

Klinische Dokumentation zum ASTRA TECH Implant System™

Das ASTRA TECH Implant System besitzt vier Hauptmerkmale: das Design der Implantat-Abutment-Verbindung (Conical Seal Design), das Mikrogewinde am Implantathals (MicroThread), die einzigartige Formgebung der Schnittstelle zwischen Abutment und dem Implantat (Connective Contour) und die OsseoSpeed-Oberfläche.

Die OsseoSpeed-Oberfläche wurde 2004 eingeführt und ist die Weiterentwicklung der mäßig rauen Titanoberfläche, TiOblast, die zu den Produkten mit den am längsten klinischen prospektiven Follow-ups in der Zahnimplantat-Literatur zählt¹⁻⁸.

Das OsseoSpeed-Implantat wurde in mehreren prospektiven klinischen Studien mit einem Follow-up von mindestens einem Jahr dokumentiert. Die Ergebnisse zeigen, dass das Implantat bei einer Vielzahl von Indikationen im Ober- und Unterkiefer zuverlässig verwendet werden kann, mit einer Überlebensrate von 94,5 bis 100 Prozent⁹⁻²⁴. Vergleichbar gute Resultate werden bei Sofortbelastungsprotokollen im atrophierten Oberkiefer²⁵⁻²⁷, im posterioren Bereich nach Sinuslift/Augmentation²⁸⁻³⁶ und nach Sofortimplantation in Extraktionsalveolen^{15-17, 24, 37-45} berichtet. Außerdem wurde in mehreren Studien über gute Ästhetik^{24, 41, 46-50} und hohe Patientenzufriedenheit^{16, 51-66} berichtet.

Sehr geringe Veränderungen bei den Werten des Implantat-Stabilitäts-Quotienten (ISQ) wurden für OsseoSpeed-Implantate während der frühen Einheilung verzeichnet^{31, 67-71}, was als kontinuierlicher Zugewinn an Osseointegration und Stabilität interpretiert wird. Prospektive klinische Studien berichten über sehr geringe Veränderungen des mittleren marginalen Knochenniveaus um OsseoSpeed-Implantate nach einem Jahr^{25, 32, 40, 49, 60, 68, 69, 72-85} (Bereich +0,06 bis 0,54 mm), zwei Jahren^{21, 86-88} (Bereich 0,11 bis 0,6 mm), drei Jahren^{15, 17, 23, 27, 58, 67, 89-92} (Bereich +1,6 bis 0,88 mm) und fünf Jahren^{19, 42, 70, 93, 94} (Bereich 0,1 bis 0,3 mm) in Funktion. Tatsächlich weist die Mehrzahl der Studien eine mittlere Reduktion des marginalen Knochenniveaus von 0,3 mm oder weniger nach ein, zwei, drei und fünf Jahren in Funktion aus.

