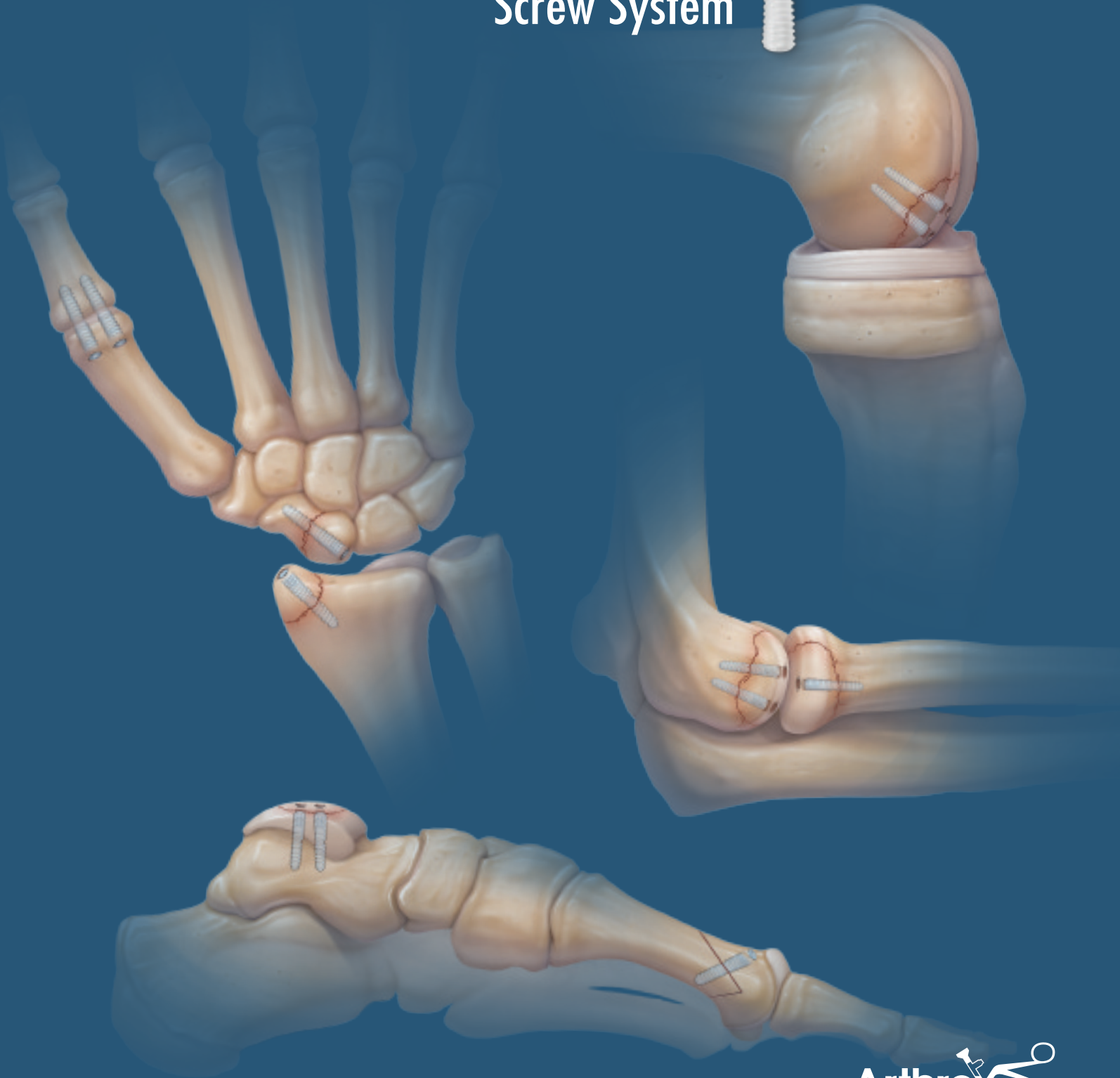


Arthrex[®]

Bio-Compression

Screw System



Bio-Compression Screw System



3 mm Bio-Compression Screw

Bio-Compression Screws (BCS) are versatile and may be used to treat a broad range of indications in both lower and upper extremities. Designed with a stepped pitch and taper, this screw draws two fragments together using straightforward instrumentation for drilling and tapping. Made of solid enhanced PLLA material, the BCS absorbs over time without losing strength during the healing phase.

