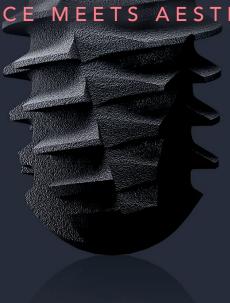




# GENESIS

SCIENCE MEETS AESTHETICS





## GENESIS

#### THE BIOMIMETIC IMPLANT SYSTEM™

The Genesis Implant System pioneered implant anodization, imitating the natural pink hue of soft tissue and the characteristics of bone. Backed by a decade of science, the Genesis Implant System achieves predictable aesthetics and long-term clinical success. This is a complete system for all patients and indications, including immediate implant placement, temporization, and more conservative protocols.

"With its fast osseointegration, unique pink collar, and complete line of components, Genesis has been the state-of-the-art solution for my implant patients since 2010."

Mariano Polack, Prosthodontist, Gainesville, Virginia



# **REDEFINED**

#### **ANATITE™**

The pink anodization mirrors the natural soft tissue while maintaining bone levels and enhancing the mucogingival seal.

#### **DUAL SURFACE**

The combination of the moderately rough collar and the rough topography of the Genesis implant body stimulates soft-tissue and bone growth.

#### **BIOSPARK<sup>TM</sup>**

A three-step anodic spark deposition process produces a hydrophilic-, calciumand phosphorus-enriched surface that mimics bone.

#### **ROTATIONAL SECURITY**

The anchor flute design facilitates insertion by redistributing bone chips and secures the implant.

#### TILOBE® CONNECTION

A six-lobed connection provides a conical seal and platform switch in order to maximize bone height, providing a stable implant/abutment connection.

#### **BONE MAINTENANCE**

Microthreads provide even load distribution, stabilizing and maintaining crestal bone levels.

#### **VARIABLE THREADS**

Variable threads reduce stress, and the increased surface area enables immediate placement.

#### **AGGRESSIVE THREADS**

Aggressive threads promote primary stability, especially in immediate extraction sites and soft bone.



# AnaTite

#### IMPROVED GINGIVAL AESTHETICS

AnaTite™ is a gradual pink anodization designed to mimic the lightness and purity of natural soft tissue.¹ Multiple studies confirm the long-term advantage of pink-colored implants and prosthetic components over traditional titanium.²,3,4

#### CLINICAL SIGNIFICANCE OF PINK

"Using a pink-neck implant and a pink abutment would contribute positively to the overall esthetic outcome for an anterior implant."

3. Gil MS, Ishikawa-Nagai S, Elani HW, Da Silva JD, Kim DM, Tarnow D, Schulze-Späte U, Cleber S, Bittner N. Comparison of the Color Appearance of Peri-implant Soft Tissue with Natural Gingiva Using Anodized Pink-Neck Implants and Pink Abutments: A Prospective Clinical Trial.

