



genex[®]
Bone Graft Substitute

PREPARATION
GUIDELINES



genex[®]

Bone Graft Substitute



ZIMMER BIOMET
Moving You Forward.™

Simple to use synthetic absorbable material designed to promote regeneration of bone in osseous defects.

Your choice of synthetic bone graft not only influences the efficiency of each surgical procedure, it has considerable impact on the long-term outcome.

genex is a catalyst for bone healing. It complements the body's natural healing processes, enabling the optimal remodeling of bone architecture to that of native trabecular bone. In 12 months, genex is completely absorbed and remodeled while leaving no foreign artifacts after resorption.^{1,2}

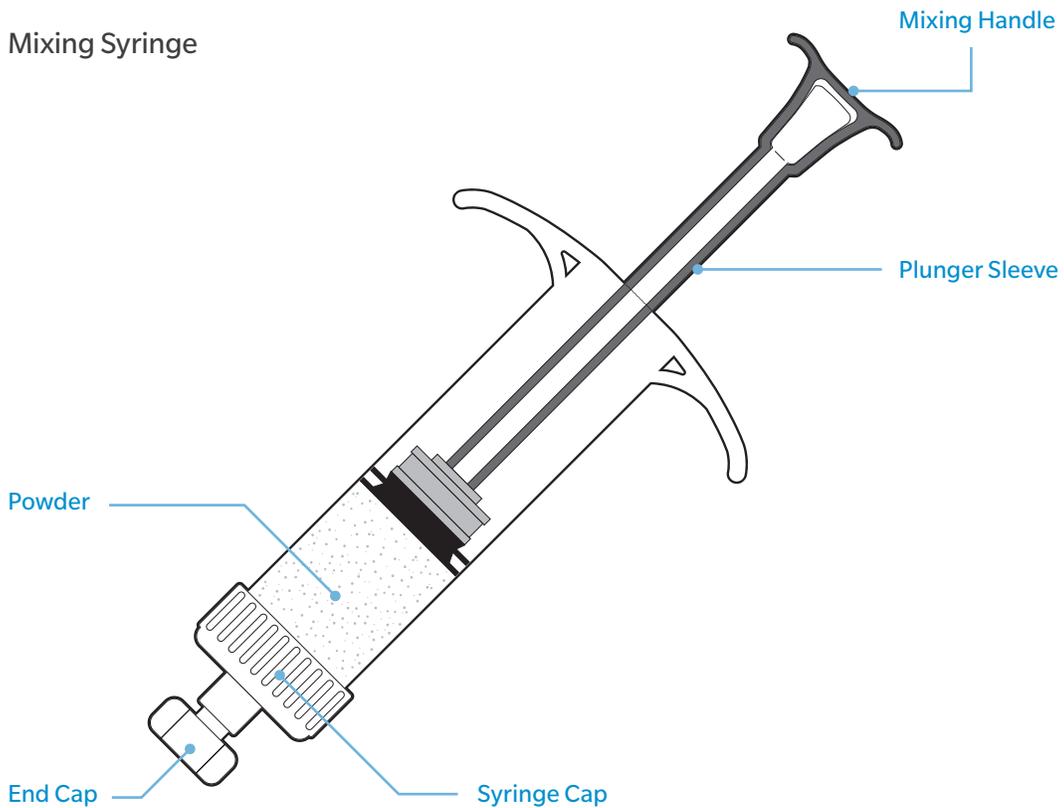
1. Yang HL et al. Bone healing response to a synthetic calcium sulfate/ β -tricalcium phosphate graft material in a sheep vertebral body defect model. J Biomed Mater Res B Appl Biomater 2012;100B(7):1911–21. • 2. Clinical case study: Mr A Nisar and Mr S Gopal; Proximal femur fracture, Data on file.

Preparation Guidelines

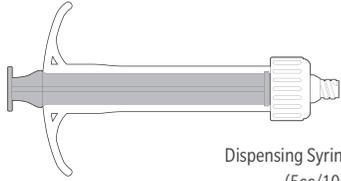
Preparation of genex Bone Graft Substitute takes only a few careful moments. Use only the mixing solution provided. Do not add any additional substances to the paste. All times stated are measured from the start of the timer.