Foot & Ankle

Applications in the foot and ankle include OCDs, fractures, osteotomies and arthrodesis of the tarsals, metatarsals and phalanges. From bunion correction to trauma management, the Bio-Compression Screw provides excellent compression and holding power maintained throughout the normal healing period.**

For lower extremity surgery, the Bio-Compression Screw may be inserted either percutaneously or in an open procedure. Accurate placement of the screw can be ensured by using the cannulated instrumentation in the set.



Post-Op

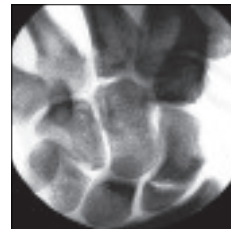


Post-Op

Hand, Wrist & Elbow

The Bio-Compression Screw is an excellent solution for complications such as hardware prominence and postoperative imaging. Arthrodesis of small bones in the wrist or fingers are also situations where the compression and zero-prominence benefits of the screw come into play.

For upper extremity surgery, the Bio-Compression Screw may be inserted either percutaneously or in an open procedure. Accurate placement of the screw can be ensured by using the cannulated instrumentation in the set.



Pre-Op



Post-Op

Knee OCD

Osteochondral fragments, flaps or grafts with sufficient bone stock are ideal candidates for fixation with the Bio-Compression Screw.

Preoperatively, radiographs and MRIs should be examined to determine location and size of the osteochondral defect and its suitability for fixation. For the more common medial condyle defect, the lateral portal is used for visualization and the medial portal is used for hardware placement. The fracture site should be debrided and brought down to bleeding bone using burrs, osteotomes, Chondro Picks, curettes, or a 2 mm drill bit (per surgeon preference).*

Postoperatively, the patient should be limited to nonweight-bearing or TTWB for 6 – 8 weeks with full range-of-motion. Begin weight-bearing at 6 – 8 weeks and a full return to activity at 12 weeks or upon radiographic healing.*



