BIOTECK®

OSTEOPLANT®

OMC-80

ORTHOPAEDICS

Preformed cortical-cancellous bone block for minimally invasive glenoid reconstruction



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OMC - 80

Preformed cortical-cancellous bone block for minimally invasive glenoid reconstruction

OMC-80 is a preformed, pre-drilled heterologous bone block of equine origin, designed to reconstruct the glenoid contour in *Bone Block* procedures.
Its geometry and the combination of cancellous and cortical bone facilitate its positioning and provide adequate mechanical strength during the fixation process.
The equine bone tissue from which OMC-80 is composed is treated using the Zymo-Teck® enzymatic deantigenisation process, which preserves type I bone collagen and the structural characteristics of the tissue, promoting graft integration and physiological bone remodelling.

PROPERTIES

- PREFORMED AND READY TO USE
- VERSATILE FIXATION OPTIONS
- CORTICAL-CANCELLOUS STRUCTURE

THE BENEFITS

REDUCES SURGICAL TIME
It minimises the intraoperative stages involved in graft preparation, thereby reducing surgical time by approximately 30 minutes.

COMPATIBLE
with cortical buttons or cerclage systems free from metal components.

RESILIENCE DURING FIXATION
The composition of OMC-80 helps to reduce the risk of the block breaking during fixation and handling.

WHEN TO USE

OMC-80 is used in the surgical procedure known as *Bone Block* when recurrent anterior shoulder instability is associated with a glenoid bone defect.
In particular, in the presence of:

- ANTERIOR MARGINAL BONE DEFECT OR ANTEROINFERIOR PART OF THE GLENOID CAVITY;
- RECURRENT ANTERIOR GLENOHUMERAL INSTABILITY;
- ANY CAPSULOLABRAL INSUFFICIENCY OR HYPERLAXITY, TO BE TREATED, WHERE INDICATED, WITH PROCEDURES INVOLVING SOFT TISSUE ARTHROPLASTY.

HOW TO USE

1. DEFECT ASSESSMENT
The bone defect and any associated lesions are assessed using pre-operative imaging and subsequent arthroscopic examination.

2. PREPARATION OF THE GLENOID
The anterior margin of the glenoid is exposed, smoothed and recontoured to create a bone bed suitable for contact with the graft.

3. TUNNEL CONSTRUCTION
Using a posterior guide, two parallel glenoid tunnels are created, aligned with the pre-drilled holes in the OMC-80.

4. INTRODUCTION OF GRAFT
The implant block to be grafted is introduced into the joint via a cannula inserted through the anterior arthroscopic portal and guided to the glenoid defect. The cancellous surface is brought into contact with the prepared bone bed and the graft is aligned with the profile of the glenoid.

5. FIXATION
The graft is stabilised through the tunnels using cortical buttons or a metal-free cerclage system made from high-strength straps.

6. FINAL CHECK
The position, stability and contact of the implant with the glenoid are checked. Where indicated, the procedure may be completed with capsulolabral repair and soft tissue reinforcement techniques, such as ASA.



GREATER PREDICTABILITY
Well-defined geometry and structural characteristics reduce the variability typically associated with donor grafts.



NO DONOR SITE
Avoids the need for autologous bone harvesting and the potential complications and morbidity associated with the harvest site.



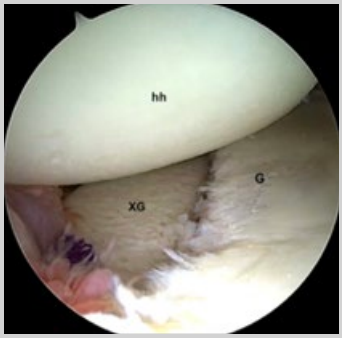
LONG-TERM STABILITY
Compared with the variability in resorption observed with some allografts, OMC-80 demonstrated volume retention at 24 months, with no resorption or graft failure.*

** Maiotti M, et al. Arthroscopic Subscapularis Augmentation With Xenograft Glenoid Bone Block in Patients With Recurrent Anterior Shoulder Instability. Arthrosc Sports Med Rehabil. 2023 May 21;5(3):e809-e816. doi: 10.1016/j.asmr.2023.04.008.*

