

# Optimal bone remodeling around Axiom® BL REG implants

- Outstanding bone stability
- Excellent esthetic results

Results from a prospective 3-year multicentre randomized controlled clinical trial

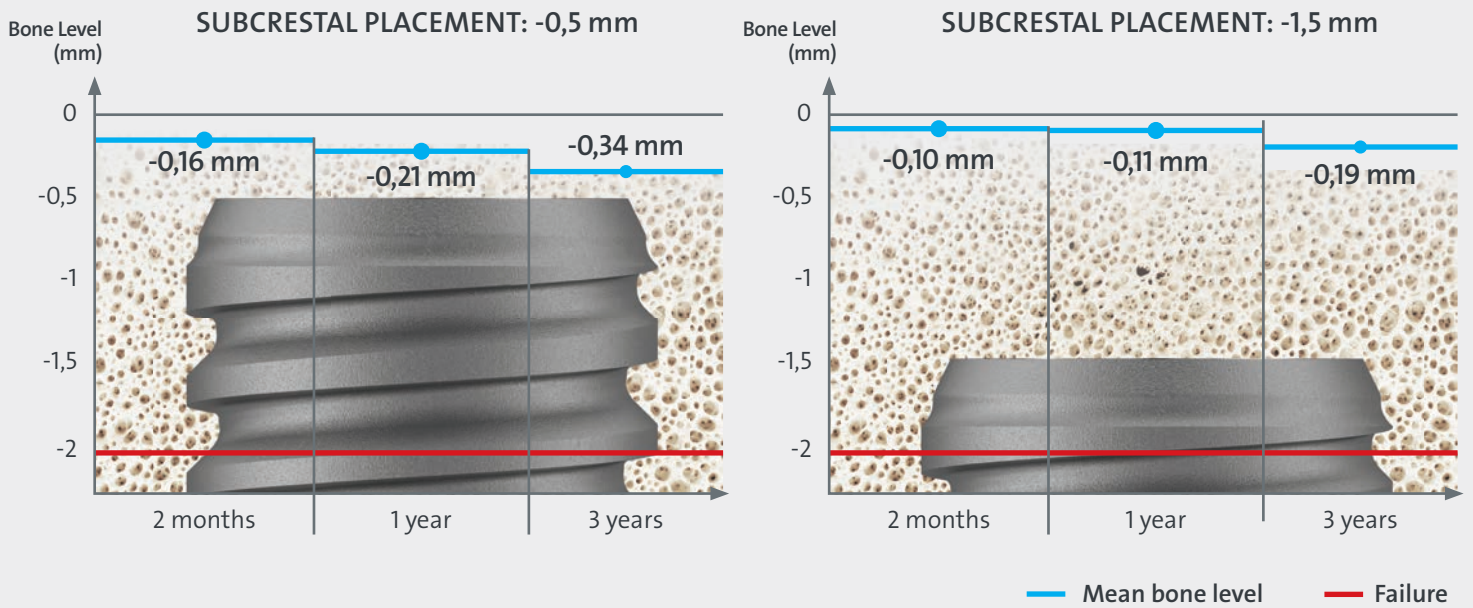


**3** years  
**6** centers  
**60** patients  
**120** Axiom® REG implants  
Survival rate **97%**



Highlight of the original publication in the International Journal of Oral Implantology

# Minimal bone loss



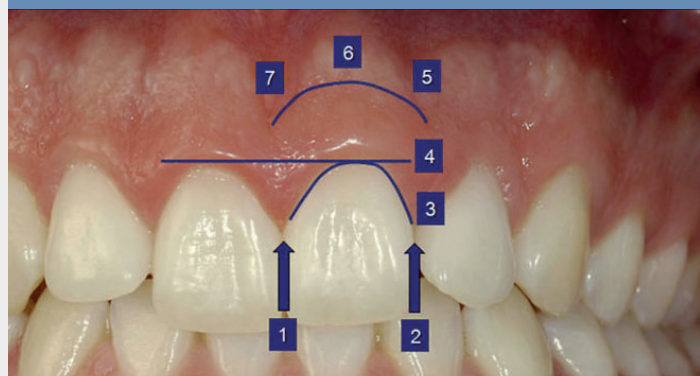
The mean bone loss is very limited, confirming the success of the implants, well above the success criteria defined by Misch<sup>1</sup> (bone loss  $\leq$  2mm from initial surgery).

# Excellent esthetic results



## What's PES<sup>2</sup> ?

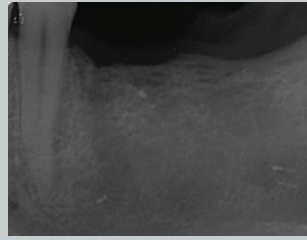
The PES enables reproducible esthetic evaluation of the soft tissue around single-crowns. 7 variables are evaluated, with a maximum score of 14 per implant.