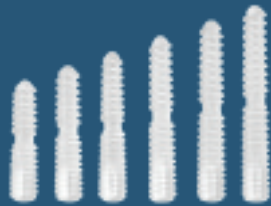
Pre-Op



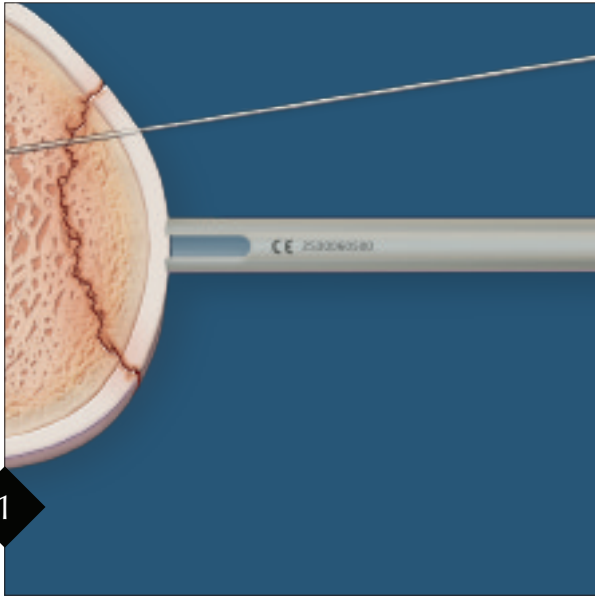
Post-Op

*standard of care

**Data on file

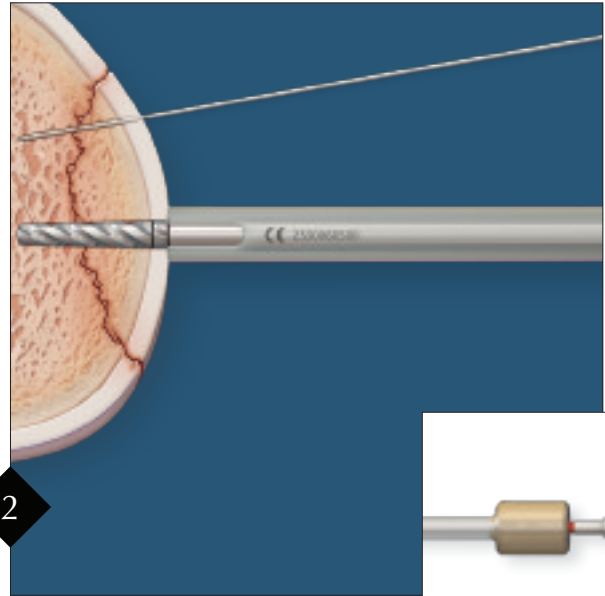


3.0 Bio-Compression Implants
Solid
In Lengths 16 – 26 mm
Actual Size



1

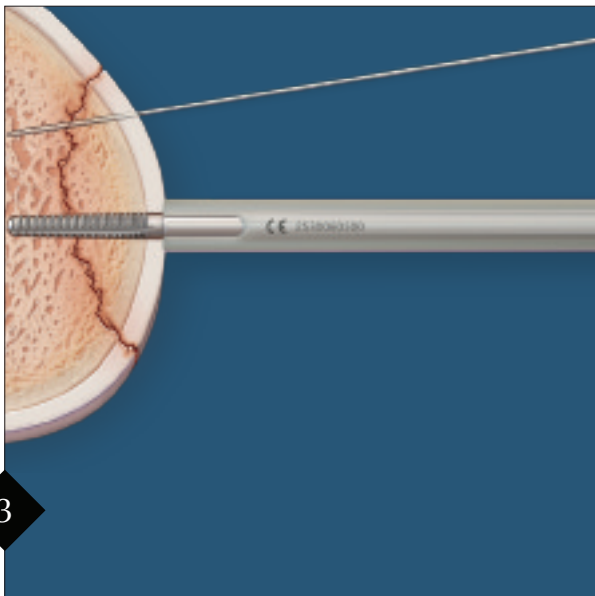
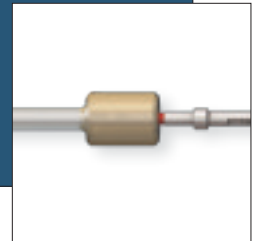
For provisional fixation, secure the osteochondral defect/flap with one or two K-wires such that they will provisionally stabilize the fragment during screw insertion and not interfere with the desired screw locations.



2

In articular applications, drill through a clear cannula with the tapered drill until the shoulder of the drill contacts the cannula and the second laser line is at the surface. This will set the screw 2-3 mm deep.

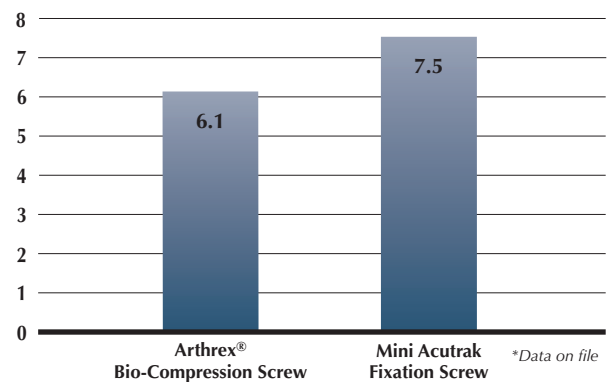
In nonarticular applications, drill to the first laser line. Orientation of the first screw should be perpendicular to the fracture for optimal compression. Any subsequent screws should be from slightly divergent angles to provide multi-planar stability.



