

More than a
bone level implant.
A flexible implant line for
proven esthetics.



To predictably preserve hard and soft tissue around the implant is the basis for long-term treatment outcomes. **How do you optimize biologic and mechanical factors for maximizing your long-term treatment success?**

Dental implant therapy in the esthetic zone is more demanding because of the higher patient expectations and challenging anatomical situations. **How do you achieve natural-looking esthetic outcomes in an efficient way?**

A clear-cut interlocking and precise fit of the implant-abutment connection is crucial for a long-term mechanical stability without clinical complications. **How do you ensure precision against rotation and long-term stability for a successful restorative treatment?**

The Straumann® Bone Level Implant Line, including bone level and bone level tapered implants, is a result of the perfect combination of expertise between Straumann and the International Team for Implantology (ITI). This implant line was developed based on the Bone Control Design™ concept that integrates proven Straumann experience. Since its introduction in 2007, the Straumann® Bone Level Implant Line has been one of the most extensively researched dental implant systems, finding its expression in a comprehensive publication list of preclinical and clinical studies.*



THE BENEFITS OF THE STRAUMANN® BONE LEVEL IMPLANT LINE:

- Optimized crestal bone preservation thanks to the Bone Control Design™ concept P 4
- Achieving esthetic results efficiently due to a design at bone level P 6
- Simplified handling with the CrossFit® connection P 8

* <http://www.straumann.com/en/home/science/straumann-publications.html>

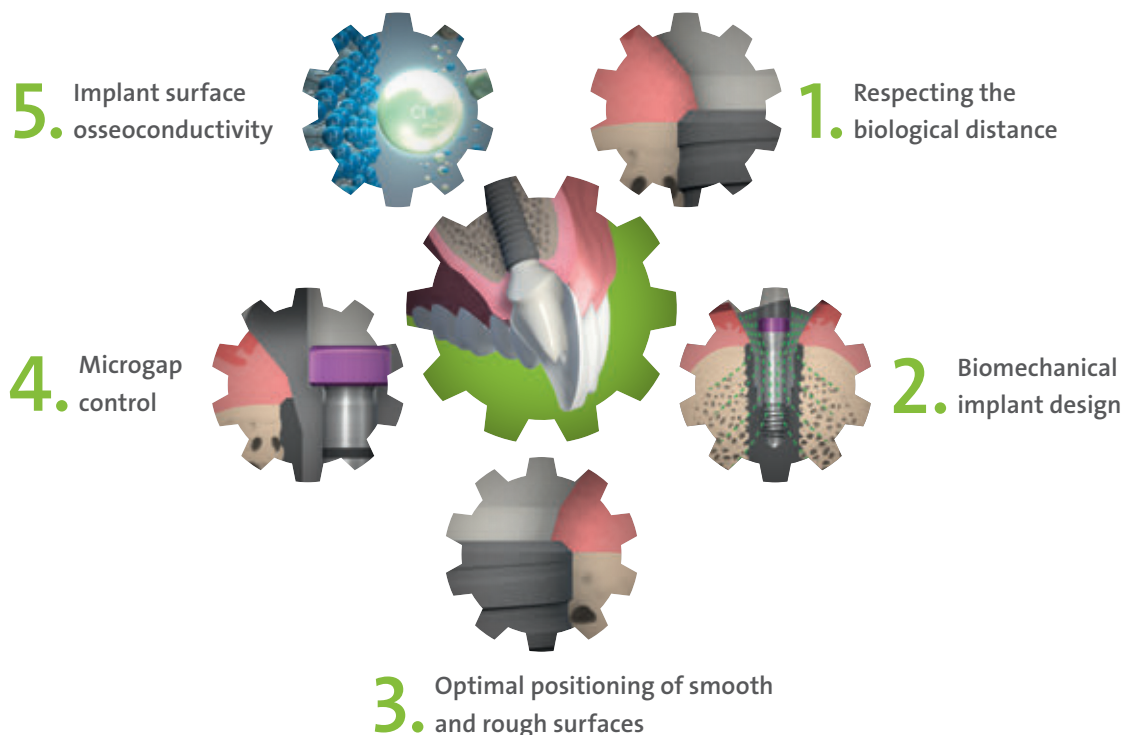
More than biological key principles. Optimizing crestal bone preservation.

