

CASE REPORT

Surgeon and Patient Information

Surgeon Name: Dr. David Be D.D.S., M.D.



Patient Name:

[Redacted]

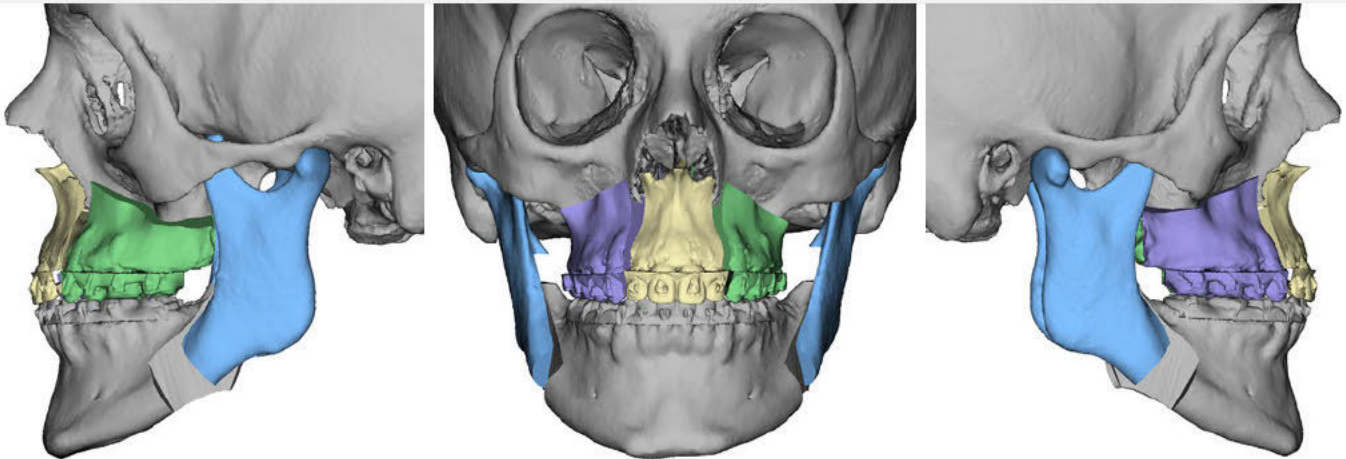
Surgery Date:

04-09-2019



Simulated Virtual Surgical Plan

Segmenta LeFort I and BSSO



Surgeon Agreement

With respect to the patient case described above (the "Case"), I, the undersigned, request that 3D Systems, Inc., ("3DS"), provide certain products including, without limitation, templates, tools, surgical splints, guides and/or anatomical models (collectively, the "Products") and certain virtual surgical planning services (the "Services") for use in connection with the Products. I hereby acknowledge and agree as follows in connection with the Case:

- I have prepared the virtual surgical plan (the "Plan") for the Case and am solely responsible for the decisions made in the Plan and the surgical planning process.
- I hereby approve and accept the Products and Services provided by 3DS in connection with the Case and certify no changes are required.
- I acknowledge that, unless otherwise agreed in writing between myself and 3DS, all Products will be delivered non-sterile and that I am solely responsible for cleaning and sterilizing such Products prior to use.
- I have reviewed the Terms and Conditions set forth on the last page of this Case Report which are incorporated herein and agree to be bound by such Terms and Conditions.

Surgeon Signature

Date

Please copy this page, sign and date, and email or fax it to 3D Systems, Inc. Please note that if this Surgeon Agreement is not formally accepted prior to the surgery for the Case but the Products and Services are accepted, you nevertheless agree to pay for the Products and Services and to be bound by the Terms and Conditions.

Rev	Rev Date	Reason for Revision

Movement Summary

Below is a list of bony and occlusal anatomical landmarks and their summarized movements from preoperative position (with mandible auto-rotated close) to simulated postoperative position.

