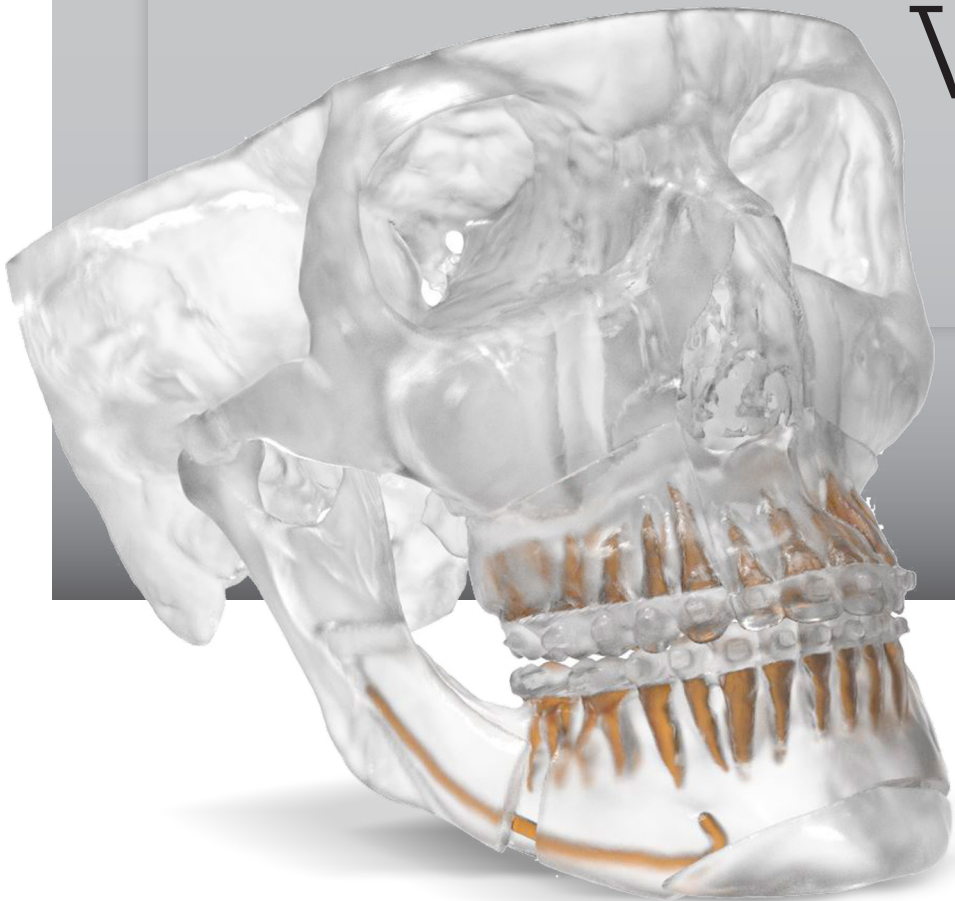


VSP[®] Orthognathics

Virtual Surgical
Planning



Virtual Surgical Planning

VSP Orthognathics represents a major leap forward in virtual planning of orthognathic surgical procedures. Years of research and technology have led to the creation of a protocol that allows for accurate planning and precise clinical transfer via 3D printed splints.

- Accurately simulate orthognathic procedures in a virtual environment using CT/CBCT.
- Software planning assistance from a team of experts at 3D Systems.
- Replace traditional model surgery with virtual planning and 3D printed splints.

Part number	Description
VSPORTHOG	VSP Orthognathics case bundle

*Part number may vary based on case deliverables

For information regarding CT scanning protocols please refer to the CT scanning protocol or your Stryker sales representative.

A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker and 3D Systems do not dispense medical advice and recommend that surgeons be trained in the use of any particular product before using it in surgery.

The information presented is intended to demonstrate the breadth of Stryker and 3D Systems product offerings. A surgeon must always refer to the package insert, product label and/or instructions for use before using any Stryker and 3D Systems product. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

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Protocol

1. Xia JJ, Gateno J, Teichgraber JF: A new clinical protocol to evaluate cranio-maxillofacial deformity and to plan surgical correction. J Oral Maxillofac Surg 67(10):2093, 2009
2. Schatz EC, Xia JJ, Gateno J: Development of a technique for recording and transferring natural head position in 3 dimensions. J Craniofac Surg 21(5):1452-1455, 2010
3. McCormick S, Drew S: Virtual model surgery for efficient planning and surgical performance. J Oral Maxillofac Surg 69:638-644, 2011
4. Xia JJ, McGrory JK, Gateno J: A new method to orient 3-dimensional computed tomography models to the natural head position: a clinica feasibility study. J Oral Maxillofac Surg 69(3):584-591, 2011
5. Bell, RB: Computer planning and intraoperative navigation in orthognathic surgery. J Oral Maxillofac Surg 69:592-605, 2011
6. Gelesko S, Markiewicz MR, Weimer K, Bell RB: Computer-aided orthognathic surgery. Atlas Oral Maxillofacial Surg Clin N Am 20:107-118, 2012
7. Polley JW, Figueroa AA: Orthognathic positioning system: intraoperative system to transfer virtual surgical plan to operating field during orthognathics surgery. J Oral Maxillofac Surg 71: 911-920, 2013

Accuracy/outcomes

8. Xia JJ, Phillips CV, Gateno J, Teichgraber JF, Christensen AM, Gliddon MJ, Lemoine JJ, Liebschner MAK: Costeffectiveness analysis for computer-aided surgical simulation in complex cranio-maxillofacial surgery. J Oral Maxillofac Surg. 64(12):1780-4, 2006
9. Xia JJ, Gateno J, Teichgraber JF, Christensen AM, Lasky RE, Lemoine JJ, Liebschner MAK: Accuracy of a Computer-Aided Surgical Simulation (CASS) System in the Treatment of Complex Cranio-Maxillofacial Deformities: A Pilot Study. J Oral Maxillofac Surg. 65(2) 248-54, 2007
10. Xia JJ, Sheychenko L, Gateno J, Teichgraber JF, Taylor TD, Lasky RD, English JD, Kau CH, McGrory KR: Outcome of computer-aided surgical simulation in the treatment of patients with craniomaxillofacial deformities. J Oral Maxillofac Surg 69(7):2014-2024, 2011
11. Hamilton T, Markiewicz MR, Jarman J: Dental outcomes in computer-aided orthognathic surgery. J Craniofac Surg 23(3):e223-e226, 2012.
12. Hsu SS, Gateno J, Bell RB, Hirsch DL, Markiewicz MR, Teichgraber JF, Zhou X, Xia JJ: Accuracy of a computeraided surgical simulation protocol for orthognathic surgery: a prospective multicenter study. J Oral Maxillofac Surg 71:128-142, 2013

Research/early development

13. Gateno J, Xia J, Teichgraber JF, Rosen A: A new technique for the creation of a computerized composite skull model. J Oral Maxillofac Surg 61:222-227, 2003
14. Gateno J, Xia J, Teichgraber JF: The precision of computer-generated surgical splints. J Oral Maxillofac Surg 61(7):814-817, 2003
15. Xia J, Gateno J, Teichgraber JF: Three-dimensional computer-aided surgical simulation for maxillofacial surgery. Atlas Oral Maxillofac Surg Clinics 13:25-39, 2005
16. Gateno J, Xia J, Teichgraber J, Christensen A, Lemoine J, Liebschner M, Gliddon M, Briggs M: Clinical feasibility of computer-aided surgical simulation in the treatment of complex cranio-maxillofacial deformities. J Oral Maxillofac Surgery. 65: 728-734, 2007.