To predictably secure hard and soft tissue around an implant is crucial for the achievement of natural-looking esthetic results. The proven design of the Straumann® Bone Level Implant is based on the Bone Control Design™ concept which was developed in order to preserve crestal bone and gingival tissue health, taking into account the key biological principles.^{1,2,3}



THE BONE CONTROL DESIGN™ CONCEPT

Bone Control Design™ consists of proven Straumann® implant design features which have been applied consistently throughout the Straumann® Dental Implant System. It is built on the 5 key factors for bone preservation, thus providing a crucial foundation for esthetic results and long-term success.



1. Respecting the biological distance

The implant/abutment interface of the Straumann® Bone Level Implant is at the crestal bone level and shifted horizontally in order to maintain crestal bone.

2. Biomechanical implant design

Straumann® Bone Level implants have a conical implant-abutment connection designed to evenly distribute stress patterns to the surrounding bone. The design and thread pitches of the Straumann® Bone Level implant also create a good primary stability, preventing from micromotion and supporting crestal bone maintenance.

3. Optimal positioning of smooth and rough surfaces

A rough surface that extends at the bone crest can support crestal bone maintenance. Thus, the rough-smooth surface interface of the Straumann® Bone Level implant is located at the top of the implant shoulder.

4. Microgap control

The conical Straumann® CrossFit® connection has a very precise fit, resulting in an extremely small microgap, which makes microbial contamination very unlikely and helps preserve bone.

5. Implant surface osseointegration

Straumann® Bone Level implants feature the Straumann® SLActive® surface which was designed to improve biological response and thereby maximizing treatment success and predictability.

More than a design at bone level.

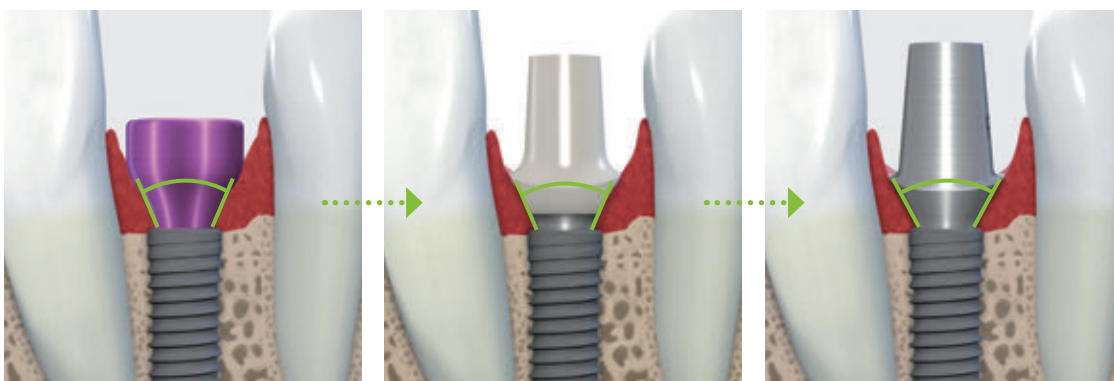
Efficiently achieving esthetics results.

Implant-borne tooth replacement in esthetically demanding sites is clinically challenging. The Straumann® Bone Level Implant can be used to efficiently restore both function and esthetics as well as satisfy the patients' high expectations.

CONSISTENT EMERGENCE PROFILES™ FOR PREFABRICATED COMPONENTS

The emergence profiles of prosthetic components from Straumann facilitate the restoration of natural-looking esthetics. Soft tissue management components are designed to match the abutment profiles and allow for easily attained esthetic results.

- Optimization and simplification of the soft tissue management process.
- Simplified making of temporary and final restorations.
- Patient comfort through minimized soft tissue impingement and tissue trauma from start to finish.