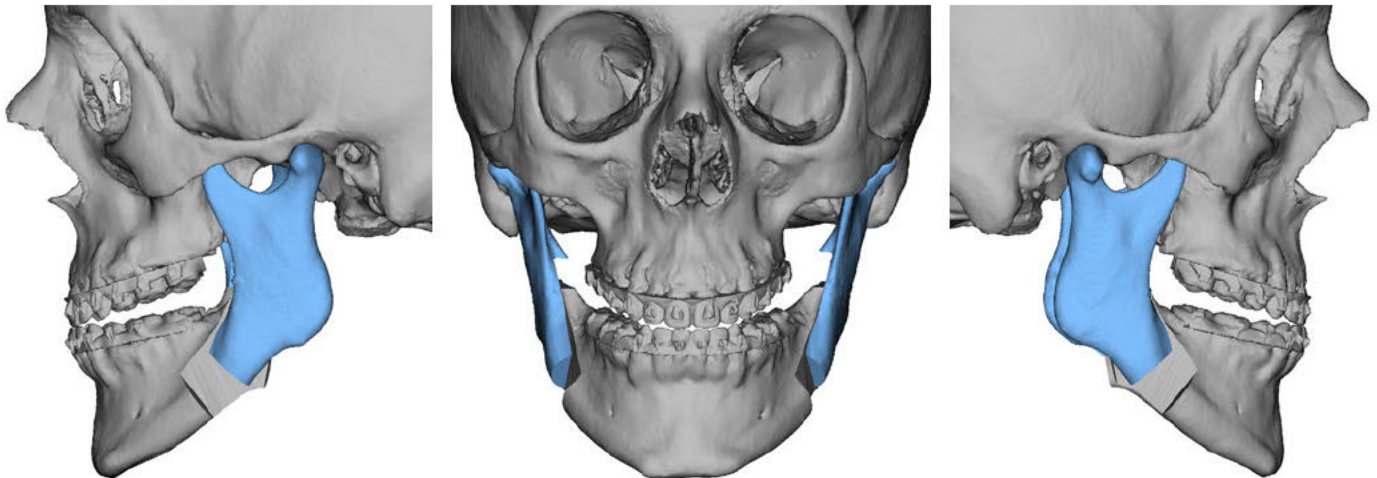
Point	Name	Anterior/Posterior	Left/Right	Up/Down
ANS	Anterior Nasal Spine	4.07mm Anterior	0.82mm Left	10.80mm Up
A	A Point	6.47mm Anterior	0.63mm Left	9.32mm Up
ISU1	Midline of Upper Incisor	12.00mm Anterior	0.00	10.00mm Up
U3L	Upper Left Canine	10.72mm Anterior	0.64mm Left	7.49mm Up
U6L	Upper Left Anterior Molar (mesiobuccal cusp)	9.83mm Anterior	1.29mm Left	3.31mm Up
U3R	Upper Right Canine	10.46mm Anterior	0.28mm Right	7.53mm Up
U6R	Upper Right Anterior Molar (mesiobuccal cusp)	9.53mm Anterior	0.51mm Right	3.90mm Up
ISL1	Midline of Lower Incisor	13.02mm Anterior	0.06mm Right	10.25mm Up
L6L	Lower Left Anterior Molar (mesiobuccal cusp)	12.04mm Anterior	0.05mm Right	3.57mm Up
L6R	Lower Right Anterior Molar (mesiobuccal cusp)	12.08mm Anterior	0.05mm Right	4.22mm Up
B	B Point	18.92mm Anterior	0.18mm Right	7.72mm Up
Pog.	Pogonion	26.70mm Anterior	0.32mm Right	8.08mm Up