Literatur über die besonderen Hauptmerkmale des ASTRA TECH Implant System finden Sie unter www.dentsplyimplants.de

1. Rasmusson L, Roos J, Bystedt H. A 10-year follow-up study of titanium dioxide-blasted implants. *Clin Impl Dent Rel Res* 2005;7(1):36-42. [Abstract in PubMed](#)
2. Vroom MG, Sipos P, de Lange GL, 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](#)
3. Albrektsson T, Sennerby L, Wennerberg A. State of the art of oral implants. *Periodontol* 2000 2008;47:15-26. [Abstract in PubMed](#)
4. Albrektsson T, Wennerberg A. Oral implant surfaces: Part 2-review focusing on clinical knowledge of different surfaces. *Int J Prosthodont* 2004;17(5):544-64. [Abstract in PubMed](#)
5. Jacobs R, Pittayapat P, van Steenberghe D, et al. A split-mouth comparative study up to 16 years of two screw-shaped titanium implant systems. *J Clin Periodontol* 2010;37(12):119-127. [Abstract in PubMed](#)
6. Ravald N, Dahlgren S, Teiwik A, et al. Long-term evaluation of Astra Tech and Branemark implants in patients treated with full-arch bridges. Results after 12-15 years. *Clin Oral Implants Res* 2013;24(10):1144-51. [Abstract in PubMed](#)
7. Mertens C, Steveling HG. Implant-supported fixed prostheses in the edentulous maxilla: 8-year prospective results. *Clin Oral Implants Res* 2010;22(5):464-72. [Abstract in PubMed](#)
8. Renvert S, Lindahl C, Persson RG. The incidence of peri-implantitis for two different implant systems over a period of thirteen years. *J Clin Periodontol* 2012;39(12):1191-7. [Abstract in PubMed](#)
9. Stanford CM, Wagner W, Rodriguez YBR, et al. Evaluation of the effectiveness of dental implant therapy in a practice-based network (FOCUS). *Int J Oral Maxillofac Implants* 2010;25(2):367-73. [Abstract in PubMed](#)
10. Bressan E, Tomasi C, Stellini E, et al. Implant-supported mandibular overdentures: a cross-sectional study. *Clin Oral Implants Res* 2012;23(7):814-9. [Abstract in PubMed](#)
11. D'haese J, De Bruyn H. Effect of smoking habits on accuracy of implant placement using mucosally supported stereolithographic surgical guides. *Clin Impl Dent Rel Res* 2011;E-pub May 20, doi:10.1111/j.1708-8208.2011.00353.x. [Abstract in PubMed](#)
12. D'haese J, Van De Velde T, Elaut L, et al. A prospective study on the accuracy of mucosally supported stereolithographic surgical guides in fully edentulous maxillae. *Clin Impl Dent Rel Res* 2012;14(2):293-303. [Abstract in PubMed](#)
13. Mumcu E, Bilhan H, Geckili O. The influence of healing type on marginal bone levels of implants supporting mandibular overdentures: A randomized clinical study. *Indian J Dent Res* 2012;23(4):514-8. [Abstract in PubMed](#)
14. Lops D, Bressan E, Chiapasco M, et al. Zirconia and titanium implant abutments for single-tooth implant prostheses after 5 years of function in posterior regions. *Int J Oral & Maxillofac Implants* 2013;28(1):281-87.
15. De Bruyn H, Raes F, Cooper LF, et al. Three-years clinical outcome of immediate provisionalization of single Osseospeed implants in extraction sockets and healed ridges. *Clin Oral Implants Res* 2013;24(2):217-23. [Abstract in PubMed](#)
16. Raes F, Cooper LF, Tarrida LG, et al. A case-control study assessing oral-health-related quality of life after immediately loaded single implants in healed alveolar ridges or extraction sockets. *Clin Oral Implants Res* 2012;23(5):602-8. [Abstract in PubMed](#)
17. Sanz M, Cecchinato D, Ferrus J, et al. Implants placed in fresh extraction sockets in the maxilla: clinical and radiographic outcomes from a 3-year follow-up examination. *Clin Oral Implants Res* 2014;25(3):321-7. [Abstract in PubMed](#)
18. Limmer B, Sanders AE, Reside G, et al. Complications and Patient-Centered Outcomes with an Implant-Supported Monolithic Zirconia Fixed Dental Prosthesis: 1 Year Results. *J Prosthodont* 2014;E-pub Jan 8, doi:10.1111/jopr.12110. [Abstract in PubMed](#)
19. Donati M, La Scala V, Di Raimondo R, et al. Marginal bone preservation in single-tooth replacement: A 5-year prospective clinical multicenter study. *Clin Impl Dent Rel Res* 2013;E-pub July 25, doi:10.1111/cid.12117. [Abstract in PubMed](#)
20. Borges T, Lima T, Carvalho A, et al. The influence of customized abutments and custom metal abutments on the presence of the interproximal papilla at implants inserted in single-unit gaps: a 1-year prospective clinical study. *Clin Oral Implants Res* 2013;E-pub Sep 12, doi:10.1111/clr.12257. [Abstract in PubMed](#)
21. Vervaeke S, Collaert B, De Bruyn H. The effect of implant surface modifications on survival and bone loss of immediately loaded implants in the edentulous mandible. *Int J Oral Maxillofac Implants* 2013;28(5):1352-7. [Abstract in PubMed](#)
22. Esquivel-Upshaw JF, Clark AE, Shuster JJ, et al. Randomized clinical trial of implant-supported ceramic-ceramic and metal-ceramic fixed dental prostheses: preliminary results. *J Prosthodont* 2014;23(2):73-82. [Abstract in PubMed](#)
23. Maiorana C, King P, Quaas S, et al. Clinical and radiographic evaluation of early loaded narrow-diameter implants: 3 years follow-up. *Clin Oral Implants Res* 2013;E-pub Oct 30, doi:10.1111/clr.12281.