Healing abutment

Temporary restoration

Final restoration

The Consistent Emergence Profiles™ concept: consistently matching geometries throughout the entire workflow.



INDIVIDUALIZED SHAPE AND EMERGENCE PROFILES

The Straumann® CARES® Abutments are designed to offer patient-specific emergence profiles and an anatomic shape to support achieving high esthetic results. There are different Straumann® CARES® X-Stream™ options available to choose from, each providing different qualities with respect to esthetics and efficiency.

		Full-contour or frameworks NEW for bridge and bars					
		3M™ ESPE™ Lava™ Plus Zirconia	zerion®	IPS e.max® CAD	coron®	ticon®	polycon® ae
		■	■	■	■	■	■
		—	■	■	■	—	■
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* Application and material availability might differ from country to country. For specific details about the availability of certain abutment/material combinations, please contact your local Straumann subsidiary/distributor.

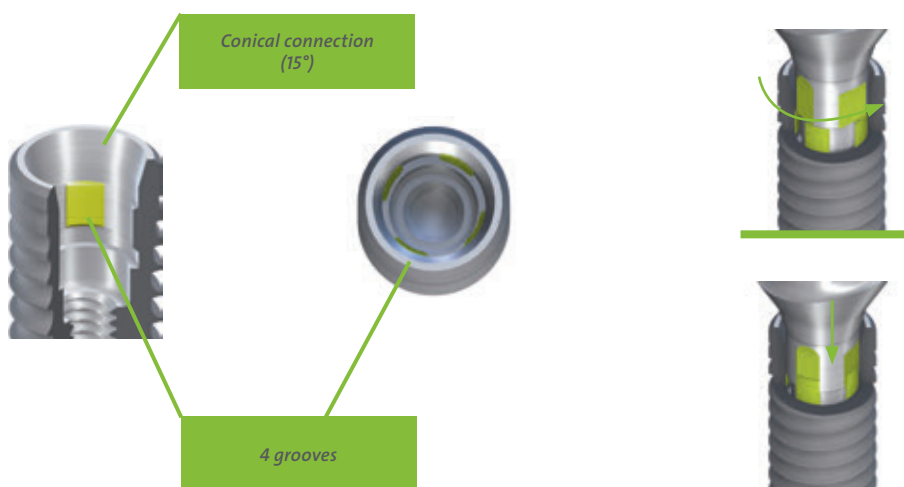
More than the CrossFit® connection. Simplified handling.

The Straumann® Bone Level Implant Line features the self-guiding internal CrossFit® connection. Its uniqueness lays in the combination of 4 grooves and a cone, which enables an intuitive handling and provides high long-term stability as well as great restorative flexibility. The CrossFit® connection offers you the foundation for the best possible prosthetic outcome for your Straumann® Bone Level Implant treatment.

THE STRAUMANN® CROSSFIT® CONNECTION

With its clear-cut interlocking, the Straumann® CrossFit® implant-abutment connection allows for a simple and guided abutment positioning and provides optimal protection against rotation.

- Abutment alignment with 4 connection grooves for a guided insertion with simple and intuitive handling.
- Orthogonal implant-abutment fit for optimal protection against rotation.
- Conical connection (15°) with minimized microgap for outstanding long-term mechanical stability and high restorative flexibility. This offers you a variety of options for the desired prosthetic outcome.



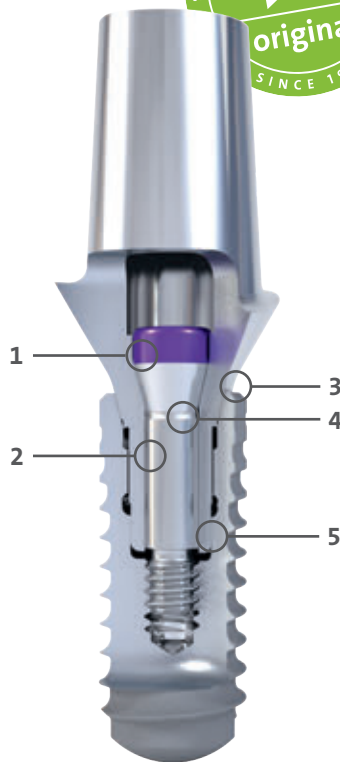
AN IMPLANT LINE DESIGN OF PERFECT HARMONY

With the exact knowledge of dimensions and tolerances of its implants, Straumann offers you perfect design harmony between Straumann implants and their corresponding prosthetic components. High-precision manufacturing and an exceedingly thorough inspection process ensure a consistent quality of all original Straumann components.