Components

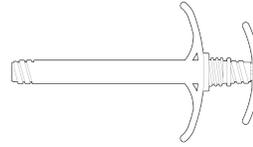
Mixing Syringe



Components (cont)



Dispensing Syringe
(5cc/10cc)



6mm ID, 8mm OD, 72mm IL, open bore plastic
cannula with handle and obturator (5cc/10cc)



3.15mm ID, 3.75mm OD, 70mm IL,
plastic cannula (9G)*



2.5mm ID, 3.5mm OD, 100mm IL,
plastic cannula (11G)*

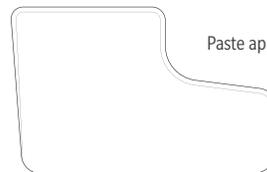


6mm ID, 8mm OD, 157mm IL,
open bore plastic cannula with
handle and obturator (10cc)

* Cannulas contain removable lure-lock adapters



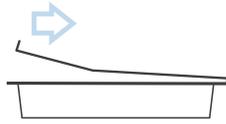
Mixing solution



Paste applicator (5cc/10cc)

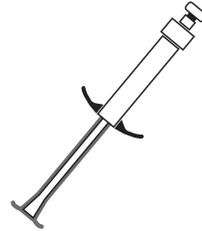
Usage Guidelines

1.



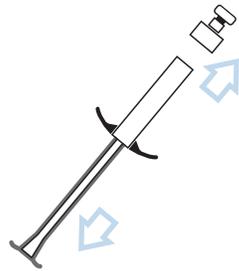
Open pack and remove all components using an aseptic, non-touch technique

2.



Remove the mixing syringe from the foil pack

3.



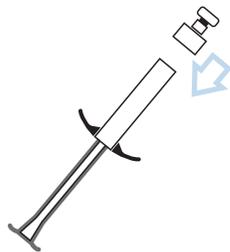
Hold the syringe upright with the syringe cap uppermost. Unscrew the syringe cap and pull the plunger fully back

4.



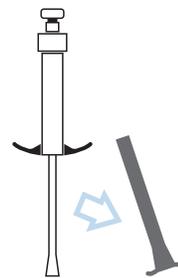
Slowly add the mixing solution (extrude all of the mixing solution into the syringe)

5.



Refit the syringe cap

6.



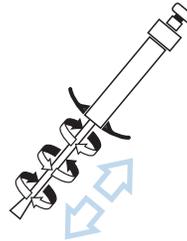
Remove the plunger sleeve (DO NOT DISCARD SLEEVE) to convert the plunger to a mixing handle

7



Start timer

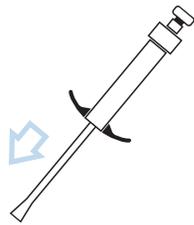
8



15 SEC

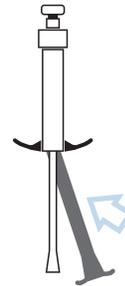
TWIST and **ROTATE** the mixer back and forth with consistent strokes for approximately 15 seconds. Ensure that all material is thoroughly mixed and has a paste-like consistency