24. Cooper LF, Reside GJ, Raes F, et al. Immediate Provisionalization of Dental Implants Placed in Healed Alveolar Ridges and Extraction Sockets: A 5-year Prospective Evaluation. *Int J Oral Maxillofac Implants* 2014;29(3):709-17. [Abstract in PubMed](#)
25. Toljanic JA, Baer RA, Ekstrand K, et al. Implant rehabilitation of the atrophic edentulous maxilla including immediate fixed provisional restoration without the use of bone grafting: a review of 1-year outcome data from a long-term prospective clinical trial. *Int J Oral Maxillofac Implants* 2009;24(3):518-26. [Abstract in PubMed](#)
26. Toljanic JA, Thor A, Baer R, et al. Immediate fixed restoration of implants in the atrophic edentulous maxilla. *Dent Today* 2008;27(6):56, 58, 60 passim; quiz 63. [Abstract in PubMed](#)
27. Thor A, Ekstrand K, Baer RA, et al. Three-year Follow-up of Immediately Loaded Implants in the Edentulous Atrophic Maxilla: A Study in Patients with Poor Bone Quantity and Quality. *Int J Oral Maxillofac Implants* 2014;29(3):642-9. [Abstract in PubMed](#)
28. Galindo-Moreno P, Padijal-Molina M, Fernandez-Barbero JE, et al. Optimal microvessel density from composite graft of autogenous maxillary cortical bone and anorganic bovine bone in sinus augmentation: influence of clinical variables. *Clin Oral Implants Res* 2010;21(2):221-7. [Abstract in PubMed](#)
29. Kahnberg KE, Wallstrom M, Rasmusson L. Local sinus lift for single-tooth implant. I. Clinical and radiographic follow-up. *Clin Impl Dent Rel Res* 2009;13(3):231-7. [Abstract in PubMed](#)
30. Trombelli L, Minenna P, Franceschetti G, et al. Transcrestal sinus floor elevation with a minimally invasive technique. *J Periodontol* 2010;81(1):158-66. [Abstract in PubMed](#)
31. Pieri F, Aldini NN, Fini M, et al. Immediate fixed implant rehabilitation of the atrophic edentulous maxilla after bilateral sinus floor augmentation: a 12-month pilot study. *Clin Impl Dent Rel Res* 2012;14 (Suppl 1):e67-82. [Abstract in PubMed](#)
32. Piero B, Mario V, Niccolo N, et al. Implant placement in combination with sinus membrane elevation without biomaterials: A 1-year study on 15 patients. *Clin Impl Dent Rel Res* 2012;14(5):682-9. [Abstract in PubMed](#)
33. Sivoilella S, Bressan E, Gnocco E, et al. Maxillary sinus augmentation with bovine bone and simultaneous dental implant placement in conditions of severe alveolar atrophy: a retrospective analysis of a consecutively treated case series. *Quintessence Int* 2011;42(10):851-62. [Abstract in PubMed](#)

34. Mertens C, Steveling HG, Seeberger R, et al. Reconstruction of severely atrophied alveolar ridges with calvarial onlay bone grafts and dental implants. *Clin Impl Dent Rel Res* 2013;15(5):673-83. [Abstract in PubMed](#)
35. Mertens C, Decker C, Seeberger R, et al. Early bone resorption after vertical bone augmentation – a comparison of calvarial and iliac grafts. *Clin Oral Implants Res* 2013;24(7):820-5. [Abstract in PubMed](#)
36. Badr M, Coulthard P, Alissa R, et al. The efficacy of platelet-rich plasma in grafted maxillae. A randomised clinical trial. *Eur J Oral Implantol* 2010;3(3):233-44. [Abstract in PubMed](#)
37. Gökcen-Röhlig B, Meric U, Keskin H. Clinical and radiographic outcomes of implants immediately placed in fresh extraction sockets. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2010;109(4):1-7. [Abstract in PubMed](#)
