









ZimVie DENTAL SOLUTIONS

Implant Treatment Options for Vertical Height Deficiencies

The T3 Short Implant's length and features are designed to provide an implant treatment option in some challenging clinical cases where the bone height is insufficient for standard length implants

The Clinical Challenge:

In areas with minimal bone height, providing implant treatment may require complex surgical procedures, such as:

- A sinus lift procedure in the maxilla
- Vertical ridge augmentation in the mandible due to the proximity to the mandibular nerve

Clinical Case by: Dr. Stavros Pelekanos,⁺ Athens, Greece.

A 32-year-old male patient presented with diminished bone height under the sinus secondary to a fractured root and extraction of the maxillary left first molar eight weeks prior to surgery.



Fig. 1: Minimal bone height under the maxillary sinus.



Fig. 1: Preoperative periapical radiograph showing missing tooth number 14 [26].



Fig. 2: Reduced vertical bone height above the inferior alveolar nerve canal.



Fig. 2: A 6.0 mmD x 6.0 mmL T3 Short Implant and healing abutment was placed in a singlestage protocol.

Clinical Treatment by: Dr. Stefano Sivolella, Padova, Italy.

A 60-year-old female patient presented with a hopeless first molar due to caries, root resorption and severe alveolar bone loss as a result of generalized periodontitis; the inferior alveolar nerve was in close proximity (approximately 7.0 mm).



Fig. 1: Preoperative periapical radiograph showing hopeless tooth number 30 [46].



Fig. 2: A 6.0 mmD x 6.0 mmL T3 Short Implant and definitive crown inserted at nine months post-implant placement.

Drs. Pelekanos and Sivolella have or had, financial relationships with ZimVie Dental resulting from speaking engagements, consulting engagements and other retained services.

Differentiating Technology

T3 Surface

Blasted and acid-etched implant surface with an average roughness of 1.4 μm along the full length of the implant.^

Initial Bone-to-Implant Contact (IBIC)

The dimensions of the surgical instrumentation and the T3 Short Implant provide a tight implant-to-osteotomy fit, to assist with primary stability.²

Implant/Abutment Clamping Force

Proprietary^{*} Gold-Tite Surface lubrication allows the screw to rotate further, increasing clamping force and maximizing abutment stability.³

Platform Switching**

Platform switching medializes the implant/abutment junction (IAJ) redirecting the reformation of the biologic width, thus helping to maintain bone levels.⁴

Coarse and fine micron surface features are designed to create an average mean surface roughness value of 1.4 µm along the full length of the implant.¹

- Coarse: (10+ microns) via resorbable calcium phosphate media blast
- Fine: (1 - 3 microns) via Dual Acid-Etching (DAE) on top of the blasted surface



Option for nano-scale features along the full length of the implant via (DCD) Discrete Crystalline Deposition of calcium phosphate



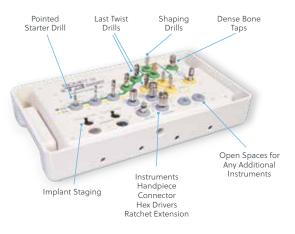
- 1 Gubbi P', Towse R'. Quantitative and Qualitative Characterization of Various Dental Implant Surfaces. Poster Presentation: European Association for Osseointegration, 20th Annual Meeting; October 2012; Copenhagen, Denmark. To view the poster, please visit www.biomet3i.com/pdf/Posters/Poster_421_EAO_Final.pdf
- Meltzer AM¹. Primary stability and initial bone-to-implant contact: The effects on immediate placement and restoration of dental implants. J Implant Reconstr Dent. 2009;1(1):35-41.
 Byrne D, Jacobs S, O'Connell B, Houston F, Claffey N. Preloads generated with repeated tightening in three types of screws used in dental implant assemblies. J. Prosthodont. 2006 May–Jun;15(3):164-171.
- 4 Boitel N, Andreoni C, Grunder U', Naef R, Meyenberg K'. A Three Year Prospective, Multicenter, Randomized-Controlled Study Evaluating Platform-Switching for the Preservation of Peri-implant Bone Levels. Academy of Osseointegration, 26th Annual Meeting: 2011 March 3-5; Washington DC. To view the poster, please visit www.biomet3i.com/Resource%20 Center/Publications%200f%20Interest/Platform_Switching_for_the_Preservation_of%20Peri_Implant%20Bone%20Levels.pdf. A Biomet 3i sponsored study.
- t The authors conducted this research while employed at Biomet 3i.
- [†] Drs Grunder, Meltzer and Meyenberg have or had, financial relationships with Zimmer Biomet Dental resulting from speaking engagements, consulting engagements and other retained services.
- * Pre-clinical studies are not necessarily indicative of clinical results.
- ** Placement of a smaller diameter restorative component than the diameter of the implant seating surface.