FEATURES

1. Conical screw head
2. Radial contact surfaces
3. Tight 15° conical implant/abutment interface
4. Tension screw
5. Deep implant/abutment engagement



BENEFITS

1. No peak stress, self-locking effect
2. Precise guidance of components upon insertion
3. Sealed connection
4. Avoidance of screw loosening or breakage
5. High stability

More than clinical success.

A proven implant line in daily practice.

The objective of implant therapy is to achieve a successful treatment result, both from an esthetic and functional point of view – and with a high degree of predictability. The Straumann® Bone Level Implant Line has proven to provide these predictable treatment outcomes with a high level of confidence, even in challenging protocols.

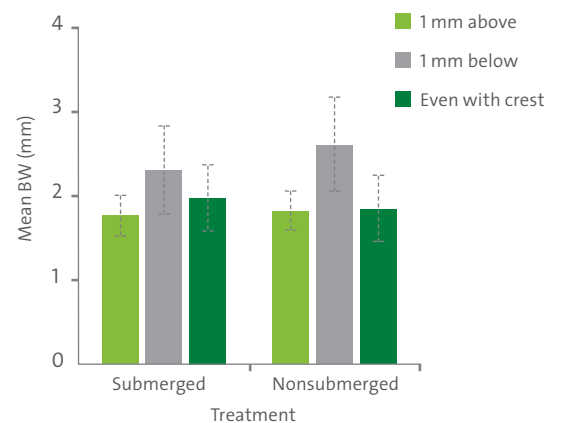
FLEXIBLE IMPLANT PLACEMENT

The Straumann® Bone Level Implant Line allows for a flexible implant placement along the coronal/apical axis with predictable bone and soft tissue preservation, both in one-stage and two-stage surgical procedures.

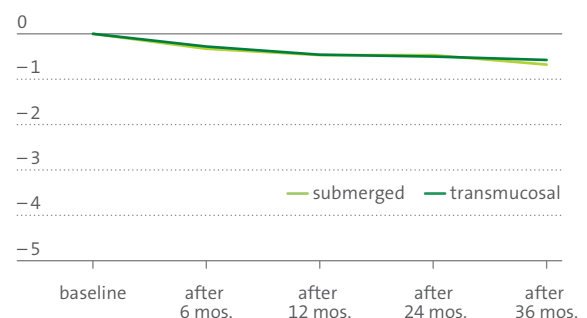
The success of the Straumann® Bone Level Implant Line has been documented in studies, where implants were placed at different heights with either submerged or transmucosal surgical approaches:

- Excellent and predictable bone preservation placed at different height positions.¹
- Predictable soft tissue integration mimicking natural teeth with a similar biological width formation, regardless of the specific surgical approach.²

A 3-year analysis of a randomized, controlled, multicenter clinical trial demonstrated the predictability of the Straumann® Bone Level Implant Line in one-stage or two-stage surgical procedures, in the anterior maxilla and mandible, with a stable bone level.³



Dimension of biologic width (BW) in different groups. Biological width significantly greater for implants placed 1 mm below the bone crest compared to even and 1 mm above.²