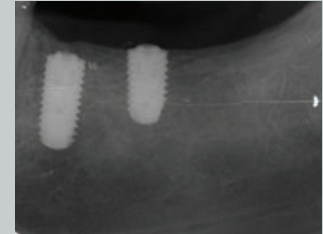
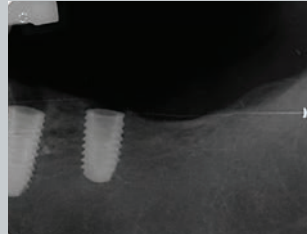
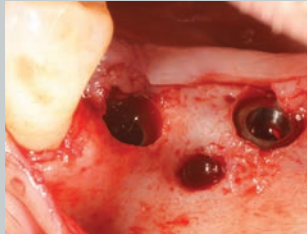
The very high mean Pink Esthetic Score<sup>2</sup> observed in this study shows the perfect healing of soft tissues around Axiom<sup>®</sup> REG implants.

Pre-op stage

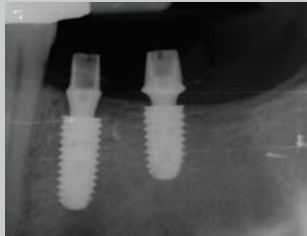
Treatment sequence of a representative patient treated by Dr Salina



Surgery



Loading



1 year



3 years



**With the courtesy of Dr Sergio Salina**

Laureate in Dentistry specialized in oral surgery, with honors - University of Milan (1995)  
 Specialisation in periodontology in Verona  
 Prof in oral surgery at the University of Milan (1999-2005)  
 Collaborator of Prof Boyne at Loma Linda University (1997-2002)  
 Active member of SICOI (now IAO) and advisor of SILO  
 Member of SIdP, ACOMS, WFLD  
 Speaker in national and international congresses

<sup>1</sup> Misch, C. E., Perel, M. L., Wang, H. L., Sammartino, G., Galindo-Moreno, P., Trisi, P., ... & Schwartz-Arad, D. (2008). Implant success, survival, and failure: the International Congress of Oral Implantologists (ICOI) pisa consensus conference. *Implant dentistry*, 17(1), 5-15.  
<sup>2</sup> Fürhauser, R., Florescu, D., Benesch, T., Haas, R., Mailath, G., & Watzek, G. (2005). Evaluation of soft tissue around single-tooth implant crowns: the pink esthetic score. *Clinical oral implants research*, 16(6), 639-644.

## PURPOSE

To evaluate if the placement of single dental implants either 0.5 or 1.5 mm subcrestally in healed bone crests has an impact on long term esthetic and biological outcomes.

## MATERIALS AND METHODS

Sixty partially edentulous patients requiring two single implant-supported crowns were recruited from six centres. According to a split-mouth design, the two sites were randomly allocated either to 0.5 mm or 1.5 mm subcrestal implant placement. During the healing period of 3 months surgical sites in aesthetic areas were closed while a one-stage approach with transgingival healing screw was followed in non-esthetic areas. Provisional acrylic crowns were delivered and were replaced after 2 months by definitive metal-ceramic crowns. Patients were followed to 3 years after loading. Outcome measures were: crown and implant failures, complications, aesthetics assessed using the pink esthetic score (PES), peri-implant marginal bone level changes, and patient preference, recorded by blinded assessors.

## RESULTS

At delivery of definitive crowns, 2 months after loading, the mean pink esthetic score was  $11.2 \pm 1.9$  and  $11.1 \pm 1.5$  for the 0.5 and 1.5 mm group, respectively. At 3 years after loading, the mean pink esthetic score was  $12 \pm 1.9$  and  $12.2 \pm 1.8$  for the 0.5 and 1.5 mm group, respectively. There were no statistically significant differences between the two groups at 2 months ( $P = 0.626$ ), at 1 year ( $P = 0.920$ ) or at 3 years ( $P = 0.296$ ). Three years after loading, patients of the 0.5 mm group lost on average  $0.34 \pm 0.87$  mm and those of the 1.5 mm group  $0.19 \pm 0.54$  mm, the difference being statistically significant (difference = 0.15 mm; 95% CI 0.00 to 0.30;  $P = 0.046$ ). The implant placement was not reflected in patient preference. There were no differences in outcomes among centres.

## CONCLUSIONS

Both surgical protocols resulted in very high esthetic outcome ( $PES > 12$ ) and minimal bone resorption ( $< 0.5$  mm) after 3 years. A slightly lower bone resorption was measured with 1.5 mm subcrestal placement compared to 0.5 mm, with no impact on the esthetic score. This tends to show that deeper implant placement might be beneficial only regarding bone stability, which will be confirmed after 5 years of follow-up.

Results presented at EAO Congress 2019 (short oral communication)

**EAO**)))  
EUROPEAN ASSOCIATION FOR OSSEointegration  
CONGRESS

Photo credits: Anthogyr - All rights reserved - Actual products may vary.

ANTHOGYR  
2 237, Avenue André Lasquin  
74700 Sallanches - France  
Phone: +33 (0)4 50 58 02 37  
[www.anthogyr.com](http://www.anthogyr.com)



**Anthogyr**  
A Straumann Group Brand