



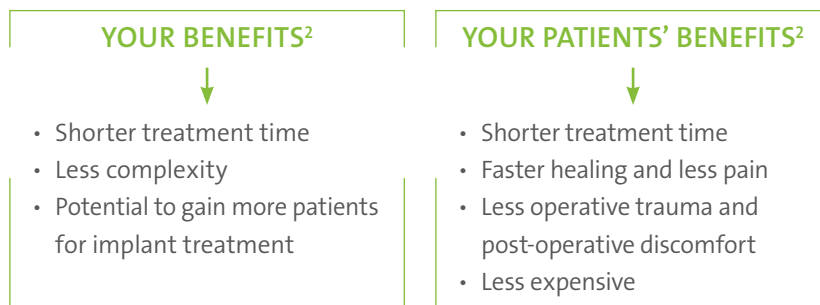
More than solid – Roxolid®.
Reducing invasiveness.

More than a less invasive solution.

Increasing patient acceptance.

Dental implants are a well-established and predictable treatment option to replace missing teeth. Nevertheless, many patients are reluctant to accept an implant treatment and are especially apprehensive if they require a bone augmentation procedure. Therefore, clinicians and patients are looking for products that reduce the invasiveness of the procedure or increase the speed of osseointegration.¹

AVOIDING INVASIVE GRAFTING PROCEDURES OFFERS YOU AND YOUR PATIENTS NUMEROUS BENEFITS:

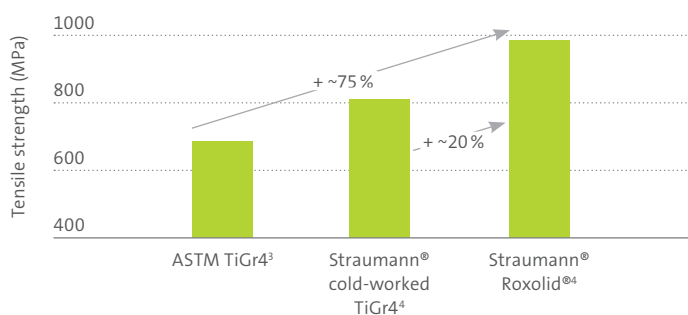


「Straumann® Roxolid® is the new standard for less invasive treatment procedures!⁹」

More than solid.

Roxolid®.

Roxolid® is a groundbreaking material specifically designed for the use in dental implantology. The titanium-zirconium alloy is **stronger** than pure titanium^{3,4} and has **excellent osseointegration** properties^{5,6,7}. This combination of properties is **unique** in the market – there is no other metallic alloy which unifies high mechanical strength and osteoconductivity.



Mechanical tests have proven the excellent mechanical properties of Roxolid®^{3,4}.



More than smaller implants.

More treatment options.

Thanks to their outstanding mechanical and biological properties, Roxolid® Implants offer more treatment options than many other small-diameter implants. In comparison to Straumann® Titanium Ø 3.3 mm Implants, Roxolid® Ø 3.3 mm Implants allow you to cover the following indications:



Single-tooth restorations in the anterior and premolar region

- No limitation to lateral incisors in the maxilla or central and lateral incisors in the mandible



Bridges on two Roxolid® Ø 3.3 mm Implants

- No combination with larger implant needed
- No splinting of suprastructure needed



Full denture on two Roxolid® Ø 3.3 mm Implants

- No need for more than 2 implants in the mandible

More than preserving bone.

Enjoying less invasive procedures.

Thanks to their outstanding mechanical and biological properties, Roxolid® Implants may allow you to use smaller implant diameters with the same clinical performance as shown by titanium regular-diameter implants⁸. Smaller-sized implants have the potential to preserve peri-implant structures and avoid invasive bone grafting procedures.