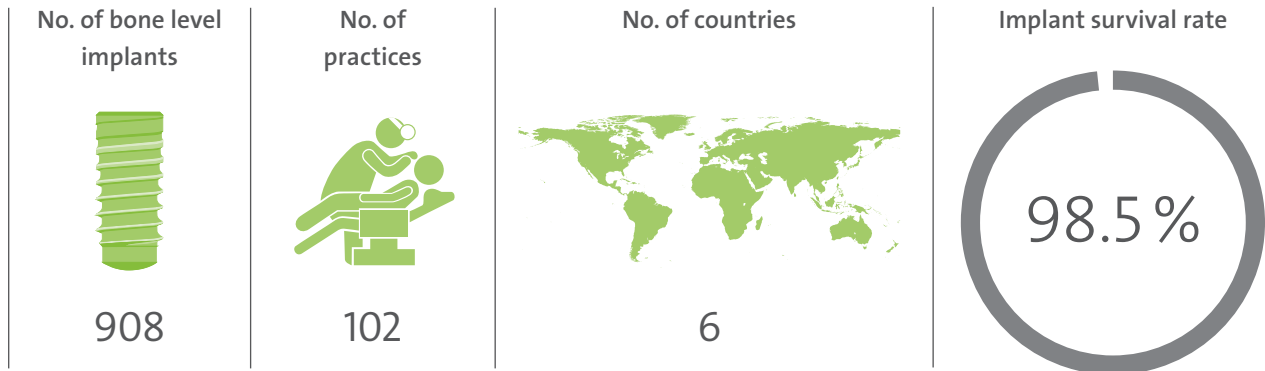


The mean change in crestal bone level from implant placement was 0.68 and 0.58 mm at 3 years in the submerged and transmucosal groups, respectively; the differences between the groups were not significant.³

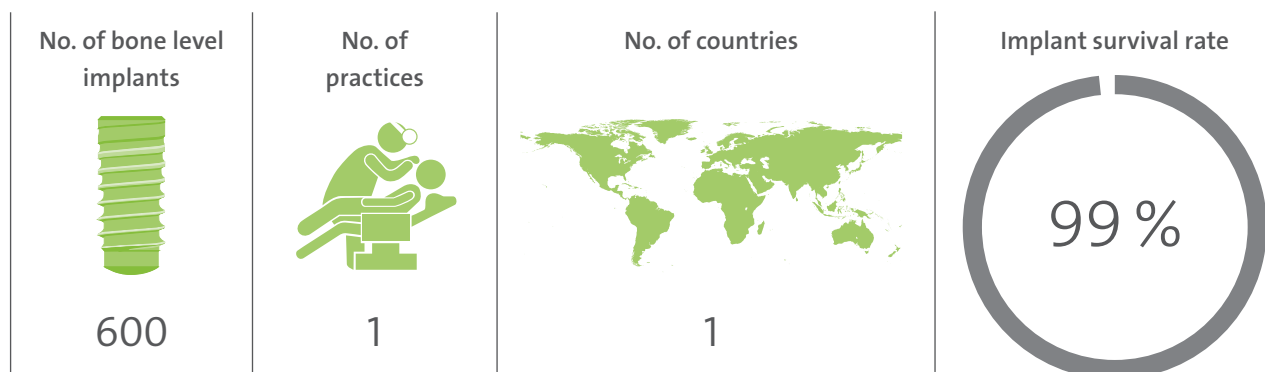
A PREDICTABLE IMPLANT LINE EVEN IN CHALLENGING PROTOCOLS

The performance of the Straumann® Bone Level Implant Line has also been researched under everyday dental practice conditions. No particular surgical and prosthetic protocol was specified and the survival rates achieved are similar to those observed in controlled clinical trials, confirming the clinical applicability in daily practice of the Straumann® Bone Level Implant Line.⁴

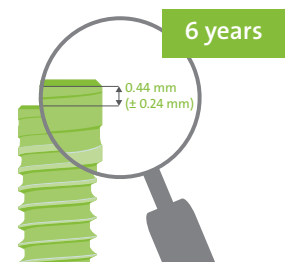
- Prospective multicenter, non-interventional study, key facts after 1 year:⁴



- Retrospective, non-interventional study, 10-years analysis of a private practice with 2060 patients and 4500 Straumann® implants placed including 600 Straumann® Bone Level implants within 3 years.⁵



- The timing of post-extraction implant placement in the esthetic zone is considered to be an important success factor which influences the esthetic treatment outcome^{6,7,8}. The Straumann® Bone Level Implant Line showed a minimal crestal bone loss and a high long-term stability of esthetic outcomes in single-tooth replacement procedures in the anterior maxilla using the concept of early implant placement with simultaneous contour augmentation.⁹



The mean value of 0.44 mm (± 0.24) is a low value for bone loss over 6 years supported by its specific platform-switching design.⁹

More than a comprehensive portfolio. A solution for all your needs.

