- ✓ Director Médico del Instituto Penta de Bs As.
- ✓ Posgrado en Ortopedia y Traumatología, Universidad de Niza (Francia)
- ✓ Posgrado en Cirugía de cadera y rodilla, Universidad Luis Pasteur (Francia)
- ✓ Fellowship en Trauma Ortopédico, Baylor College of Medicine (Houston, EEUU)
- ✓ Fellowship en Ortopedia del Deporte, Wayne State University (Detroit, EEUU.)
- ✓ Fellowship en Cirugía reconstructiva, NYU-Hospital for Joint Diseases (New York, EEUU)



Modalidad Operativa

- ✓ Recibirán un mail con usuario y contraseña para entrar a nuestra plataforma
- ✓ Iniciar sesión con usuario y contraseña
- ✓ Completar campos con datos del paciente a evaluar
- ✓ Aceptar términos y condiciones

Información Importante

- ✓ Procedimiento de alto precio
- ✓ Sin cobertura por parte de los financiadores
- ✓ Honorarios profesionales a médicos de la Red SmartDoc
 - Por procedimiento realizado
 - Se abonarán a mes vencido, dentro de los 15 días de recibida la factura
 - En la misma moneda que haya pagado el paciente
- ✓ Comunicar al paciente que deberá concurrir a la consulta con las imágenes impresas y el informe, o bien, el link para acceder a los estudios



Smart**Doc** /

Bienvenido

Hola Tomás Roqué Moreno, desde aquí podrás ingresar tu caso para ser evaluado.

Postulá tu caso

DATOS DEL MÉDICO DIFUSOR

Nombre: Tomás
Apellido: Roqué Moreno
Email: tomas.roque.moreno@gmail.com

Matrícula Profesional*

DATOS DEL PACIENTE

Nombre*	Apellido*
DNI*	dd/mm/aaaa <input type="text"/>
Tel. Celular*	Tel. Alternativo*
Email*	

Acepto los términos y condiciones

Enviar

Smart**Doc**



info@smartdoc.com.ar