9



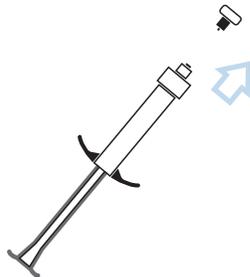
Pull the mixing handle fully back

10



Replace the plunger sleeve to convert the mixing handle back to a plunger

11



Remove the end cap from the syringe cap

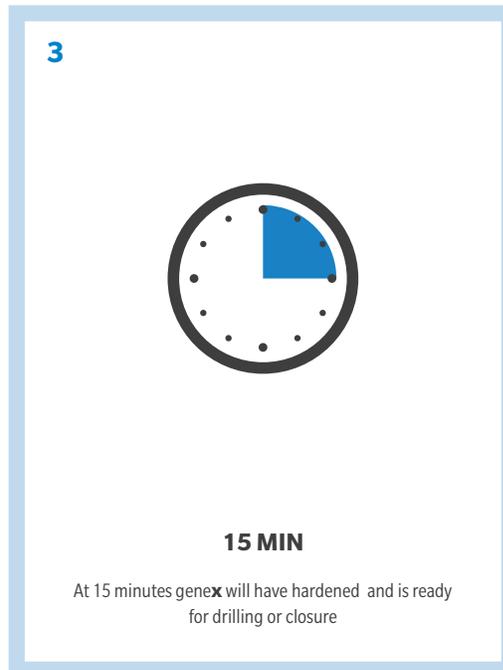
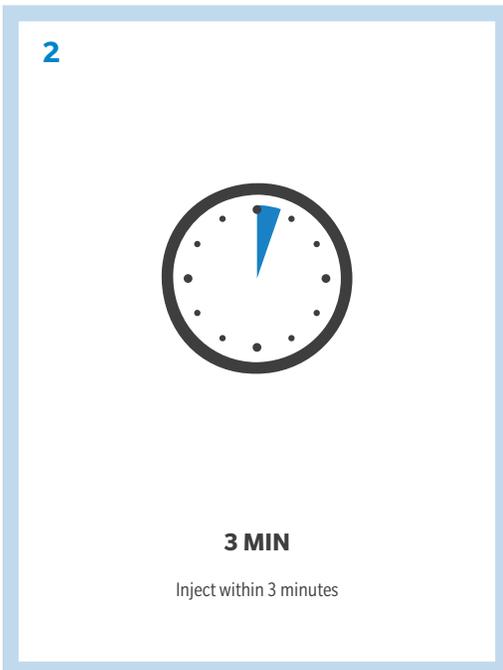
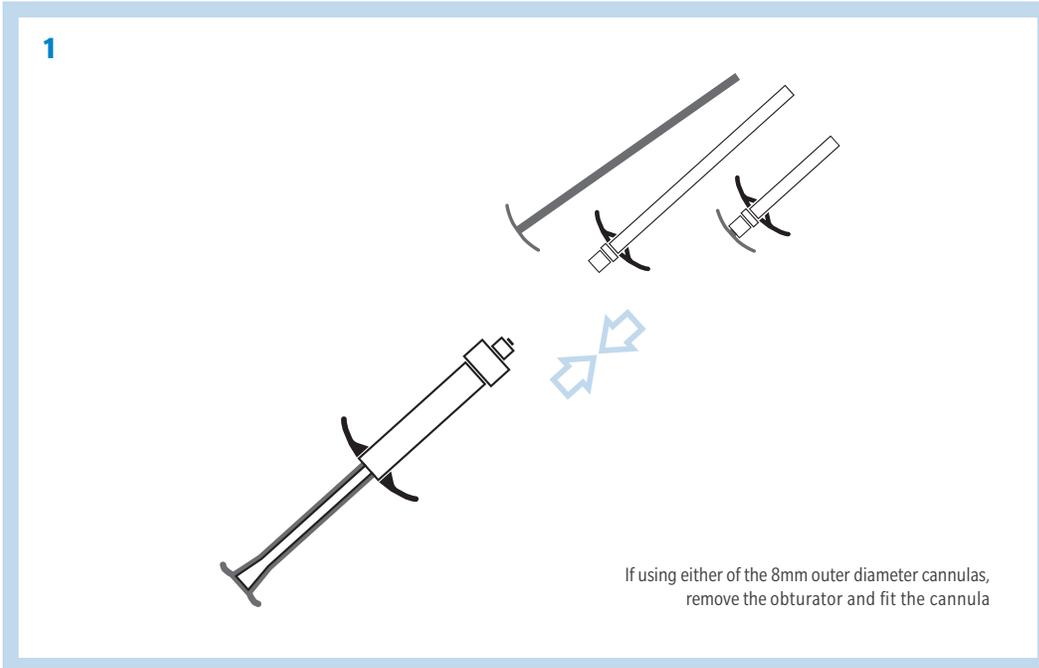
12