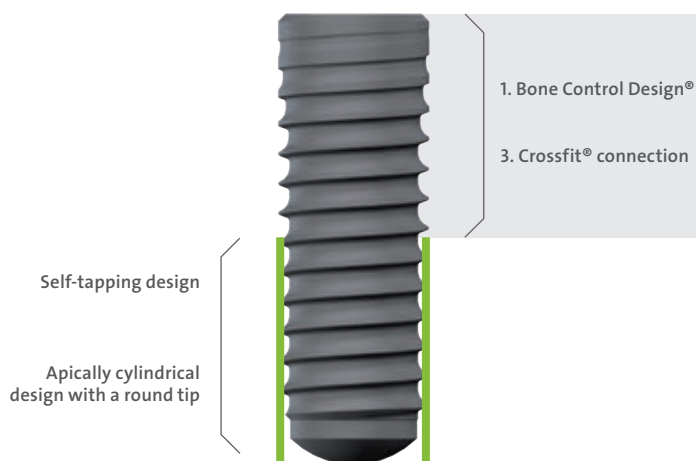
Enjoy more treatment flexibility for your patients. Choose from a complete range of treatment options to create the optimal tooth replacement outcomes for all indications, from single tooth to fully edentulous.

A VERSATILE IMPLANT DESIGN THAT MAXIMIZES TREATMENT FLEXIBILITY.

The Straumann® Bone Level Implant Line provides two different implant body designs, both taking into account the biological principles. This allows for tailored treatment options according to the specific clinical situation, with respect to the fundamentals of implant dentistry.

Straumann® Bone Level Implant: coronal-apical placement flexibility

The Straumann® Bone Level Implant has a cylindrical (parallel) outer contour. The core is cylindrical in the apical region, becoming slightly conical in the coronal part of the implant leading to a mild taper. The implant features a thread pitch of 0.8 mm to the top for extensive interlocking with the bone¹⁰. This allows for vertical implant placement flexibility, making it the implant of choice in esthetic sites. It helps the clinician to better preserve important peri-implant bone structures in the crestal area – an important prerequisite in order to optimize esthetics outcomes.
















Straumann® Bone Level Tapered Implant: more primary stability

The Straumann® Bone Level Tapered Implant offers excellent primary stability in soft bone and fresh extraction sockets. The tapered form adequately compresses the underprepared osteotomy. It also lets you effectively master your patient's limited anatomy such as facial undercuts, converging root tips, concave jaw structures or narrow atrophied ridges.



THE PROSTHETIC COMPONENTS OF THE STRAUMANN® BONE LEVEL IMPLANT LINE: ALWAYS THE RIGHT CHOICE

All implant designs of the Straumann® Bone Level Implant Line feature the same CrossFit® prosthetic platform, giving you full access to a complete prosthetic portfolio. For single-unit and multi-unit replacements, you can provide screw- or cement-retained solutions. For edentulous treatments, fixed or removable options can be offered. You can choose between cost-effective and premium solutions, no matter whether you prefer a conventional or digital workflow.

