Proven results in cartilage repair

Supporting healthcare professionals for over 150 years
Proven Performance | Simplicity | Versatility
What is CARGEL® Bioscaffold?

CARGEL Bioscaffold is an easy, ready-to-use product applied during a single-step bone marrow stimulation procedure. It is easily prepared by mixing a buffer, a chitosan solution and the patient’s whole blood to create a liquid bioscaffold, resulting in superior cartilage repair.1,2

How does CARGEL Bioscaffold work?

- **A** Physically stabilizes a more voluminous blood clot
- **B** Provides structural framework for subsequent cellular ingrowth
- **C** Impedes blood clot retraction
- **D** Generates an adhesive bond between clot and surrounding cartilage

The above images are provided for illustrative purposes only.
Why choose CARGEL® Bioscaffold?

Proven Performance
CARGEL Bioscaffold has the highest standard of proven evidence in cartilage repair, as shown through Level I, randomized, controlled clinical trials at 1 and 5 years.¹

Improvement in cellular and structural tissue quality
CARGEL Bioscaffold treatment improves repair-tissue structure at 13 months by ICRS histological scoring of biopsies. The results also showed improved tissue cellularity and a smoother articulating surface.³

CARGEL VS MICROFRACTURE
Number of Improved ICRS Parameters
ICRS I, 4 of 6
ICRS II, 10 of 14

Superior Structure Parameters
Surface Architecture
Superficial Zone
Basal Integration
Overall Assessment

The biopsy images above represent the best of both groups. Results will vary.

*Please refer to the Instructions for Use (IFU) for a complete list of indications and contraindications.
Greater quantity of repair tissue
Statistically significant difference in % fill over 5 years with CARGEL® Bioscaffold compared to microfracture alone.

Better quality of repair tissue
Statistically significant difference in T2 relaxation time* over 5 years with CARGEL Bioscaffold compared to microfracture alone.

Significant modifications in healing sequence
Animal studies have shown increased bone remodeling, increased vascularization, and increased stromal cell recruitment with CARGEL Bioscaffold versus microfracture alone.⁴

* Lower scores for T2 indicate superior quality, with ~50 ms considered the average value for a control posterior region on the same condyle.
**Simplicity**

CARGEL® Bioscaffold is easy to use and is applied as a liquid, allowing it to conform to any lesion shape. CARGEL Bioscaffold eliminates the need for sizing, shaping, cutting, gluing and suturing, which are common with solid scaffolding technologies.

**PREPARE.** The lesion area is surgically prepared by standard bone marrow stimulation.

**MIX.** These steps can be done by a non-sterile nurse while the lesion is being surgically prepared.

**DELIVER.** Administer the CARGEL Bioscaffold/blood mixture to the lesion.

**Versatility**

Available for use arthroscopically or through a mini-open technique, and applicable in a broad range of lesions in all synovial joints, CARGEL Bioscaffold is highly versatile and adaptable.

**SIZE.** CARGEL Bioscaffold can be used in a variety of lesion shapes and sizes.

**INDICATIONS.** CARGEL Bioscaffold is indicated for use in all synovial joints.*

**PROCEDURES.** CARGEL Bioscaffold can be applied arthroscopically or through mini-open procedures.

*Please refer to the Instructions for Use (IFU) for a complete list of indications and contraindications.
Case report
Pre and post images of a repair using CARGEL® Bioscaffold with 13-month follow-up

41-year-old male, BMI: 27  |  Chronic chondral lesion  |  Lesion size: 3.85cm²

QUANTITATIVE MRI RESULTS
Lesion % Fill: 97%
Average Repair Tissue T2: 58 ms

Cartilage lesion  |  After debridement  |  After microfracture  |  Second look at 13 months

Courtesy of Dr. Manuel Leyes, Spain
Results may not represent typical outcomes. Results will vary.
### Ordering Information

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<th>Reference #</th>
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<tr>
<td>72204980</td>
<td>CARGEL® Bioscaffold</td>
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**B. Braun Dispensing Pin™**

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**Microfracture Pick**

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<tr>
<td>72202120</td>
<td>Microfracture Pick XL, 45°</td>
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<td>72202210</td>
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**Open Ring Curette**

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<td>Open Curette XL, reverse cut 6.0mm</td>
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**SPIDER2 Limb Positioner**

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<td>SPIDER2 Limb Positioner</td>
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<td>72203300</td>
<td>Switch Drape (case of 20)</td>
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<td>72203301</td>
<td>SPIDER2 Battery Pack</td>
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<td>72203840</td>
<td>SPIDER2 Battery Charger</td>
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<td>7210570</td>
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**Leg Accessories**

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<td>72203235</td>
<td>SPIDER Leg Accessory (left)</td>
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<td>SPIDER Leg Accessory (right)</td>
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<td>72203239</td>
<td>3D SPIDER Connector (one required for each Leg Accessory)</td>
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<td>SPIDER Leg Stabilization Kit (case of 10)</td>
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**In all approved countries (with the exception of Canada) CARGEL® Bioscaffold is indicated for all synovial joints. In Canada, CARGEL® Bioscaffold is indicated for the repair of Grade 3 or 4 cartilage lesions of the femoral condyles with areas of ≥ 2cm².**

**CARGEL® Bioscaffold is not available in the United States and its territories.**

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