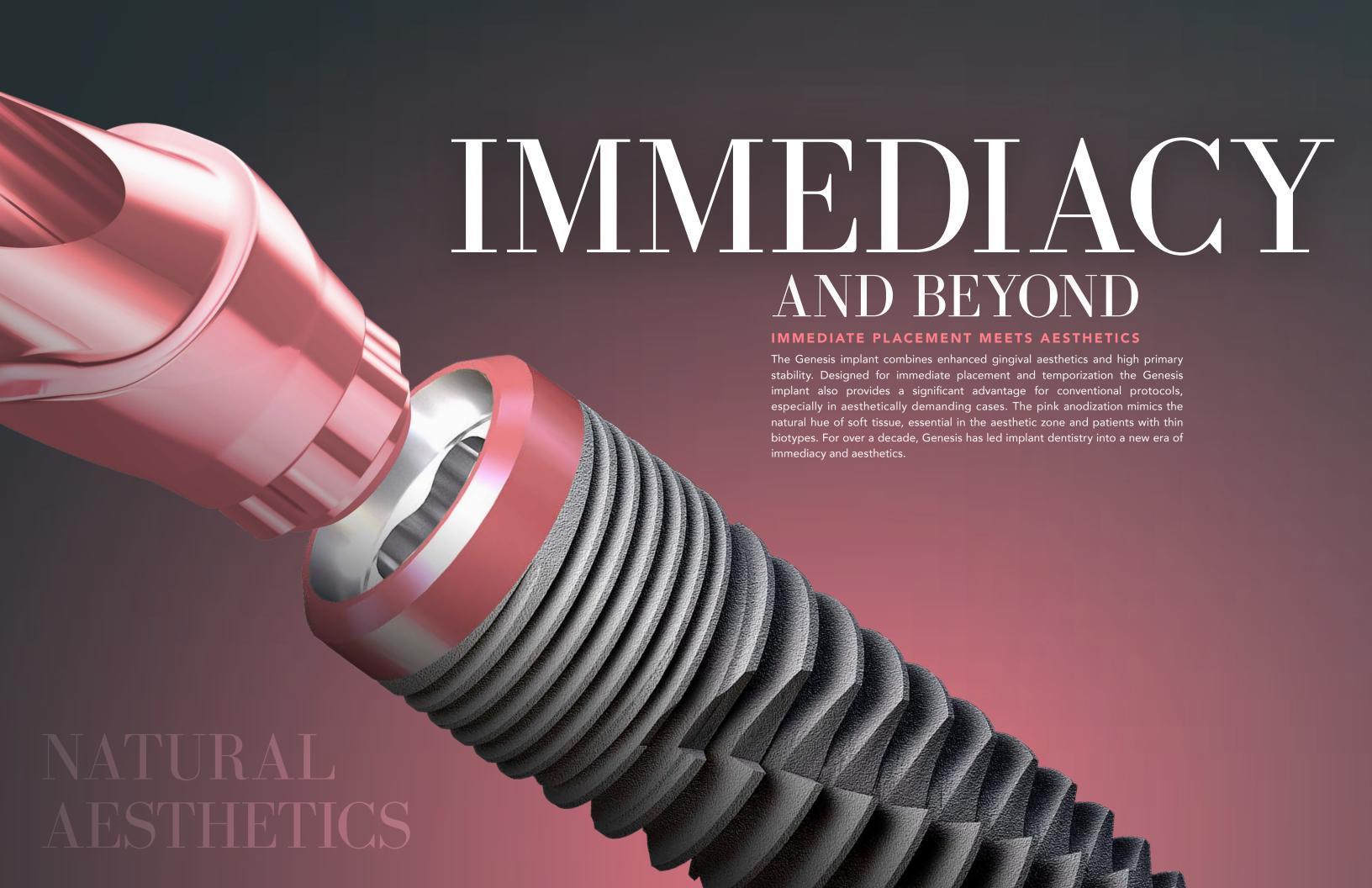
#### ENHANCED SOFT TISSUE SEAL

The anodization process has been shown to align collagen fibers perpendicular to the implant surface, enhancing the mucogingival seal and aesthetics.<sup>5,6,7</sup>



Adapted from Ishikawa-Nagai S, Da Silva JD, Weber HP, Park SE. Optical phenomenon of peri-implant soft tissue. Part II. Preferred implant neck color to improve soft tissue aesthetics.<sup>8</sup>







# Hydrophilic

#### **HYDROPHILICITY**

The Genesis implant offers a hydrophilic surface. Hydrophilicity, combined with other unique BioSpark<sup>™</sup> surface properties, promotes early bone formation.<sup>17,18</sup>







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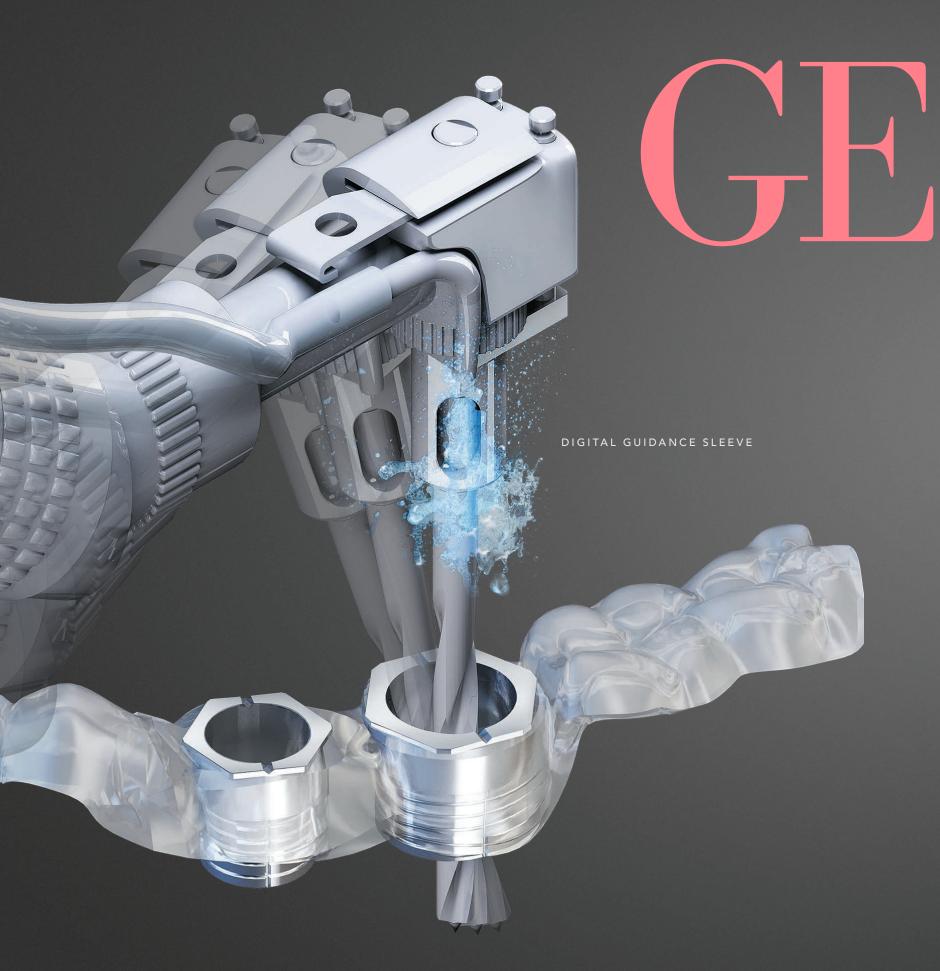


