

## DirectInject Value Analysis Brief

### **Description of Product:**

DirectInject is a self-setting, calcium phosphate cement delivered in a sterile dual paste system that is ready for implantation immediately upon the surgeon's request. It is intended to repair neurosurgical burr holes, contiguous craniotomy cuts and other cranial defects not intrinsic to the stability of the bony structure. It is also intended for augmentation or restoration of bony contour in the craniofacial skeleton to include the cranial and zygomatic bones.

### **Value Proposition:**

Stryker has paved the way in neurosurgical bone cements since 1999, continually pushing the boundaries of innovation. DirectInject is the first and only on-demand hydroxyapatite (HA) cement, redefining ease-of-use in cranial closure.

### **On-Demand:**

DirectInject is ready for implantation immediately upon request and requires no manual mixing or preparation, thus removing the complexity of bone cement preparation. The double barrel syringe contains two pastes that form a homogenous HA cement upon exiting the innovative mixer-cannula. This results in a two-step process, allowing OR staff to simply remove the transit cap and attach the mixer-cannula seconds prior to implantation. DirectInject is ready when you are.

### **Consistent Viscosity:**

DirectInject is designed to maintain a stable viscosity throughout implantation, resulting in negligible displacement of cement and no run-out. Typical HA cements require a laborious mixing process, requiring the surgeon to wait for the cement to cure to an ideal viscosity. DirectInject's innovative mixer-cannula is designed to produce cement with a consistent viscosity during each use.

### **Flexible Implantation**

DirectInject is packaged with two mixer-cannulas which allows for dual interval implantation. DirectInject gives you the flexibility to pause implantation while addressing other surgical needs, without jeopardizing the cement in the syringe. This feature may result in potential cost savings, removing the need to open additional boxes during surgery.

### **Additional Features**

DirectInject delivers excellent features that surgeons have come to expect from HA cements. It is isothermic and radiopaque, giving off no heat or toxic fumes and is visible on post-operative scans. DirectInject also offers a fast set time of 7 minutes and 30 seconds<sup>1</sup> and the ability to set up in a wet field.



## Reconstructive

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Hips  
Knees  
Trauma & Extremities  
Foot & Ankle  
Joint Preservation  
Orthobiologics & Biosurgery

## MedSurg

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Power Tools & Surgical Accessories  
Computer Assisted Surgery  
Endoscopic Surgical Solutions  
Integrated Communications  
Beds, Stretchers & EMS  
Reprocessing & Remanufacturing

## Neurotechnology & Spine

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Craniofacial  
Interventional Spine  
Neurosurgical, Spine & ENT  
Neurovascular  
Spinal Implants

*A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery.*

*The information presented is intended to demonstrate the breadth of Stryker product offerings. A surgeon must always refer to the package insert, product label and/or instructions for use before using any Stryker product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area*

1: Stryker DirectInject – Verification and Validation of Setting Time Report

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