38. Lops D, Chiapasco M, Rossi A, et al. Incidence of inter-proximal papilla between a tooth and an adjacent immediate implant placed into a fresh extraction socket: 1-year prospective study. *Clin Oral Implants Res* 2008;19(11):1135-40. ID No. 79132 [Abstract in PubMed](#)
39. Acocella A, Bertolai R, Sacco R. Modified insertion technique for immediate implant placement into fresh extraction socket in the first maxillary molar sites: a 3-year prospective study. *Implant Dent* 2010;19(3):220-8. [Abstract in PubMed](#)
40. Barbier L, Abeloos J, De Clercq C, et al. Peri-implant bone changes following tooth extraction, immediate placement and loading of implants in the edentulous maxilla. *Clin Oral Investig* 2012;16(4):1061-70. [Abstract in PubMed](#)
41. Noelken R, Neffe BA, Kunkel M, et al. Maintenance of marginal bone support and soft tissue esthetics at immediately provisionalized OsseoSpeed implants placed into extraction sites: 2-year results. *Clin Oral Implants Res* 2014;25(2):214-20. [Abstract in PubMed](#)
42. Berberi AN, Sabbagh JM, Aboushelib MN, et al. A 5-year comparison of marginal bone level following immediate loading of single-tooth implants placed in healed alveolar ridges and extraction sockets in the maxilla. *Front Physiol* 2014;5:29. [Abstract in PubMed](#)
43. Levin B, Wilk B. Immediate provisionalization of immediate implants in the esthetic zone: a prospective case series evaluating implant survival, esthetics, and bone maintenance. *Compendium* 2013;34(5):352-61.
44. Cecchinato D, Lops D, Salvi GE, et al. A prospective, randomized, controlled study using OsseoSpeed implants placed in maxillary fresh extraction socket: soft tissues response. *Clin Oral Implants Res* 2013;E-pub Dec 5, doi:10.1111/clr.12295. [Abstract in PubMed](#)
45. Raes F, Renckens L, Aps J, et al. Reliability of circumferential bone level assessment around single implants in healed ridges and extraction sockets using cone beam CT. *Clin Impl Dent Rel Res* 2013;15(5):661-72. [Abstract in PubMed](#)
46. Bressan E, Paniz G, Lops D, et al. Influence of abutment material on the gingival color of implant-supported all-ceramic restorations: a prospective multicenter study. *Clin Oral Implants Res* 2010;22(6):631-7. [Abstract in PubMed](#)
47. Raes F, Cosyn J, Crommelinck E, et al. Immediate and conventional single implant treatment in the anterior maxilla: 1-year results of a case series on hard and soft tissue response and aesthetics. *J Clin Periodontol* 2011;38(4):385-94. [Abstract in PubMed](#)
48. Raes F, Cosyn J, De Bruyn H. Clinical, aesthetic, and patient-related outcome of immediately loaded single implants in the anterior maxilla: A prospective study in extraction sockets, healed ridges, and grafted sites. *Clin Impl Dent Rel Res* 2013;15(6):819-35. [Abstract in PubMed](#)
49. Tsuda H, Rungcharassaeng K, Kan JY, et al. Peri-implant tissue response following connective tissue and bone grafting in conjunction with immediate single-tooth replacement in the esthetic zone: A case series. *Int J Oral Maxillofac Implants* 2011;26(2):427-36. [Abstract in PubMed](#)
50. van Brakel R, Noordmans HJ, Frenken J, et al. The effect of zirconia and titanium implant abutments on light reflection of the supporting soft tissues. *Clin Oral Implants Res* 2011;22(10):1172-8. [Abstract in PubMed](#)
