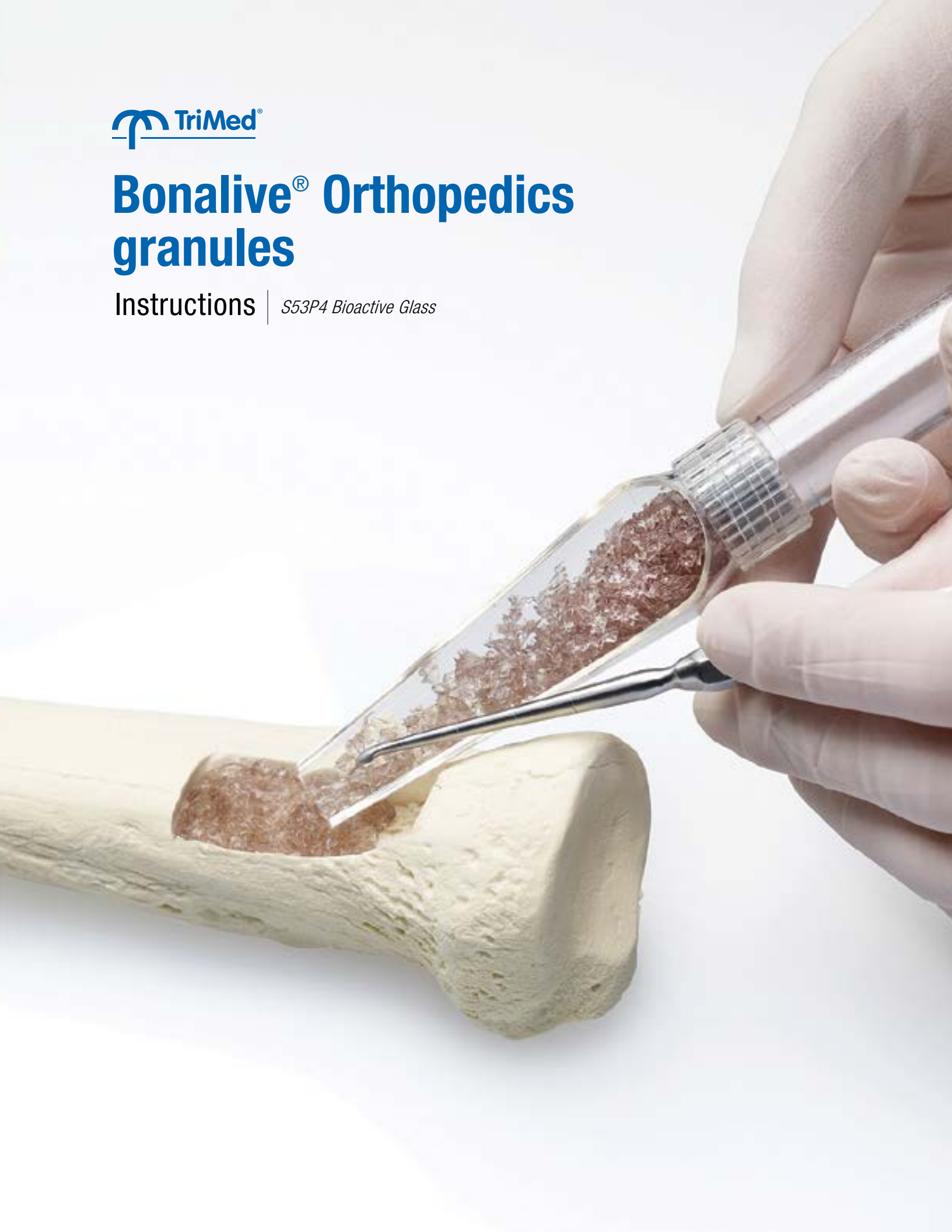




# Bonalive<sup>®</sup> Orthopedics granules

Instructions | *S53P4 Bioactive Glass*





### Open Sterile Pouch

- Open peel pouch from corners and aseptically remove sterile tray.
- Remove applicator from tray.



### Moisten Granules

- Using a syringe, slowly inject sterile saline through the cap membrane.
- Ensure that granules are evenly moistened by turning and tapping the applicator.

Saline volume is roughly 1/3 of granule volume.

**Note:** Saline injection may increase pressure inside the applicator. Pressure can be released by detaching injection needle or unscrewing applicator cap.



### Install Shovel

- To prevent spilling, hold applicator vertically with the cap end up.
- Unscrew cap and remove membrane.
- Screw shovel onto applicator

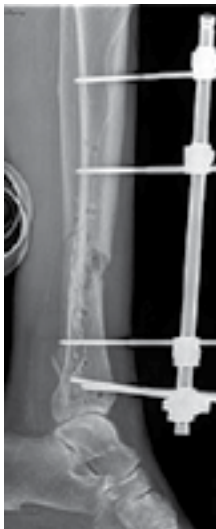


## Implant Granules

- Turn applicator to a horizontal position and push plunger to slide moistened granules onto the shovel.
- Align applicator over defect site and implant moistened granules into defect with the aid of a sterile instrument.
- Gently pack implanted granules evenly throughout defect.

**Note:** Any granules that may have fallen outside the bone defect should be removed.

## X-RAYS



Multiple revisions,  
persistence of bacteria  
and implantation  
of antibiotic  
releasing beads



Thorough debridement  
was performed and  
10cc S53P4 bioactive  
glass was implanted



12 months post-op

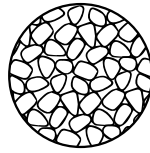


18 months post-op

Pictures: Courtesy of BG Unfallklinik Duisburg, Germany

### Small Granules 0.5 - 0.8mm

14120 - 2.5cc  
14130 - 5cc



### Large Granules 1.0 - 2.0mm

14330 - 5cc  
14340 - 10cc

