

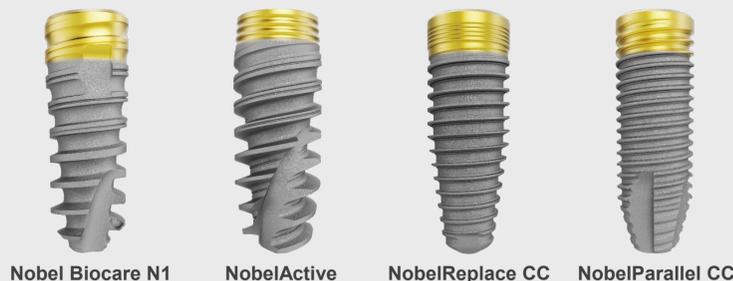
## CLINICAL RELEVANCE

- Gradually anodized surface implants demonstrate high versatility across a wide variety of protocols and all indications in routine clinical practice.
- They promote successful early osseointegration and healthy soft tissue response.

## Background and Aim

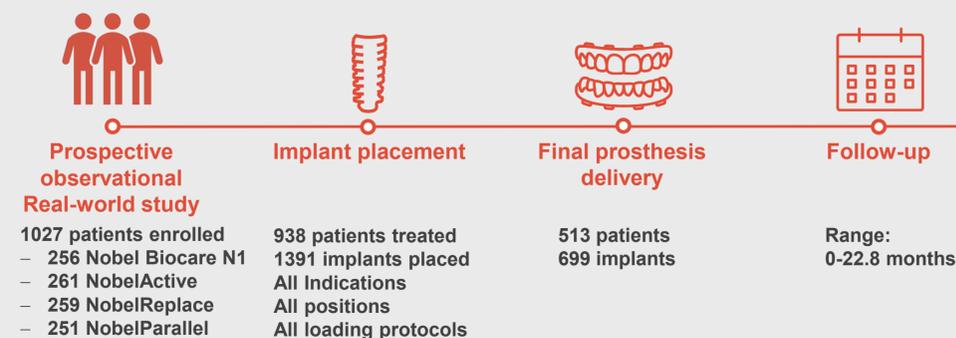
Gradually anodized implant surface is characterized by a moderately rough apex and a minimally rough collar designed to promote early osseointegration, limit peri-implantitis, and facilitate cleaning in case it occurs<sup>1</sup>.

**AIM** To evaluate the clinical performance of TiUltra in a large-scale prospective real-world data (RWD) collection from routine clinical practice and a diverse population of consecutive patients with varying comorbidities and demographics, not subject to the strict eligibility criteria nor a specified protocol typically followed in a clinical trial.



**Figure 1.** The four implant systems used in the study.

## Methods and Materials



**Figure 2.** Study flow-chart. Data according to extraction on July 3, 2023.

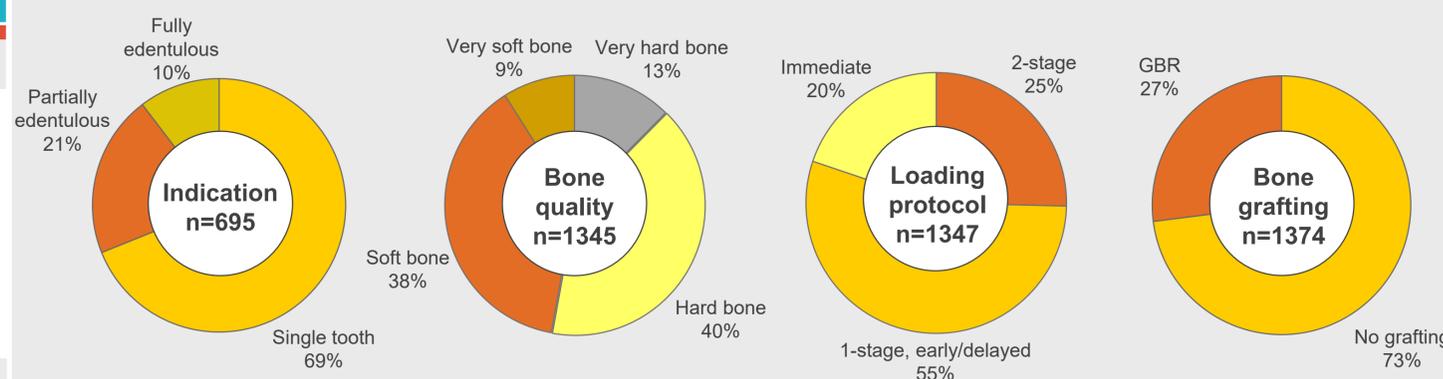
# Real-world study with 1000 patients treated with gradually anodized surface implants: Initial results

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## Results

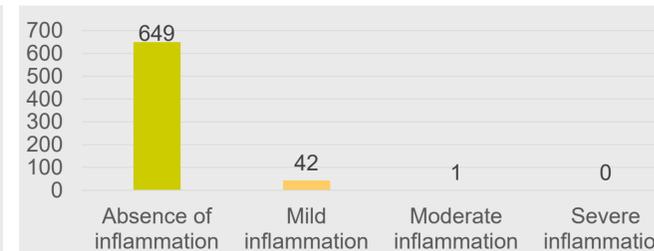
- Mean patient age was 53.3 ± 11.7 years. Of the 1027 patients, 77 (7.5%) were nicotine users, 42 (4.1%) had parafunctional tendencies, 85 (8.3%) had a history of periodontitis, 15 (1.5%) of peri-implantitis, 18 (1.8%) of severe oral mucositis, 23 (2.2%) diabetes, and 59 (5.7%) other significant diseases including osteoporosis, took bisphosphonates, or had various cancers (but no oral cancer).
- Of the 1391 implants placed in 938 treated patients, 14 failures occurred during the 0-22.8 months of follow-up.