51. Bashutski JD, Wang HL, Rudek I, et al. Effect of flapless surgery on single-tooth implants in the esthetic zone: a randomized clinical trial. *J Periodontol* 2013;84(12):1747-54. [Abstract in PubMed](#)
52. Bilhan H, Geckili O, Sulun T, et al. A quality-of-life comparison between self-aligning and ball attachment systems for two-implant-retained mandibular overdentures. *J Oral Implantol* 2010;37(sp1):167-73. [Abstract in PubMed](#)
53. De Kok I, Chang K-H, Li T-S, et al. Comparison of three-implant-supported fixed dentures and two-implant-retained overdentures in the edentulous mandible: A pilot study of treatment efficacy and patient satisfaction. *Int J Oral Maxillofac Implants* 2011;26(2):415-26. [Abstract in PubMed](#)
54. Erkapers M, Ekstrand K, Baer RA, et al. Patient satisfaction following dental implant treatment with immediate loading in the edentulous atrophic maxilla. *Int J Oral Maxillofac Implants* 2011;26(2):356-64. [Abstract in PubMed](#)
55. Gates WD, 3rd, Cooper LF, Sanders AE, et al. The effect of implant-supported removable partial dentures on oral health quality of life. *Clin Oral Implants Res* 2014;25(2):207-13. [Abstract in PubMed](#)
56. Geckili O, Bilhan H, Bilgin T. Impact of mandibular two-implant retained overdentures on life quality in a group of elderly Turkish edentulous patients. *Arch Gerontol Geriatr* 2011;53(2):233-6. [Abstract in PubMed](#)
57. Hosseini M, Gotfredsen K. A feasible, aesthetic quality evaluation of implant-supported single crowns: an analysis of validity and reliability. *Clin Oral Implants Res* 2012;23(4):453-8. [Abstract in PubMed](#)
58. Hosseini M, Worsaae N, Schiodt M, et al. A 3-year prospective study of implant-supported, single-tooth restorations of all-ceramic and metal-ceramic materials in patients with tooth agenesis. *Clin Oral Implants Res* 2013;24(10):1078-87. [Abstract in PubMed](#)
59. Pieri F, Aldini NN, Marchetti C, et al. Esthetic outcome and tissue stability of maxillary anterior single-tooth implants following reconstruction with mandibular block grafts: a 5-year prospective study. *Int J Oral Maxillofac Implants* 2013;28(1):270-80. [Abstract in PubMed](#)
60. Slot W, Raghoobar GM, Vissink A, et al. Maxillary overdentures supported by four or six implants in the anterior region; 1-year results from a randomized controlled trial. *J Clin Periodontol* 2013;40(3):303-10. [Abstract in PubMed](#)
61. Kriz P, Seydlova M, Dostalova T, et al. Oral health-related quality of life and dental implants - preliminary study. *Cent Eur J Med* 2012;7(2):209-15.
62. Van Lierde K, Browaeys H, Corthals P, et al. Comparison of speech intelligibility, articulation and oromyofunctional behaviour in subjects with single-tooth implants, fixed implant prosthetics or conventional removable prostheses. *J Oral Rehabil* 2012;39(4):285-93. [Abstract in PubMed](#)
63. Vera C, De Kok IJ, Chen W, et al. Evaluation of post-implant buccal bone resorption using cone beam computed tomography: a clinical pilot study. *Int J Oral Maxillofac Implants* 2012;27(5):1249-57. [Abstract in PubMed](#)
64. Kriz P, Seydlova M, Dostalova T, et al. Dental implants and improvement of oral health-related quality of life. *Community Dent Oral Epidemiol* 2012;40(Suppl 1):65-70.