Virtual Planning Work Flow

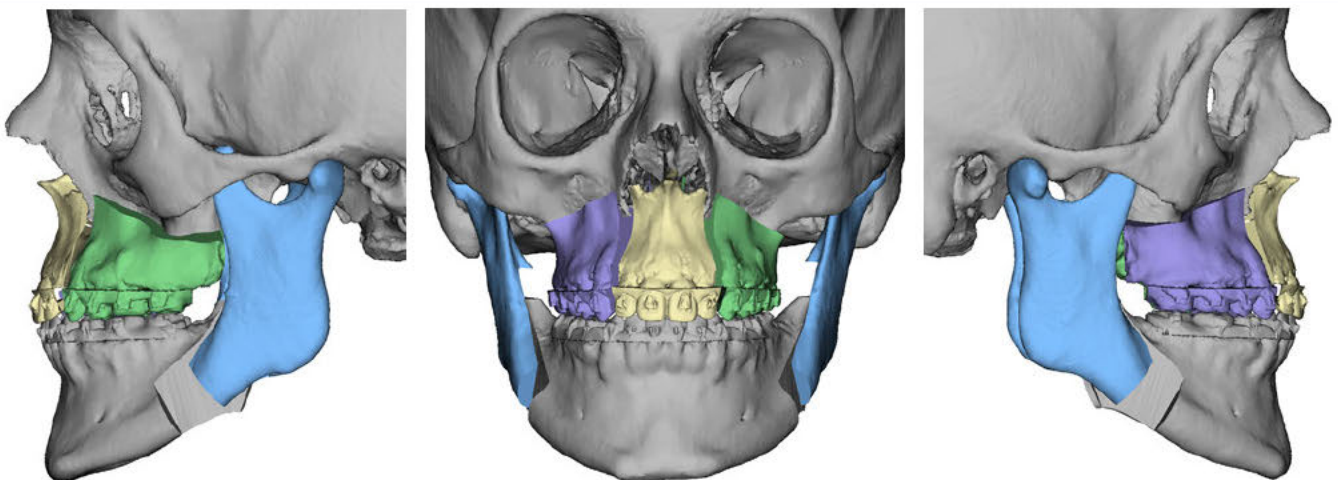
Preoperative Position



Intermediate Position



Postoperative Position

