

# Robust papilla regeneration and marginal bone gain with Xeal™ and TiUltra™ surfaces: 2-year results

## Clinical relevance

### Excellent soft tissue response

Robust regeneration of the papilla, increased soft tissue thickness and stable keratinized mucosa height.

### Improved soft tissue health

Both bleeding and gingival indices improved from final prosthetic delivery to 2 years.

### Marginal bone gain

from prosthetic delivery to 2 years.

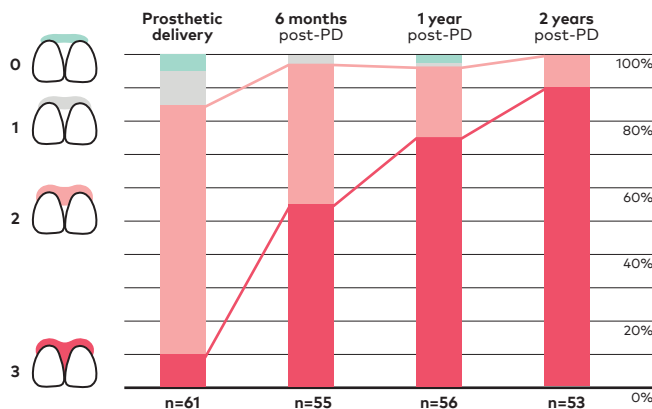


Robust papilla regeneration and marginal bone gain: 2-year results from a prospective study. Giacomo Fabbri, Giorgio Ban, Hyun-Chang Lim, Kwantae Noh. Presented at the The European Association for Osseointegration (EAO) meeting September 2023 Berlin, Germany

## The results

- Robust papilla regeneration with 90% of sites having full papilla height after 2 years.
- Increased keratinized mucosa height from prosthetic delivery to 6 months, then stable to 2 years.
- Healthy gingiva surrounding the crown with no sign of inflammation at 98.1% of sites, and 92.5% of sites showing no bleeding after 2 years.
- Mean marginal bone level increased from -1.12 mm at prosthetic delivery to -1.08 mm at 1 year and -1.06 mm at 2 years.
- No implant failure from 1- to 2-year follow-up.

### Robust papilla regeneration: Jemt Papilla Index improved throughout the study progression



## Study design

A 3-year prospective single-center clinical study. Interim results.

Single-tooth restoration in healed premolar and molar

61 patients

61 NobelActive TiUltra implants and On1 Base Xeal

61 screw-retained restorations (43 NobelProcera®)

2 years from prosthetic delivery

## Sample clinical case from the study



Images courtesy of Dr. Giacomo Fabbri, Italy

Clinical views and periapical radiographs at indicated time points. A 51-year-old male patient, non-smoker with a missing first molar tooth in the maxilla (FDI position 16) received NobelActive TiUltra RP 5.0 x 8.5 mm. Following the digital impression, an On1 Base Xeal and an On1 Healing Cap were placed on top of the implant. The final prosthesis was delivered 3 months later and consisted of an On1 Universal Abutment and a NobelProcera full-contour zirconia crown. Note the marginal bone level stability and improvement of soft tissue health throughout the follow-up.

## Authors' conclusion

**“NobelActive implants with gradually anodized surface [TiUltra] and restored with anodized abutment bases [Xeal] support successful osse- and mucointegration and continue to promote excellent bone and soft tissue response thereafter.”**

## More to explore



Compendium:  
a comprehensive  
approach to design  
the emergence profile



Xeal™ and TiUltra™:  
The clinically  
proven surfaces



[nobelbiocare.com/surface](https://nobelbiocare.com/surface)

MKT-5549 Rev 00 (02/24, GMT 88568) © Nobel Biocare USA, LLC, 2024. All rights reserved. Nobel Biocare, the Nobel Biocare logotype and all other trademarks are, if nothing else is stated or is evident from the context in a certain case, trademarks of Nobel Biocare. Please refer to [nobelbiocare.com/trademarks](https://nobelbiocare.com/trademarks) for more information. Product images are not necessarily to scale. All product images are for illustration purposes only and may not be an exact representation of the product. Disclaimer: Some products may not be regulatory cleared/released for sale in all markets. Please contact the local Nobel Biocare sales office for current product assortment and availability. Caution: Federal (United States) law or the law in your jurisdiction restricts this device to sale by or on the order of a dentist or a physician. See Instructions For Use for full prescribing information, including indications, contraindications, warnings and precautions.