Straumann® Bone Level
Titanium Ø 4.1mm



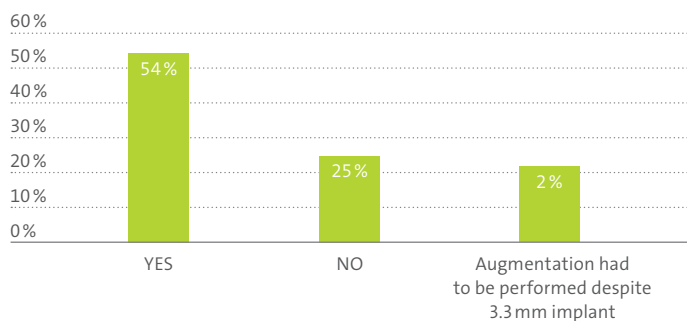
Straumann® Bone Level
Roxolid® Ø 3.3mm

USE OF SMALLER-SIZED IMPLANTS ALLOWS TO KEEP VITAL STRUCTURES AND VASCULARIZATION

A randomized controlled clinical study has demonstrated that Roxolid® Ø 3.3 mm Implants do not perform differently from Titanium Ø 4.1 mm Implants when used for anterior and premolar single crowns⁸.

REDUCED IMPLANT SIZE CAN ELIMINATE THE NEED FOR GBR PROCEDURES

Participants of a clinical non-interventional study stated that for 54 % of the implants placed, a bone augmentation procedure could be avoided due to the use of Roxolid® Ø 3.3 mm Implants⁹.



Increase patient acceptance
of implant treatment by providing
less invasive solutions² with
Straumann® Roxolid®.

More than stronger performance.

More freedom of choice.

The Roxolid® Implant portfolio comprises all Straumann implant lines, diameters and lengths. Straumann® Roxolid® Implants are available with the well-documented SLA® surface and the highly osteoconductive SLActive® surface. This gives you freedom of choice and allows you to offer your patients a solution that fulfills the specific requirements of each individual situation.

ROXOLID® PORTFOLIO



	S	SP	NNC	SPS	TE	BL
Roxolid® SLA®	■	■	■		■	■
Roxolid® SLActive®	■	■	■	■	■	■

S Straumann® Standard Implant
 SP Straumann® Standard Plus Implant
 NNC Straumann® Standard Plus Narrow Neck CrossFit® Implant

SPS Straumann® Standard Plus Short Implant
 TE Straumann® Tapered Effect Implant
 BL Straumann® Bone Level Implant

More than security. Peace of mind.

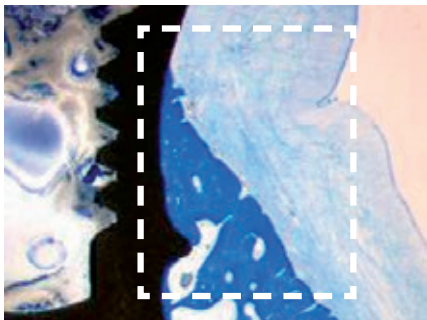
Roxolid® SLActive® Implants **combine Straumann's best material and surface** technologies and offer additional benefits to Roxolid® SLA®.

THEY ARE DESIGNED TO DELIVER

- Higher security in all indications^{10,11}
- Predictable treatment success even in challenging cases¹²
- Practice differentiation offering new treatment possibilities

Roxolid® SLActive® Implants are a perfect solution for both **standard indications and challenging cases**, i.e. limited bone volume, immediate loading, compromised healing, etc.

SLActive®



80% BIC after 12 weeks

SLA®



5% BIC after 12 weeks

Preclinical studies in dogs showed that SLActive® Implants promote the production of significantly greater and more mature bone than SLA® Implants.

SLActive® may have a high potential to support osseointegration in dehiscence-type defects¹³.

More than 4 mm. A practice differentiator.

With the Straumann® Standard Plus Short Implant, vertical space is no longer a limitation.



- **Shortest** screw-type implant with internal connection on the market provides you with additional treatment options.
- Possibility to treat patients **without complex vertical bone augmentations**.
- Perfectly suitable for the treatment of partially and fully edentulous patients with very **limited vertical bone availability** in the posterior region.
- **5-year clinical data** showing a high survival rate of 94% and a mean marginal bone loss of 0.5 mm after 5 years¹⁴.

