



UNIVERSITY OF LEEDS

This is a repository copy of *Primary orbital reconstruction with selective laser melted core patient-specific implants: overview of 100 patients.*

White Rose Research Online URL for this paper:
<http://eprints.whiterose.ac.uk/131525/>

Version: Accepted Version

Article:

Rana, M, Holtmann, H, Rana, M et al. (7 more authors) (2019) Primary orbital reconstruction with selective laser melted core patient-specific implants: overview of 100 patients. *British Journal of Oral and Maxillofacial Surgery*, 57 (8). pp. 782-787. ISSN 0266-4356

<https://doi.org/10.1016/j.bjoms.2019.07.012>

© 2019 The British Association of Oral and Maxillofacial Surgeons. Published by Elsevier Ltd. Copyright (c) 2018 Elsevier B. V. Licensed under the Creative Commons Attribution-Non Commercial No Derivatives 4.0 International License (<https://creativecommons.org/licenses/by-nc-nd/4.0/>).

Reuse

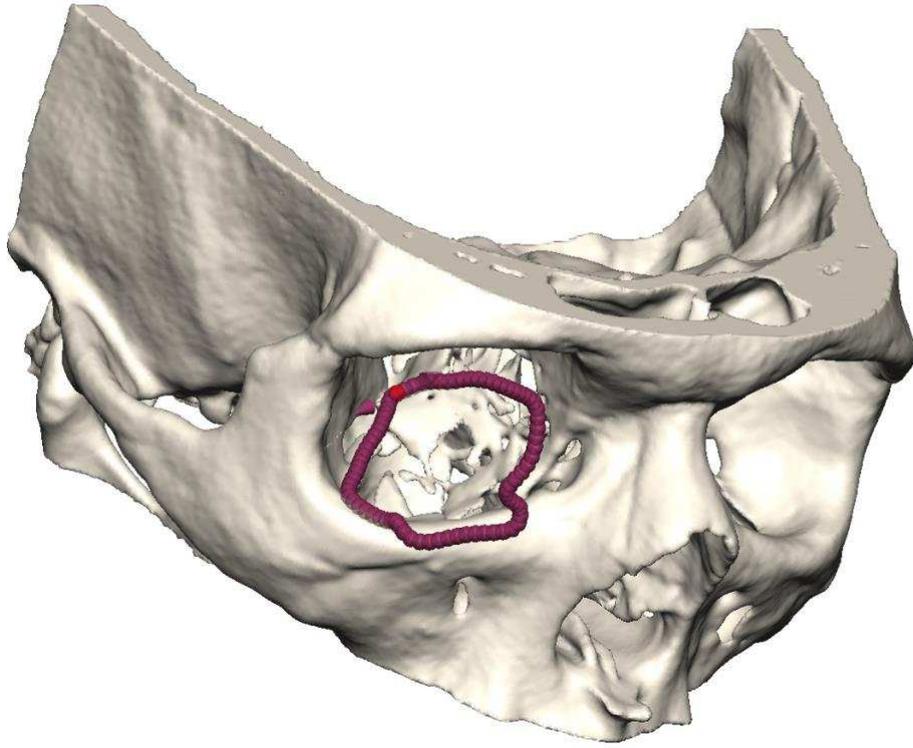
This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