**Figure 3.** Baseline characteristics based on data extraction on July 3, 2023.



**Figure 4.** Average time to final prosthesis delivery (n=692 implants).



**Figure 5.** Gingival Index at final prosthesis delivery (n=692 implant sites).

## Conclusion

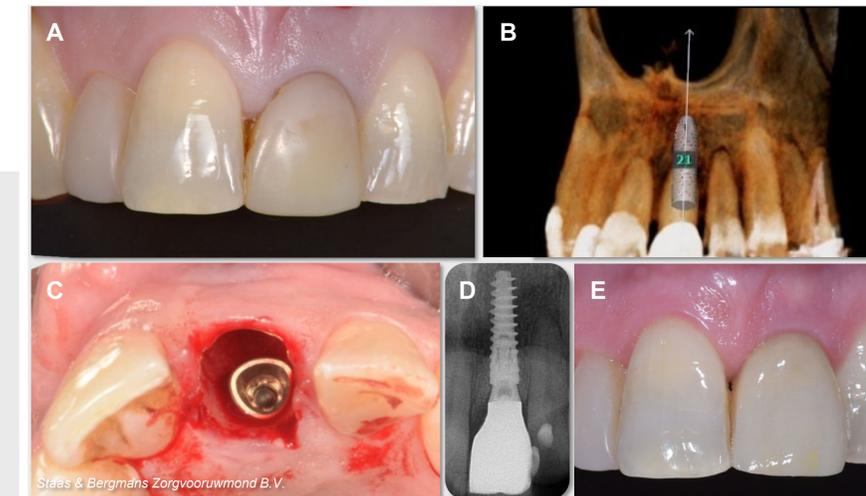
Within the limitations of the short follow-up gradually anodized surface implants demonstrate successful early osseointegration (with only 14 failures out of 1391 placed implants) and absence of inflammation in 92.8% of implant sites at the time of final prosthesis delivery across all indications.

## References

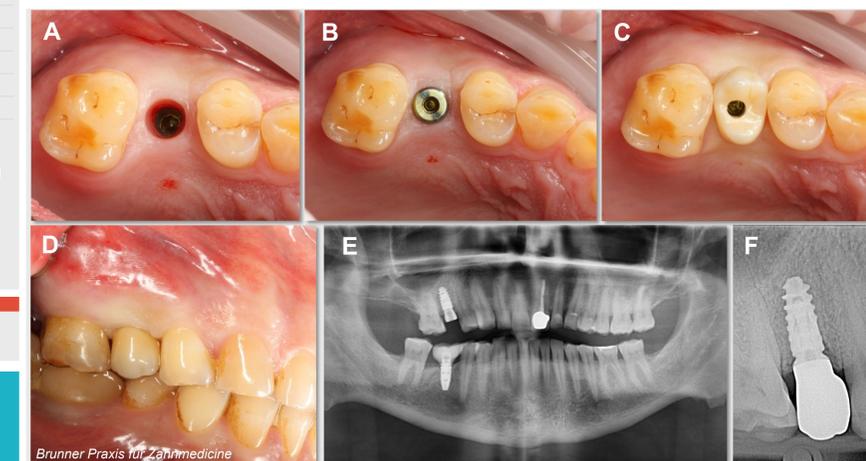
1. Rational design and in vitro characterization of novel dental implant and abutment surfaces for balancing clinical and biological needs. V Milleret, P S Lienemann, A Gasser, S Bauer, M Ehrbar, A Wennerberg. Clin Implant Dent Relat Res. 2019 Mar;21 Suppl 1:15-24.

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## Clinical Cases



**Figure 6.** A 57-year-old non-smoker male presented with recurrent endodontic problem on a frontal incisor (FDI 21) with a history of treatment and re-treatment (A). Treatment plan (B). Nobel Biocare N1 implant was placed (C) and provisionalized (D) on the same day. Final prosthesis delivery took place 3.9 months after implant insertion. Clinical view 17 weeks after final prosthesis delivery (E).



**Figure 7.** A 53-year-old non-smoker male presented with a longitudinal fracture at FDI 15. An implant (Nobel Biocare N1 RP, 9 mm) was placed subcrestally (A) in a healed socket 6 months post-extraction (without grafting) and covered with a healing abutment (B). Since the implants were deemed sufficiently stable, the final prosthesis (zirconia on Ti base) was delivered already 3.68 months after implantation (C,D). Radiographs taken at the definitive prosthesis delivery (E,F) show stable bone levels.