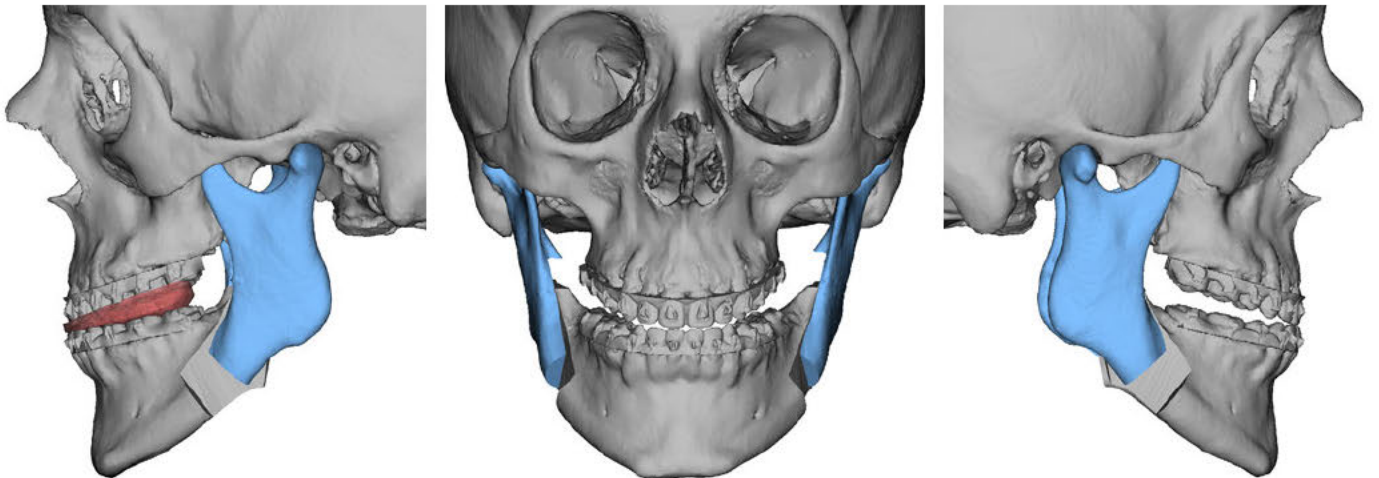


Virtual Planning Work Flow

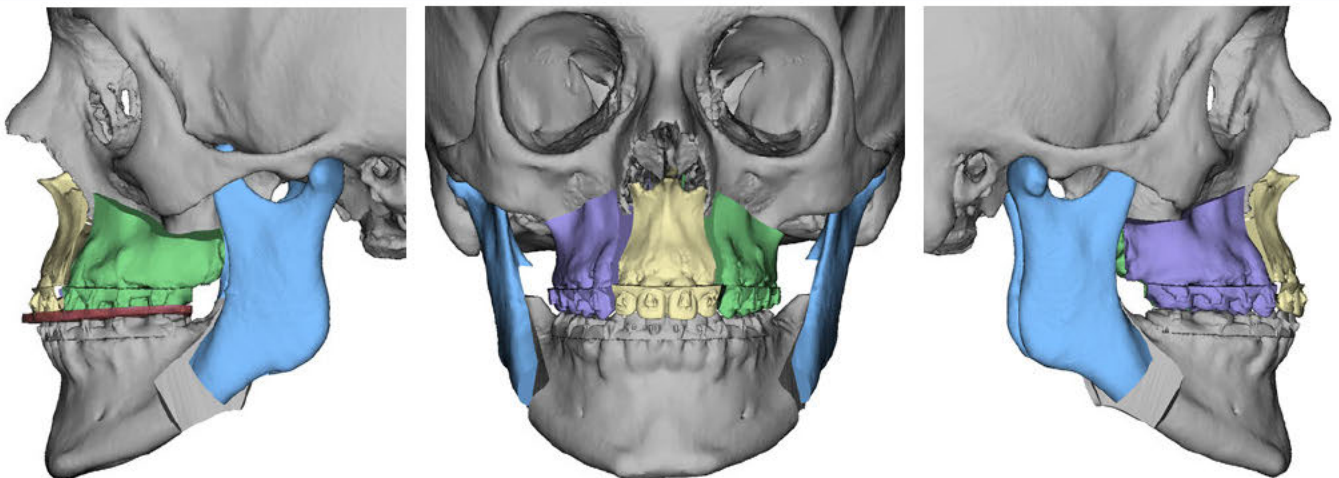
Preoperative Position



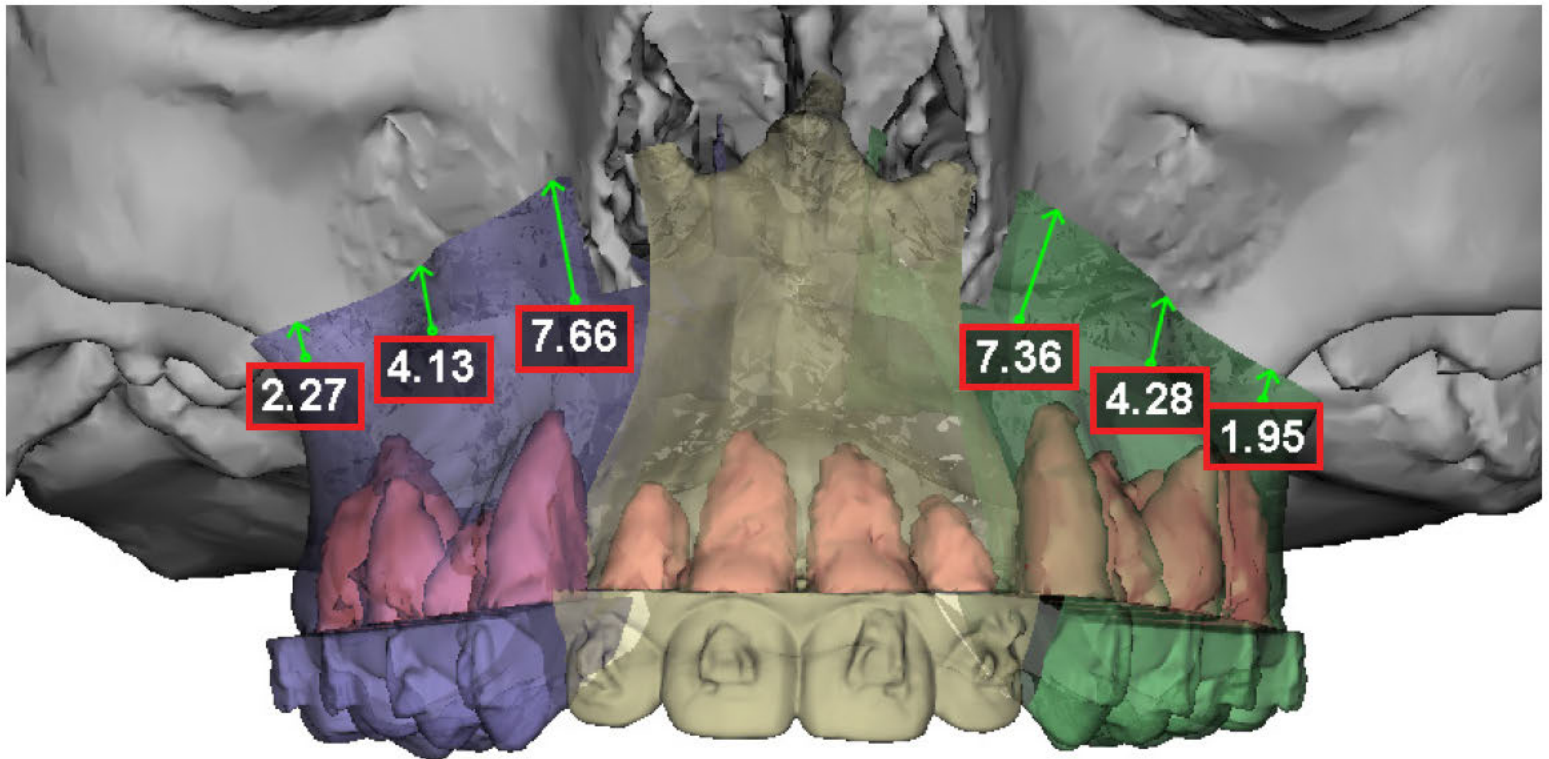