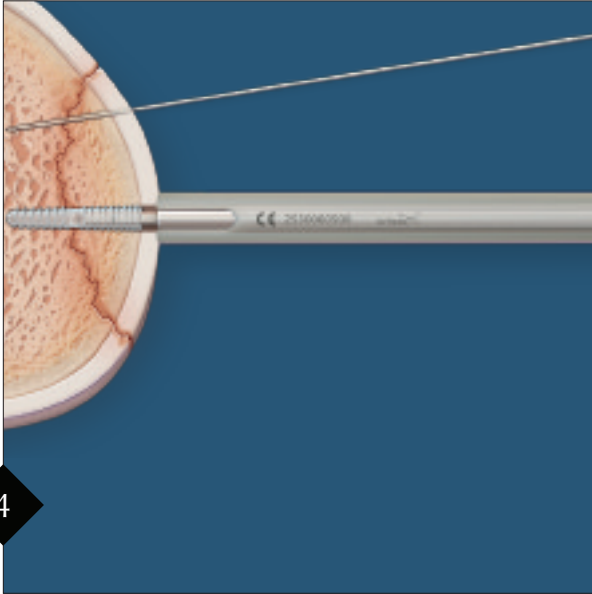
3

Tap the drill hole through the clear cannula with a tapered tap until the shoulder of the tap contacts the cannula. This will correspond to the end of the drill hole. In nonarticular applications, tap until the threads are just buried.

Compressive Load, 20 mm (lbf)*

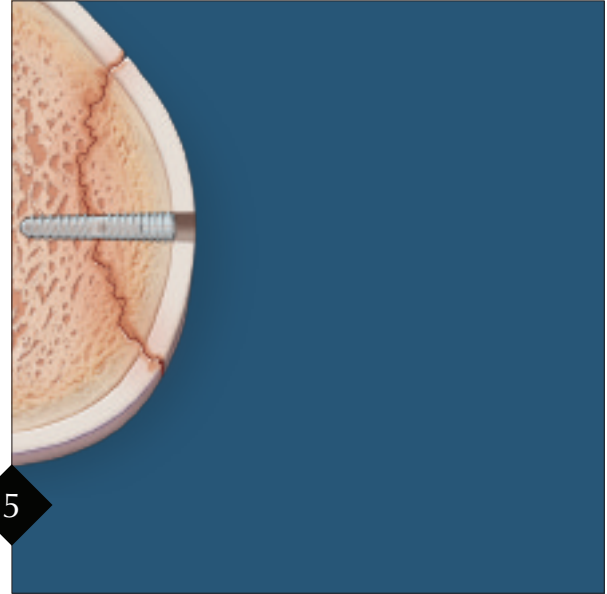


Test showed no statistically significant difference in compressive load



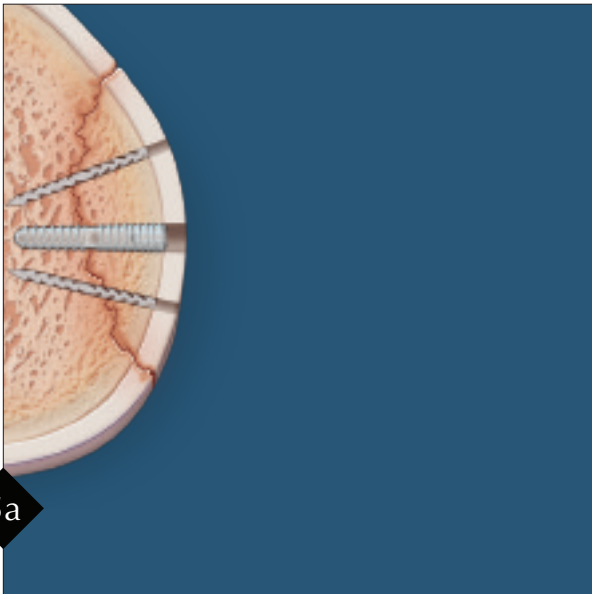
4

Load the Bio-Compression Screw onto the tip of the hex driver. The screw will remain 3 mm from the smooth shaft of the driver when seated. Insert the Bio-Compression Screw through the clear cannula until the shoulder of the driver contacts the cannula. Typically the tapered screw will easily insert 60% before it engages bone. At full seating, the screw should be 2-3 mm below the articulating surface. Disengage the driver by pulling straight out.