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#### OVER A DECADE OF RESTORATIVE PREDICTABILITY

The TiLobe® connection, with over a decade of restorative predictability and a complete line of AnaTite™ prosthetic components, provides unlimited analog and digital flexibility.¹9,20,2¹ The self-sealing conical taper minimizes the microgap between implant and abutment, maintaining bone and soft tissue health. The rounded six-lobe design provides even load distribution and a solid antirotation mechanism while the built-in platform shift across all diameters stabilizes bone and soft tissue.²2,23





## Fully Guided Surgery

#### INNOVATIVE HANDPIECE-BASED GUIDANCE

The pioneering Digital Guidance Sleeve (DGS) engages into the handpiece and eliminates the need for drill keys. Increased entry-angle flexibility allows for access in limited-posterior interarch spaces. The DGS protects the osteotomy from inadvertent metal shavings while allowing for copious direct irrigation.



## References

- Park S, Da Silva J, Weber H, Ishikawa-Nagai S. Optical phenomenon of peri-implant soft tissue. Part I. Spectrophotometric assessment of natural tooth gingiva and peri-implant mucosa. Clin Oral Implants Res. 2007 Oct;18(5):569-74. Epub 2007 Jul 26.
- Gil M, Ishikawa-Nagai S, Elani H. A prospective clinical trial to assess the optical efficacy of pink neck implants and pink abutments on soft tissue aesthetics. J Esthet Restor Dent. 2017;29(6):1-7.38.
- 3 Gil M, Ishikawa-Nagai S, Elani H, Da Silva J, Kim D, Tarnow D, Schulze-Späte U, Cleber S, Bittner N. Comparison of the Color Appearance of Peri-implant Soft Tissue with Natural Gingiva Using Anodized Pink-Neck Implants and Pink Abutments: A Prospective Clinical Trial. Int J Oral Maxillofac Implants. 2019 May/June;34(3):752–758.
- 4 Bittner N, Schulze-Späte U, Cleber S, Da Silva J, Kim D, Tarnow D, Ishikawa-Nagai S, Gil M. Comparison of Peri-implant Soft Tissue Color with the Use of Pink-Neck vs Gray Implants and Abutments Based on Soft Tissue Thickness: A 6-Month Follow-up Study. Int J Prosthodont. 2020 Jan/Feb;33(1):29-38.
- 5 Schupbach P, Roland G. The defense architecture of the human periimplant mucosa: A histological study. J Prosthet Dent 2007; 97: S15-S25.
- Zigterman B, Van den Borre C, Braem A, Mommaerts M. Titanium surface modifications and their soft tissue interface on nonkeratinized soft tissues—A systematic review. Biointerphases, Vol. 14, No. 4, Jul/Aug 2019.
- Mussano F, Genova T, Laurenti M, Zicola E, Munaron L, Rivolo P, Mandracci P, Carossa S. Early Response of Fibroblasts and Epithelial Cells to Pink-Shaded Anodized Dental Implant Abutments: An In-vitro Study. Int J Oral Maxillofac Implants. 2018 May/Jun;33(3):571-579.
- Ishikawa-Nagai S, Da Silva J, Weber H, Park S. Optical phenomenon of peri-implant soft tissue. Part II. Preferred implant neck color to improve soft tissue aesthetics. Clin Oral Impl Res. 18, 2007; 575-580.
- 9 Giavaresi G, Fini M, Chiesa R, Giordano C, Sandrini E, Bianchi A, Ceribelli P, Giardino R. A novel multiphase anodic spark deposition coating for the improvement of orthopedic implant osseointegration: An experimental study in cortical bone of sheep. Published online 9 October 2007 in Wiley InterScience (www.interscience.wiley.com).
