

# All-on-4® treatment concept – efficient and reliable full-arch restorations.

#### Science First

The All-on-4 treatment concept provides edentulous and soon-to-be edentulous patients with an efficient and effective restoration using four implants to support an immediately delivered full-arch prosthesis.

#### **Proven long-term solution**

Up to 10 years follow-up in the mandible and 5 years in the maxilla.<sup>1,2</sup>

#### High survival rates

High cumulative survival rates (CSR) in both edentulous maxilla and mandible.  $^{1-8}$ 

Mid-term 3–4 years 96.3–100% <sup>4-6</sup> Long-term 5–10 years 94.8–98.0% <sup>1,2</sup>

#### Favorable bone and soft tissue parameters

Stable marginal bone levels<sup>4-8</sup> and healthy soft tissue<sup>5</sup> both for tilted and axial implants.

#### Rapid improvement in quality of life

Immediate implant loading with a fixed provisional prosthesis quickly leads to improved patient satisfaction – with regards to function, esthetics, sense, speech, and self-esteem.<sup>7,8</sup> In an OHIP (oral health

impact profile) study, 95% of 250 patients described themselves as being either extremely satisfied (74%) or satisfied (21%) with their new teeth, and 98% said they would definitely recommend (88%) or consider recommending (10%) similar treatment to friends and colleagues.<sup>9</sup>

#### Shorter treatment times

Two key elements of the All-on-4 treatment concept significantly reduce treatment complexity, the number of surgeries, and the overall treatment time: tilting of the posterior implants avoids the need for time-consuming bone grafting procedures and reduces prosthetic cantilevers, while immediate loading shortens time to teeth.

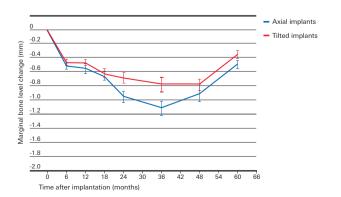
#### Lower costs

The All-on-4 treatment concept is not only the least time-consuming treatment option in comparison with conventional implant treatment modalities of the edentulous and soon-to-be edentulous jaw, but also the least costly.<sup>10</sup>

#### For healed and extraction sites

The All-on-4 treatment concept is successful in healed and extraction sites,<sup>8</sup> also in combination with the treatment concept NobelGuide with guided drilling and implant insertion.<sup>12,13</sup>

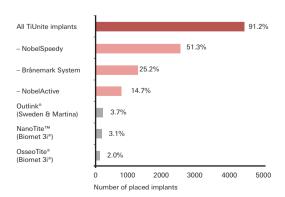
#### Stable bone levels around axial and tilted implants



Implants immediately loaded with radiographic baseline set at time of insertion.

Therefore all bone remodeling is reported. Graph shows results for mandible, but results for maxilla are similar.<sup>4</sup>

### TiUnite implants are the implants of choice for the All-on-4 treatment concept



Systematic review of clinical studies on All-on-4 treatment concept until August 3, 2012 (13 of 487 initially identified papers met the inclusion criteria). Nobel Biocare implants with TiUnite surface are predominantly used for this type of full-arch restoration (adapted from Patzelt et al. 2013).

## Clinical evidence supporting the All-on-4® treatment concept.

Published clinical studies evaluate the use of approximately 10,000 implants (NobelSpeedy Groovy, Brånemark System, NobelActive) in 2500 patients in both edentulous mandible and maxilla, with follow-up times of up to 10 years.

#### References

- 1 Malo P, de Araujo Nobre M, Lopes A, Moss SM, Molina GJ. A longitudinal study of the survival of All-on-4 implants in the mandible with up to 10 years of follow-up. J Am Dent Assoc 2011:142:310-20
- 2 Malo P, de Araujo Nobre M, Lopes A, Francischone C, Rigolizzo M. "All-on-4" Immediate-Function Concept for Completely Edentulous Maxillae: A Clinical Report on the Medium (3 Years) and Long-Term (5 Years) Outcomes. Clin Implant Dent Relat Res 2012;14 Suppl 1:e139-50
- 3 Babbush C, Kutsko G, Brokloff J. The all-on-four immediate function treatment concept with NobelActive implants: a retrospective study. J Oral Implantol 2011;37:431-45
- 4 Francetti L, Romeo D, Corbella S, Taschieri S, Del Fabbro M. Bone Level Changes Around Axial and Tilted Implants in Full-Arch Fixed Immediate Restorations. Interim Results of a Prospective Study. Clin Implant Dent Relat Res 2012;14:646-54
- 5 Agliardi E, Panigatti S, Clericò M, Villa C, Malò P. Immediate rehabilitation of the edentulous jaws with full fixed prostheses supported by four implants: interim results of a single cohort prospective study. Clin Oral Implants Res 2010;21:459-65

- 6 Balshi TJ, Wolfinger GJ, Slauch RW, Balshi SF. A retrospective analysis of 800 Brånemark System implants following the All-on-Four™ protocol. J Prosthodont 2014;23:83-8
- 7 Weinstein R, Agliardi E, Fabbro MD, Romeo D, Francetti L. Immediate rehabilitation of the extremely atrophic mandible with fixed full-prosthesis supported by four implants. Clin Implant Dent Relat Res 2012;14:434-41
- 8 Mozzati M, Arata V, Gallesio G, Mussano F, Carossa S. Immediate Postextractive Dental Implant Placement with Immediate Loading on Four Implants for Mandibular-Full-Arch Rehabilitation: A Retrospective Analysis. Clin Implant Dent Relat Res 2013;15:332-40
- 9 Babbush CA. Posttreatment quantification of patient experiences with full-arch implant treatment using a modification of the OHIP-14 questionnaire. J Oral Implantol 2012;38:251-60
- 10 Babbush CA, Kanawati A, Kotsakis GA, Hinrichs JE. Patient-Related and Financial Outcomes Analysis of Conventional Full-Arch Rehabilitation Versus the All-on-4 Concept: A Cohort Study. Implant Dent 2014;23:218-24

- 11 Patzelt SB, Bahat O, Reynolds MA, Strub JR. The All-on-Four Treatment Concept: A Systematic Review. Clin Implant Dent Relat Res 2013 [epub ahead of print]
- 12 Pomares C. A retrospective study of edentulous patients rehabilitated according to the 'all-on-four' or the 'all-on-six' immediate function concept using flapless computer-guided implant surgery. Eur J Oral Implantol 2010;3:155-63
- 13 Malo P, de Araujo Nobre M, Lopes A. The use of computer-guided flapless implant surgery and four implants placed in immediate function to support a fixed denture: preliminary results after a mean follow-up period of thirteen months. J Prosthet Dent 2007;97(6 Suppl):26-34