5

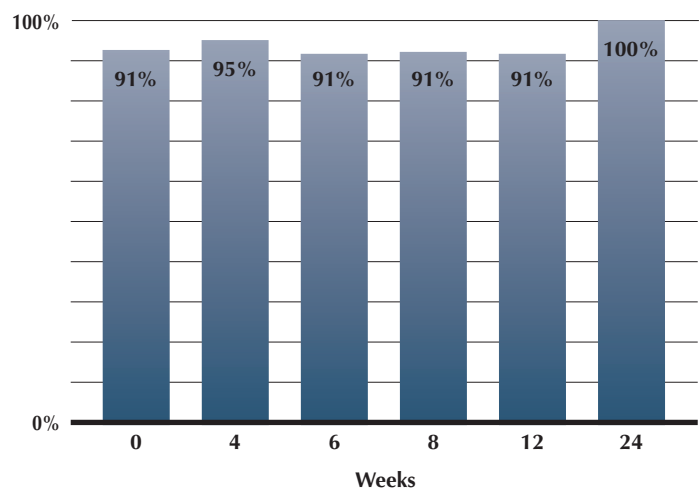
Insert additional Bio-Compression Screws if needed using the same technique.



5a

Should a smaller size rotational fixation be desired, Chondral Darts™ or a TRIM-IT Drill Pin® (if performed open) can be placed adjacent to the Bio-Compression Screw.

Enhanced PLLA Strength Retention/ Normalized Shear Force*



Test showed no statistically significant difference in shear force over time

*Data on file

Ordering Information

3 mm Bio-Compression Screw Instrumentation Set (AR-5025S) includes:

Bio-Compression Screw Driver, noncannulated, 2.7 mm Small Handle w/AO Connection	AR-5025DB AR-2001AOT
Bio-Compression Screw Dilator Tap, 20 mm	AR-5025TB
Bio-Compression Screw Driver Guide, 20 mm	AR-5025G
Bio-Compression Screw Drill Bit, 20 mm	AR-5025TD
Bio-Compression cannulated Dilator Tap, 16 mm	AR-5025TBC-16
Bio-Compression cannulated Dilator Tap, 18 mm	AR-5025TBC-18
Bio-Compression cannulated Dilator Tap, 20 mm	AR-5025TBC
Bio-Compression cannulated Dilator Tap, 22 mm	AR-5025TBC-22
Bio-Compression cannulated Dilator Tap, 24 mm	AR-5025TBC-24
Bio-Compression cannulated Dilator Tap, 26 mm	AR-5025TBC-26
Bio-Compression Screw cannulated Drill Bit, 16 mm	AR-5025TDC-16
Bio-Compression Screw cannulated Drill Bit, 18 mm	AR-5025TDC-18
Bio-Compression Screw cannulated Drill Bit, 20 mm	AR-5025TDC
Bio-Compression Screw cannulated Drill Bit, 22 mm	AR-5025TDC-22
Bio-Compression Screw cannulated Drill Bit, 24 mm	AR-5025TDC-24
Bio-Compression Screw cannulated Drill Bit, 26 mm	AR-5025TDC-26
Bone Reduction Forceps w/ teeth	AR-4160FT
Depth Device, cannulated	AR-5025DG
Bio-Compression Screw Instrumentation Case	AR-5025C

Implants:

Bio-Compression Screw, 3 - 3.7 mm x 16 mm	AR-5025B-16
Bio-Compression Screw, 3 - 3.7 mm x 18 mm	AR-5025B-18
Bio-Compression Screw, 2.7 mm - 3.7 mm x 20 mm	AR-5025B-20
Bio-Compression Screw, 3 - 3.7 mm x 22 mm	AR-5025B-22
Bio-Compression Screw, 3 - 3.7 mm x 24 mm	AR-5025B-24
Bio-Compression Screw, 3 - 3.7 mm x 26 mm	AR-5025B-26

