

MARROW-STEM™

BONE MARROW MESENCHYMAL STEM CELLS ASPIRATION KIT

MARROW-STEM™ is a disposable device for the selective aspiration of mesenchymal cells from the bone marrow. With its innovative features, **MARROW-STEM™** optimizes the cellular yield and minimizes the contamination of peripheral blood, thanks to a micrometric system for lateral aspiration and the closet distal tip of the device.



INNOVATIVE

- Closed & sealed distal tip: guarantees a high cellular yield.
- 100% lateral aspiration: no peripheral blood contamination.
- Micrometric gear: 0,5 cm cannula retraction every 360° rotation.



EASY

- Single-step device: faster and easier procedure.
- Point of care therapy: minimally invasive procedure.
- Residual retraction control thanks to the numbers printed on the gear window.



CONVENIENT

- Centrifuge free: saving on time, personnel and tools.
- No processing time: ready to use bone marrow MSCs concentrate.
- Minimizes staff training, OR preparation and clean-up.

FEATURES:

SINGLE STEP DEVICE

Faster and easier procedure



CENTRIFUGE FREE

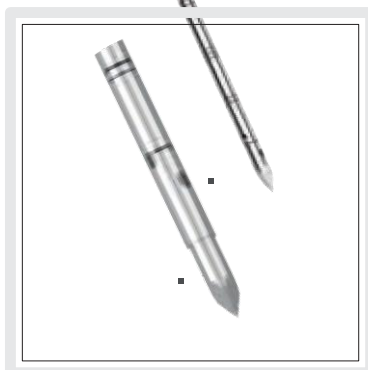
Reduction in time, cost, operating theatre personnel

MICROMETRIC GEAR

0,5 cm retraction each 360° rotation

CLOSED & SEALED DISTAL TIP

No peripheral blood contamination



LATERAL ASPIRATION

High cellular yield related to a reduced volume of marrow aspirate

KIT INCLUDES:



Aspiration syringe



Filtering system



Injection syringe

FIELDS OF APPLICATION:

The bone marrow aspirated with **MARROW-STEM**™ can be injected to accelerate the natural healing process, or can be combined with other kinds of bone substitutes to create an enhanced bone graft.

BONE MARROW MSC CONCENTRATE



INDICATIONS:

- BONE CYSTS
- INTRAARTICULAR INFILTRATION
- TENDINOPATHY
- PAIN REDUCTION (FACET JOINTS)

BONE MARROW ASPIRATE + ANY KIND OF BONE SUBSTITUTE



INDICATIONS:

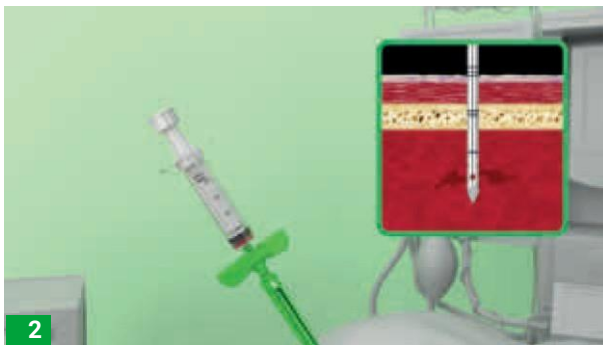
- SPINAL FUSIONS
- BONE MARROW LESIONS
- FOOT & ANKLE FUSIONS

BONE MARROW ASPIRATE + AUTOLOGOUS BONE DOWEL



INDICATIONS:

- AVASCULAR NECROSIS
- BONE MARROW LESIONS
- BONE REGENERATION
- TRAUMA PROCEDURES & FRACTURES



SURGICAL TECHNIQUE:

1. Introduce MARROW-STEM™ tip at least 2 cm beyond the cortical.
2. Remove the internal stylet, connect the VacLok syringe and aspirate the first cc of marrow.
3. Introduce the cannula till preferred depth and adjust the gear until in contact with the skin.
4. The rotation of the handle retracts the cannula 0,5 cm allowing to aspirate from a fresh site, with no peripheral blood contamination.
5. The 270 µm filter provided in the kit allows the separation from possible contamination of bone fragments, oil and fat.

STANDARD KIT COMPOSITION:

- No. 1 MARROW-STEM™ MSCs aspiration device
- No. 1 270 µm filter
- No. 1 VacLok AT syringe 20 ml
- No. 1 injection syringe 10 ml