	Single and multi-unit replacement		Edentulous treatment						
	Screw-retained		cement-retained	Fixed		Removable			
Premium	 Gold Abutment	 CARES® Abutment ZrO ₂	 Gold Abutment	 CARES® Abutment ZrO ₂	 CARES® Advanced Fixed Bar	 Gold Abutment	 CARES® Milled Bar	 Abutment for bars gold	
Advanced	 CARES® Screw-retained Bridge	 Screw-retained Abutment*	 Anatomic Abutment, angled 15°	 CARES® Abutment Ti	 CARES® Basic Fixed Bar	 Screw-retained Abutment*	 CARES® Bar	 Abutment for bars Ti	 Screw-retained Abutment*
	 CARES® Abutment TAN				 CARES® Screw-retained Bridge				
Standard	 Variobase™ Abutment		 Cementable Abutment				 LOCATOR®		

Legend

Premium

Solutions for cases requiring a higher degree of individualization, zirconia for high esthetics, or high noble gold alloys.

Advanced

Technically advanced solution for cases requiring a higher degree of individualization.

Standard

Cost-effective solution with standard components and techniques for straightforward cases.

REFERENCES

- 1 R.E. Jung, A.A. Jones, F.L. Higginbottom, T.G. Wilson, J. Schoolfield, D. Buser, C.H. Hämmerle, D.L. Cochran. The influence of matching and non-matching implant and abutment diameters on radiographic crestal bone levels in dogs. *J Periodontol* 2008;79(2):260–270.
- 2 Cochran DL1, Mau LP, Higginbottom FL, Wilson TG, Bosshardt DD, Schoolfield J, Jones AA. Soft and hard tissue histologic dimensions around dental implants in the canine restored with smaller-diameter abutments: a paradigm shift in peri-implant biology. *Int J Oral Maxillofac Implants*. 2013 Mar-Apr;28(2):494-502.
- 3 Sanz M, Ivanoff CJ, Weingart D, Wiltfang J, Gahlert M, Cordaro L, Ganeles J, Bragger U, Jackowski J, Martin WC, Jung RE, Chen S, Hammerle C. Clinical and Radiologic Outcomes after Submerged and Transmucosal Implant Placement with Two-Piece Implants in the Anterior Maxilla and Mandible: 3-Year Results of a Randomized Controlled Clinical Trial. *Clin Implant Dent Relat Res*. 2013 Jul 9. doi: 10.1111/cid.12107. [Epub ahead of print]
- 4 Filippi A, Higginbottom FL, Lambrecht T, Levin BP, Meier JL, Rosen PS, Wallkamm B, Will C, Rocuzzo M: A prospective noninterventional study to document implant success and survival of the Straumann Bone Level SLActive dental implant in daily dental practice. *Quintessence Int* 2013;44(7):499-512.
- 5 French D, Larjava H, Ofec R. Retrospective cohort study of 4591 Straumann implants in private practice setting, with up to 10-year follow-up. Part 1: multivariate survival analysis. *Clin Oral Implants Res*.
- 6 Buser D, Chen ST, Weber HP, Belser UC. Early implant placement following single tooth extraction in the esthetic zone: biologic rationale and surgical procedures. *Int J Periodontics Restorative Dent* 28:441-451.
- 7 Buser D, Hart C, Bornstein M, Grütter L, Chappuis V, Belser UC (2009). Early implant placement with simultaneous GBR following single-tooth extraction in the esthetic zone: 12-month results of a prospective study with 20 consecutive patients. *J Periodontol* 80:152-162.
- 8 Buser D, Wittneben J, Bornstein MM, Grütter L, Chappuis V, Belser UC (2011). Stability of contour augmentation and esthetic outcomes of implant-supported single crowns in the esthetic zone: 3-year results of a prospective study with early implant placement postextraction. *J Periodontol* 82:342-349.
- 9 Buser D, Chappuis V, Kuchler U, Bornstein MM, Wittneben JG, Buser R, Cavusoglu Y, Belser UC. Long-term Stability of Early Implant Placement with Contour Augmentation. *J Dent Res*. 2013 Dec;92 (12 Suppl):1765-825.
- 10 Takeshi Toyoshima et al. Primary Stability of a Hybrid Self-Tapping Implant Compared to a Cylindrical Non-Self-Tapping Implant with Respect to Drilling Protocols in an Ex Vivo Model. *Clin Implant Dent Relat Res*. 2011 Mar;13(1):71-8.

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