FIELD OF APPLICATION/INDICATIONS

Use the chronOS Putty in regions requiring cancellous rather than cortical bone. This includes filling of bone defects and reconstruction of resected or damaged bone areas. Use the chronOS Putty as bone replacement for bone defects in non load-bearing areas, such as those resulting from the insertion and the revision of artificial joints, e.g. to fill the acetabular bone defects when replacing a prosthesis.

CONTRAINDICATIONS

Do not use chronOS Putty in:

- Acute and chronic infections in the operating area, e.g. inflammatory, bacterial bone diseases (posttraumatic or chronic osteomyelitis) and soft-tissue infections
- Untreated, malignant myeloma, Burkitt’s lymphoma and other lymphomas
- Defects in the area of an unclosed epiphyseal growth cartilage
- Defects in which the bone replacement takes on the load-bearing functions
- Open fractures
- Osteocartilaginous defects
- Limited renal function

ORDERING INFORMATION

chronOS Putty for Trauma

<table>
<thead>
<tr>
<th>Article number</th>
<th>Product name</th>
<th>Liquid to add</th>
</tr>
</thead>
<tbody>
<tr>
<td>710.7015</td>
<td>chronOS Putty, 1.0 cc</td>
<td>0.80 ± 0.25 ml</td>
</tr>
<tr>
<td>710.7025</td>
<td>chronOS Putty, 2.5 cc</td>
<td>2.00 ± 0.5 ml</td>
</tr>
<tr>
<td>710.7035</td>
<td>chronOS Putty, 5.0 cc</td>
<td>4.00 ± 0.5 ml</td>
</tr>
<tr>
<td>710.7045</td>
<td>chronOS Putty, 10.0 cc</td>
<td>8.00 ± 0.5 ml</td>
</tr>
</tbody>
</table>

Bone Access Needle

INTENDED USE

The bone access needle is a sterile-packed kit used in procedures where access to bone is required. The bone access needle is inserted into the bone with the aid of imaging procedures. The bone access needle can also be used for providing access for appropriate guide wires, for obtaining bone marrow by aspiration technique and for inserting therapeutic materials, including bone cements. When using the bone access needle in connection with other instruments and/or therapeutic materials, the Surgical Technique and/or the Instructions for Use issued by the relevant manufacturers should be observed.

CONTRAINDICATIONS

This product must not be used in patients with coagulation disorders or infections.

ORDERING INFORMATION

Bone Access Needle

<table>
<thead>
<tr>
<th>Article number</th>
<th>Diamond tip, 11G front-opening cannula, 100 mm, violet, pack of 1 unit, sterile</th>
</tr>
</thead>
<tbody>
<tr>
<td>03.702.2415</td>
<td>Diamond tip, 11G front-opening cannula, 150 mm, violet, pack of 1 unit, sterile</td>
</tr>
</tbody>
</table>

Enhanced remodeling
Flexible handling
Osteoinductive when mixed with bone marrow

chronOS PUTTY – TRAUMA.

THE HYALURONIC SOLUTION.

© DePuy Synthes Biomaterials, a division of Synthes GmbH. 2016. All rights reserved. 036.000.756  DSEM/BIO/1215/0047  08/16
chronOS PUTTY – TRAUMA.

THE HYALURONIC SOLUTION.

ENHANCED REMODELING
chronOS Granules
chronOS Putty consists of chronOS Granules and sodium hyaluronate of non-animal origin. chronOS is made of pure β-tricalcium phosphate (β-TCP).

Osteoconductive
• Optimised pore size scaffold for bone tissue infiltration
• Interconnected pores for bone growth through the whole implant

100% Synthetic
• Controlled quality

FLEXIBLE HANDLING
Sodium hyaluronate
Sodium hyaluronate is a polysaccharide naturally occurring in the human body. It plays an essential role in cell proliferation, migration and adhesion. Its degradation products induce angiogenesis. Sodium hyaluronate has also been shown to stimulate bone formation. The synthetic sodium hyaluronate used in chronOS Putty provides flexible handling properties and confers positional stability to the product during handling and use.

OSTEOINDUCTIVE WITH BONE MARROW
Bone marrow aspirate and blood
Autologous bone marrow features an enhanced osteogenic potential. Mixing chronOS Putty with bone marrow or blood introduces blood cells, growth factors and, in the case of bone marrow, osteoprogenitor cells. Perfusion of the β-TCP component of chronOS Putty with bone marrow aspirate has been shown to have the following advantages:
• 4 times more bone 6 weeks postoperatively if perfused with bone marrow vs. blood
• Clear remodeling of chronOS into new host bone 12 weeks postoperatively

References