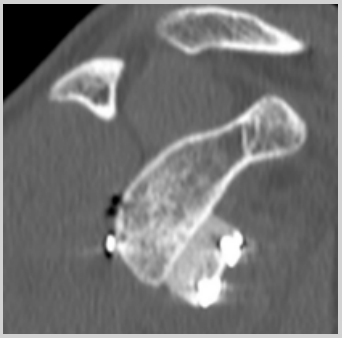
Clinical cases

FIXATION WITH BUTTON

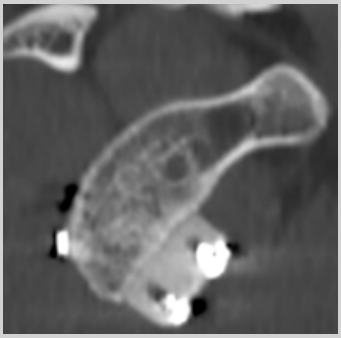
Excerpted from Maiotti et al. 2023 Arthroscopy, Sports Medicine, and Rehabilitation



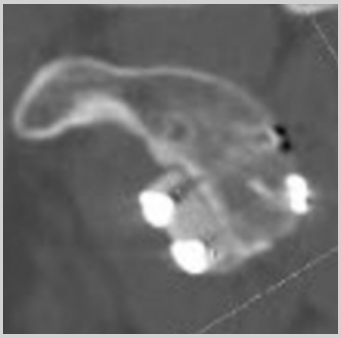
OMC-80 (XG) is positioned on the anterior glenoid rim, at the same level as the glenoid surface. G, glenoid; hh, humeral head; XG, xenograft.



Sagittal projection obtained from a postoperative follow-up computed tomography scan showing the correct positioning of OMC-80.



The figure shows sagittal cross-sectional computed tomography images at the 2-year follow-up.



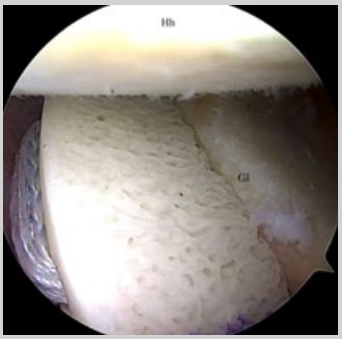
The figure shows sagittal cross-sectional computed tomography images at the 4-year follow-up. Note the absence of graft resorption.

CERCLAGE FIXATION

Excerpted from Maiotti and Massoni 2023, Arthroscopy Techniques



Right shoulder. Lateral decubitus position, anterior-superior view. Passing of nitinol wires with loops through the glenoid channels. Gl, glenoid; Hh, humeral head.



Lateral decubitus position, anterior-superior view. Positioning of the OMC-80 on the glenoid defect. Gl, glenoid; Hh, humeral head.



The OMC-80 is inserted into the joint via the lower metal cannula (red arrow).



Magnetic resonance imaging (axial view). The OMC-80 is perfectly flush with the glenoid surface (white arrow). The soft tissue coverage of the implant (capsule and subscapularis tendon) is clearly visible (red arrow).

MINIMALLY INVASIVE TECHNIQUE THAT PRESERVES THE ANATOMY

The *Bone Block* surgical technique can be used when the aim is to anatomically reconstruct the glenoid, preserve the coracoid and the coracohumeral tendon, or when the coracoid cannot be used, including in revision cases. It also allows the bone defect and soft tissue injuries to be treated separately.

The choice depends on the characteristics of the defect, any associated injuries, the quality of the tissues, the patient's needs and the surgeon's experience.

Go to active literature

OSTEOPLANT®

OMC-80



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OMC-80	Bone Block for Glenoid	1 pc 22 x 8 x 9 mm





BIOTECK®.
INNOVATING BIOMATERIALS.

Bioteck® is an Italian company that has been producing bone substitutes and protective membranes and solution successfully used in orthopaedics, neurosurgery and oro-maxillo facial surgery since 1995.
Scientific research and innovation are the guiding principles that have enabled **Bioteck®** to patent new production processes and to create unique bio-materials of high quality in terms of performance level and safety guarantees. Materials now used in 72 countries worldwide.
At its multi-functional centre for research and development and thanks to state-of-the-art production processes, every day **Bioteck®** works to pursue its key objective: to innovate bio-materials.

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BIOTECK ACADEMY.
SCIENTIFIC COMMUNITY FOR THE CULTURE OF THE CONSCIOUS CHOICE.

Bioteck Academy is the innovative scientific community which promotes the circulation and sharing of knowledge in the field of tissue regeneration applied to dentistry, maxillo-facial surgery, orthopaedics and neurosurgery.
Originally created as a center for collecting and enhancing the clinical and scientific knowledge developed through **Bioteck®**'s continuous research, has now evolved into an open platform for all professionals who wish to participate, contribute, and share their surgical experience.

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