

## Overdentures supported by Astra Tech Implant System™

Prospective clinical studies with the Astra Tech Implant System™ show that the survival rate of implants in the mandible is the same when comparing overdentures and fixed bridges, irrespective of retaining system used<sup>1-11</sup>. The use of a ball abutment for a non-splinted support, as well as the use of a bar attachment for a splinted support, is well documented with a follow-up of 2-4 years<sup>2, 3, 5, 6, 8, 12-16</sup>, 5 years<sup>1, 4, 7, 9, 10, 17</sup>, and even 12 years<sup>18</sup>. The implants have been placed according to a 1-stage surgical technique<sup>2, 12, 17</sup> or a 2-stage technique<sup>1, 3-6, 8-10, 18</sup>. An overall healthy soft tissue response is reported, with only minor changes in marginal bone levels and very few complications. The reported survival rates for implants range from 95% to 100%<sup>1-10, 17, 18</sup>. Moreover, high patient satisfaction has been reported<sup>4, 6, 15-17, 19</sup>. The prosthetic and maintenance care is of great importance in achieving the successful outcome reported with this simple and cost-effective treatment option<sup>2, 3, 5, 7, 12, 15, 17-19</sup>.

The conclusion is that the use of Astra Tech Implant System™ provides reliable and predictable support for overdentures in the edentulous mandible.

1. Bakke M, Holm B, Gotfredsen K. Masticatory function and patient satisfaction with implant-supported mandibular overdentures: a prospective 5-year study. *Int J Prosthodont* 2002;15(6):575-81. (ID No. 78148) [Abstract in PubMed](#)
2. Cooper LF, Scurria MS, Lang LA, Guckes AD, Moriarty JD, Felton DA. Treatment of edentulism using Astra Tech implants and ball abutments to retain mandibular overdentures. *Int J Oral Maxillofac Implants* 1999;14(5):646-53. [Abstract in PubMed](#)
3. Davis DM. Implant supported overdentures-the King's experience. *J Dent* 1997;25 Suppl 1:S33-7. [Abstract in PubMed](#)
4. Davis DM, Packer ME. Mandibular overdentures stabilized by Astra Tech implants with either ball attachments or magnets: 5-year results. *Int J Prosthodont* 1999;12(3):222-9. (ID No. 79028) [Abstract in PubMed](#)
5. Davis DM, Rogers JO, Packer ME. The extent of maintenance required by implant-retained mandibular overdentures: a 3-year report. *Int J Oral Maxillofac Implants* 1996;11(6):767-74. [Abstract in PubMed](#)
6. Gotfredsen K. Implant supported overdentures-the Copenhagen experience. *J Dent* 1997;25 Suppl 1:S39-42. [Abstract in PubMed](#)
7. Gotfredsen K, Holm B. Implant-supported mandibular overdentures retained with ball or bar attachments: a randomized prospective 5-year study. *Int J Prosthodont* 2000;13(2):125-30. (ID No. 75355) [Abstract in PubMed](#)
8. Gotfredsen K, Holm B, Sewerin I, Harder F, Hjorting-Hansen E, Pedersen CS, et al. Marginal tissue response adjacent to Astra Dental Implants supporting overdentures in the mandible. *Clin Oral Implants Res* 1993;4(2):83-9. [Abstract in PubMed](#)
9. Makkonen TA, Holmberg S, Niemi L, Olsson C, Tammisalo T, Peltola J. A 5-year prospective clinical study of Astra Tech dental implants supporting fixed bridges or overdentures in the edentulous mandible. *Clin Oral Implants Res* 1997;8(6):469-75. (ID No. 75181) [Abstract in PubMed](#)
10. von Wowern N, Gotfredsen K. Implant-supported overdentures, a prevention of bone loss in edentulous mandibles? A 5-year follow-up study. *Clin Oral Implants Res* 2001;12(1):19-25. (ID No. 75358) [Abstract in PubMed](#)
11. Geckili O, Bilhan H, Bilgin T. A 24-week prospective study comparing the stability of titanium dioxide grit-blasted dental implants with and without fluoride treatment. *Int J Oral Maxillofac Implants* 2009;24(4):684-8. (ID No. 79232) [Abstract in PubMed](#)
12. Chaffee NR, Felton DA, Cooper LF, Palmqvist U, Smith R. Prosthetic complications in an implant-retained mandibular overdenture population: initial analysis of a prospective study. *J Prosthet Dent* 2002;87(1):40-4. [Abstract in PubMed](#)
13. Davis DM, Packer ME. The maintenance requirements of mandibular overdentures stabilized by Astra Tech implants using three different attachment mechanisms-balls, magnets, and bars; 3-year results. *Eur J Prosth Rest Dent* 2000;8(4):131-4. [Abstract in PubMed](#)
14. Yusuf H, Ratra N. Observations on 25 patients treated with ball-retained overdentures using the Astra Tech implant system. *Eur J Prosth Rest Dent* 1996;4(4):181-3. [Abstract in PubMed](#)
15. De Bruyn H, Besseler J, Raes F, Vaneker M. Clinical outcome of overdenture treatment on two nonsubmerged and nonsplinted Astra Tech Microthread implants. *Clin Implant Dent Relat Res* 2009;11(2):81-9. [Abstract in PubMed](#)
16. Packer M, Nikitin V, Coward T, Davis DM, Fiske J. The potential benefits of dental implants on the oral health quality of life of people with Parkinson's disease. *Gerodontology* 2009;26(1):11-8. [Abstract in PubMed](#)
17. Cooper LF, Moriarty JD, Guckes AD, Klee LB, Smith RG, Almgren C, et al. Five-year prospective evaluation of mandibular overdentures retained by two microthreaded, TiOblast nonsplinted implants and retentive ball anchors. *Int J Oral Maxillofac Implants* 2008;23(4):696-704. [Abstract in PubMed](#)
18. Vroom MG, Sipos P, de Lange GL, Grundemann LJ, Timmerman MF, Loos BG, et al. Effect of surface topography of screw-shaped titanium implants in humans on clinical and radiographic parameters: a 12-year prospective study. *Clin Oral Implants Res* 2009;20(11):1231-39. [Abstract in PubMed](#)
19. Davis DM, Watson RM. The use of two implant systems for providing implant supported overdentures in the mandible--a clinical appraisal. *Eur J Prosth Rest Dent* 1993;2(2):67-71. [Abstract in PubMed](#)