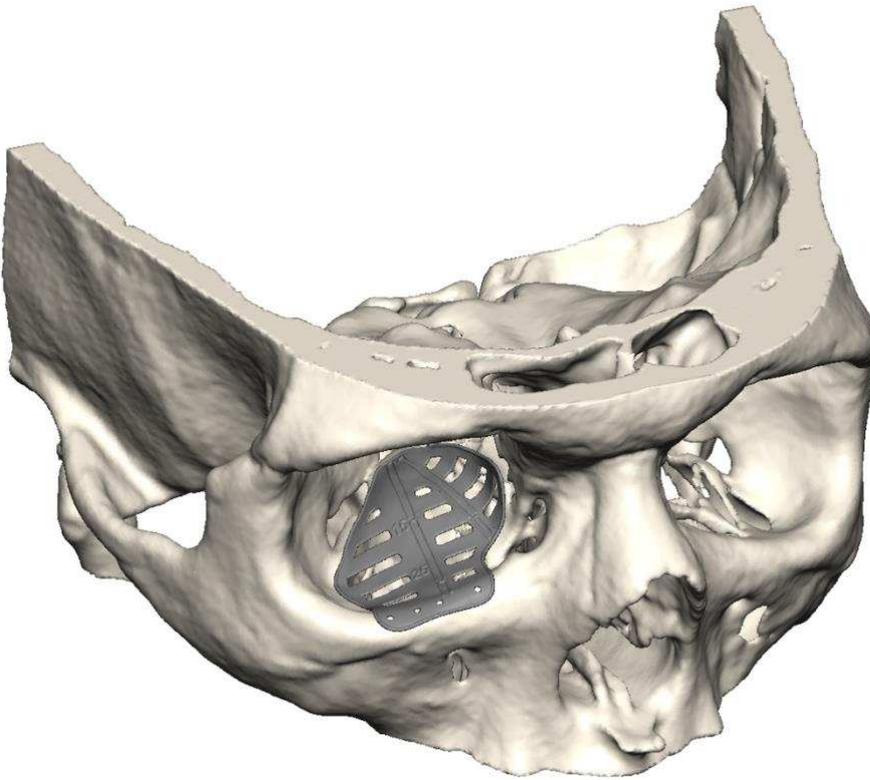
If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>



a



b

Figure 1) Preoperative planned implant position and orbital volume with 3D planning software on the left side with iPlan CMF (version 3.0.5, Brainlab®, Feldkirchen, Germany) and Geomagic - Freeform® Plus (Morrisville, NC, USA): marking the planned margin of the further orbital floor implant (a) and finished design before production (b).

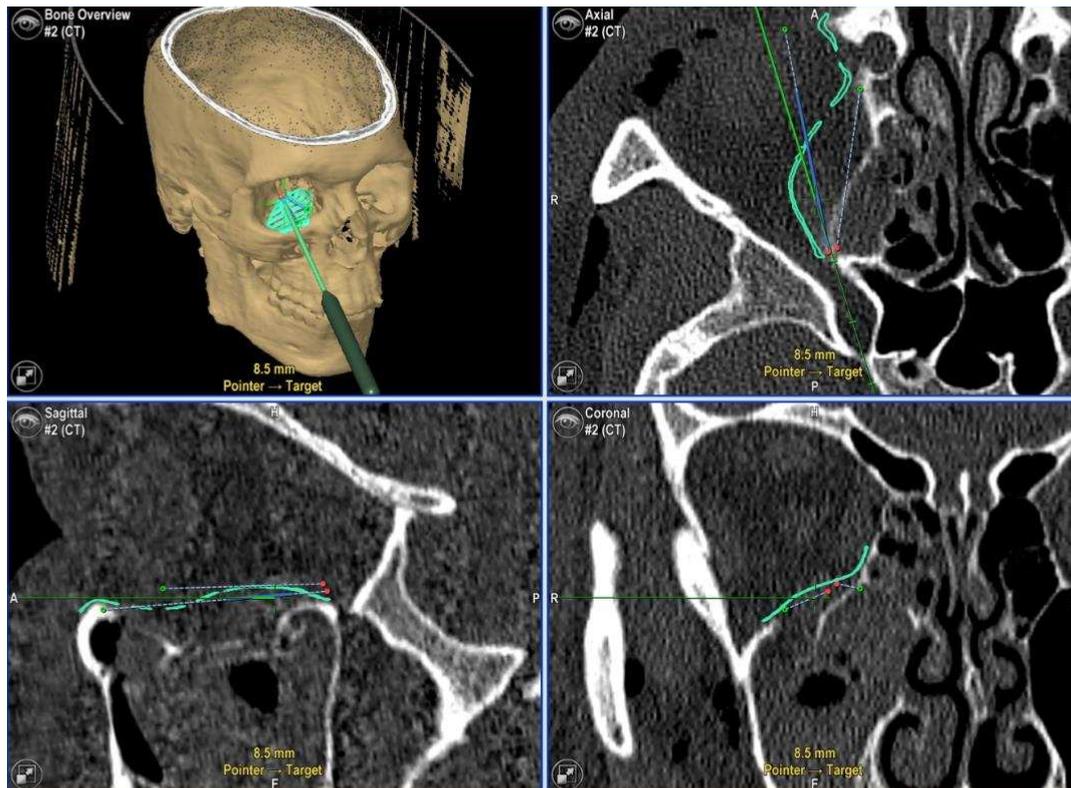


Figure 2: Intraoperative position control via pointer through the trajectory lines of the implant by intraoperative Navigation (Kick, Brainlab®, Feldkirchen, Germany).