Intermediate Position



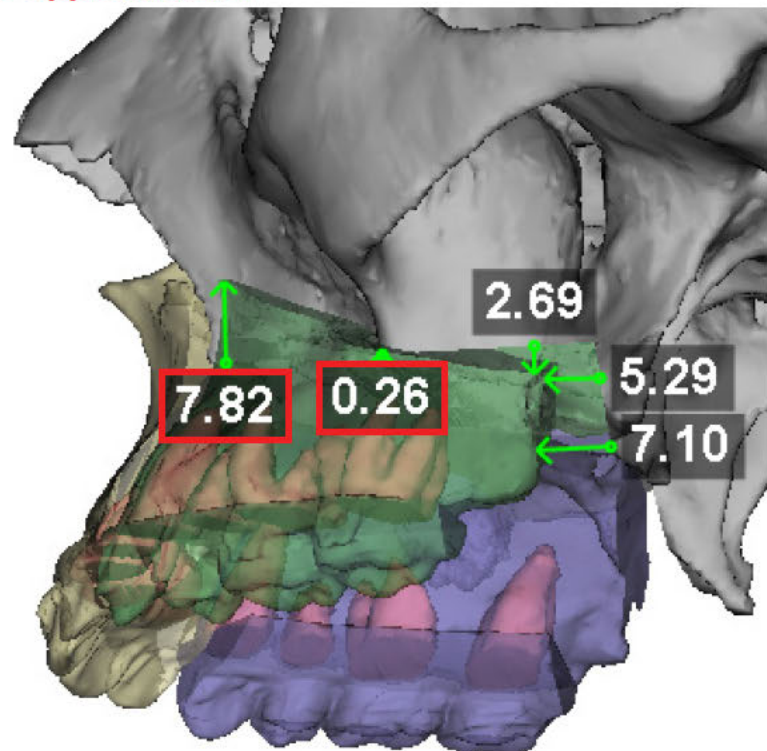
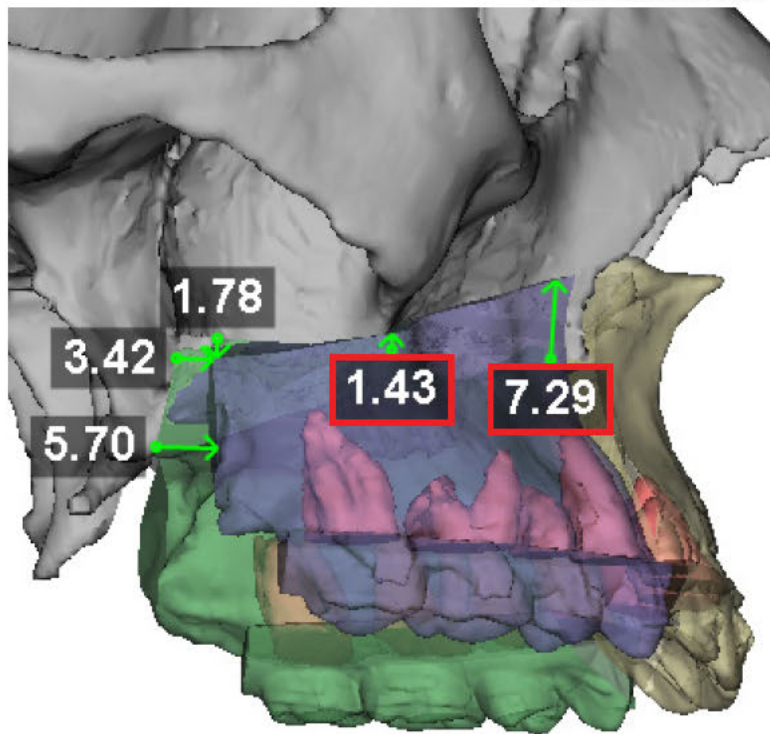
Postoperative Position