Surgical Kit

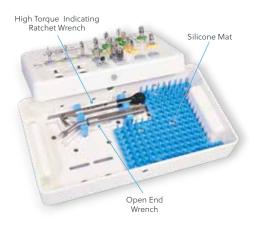
- Everything needed to place a T3 Short Implant in one compact kit
- Instrumentation specific to the T3 Short Implants
- The drilling sequence undersizes the osteotomy in diameter by 1.15 mm
- 5.0 mm diameter implants: Yellow Path
- 6.0 mm diameter implants: Green Path



Kit Insert



Kit Bottom Tray

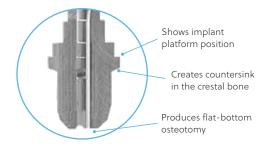


Surgical Kit: BSISK

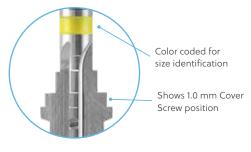
| ltem # | Description | ltem # | Description |
|---------|---|--------|---|
| ACT206S | ACT [®] Reusable Twist Drill 2.0 mmD x 6.0 mmL | TAP56S | Short Implant Dense Bone Tap, 5.0 mmD x 5-6.0 mmL |
| ACT326S | ACT Reusable Twist Drill 3.25 mmD x 6.0 mmL | TAP66S | Short Implant Dense Bone Tap, 6.0 mmD x 5-6.0 mmL |
| ACT386S | ACT Reusable Twist Drill 3.85 mmD x 6.0 mmL | RE100 | Short Ratchet Extension |
| ACT426S | ACT Reusable Twist Drill 4.25 mmD x 6.0 mmL | PHD02N | Narrow Posterior Large Hex Driver |
| ACT486S | ACT Reusable Twist Drill 4.85 mmD x 6.0 mmL | PHD00N | Narrow Posterior Small Hex Driver |
| FCS385S | Flat Bottom Countersink Shaping Drill 5.0 mmL | H-TIRW | High Torque Indicating Ratchet Wrench |
| FCS386S | Flat Bottom Countersink Shaping Drill 6.0 mmL | MDR10 | Handpiece Connector |
| FCS485S | Flat Bottom Countersink Shaping Drill 5.0 mmL | CW100 | Open End Wrench |
| FCS486S | Flat Bottom Countersink Shaping Drill 6.0 mmL | ACTPSD | ACT Pointed Starter Drill |

Flat Bottom Shaping Drills

- Similar design to existing Tapered Implant Quad Shaping Drills
- Special cutting features
- Flat-bottom cutting tip to prepare an osteotomy that matches the dimensions of the implant
- Incorporates the countersink so the implant will be properly seated in the osteotomy
- Depth and diameter specific







Dense Bone Taps

The surgical kit also includes taps for the T3 Short Implants:

- One tap for the 5.0 mmD implants
- One tap for the 6.0 mmD implants
- Same design as existing taps but shorter
- One band with two depth marks (see image to right)

ACT Twist Drills

- Based on the design of standard length ACT Drills
- One laser mark indicating two depths: 5.0 mm and 6.0 mm
- The depth mark includes the drill tip length for precise depth drilling
- Two cutting flutes at the tip





Ordering Information

| | 5.0 mmD | External Hex Implants | |
|-----|---------|--|--|
| | ltem # | Description | |
| 483 | BOES505 | 5.0 mmD x 5.0 mmL | |
| | BOES506 | 5.0 mmD x 6.0 mmL | |
| | 5.0 mmD | External Hex Implants with DCD Surface | |
| | ltem # | Description | |
| - | BNES505 | 5.0 mmD x 5.0 mmL | |
| | BNES506 | 5.0 mmD x 6.0 mmL | |

| | 6.0 mmD | External Hex Implants | | |
|----------|---------|--|--|--|
| | ltem # | Description | | |
| | BOES605 | 6.0 mmD x 5.0 mmL | | |
| <u> </u> | BOES606 | 6.0 mmD x 6.0 mmL | | |
| | 6.0 mmD | External Hex Implants with DCD Surface | | |
| | ltem # | Description | | |
| - | BNES605 | 6.0 mmD x 5.0 mmL | | |
| | BNES606 | 6.0 mmD x 6.0 mmL | | |

Encode[®] Two-Piece

Recommended Healing Abutments for Platform Switching

| | 4.1 mmD | Seating Surface | | |
|---------------------------|---------|----------------------|------------------|--|
| | Item # | Emergence Profile | Collar Height | |
| | EHA443 | 4.1 mm | 3.0 mm | |
| Ö | EHA444 | 4.1 mm | 4.0 mm | |
| | EHA446 | 4.1 mm | 6.0 mm | |
| 42 | EHA448 | 4.1 mm | 8 .0 mm | |
| | EHA453 | 5.0 mm | 3.0 mm | |
| | EHA454 | 5.0 mm | 4.0 mm | |
| h h | EHA456 | 5.0 mm | 6.0 mm | |
| 68 <u>°\</u> ⊥ ⊢ 4.1 ⊣ | EHA458 | 5.0 mm | 8.0 mm | |
| F 4.1 7 | EHA463 | 6.0 mm | 3.0 mm | |
| | EHA464 | 6.0 mm | 4.0 mm | |
| | EHA466 | 6.0 mm | 6.0 mm | |
| | EHA468 | 6.0 mm | 8.0 mm | |

Recommended Healing Abutments for Platform Switching

| | 5.0 mmD | Seating Surface | | |
|-------|---------|----------------------|------------------|--|
| | Item # | Emergence Profile | Collar Height | |
| W. | EHA553 | 5.6 mm | 3.0 mm | |
| | EHA554 | 5.6 mm | 4.0 mm | |
| ₩ | EHA556 | 5.6 mm | 6.0 mm | |
| T | EHA558 | 5.6 mm | 8.0 mm | |
| 45°∖h | EHA563 | 6.0 mm | 3.0 mm | |
| ⊢ 5 ⊣ | EHA564 | 6.0 mm | 4.0 mm | |
| | EHA566 | 6.0 mm | 6.0 mm | |
| | EHA568 | 6.0 mm | 8.0 mm | |

This product is not available in all markets. Please contact your local ZimVie Sales Representative for availability in your market. Refer to the Surgical Catalog for more options.

Note: Wrenches will be packaged individually.

For more information, visit ZimVie.com

ZimVie

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