



Straumann® Roxolid®



More than solid – Roxolid®.  
Reducing invasiveness.





“

This is a real break-through for me.  
I can place a Roxolid® implant, make the restoration,  
then go home and sleep well at night.

”

Dr. C. Kunavisarut, Thailand at EAO 2015 in Stockholm.

# A solid foundation to build on.

## Roxolid® – Setting new standards.

Roxolid® is a high performance alloy, specifically designed by Straumann® to offer higher strength than pure titanium and excellent osseointegration capabilities.

Since its launch in 2009, Roxolid® has been successfully used to help implant patients with narrow spaces or where limited bone is available. The clinical data gathered since its introduction confirm that using smaller-diameter Roxolid® Implants helps to avoid bone augmentation, reduces invasiveness and creates treatment opportunities for patients with insufficient bone.<sup>1-3</sup>

### DISCOVER ROXOLID®:

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## Increase patient acceptance with less invasive treatment plans.

Dental implants are a well-established and predictable treatment option to replace missing teeth. Nevertheless, many patients are reluctant to face an implant treatment and are apprehensive if they require a bone augmentation procedure.

Whether you are looking to increase your patients' acceptance of implant treatments, or for the peace of mind that less invasive techniques can provide. Roxolid® offers more confidence when placing reduced-diameter implants and more flexibility of treatment options with smaller implants, especially in cases where bone augmentation can be avoided.<sup>1,4</sup>



# Clear advantages for you and your patients.

Do you have patients who are unsure about implant therapies because they are worried about grafting procedures, lengthy treatment times, or high therapy costs?

Roxidid® treatment plans can help to overcome many patient doubts – imagine the possibilities for your practice. The hydrophilic surface of SLActive® is designed for faster healing and higher treatment predictability, even in challenging indications.<sup>5,6,11</sup> The excellent osseointegration properties of Roxolid® SLActive® Implants help to reduce the overall treatment complexity and improve patient acceptance.<sup>1-4,7,8</sup>

## **AVOIDING INVASIVE GRAFTING PROCEDURES WITH ROXOLID® OFFERS YOU AND YOUR PATIENTS NUMEROUS BENEFITS<sup>1,2</sup>:**

- Minimize patient anxiety with shorter treatment times
- Faster healing and less post-operative discomfort with smaller and shorter implants
- Smaller-sized implants protect vital structures and vascularization
- Minimize the mental hurdle with lower treatment costs

“ I was afraid that bone would have to be transplanted.  
The implant I have now was like a gift for me. ”

Elke Z., Germany, received Roxolid® Implants five years ago.

# More treatment options.

## Implants in various diameters.

Roxidid® reduced-diameter implants offer more treatment options with smaller and stronger implants. You can offer your patients a solution designed to fit to their individual needs.<sup>4</sup>

### 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 two implants in the mandible

### ROXOLID® REDUCED-DIAMETER IMPLANTS HAVE MULTIPLE ADVANTAGES OVER THEIR REGULAR-DIAMETER COUNTERPARTS, SUCH AS:

- **Reduced drilling** – preserve vital structures and vascularization
- **Easier placement** – saving time and patient discomfort
- **Better fit in narrow spaces** – leading to reduced treatment complexity

Straumann® Bone Level titanium Ø 4.1mm



Straumann® Bone Level Roxolid® Ø 3.3 mm

Roxidid® Implants are available with the well-documented SLA®, and the highly osteoconductive SLActive® surface. The Roxolid® Implant portfolio is available in all Straumann® implant lines, diameters and lengths.



## Reduced invasiveness through use of shorter implants.

Straumann has also developed a Roxolid® 4 mm Short Implant, the shortest screw-type implant with internal connection on the market. This provides even more treatment options.

Smaller-sized Roxolid® Implants have the potential to preserve peri-implant structures and avoid invasive bone grafting procedures, thus safeguarding existing bone and vascular supply.



- Perfectly suitable for the treatment of partially and fully edentulous patients with very limited vertical bone availability in the posterior region.
- Possibility to treat patients without complex vertical bone augmentations.

# Groundbreaking material.

Stronger than titanium.



Roxidid® is a metal alloy composed of 15% zirconium and 85% titanium. The combination of these two metals leads to a material with a higher tensile and fatigue strength than comparable titanium implants.