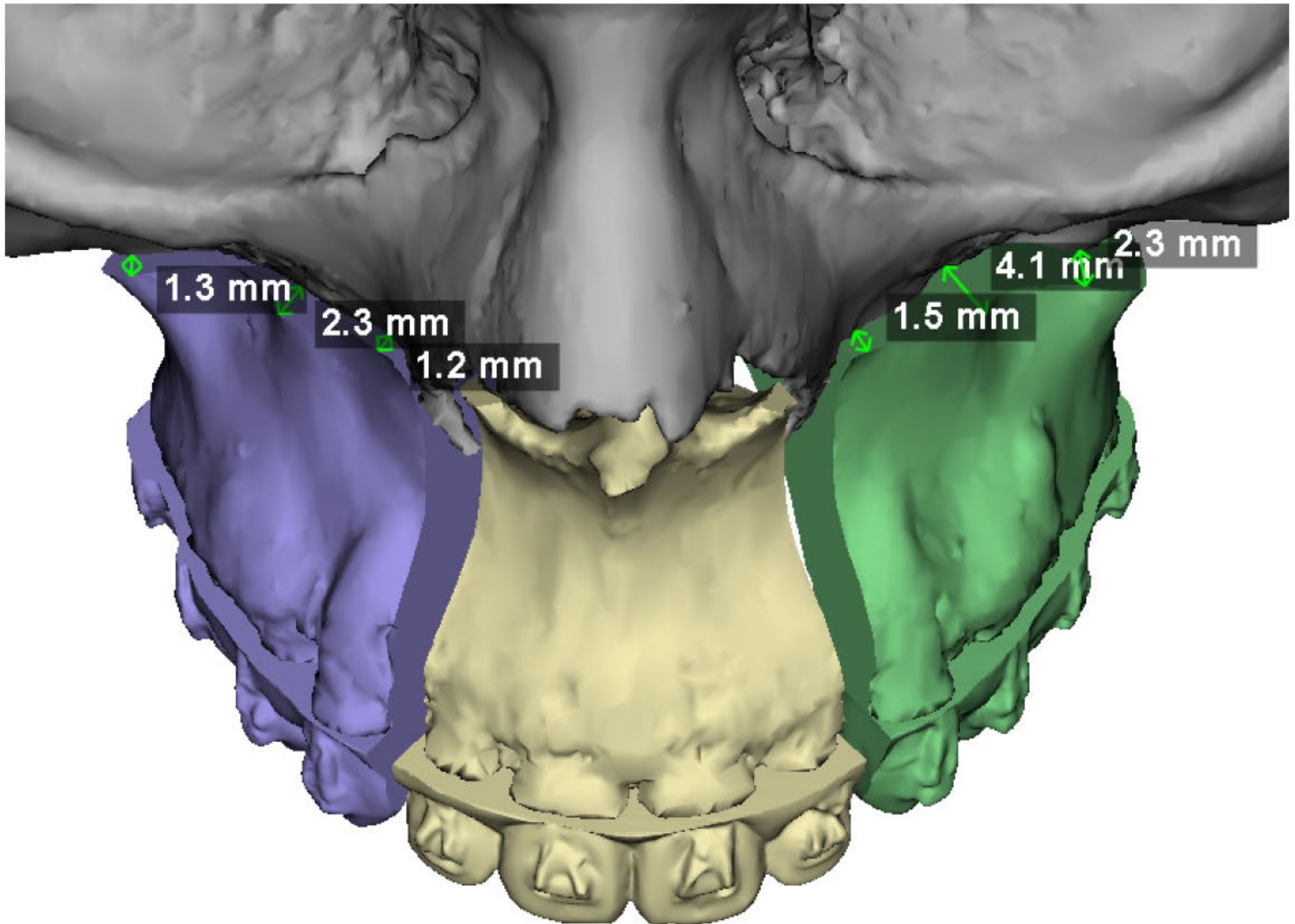


LeFort Overlap Analysis



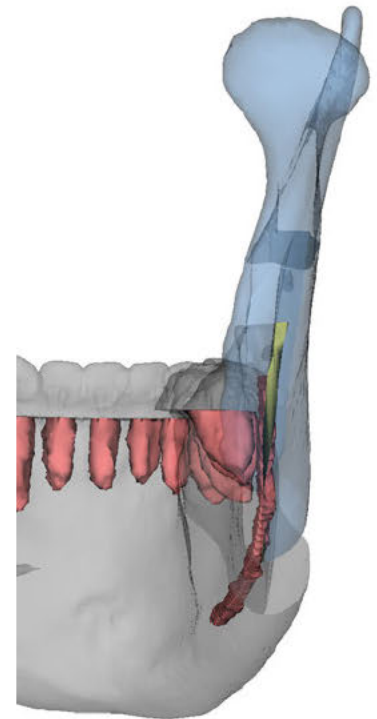
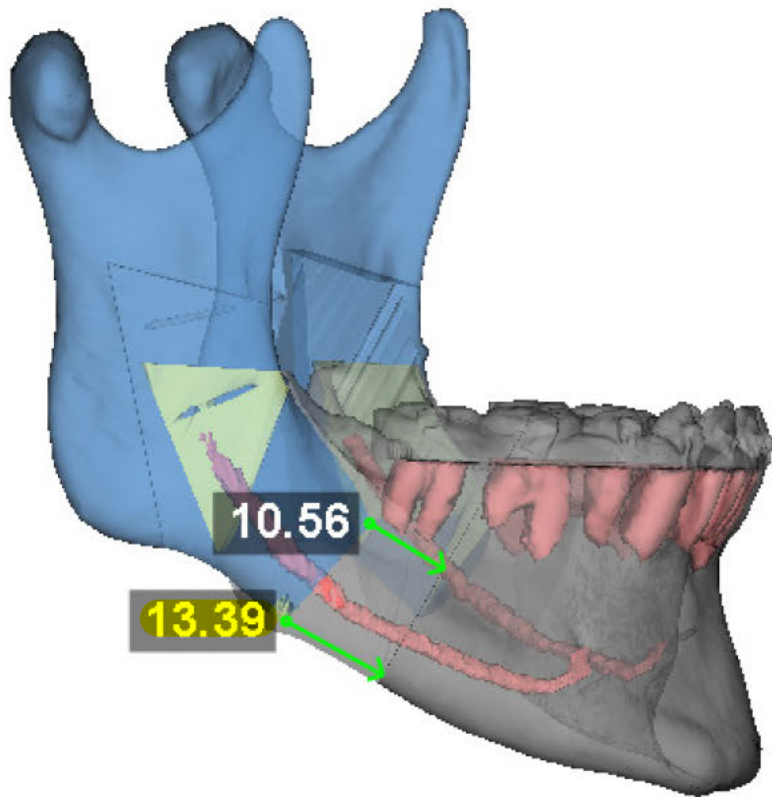
