

Xeal[™] and TiUltra[™] surfaces support excellent peri-implant tissue health

1-year results from a prospective clinical trial



Excellent soft tissue health and stable marginal bone levels after initial remodeling with NobelActive® TiUltra implants and On1™ Base Xeal at 1-year follow-up

Clinical Study with Gradually Anodized Implants Restored with Two-Piece Anodized Abutments – 1-Year Results. Giacomo Fabbri and Giorgio Ban. Presented at the Annual Meeting of the Academy of Osseointegration Feb. 24 – 26, 2022 San Diego, CA, USA.

Study design

Prospective, single-center

Inclusion criteria:

- Sinale tooth
- Healed sites
- Premolar or molar
- Maxilla or mandible
- 61 implants placed

61 implants restored with definitive prosthesis

55 implants evaluated at 6 months

56 implants evaluated at 1 year

Clinical relevance

Excellent peri-implant soft tissue health with robust regeneration of the papilla by 1 year

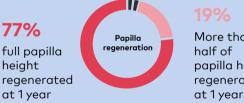
Stable marginal bone levels after the initial remodeling post-insertion

High patient satisfaction and improved oral health-related quality of life

Confirms benefits of the On1 concept, whereby the On1 Base is seated at the time of implant placement and not disconnected thereafter.

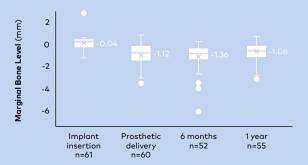
The results

- 96.5% cumulative implant survival rate at 1 year
- Excellent soft tissue response with continuous improvement in keratinized mucosa presence and height, bleeding and gingival indices, and Jemt's papilla score



More than half of papilla height regenerated

Stable marginal bone levels from prosthetic delivery to 1 year after the expected remodeling following implant insertion



Improved oral health-related quality of life with the OHIP-14 score decrease from 1.1 at pre-treatment to 0.1 at prosthetic delivery and 0.0 at 1 year. Very high patient satisfaction with function and esthetics, with mean scores of ≥9.7, on a scale from 0 to 10, at all follow-up visits

Sample clinical case from the study

Implant insertion





Prosthetic delivery





6 months





1 year





Clinical views (top row) and peri-apical radiographs (bottom row) at indicated time points. A 43-year-old female patient, non-smoker, reported with a missing first molar tooth in the mandible (FDI position 36) and received NobelActive TiUltra RP 4.3 x 10mm. 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 6.7 months later and consisted of an On1 universal abutment and a NobelProcera® full-contour zirconia crown. Note the improvement of soft tissue health throughout the follow-up and marginal bone level stability following the initial remodeling.

Xeal and TiUltra are well-documented, clinically proven surfaces

In published studies as of February 2022

235 patients

TiUltra implants

160 Xeal abutments

Xeal and TiUltra surfaces support excellent soft tissue integration and healthy marginal bone response

More to explore



View poster on the AO2022 website



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