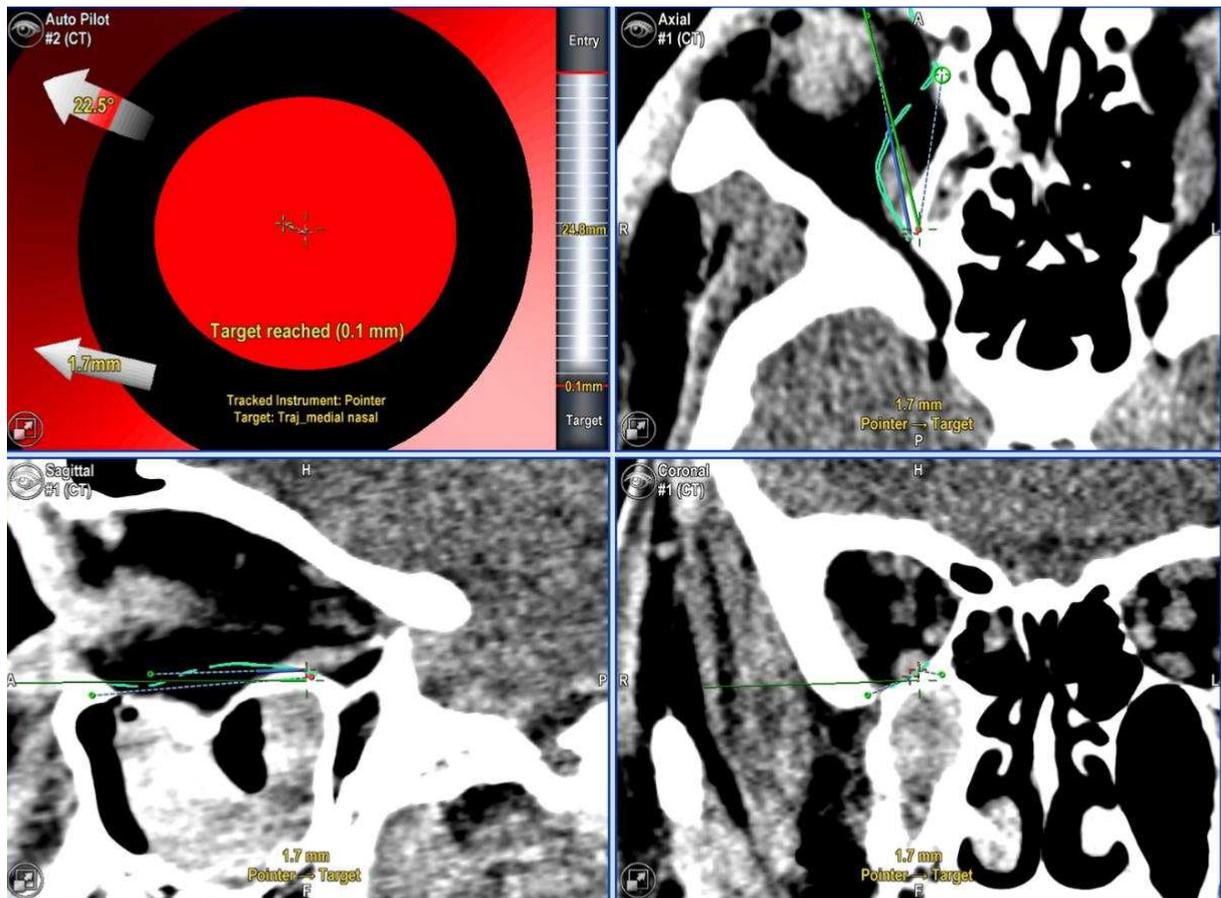


Figure 3: Intraoperative target and precision control (Kick, Brainlab®, Feldkirchen, Germany).