65. Van Lierde KM, Corthals P, Browaeys H, et al. Impact of anterior single-tooth implants on quality of life, articulation and oromyofunctional behaviour: a pilot study. *J Oral Rehabil* 2011;38(3):170-5. [Abstract in PubMed](#)

66. Cakir O, Kazancioglu HO, Celik G, et al. Evaluation of the Efficacy of Mandibular Conventional and Implant Prostheses in a Group of Turkish Patients: A Quality of Life Study. *J Prosthodont* 2014;E-pub Jan 15, doi:10.1111/jopr.12120. [Abstract in PubMed](#)
67. Geckili O, Bilhan H, Mumcu E, et al. Three-year radiologic follow-up of marginal bone loss around titanium dioxide grit-blasted dental implants with and without fluoride treatment. *Int J Oral Maxillofac Implants* 2011;26(2):319-24. [Abstract in PubMed](#)
68. Liaje A, Ozkan YK, Ozkan Y, et al. Stability and marginal bone loss with three types of early loaded implants during the first year after loading. *Int J Oral Maxillofac Implants* 2012;27(1):162-72. [Abstract in PubMed](#)
69. Rismanchian M, Fazel A, Rakhshan V, et al. One-year clinical and radiographic assessment of fluoride-enhanced implants on immediate non-functional loading in posterior maxilla and mandible: a pilot prospective clinical series study. *Clin Oral Implants Res* 2011;22(12):1440-5. [Abstract in PubMed](#)
70. Schliephake H, Rodiger M, Phillips K, et al. Early loading of surface modified implants in the posterior mandible - 5 year results of an open prospective non-controlled study. *J Clin Periodontol* 2012;39 (2):188-95. [Abstract in PubMed](#)
71. Störe G, Heyden A, Walaas L. Osseointegration surgery and implant stability in irradiated mandibles. *Oral Surgery* 2011;4:65-72. [Abstract](#)
72. Galindo-Moreno P, Nilsson P, King P, et al. Clinical and radiographic evaluation of early loaded narrow diameter implants - 1-year follow-up. *Clin Oral Implants Res* 2012;23(5):609-16. [Abstract in PubMed](#)
73. Gulje F, Abrahamsson J, Chen S, et al. Implants of 6 mm vs. 11 mm lengths in the posterior maxilla and mandible: a 1-year multicenter randomized controlled trial. *Clin Oral Implants Res* 2013;24(12):1325-31. [Abstract in PubMed](#)
74. Marcellis K, Verbruggen M, Naert I, et al. Model-based guided implant insertion for solitary tooth replacement: a pilot study. *Clin Oral Implants Res* 2012;23(8):999-1003. [Abstract in PubMed](#)
75. Noelken R, Donati M, Fiorellini J, et al. Soft and hard tissue alterations around implants placed in an alveolar ridge with a sloped configuration. *Clin Oral Implants Res* 2014;25(1):3-9. [Abstract in PubMed](#)
76. Slot W, Raghoobar GM, Vissink A, et al. Maxillary overdentures supported by anteriorly or posteriorly placed implants opposed by a natural dentition in the mandible: a 1-year prospective case series study. *Clin Implant Dent Relat Res* 2014;16(1):51-61. [Abstract in PubMed](#)
77. D'haese J, Vervaeke S, Verbanck N, et al. Clinical and radiographic outcome of implants placed using stereolithographic guided surgery: a prospective monocenter study. *Int J Oral Maxillofac Implants* 2013;28(1):205-15. [Abstract in PubMed](#)
78. Balleri P, Ferrari M, Veltri M. One-year outcome of implants strategically placed in the retrocanine bone triangle. *Clin Impl Dent Rel Res* 2010;12(4):324-30. [Abstract in PubMed](#)
79. Cooper LF, Raes F, Reside GJ, et al. Comparison of radiographic and clinical outcomes following immediate provisionalization of single-tooth dental implants placed in healed alveolar ridges and extraction sockets. *Int J Oral Maxillofac Implants* 2010;25(6):1222-32. [Abstract in PubMed](#)