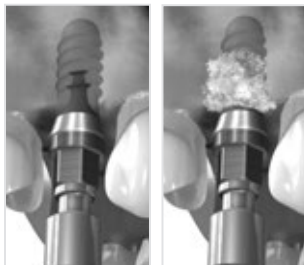


More than a less invasive solution.

Setting new standards.

Roxolid® Implants allow you to choose smaller-diameter implants in order to **avoid grafting procedures.**

Conventional



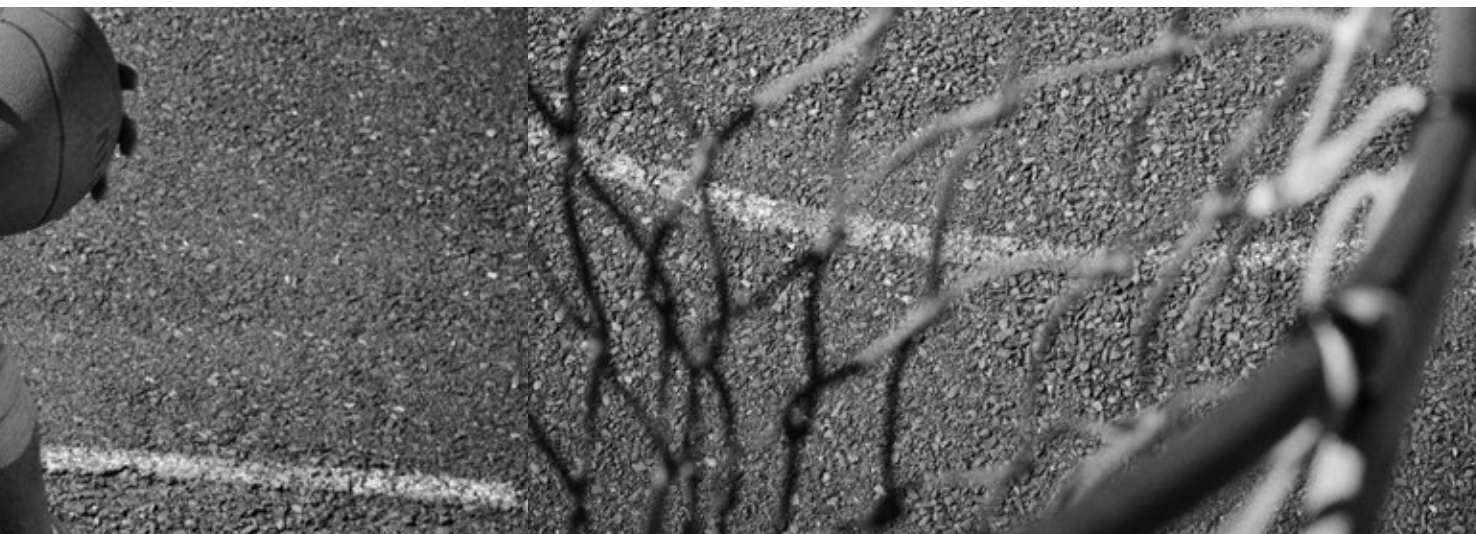
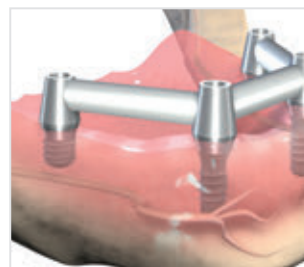
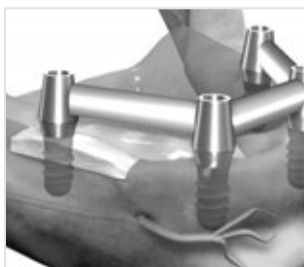
Less invasive



Roxolid® SLActive® Short Implants allow you to treat your patients with severely atrophied posterior mandibles **without complex vertical bone augmentations.**



Roxolid® SLActive® Short Implants may **reduce the invasiveness and the complexity** of implant cases.