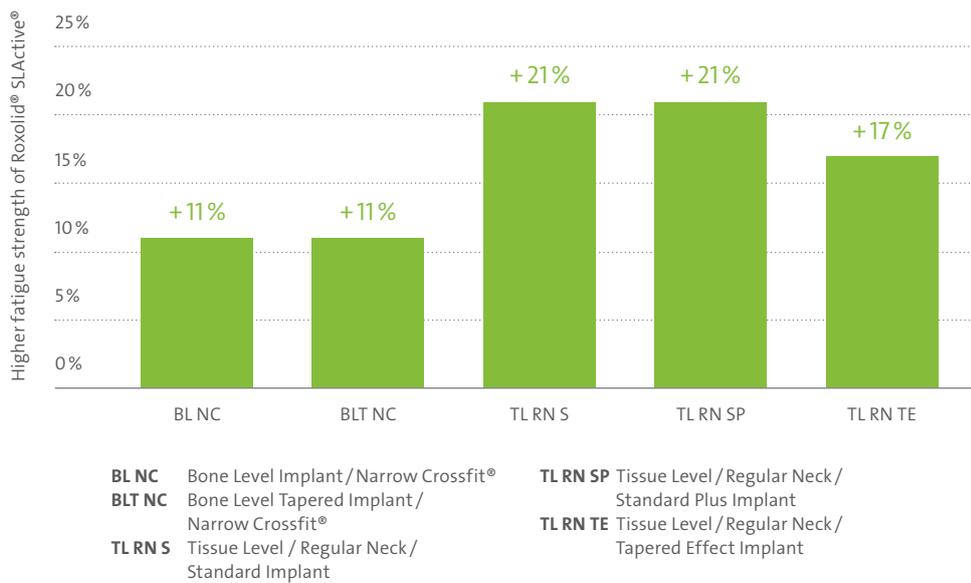
Mechanical tests have proven that Roxidid® is actually stronger than titanium grade 4. Our unique material combines high mechanical strength with excellent osteoconductivity and opens the door to a new generation of smaller implants. The improved mechanical properties of Roxidid® extend the indications in implant therapy to more challenging clinical situations and allow promoting a minimally invasive treatment approach which is particularly suitable for elderly patients with limited bone availability.<sup>4</sup>

## HIGHER TENSILE STRENGTH<sup>9</sup>





### INCREMENTAL FATIGUE STRENGTH PER IMPLANT TYPE<sup>10</sup>



Roxolid® SLActive® (Ø 3.3 mm) Implants show a higher fatigue strength in comparison to titanium SLActive® Implants.

### THE STRENGTH OF ROXOLID® IMPLANTS IS REFLECTED IN DAILY PRACTICE:

Roxolid® has a low fracture rate of 0.04%.<sup>10</sup> This is the cumulated fracture rate of all Roxolid® small-diameter Implants in the market and is significantly lower compared to our titanium implants.

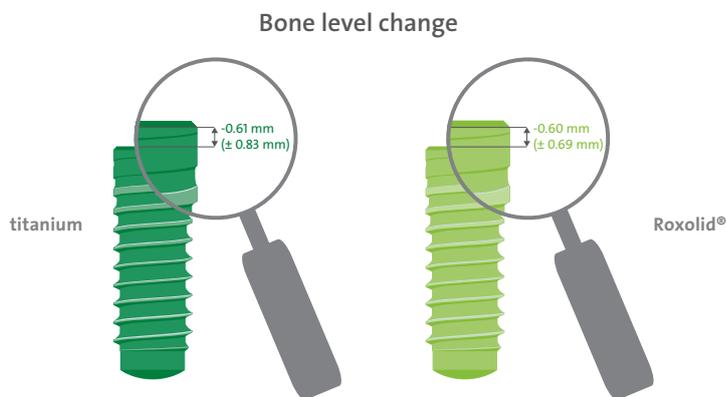
# Validated clinical performance.

## Results you can rely on.

The successful use of Roxolid® Implants has been documented in numerous clinical indications.<sup>6</sup>

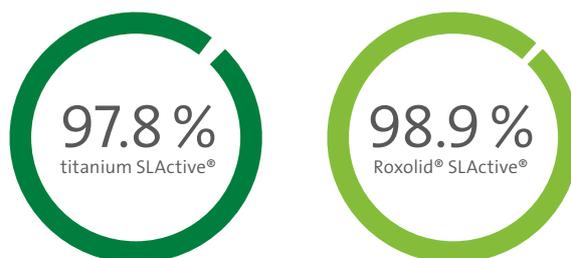
New data from a randomized multicenter study demonstrate that Roxolid® Ø 3.3 mm Implants provide a safe and reliable alternative to titanium grade-4 dental implants.<sup>2</sup> The 5-year follow-up data showed that success and survival are maintained over time and confirmed the credentials of small-diameter Roxolid® Implants in edentulous mandibles. There was no statistically significant difference between the crestal bone level changes for Roxolid® compared to titanium implants five years after implant placement.

### 5 years of validated clinical performance.<sup>2</sup>



There was no statistically significant difference between the crestal bone level changes for Roxolid® compared to titanium implants five years after implant placement.

### Implant survival





Advancing oral implantology  
and tissue regeneration.  
Committed to science.

In collaboration with leading clinics, research institutes and universities around the world, Straumann is committed to research in the field of oral implantology and tissue regeneration. Our commitment to science and quality shows in the high amount of publicly available data on Straumann® products.

Visit the Science section on our website to discover a wide selection of fascinating material such as clinical reviews, case studies and publications from clinical trials in peer-reviewed journals. We also have a range of videos showing key note speakers sharing their expert opinions on implant dentistry, details on congresses and links to useful information on the web.



Discover more about clinical studies, peer-review journals and expert opinions at the Straumann® science website, or on request. [www.straumann.com/science](http://www.straumann.com/science)

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#### International Headquarters

Institut Straumann AG  
Peter Merian-Weg 12  
CH-4002 Basel, Switzerland  
Phone +41 (0)61 965 11 11  
Fax +41 (0)61 965 11 01  
[www.straumann.com](http://www.straumann.com)

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