80. Donati M, La Scala V, Billi M, et al. Immediate functional loading of implants in single tooth replacement: a prospective clinical multicenter study. *Clin Oral Implants Res* 2008;19(8):740-48. [Abstract in PubMed](#)
81. Gulje F, Raghoobar GM, Ter Meulen JW, et al. Mandibular overdentures supported by 6-mm dental implants: A 1-year prospective cohort study. *Clin Impl Dent Rel Res* 2011;14(Supplement 1):e59-e66. [Abstract in PubMed](#)
82. Kim JJ, Lee DW, Kim CK, et al. Effect of conical configuration of fixture on the maintenance of marginal bone level: preliminary results at 1 year of function. *Clin Oral Implants Res* 2010;21(4):439-44. [Abstract in PubMed](#)
83. Koutouzis T, Koutouzis G, Tomasi C, et al. Immediate loading of implants placed with the osteotome technique: One-year prospective case series. *J Periodontol* 2011;82(11):1556-62. [Abstract in PubMed](#)
84. Roe P, Kan JY, Rungcharassaeng K, et al. Immediate loading of unsplinted implants in the anterior mandible for overdentures: a case series. *Int J Oral Maxillofac Implants* 2010;25(5):1028-35. [Abstract in PubMed](#)
85. Ghozeizi R, Alikhasi M, Siadat M-R, et al. A radiographic comparison of progressive and conventional loading on crestal bone loss and dentistry in single dental implants: A randomized controlled trial study. *J Dentistry, Teheran Univ Med Sci* 2013;10(2):155-63.
86. Pieri F, Aldini NN, Fini M, et al. Preliminary 2-year report on treatment outcomes for 6-mm-long implants in posterior atrophic mandibles. *Int J Prosthodont* 2012;25(3):279-89. [Abstract in PubMed](#)
87. Collaert B, Wijnen L, De Bruyn H. A 2-year prospective study on immediate loading with fluoride-modified implants in the edentulous mandible. *Clin Oral Implants Res* 2011;22(10):1111-6. [Abstract in PubMed](#)
88. Raes S, Rocci A, Raes F, et al. A prospective cohort study on the impact of smoking on soft tissue alterations around single implants. *Clin Oral Implants Res* 2014. [Abstract in PubMed](#)
89. Tabrizi R, Pourdanesh F, Zare S, et al. Do angulated implants increase the amount of bone loss around implants in the anterior maxilla? *J Oral Maxillofac Surg* 2013;71(2):272-7. [Abstract in PubMed](#)
90. Barewal RM, Stanford C, Weesner TC. A randomized controlled clinical trial comparing the effects of three loading protocols on dental implant stability. *Int J Oral Maxillofac Implants* 2012;27(4):945-56. [Abstract in PubMed](#)
91. Roe P, Kan JY, Rungcharassaeng K, et al. Immediate loading of unsplinted implants in the anterior mandible for overdentures: 3-year results. *Int J Oral Maxillofac Implants* 2011;26(6):1296-302. [Abstract in PubMed](#)
92. Palmer RM, Howe LC, Palmer PJ, et al. A prospective clinical trial of single Astra Tech 4.0 or 5.0 diameter implants used to support two-unit cantilever bridges: results after 3 years. *Clin Oral Implants Res* 2012;23(1):35-40. [Abstract in PubMed](#)
93. Mertens C, Steveling HG. Early and immediate loading of titanium implants with fluoride-modified surfaces: results of 5-year prospective study. *Clin Oral Implants Res* 2011;22(12):1354-60. [Abstract in PubMed](#)
94. Lops D, Bressan E, Chiapasco M, et al. Zirconia and titanium implant abutments for single-tooth implant prostheses after 5 years of function in posterior regions. *Int J Oral Maxillofac Implants* 2013;28(1):281-7. [Abstract in PubMed](#)