More than just a transfer piece. Easy handling.

All Straumann® Roxolid® Implants are delivered with the new Loxim™ Transfer Piece, which is connected to the implant with a snap-in mounting. Its design offers various new features and benefits.

FEATURES

- Snap-in mounting ...
- Blue color ...
- Compact dimensions ...
- Height markings ...
- Pre-determined breaking point ...



BENEFITS

- ... for easy handling without counter-maneuvering
- ... for high visibility
- ... for easy access
- ... for correct implant placement
- ... for protecting the inner implant configuration



COMPARED TO THE SCREW-RETAINED
TRANSFER PIECE, THE LOXIM™ OFFERS YOU
MANY ADVANTAGES:

Easier handling with the Loxim™ Transfer Piece



Old
Screw-retained
transfer piece



New
Loxim™ Transfer Piece

- No Holding Key
- No counter-maneuvering
- Detaches with Adapter



REFERENCES

- 1 Millenium Report, Dental Implants & Final Abutments, USA 2013 2 If a GBR procedure can be avoided 3 Norm ASTM F67 (states min. tensile strength of annealed titanium). 4 Data on file for Straumann cold-worked titanium and Roxolid® Implants. 5 Gottlow J, Dard M, Kjellson F, Obrecht M, Sennerby L. Evaluation of a new titanium-zirconium dental implant: a biomechanical and histological comparative study in the mini pig. *Journal of Clinical Implant Dentistry and Related Research* 2012; 14: 538–545 6 Bo Wen et al. The osseointegration behavior of titanium-zirconium implants in ovariectomized rabbits. *Clin Oral Implants Res.* 2013 Feb 21. 7 Barter S, Stone P, Brägger U.: A pilot study to evaluate the success and survival rate of titanium-zirconium implants in partially edentulous patients: results after 24 months of follow-up. *Clin Oral Implants Res.* 2012 Jul;23(7):873–81 8 Benic GI, Gallucci GO, Mokti M, Hämmerle CH, Weber HP, Jung RE. Titanium-zirconium narrow-diameter versus titanium regular-diameter implants for anterior and premolar single crowns: 1-year results of a randomized controlled clinical study. *Journal of Clinical Periodontology* 2013; [Epub ahead of print] 9 Freiburger P, Al-Nawas B. Non-interventional Study on Success and Survival of TiZr Implants. EAO 2012 Copenhagen; 305 Posters – Implant Therapy Outcomes, Surgical Aspects. 10 Bornstein MM, Wittneben JG, Brägger U, Buser D. Early loading at 21 days of non-submerged titanium implants with a chemically modified sandblasted and acid-etched surface: 3-year results of a prospective study in the posterior mandible. *J. Periodontol.* 2010 Jun;81(6):809–18. 11 Schwarz F, Ferrari D, Herten M, Mihatovic I, Wieland M, Sager M, Becker J. Effects of surface hydrophilicity and microtopography on early stages of soft and hard tissue integration at non-submerged titanium implants: An immunohistochemical study in dogs. *J. Periodontol.* 2007;78(11):2171–2184. 12 Nicolau, P., et al., Immediate and early loading of chemically modified implants in posterior jaws: 3-year results from a prospective randomised multicenter study *Clin Implant Dent Relat Res.* 2011 Dec 15. doi: 10.1111/j.1708-8208.2011.00418.x. [Epub ahead of print] 13 Schwarz, F., et al., Bone regeneration in dehiscence-type defects at non-submerged and submerged chemically modified (SLActive®) and conventional SLA titanium implants: an immunohistochemical study in dogs. *J Clin.Periodontol.* 35.1 (2008): 64–75. 14 Slotte Christer et al, Four-mm implants supporting fixed partial dentures in the posterior mandible. 5-year results from a multicenter study. Presented at the 20th Annual Scientific Meeting of the European Association of Osseointegration, 10–13 October 2012, Copenhagen, Denmark.

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