- Giordano C, Sandrini E, Del Curto B, Signorelli E, Rondelli G, Di Silvio L. Titanium for osteointegration: Comparison between a novel biometric treatment and commercially exploited surfaces. Journal of Applied Biomaterials and Biomechanics, Volume: 2 issue: 1, page(s): 35-44 Issue published: January 1, 2004.
- Giordano C, Chiesa R, Sandrini E, Cigada A, Giavaresi G, Fini M, Giardino R. Physical and biological characterizations of a novel multiphase anodic spark deposition coating to enhance implant osseointegration. J Mater Sci Mater Med. 2005 Dec;16(12):1221-9.
- 12 Chiesa R, Giavaresi G, Fini M, Sandrini E, Giordano C, Bianchi A, Giardino R. In-vitro and in-vivo performance of a novel surface treatment to enhance osseointegration of endosseous implants. Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 2007 Jun;103(6):745-56. Epub 2007 Jan 2.
- Giordano C, Sandrini E, Busini V, Chiesa R, Fumagalli G, Giavaresi G, Fini M, Giardino R, Cigada A. A new chemical etching process to improve endosseous implant osseointegration: in-vitro evaluation on human osteoblast-like cells. Int J Artif Organs. 2006 Aug;29(8):772-780.
- 14 Grecchi F, Zollino I, Parafioriti A, Mineo G, Pricolo A, Carinci F. One-step oral rehabilitation by means of implants' insertion, Le Fort I, grafts, and immediate loading. J Craniofac Surg. 2009 Nov;20(6):2205-10.
- 15 Chiesa R, Sandrini E, Santin M, Rondelli G, Cigada A. Osteointegration of Titanium and Its Alloys by Anodic Spark Deposition and other Electrochemical Techniques: A Review. J Appl Biomater Biomech. 2003 May-Aug;1(2):91-107.
- Giavaresi G, Chiesa R, Fini M, Sandrini E. Effect of a multiphasic anodic spark deposition coating on the improvement of implant osseointegration in the osteopenic trabecular bone of sheep. Int J Oral Maxillofac Implants. 2008 Jul-Aug;23(4):659-68.
- 17 Gittens R, Scheideler L, Rupp F, Hyzy S, Geis-Gerstorfer J, Schwartz Z, Boyan B. A review on the wettability of dental implant surfaces II: Biological and clinical aspects. \_ 2014 Acta Materialia Inc. Published by Elsevier Ltd. All rights reserved. Acta Biomaterialia 10 (2014) 2907–2918.
- Jung Y, Shaughnessy M, Zhou Z, Noh H, Vogler E, Donahue H. Surface energy effects on osteoblast spatial growth and mineralization. j. biomaterials.2007.12.026
- Milleret V, Lienemann P, Gasser A, Bauer S, Ehrbar M, Wennerberg A. Rational design and in-vitro characterization of novel dental implant and abutment surfaces for balancing clinical and biological needs. Clinical Implant Dentistry and Related Research Volume 21, Issue S1. First published:27 February 2019
- Wang T, Wang L, Lu Q, Fan Z. Changes in the esthetic, physical, and biological properties of a titanium alloy abutment treated by anodic oxidation. J Prosthet Dent. 2019 Jan;121(1):156-165.
- 21 Sumi T, Takeshita K, Takeichi T, Coelho P, Jimbo R. Patient-Specific Gingiva-Colored Abutments: A Case Series. Int J of Perio & Resto Dent, 2014; Vol. 34, Num 4: 469-475.
- Murphy K, Polack M, Arzadon J, Hickerson R, Scheyer T. A Report of Three Cases from an Ongoing Prospective Clinical Study on a Novel Pink Biomimetic Implant System A Supplement to Compendium of Continuing Education in Dentistry Volume 37, Number 2 2016.
- Polack M, Scheyer T, Murphy K, Arzadon J, Rosenfeld A, Mandelaris G. A Report of Five Cases from an Ongoing Prospective Clinical Study on a Novel Pink Biomimetic Implant System A Supplement to Compendium of Continuing Education in Dentistry Volume 3, Number 2 2017.



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