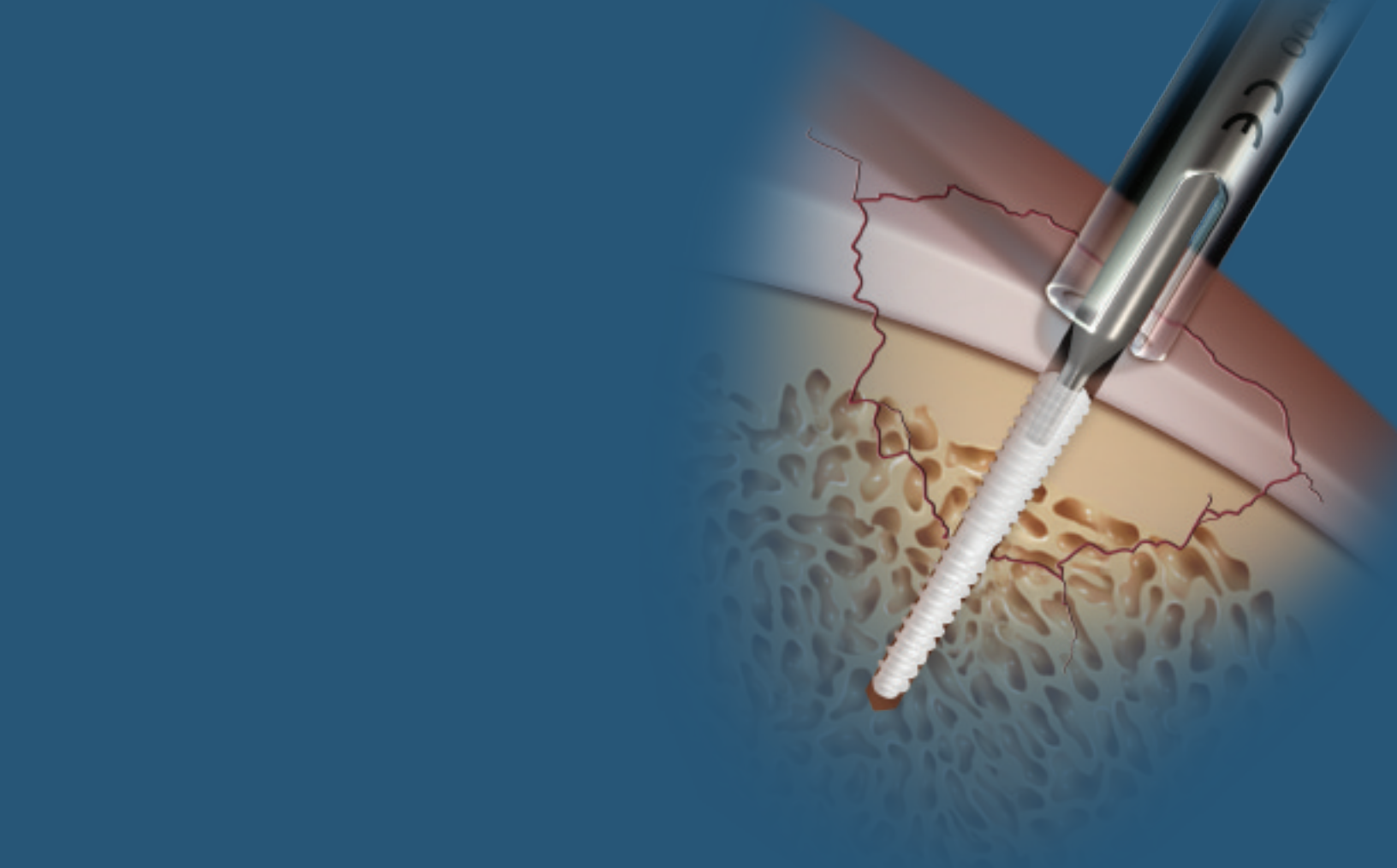
Disposable Accessory (may be used with both sets):

Guidewire, w/ Trocar Tip, .045", 1.1 mm	AR-5025K*
---	-----------

Optional:

Bio-Compression Screw Instrumentation Plate	AR-5025C-03
---	-------------

*Necessary for procedure, order separately



Arthrex®

www.arthrex.com

... up-to-date technology
just a click away

Developed in conjunction with Robert Scheinberg, MD, Dallas TX; and Brian Cole, MD, Chicago IL

©2016, Arthrex Inc. All rights reserved. LB1-0436-EN_J