Measurements outlined in red indicate an overlap.
Measurements are approximate.



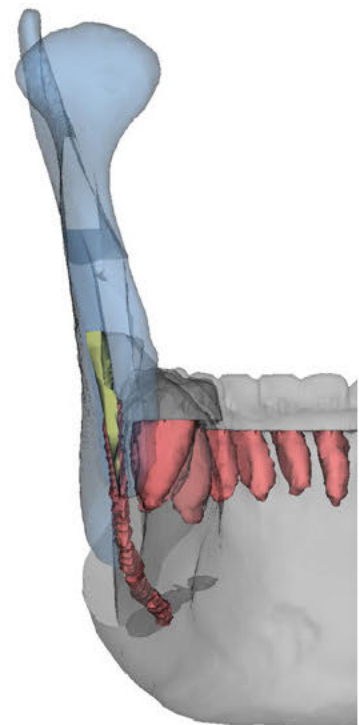
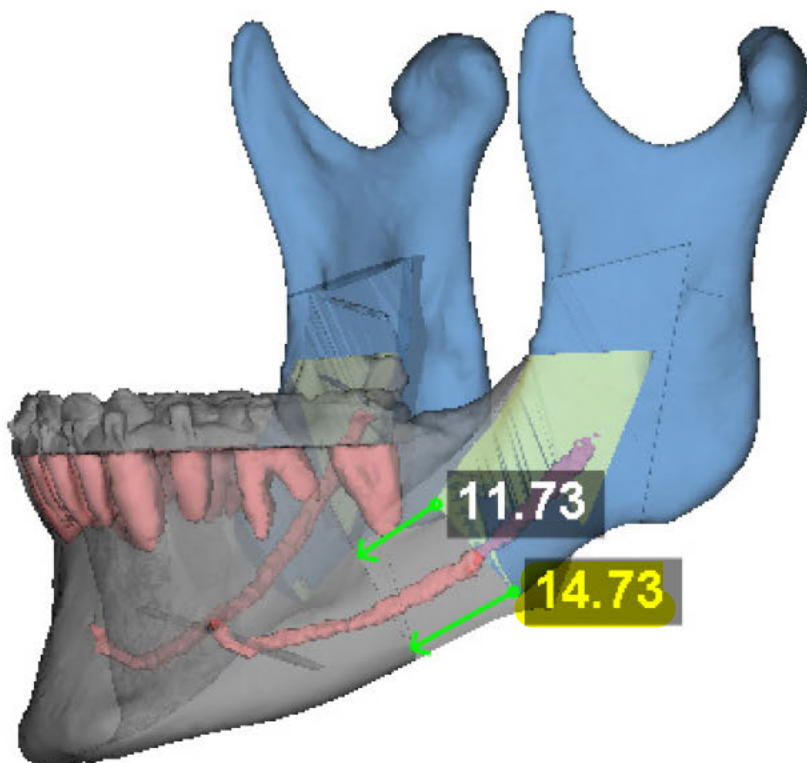


