

Long-term clinical documentation of the Astra Tech Implant System™

The long-term (i.e. ≥ 5 years) clinical documentation is one of the most important tools showing evidence that the Astra Tech Implant System™ is efficient, reliable and safe. It is important to note that the main features of the Astra Tech Implant System marketed today, i.e. Conical Seal Design™, MicroThread™, and Connective Contour™ are all evaluated in long-term clinical documentation.

The surface marketed today is the OsseoSpeed™ surface, which is a further development and improvement of the TiOblast™ surface. The TiOblast surface has among the longest clinical follow-up period reported in the literature, compared with competitor systems with other moderately roughened surfaces, i.e. 10 years¹⁻³. The prospective, 10-year follow-up study on fixed full arches in edentulous patients reported a cumulative implant survival rate of 96.6% in the maxilla and 97.2 % in the mandible, and a 100% survival rate for the suprastructures².

A study with up to 7 years follow-up on treatment with single implants report a success rate of 95.6%⁴ showing that the Astra Tech Implant System can maintain the good hard and soft tissue response over time. The results on maintained bone levels and good esthetics are confirmed in other long-term prospective clinical trials on treatment with single implants⁵⁻⁷. Furthermore, the Astra Tech Implant System is documented in the long-term perspective with regards to prospective clinical studies on partially dentate patients treated with fixed partial bridges⁸⁻¹¹, totally edentulous patients treated with overdentures¹²⁻¹⁸ or fixed full bridges^{2, 16, 19, 20}, as well as in augmentation situations²¹. These studies (complete study cohorts) reports mean bone level changes from gain of 0.12 mm to a loss of 0.48 mm after 5 years in function^{5-9, 11, 13-16, 18-20}. Five to ten year clinical outcomes on implant treatment of periodontally compromised patients are also available^{11, 22-24}. In addition, there are several long-term retrospective studies published²⁵⁻³¹.

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Reprints can be ordered from references marked with Ref. No.

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