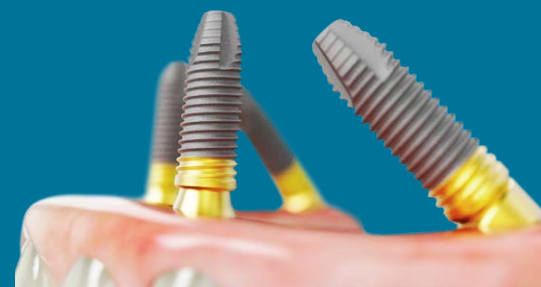


# Excellent marginal bone response and healthy soft tissue for the All-on-4<sup>®</sup> treatment concept with Xeal<sup>™</sup> and TiUltra<sup>™</sup> surfaces

1-year results from a prospective clinical trial: Pilot study

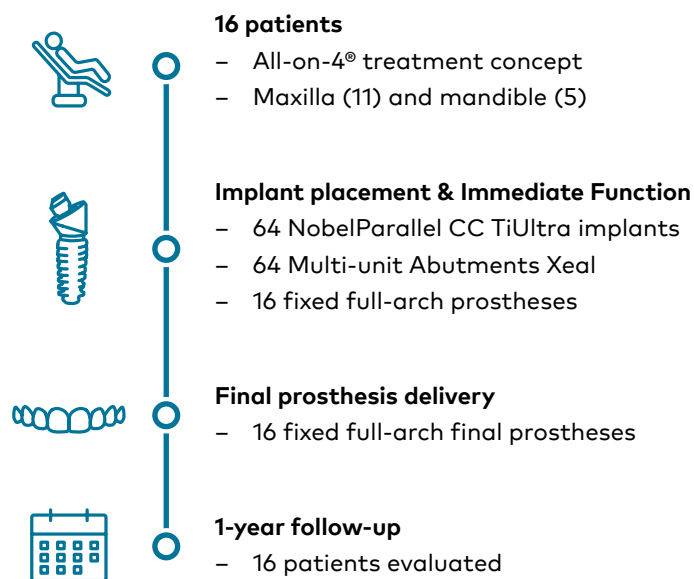


Low marginal bone remodeling and very good soft tissue health with NobelParallel CC TiUltra implants and Multi-unit Abutments Xeal, placed according to the All-on-4<sup>®</sup> treatment concept.

Ferro A, De Araújo Nobre M. All-on-4 concept using TiUltra surface implants and Multi-unit Xeal abutments: Pilot study report. Clin Oral Implant Research 2021; 32(S22):59.

## Study design

Prospective, single-center

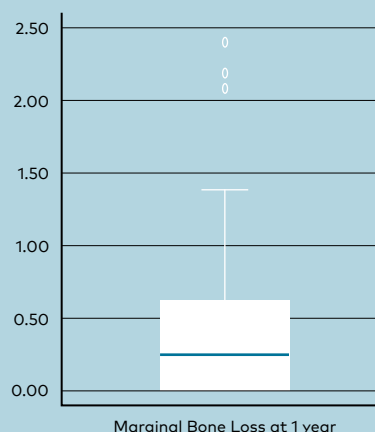


## Clinical relevance

- **Very high implant and prosthetic survival** with the All-on-4<sup>®</sup> treatment concept using TiUltra implants and Xeal abutments.
- **Excellent marginal bone response combined with good and stable soft tissue health** can be achieved with TiUltra implants and Xeal abutments for Immediate Function full-arch restorations.

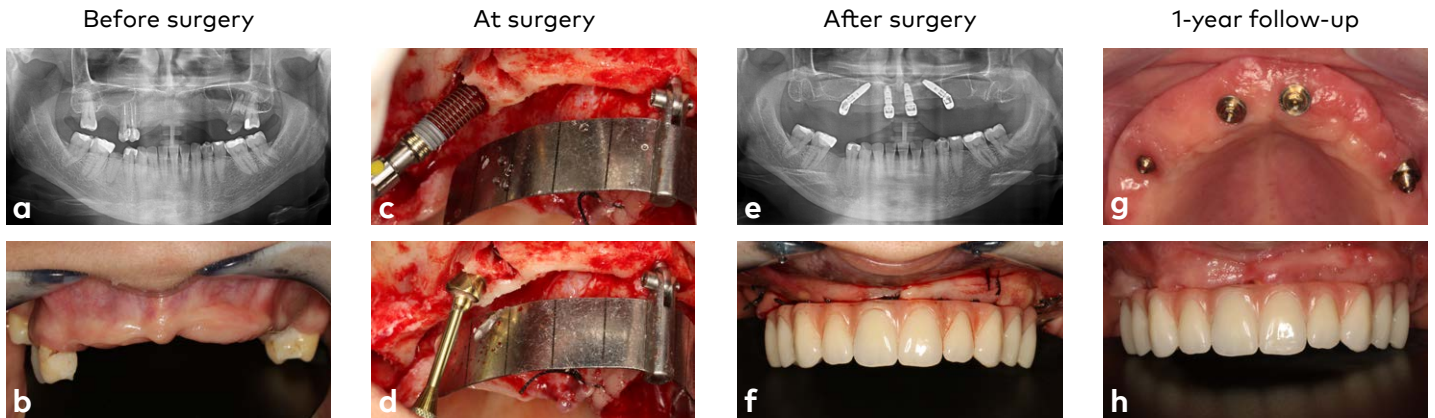
## The results

- **100% cumulative implant survival and prosthetic success.**
- **Low marginal bone remodeling** with a mean of -0.46 mm from implant insertion to 1 year.



- **Healthy and stable soft tissue response**, with the low median sulcus bleeding index of 1 (isolated bleeding spots visible when a periodontal probe is passed along the gingival margin) and mild plaque accumulation at the 1-year follow-up.
- **No biological complications.**

## Sample clinical case from the study



A 53-year-old female with failing dentition and severe bone atrophy in the maxilla (a,b) was treated according to the All-on-4® treatment concept with four NobelParallel CC TiUltra implants and Multi-unit Abutments Xeal (c-e). A temporary prosthesis, Malo Clinic all-acrylic bridge, was placed on the day of surgery (f) while the final prosthesis, Malo Clinic acrylic bridge on NobelProcera implant bar, was placed 3 months later. At 1 year, the patient shows excellent soft tissue health around the final restoration (g,h).

Images courtesy of Dr Ana Ferro. Video of the case available from the QR code below.

### Xeal and TiUltra are well-documented, clinically proven surfaces

In published studies as of February 2022

**235** patients  
**377** TiUltra implants  
**160** Xeal abutments

**Xeal and TiUltra surfaces show low marginal loss and healthy soft tissue response with the All-on-4® treatment concept**

### More to explore



Failing dentition and severe bone atrophy in the maxilla  
**Clinical case video**



**Study presentation video**  
**Dr. Ana Ferro**



[nobelbiocare.com/en-us/surfaces](https://nobelbiocare.com/en-us/surfaces)

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