genex is now ready to implant/inject.
Proceed to delivery option 1, 2, 3 or 4

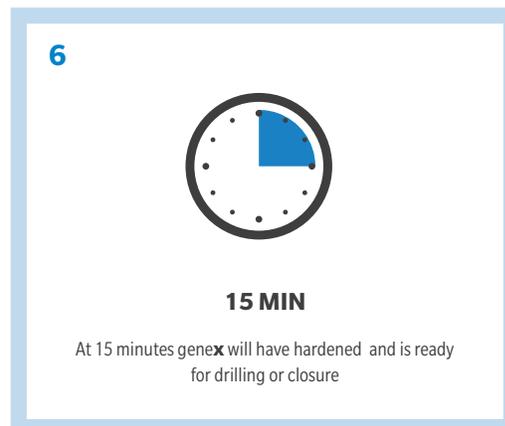
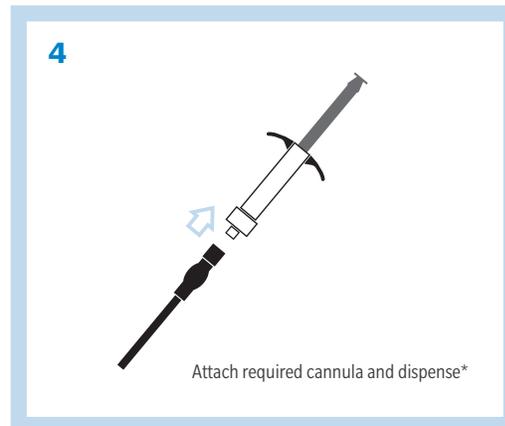
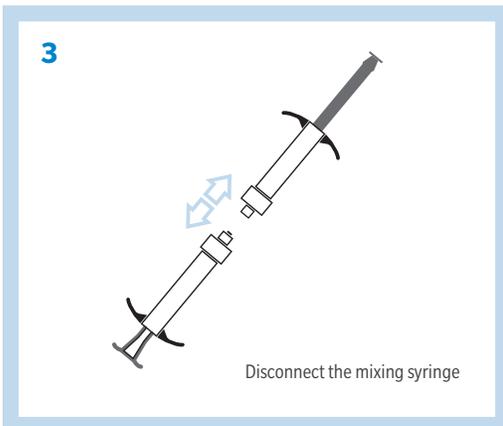
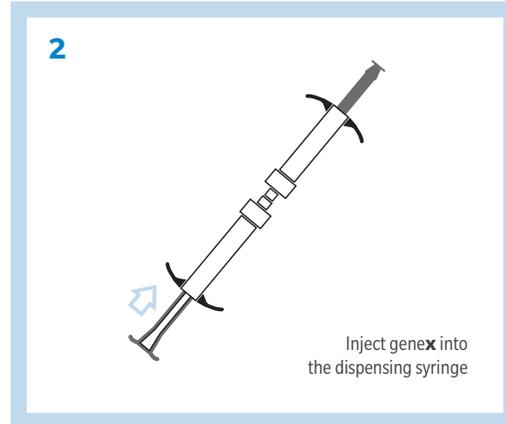
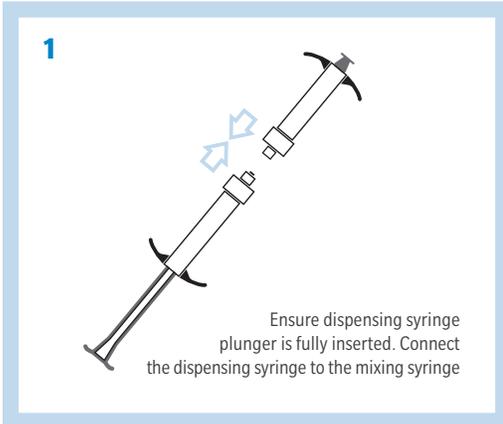
Delivery Options

OPTION 1. Injecting using 8mm outer diameter cannula (5cc/10cc)



OPTION 2. Injecting using 9, 11 or 12 gauge cannulas

For 3cc select and fit required cannula. For 5cc/10cc follow instructions below



* **Warning: The dispensing syringe has reverse threads and does not have a standard lure-lock connection.** ▶ Removable lure-lock adapters can be found on the two clear cannula's in the kit enabling them to properly connect. ▶ The radio-opaque cannula is not removable and can connect directly.

Delivery Options

OPTION 3. Manual implantation

1



Dispense paste from mixing syringe
and wait until 3 minutes

2



Mold and
implant genex

3



5 MIN

Do not manipulate
after 5 minutes

4

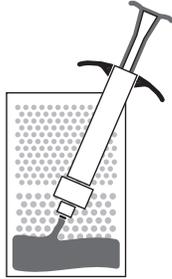


15 MIN

At 15 minutes genex will have hardened
and is ready for drilling or closure

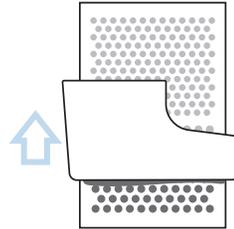
OPTION 4. Implanting beads (5cc/10cc)

1



Select the size of bead required and dispense a uniform layer of paste onto the bead mat provided

2



Use the paste applicator to ensure complete filling of each bead cavity

3



Allow paste to set undisturbed for at least 10 minutes after mixing

4



Flex bead mat to release beads

5



Before implanting the beads, it is recommended that the structural integrity is checked by compressing the bead between thumb and index finger to confirm the bead has set before implantation

SURGEON'S TIPS

1. Use timer during preparation
2. If injecting, prepare site prior to commencing geneX preparation
3. If implanting beads, prepare geneX in advance of preparing site
4. If using an alternative cannula, a 12 gauge is the narrowest geneX paste will flow through

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Biocomposite, LTD is the responsible manufacturer of genex® Bone Graft Substitute.

For complete product information, including indications, contraindications, warnings, precautions, and potential adverse effects, see the package insert and www.zimmerbiomet.com or contact your local Zimmer Biomet sales representative; for additional product information, visit www.zimmerbiomet.com.

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3839.1-US-en-Issue Date-2022-04-15



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