Measurements are approximate.

Proximal Segment Overlap Analysis

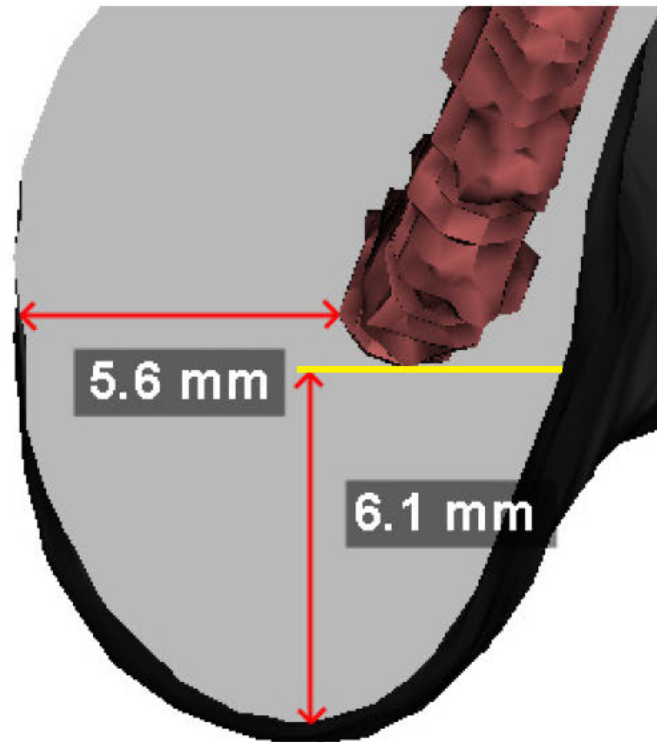
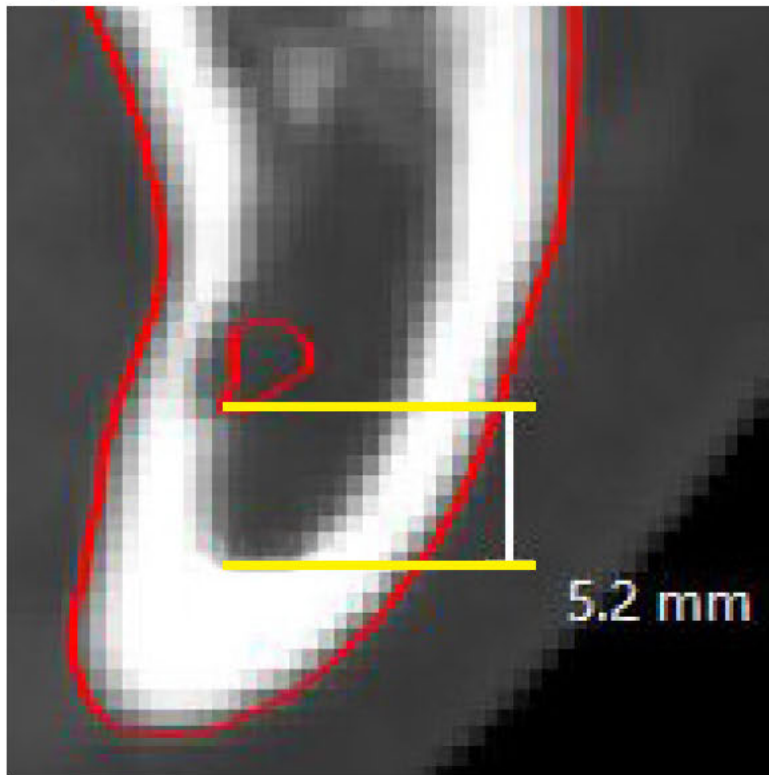


Measurements outlined in red indicate an overlap.
Measurements are approximate.

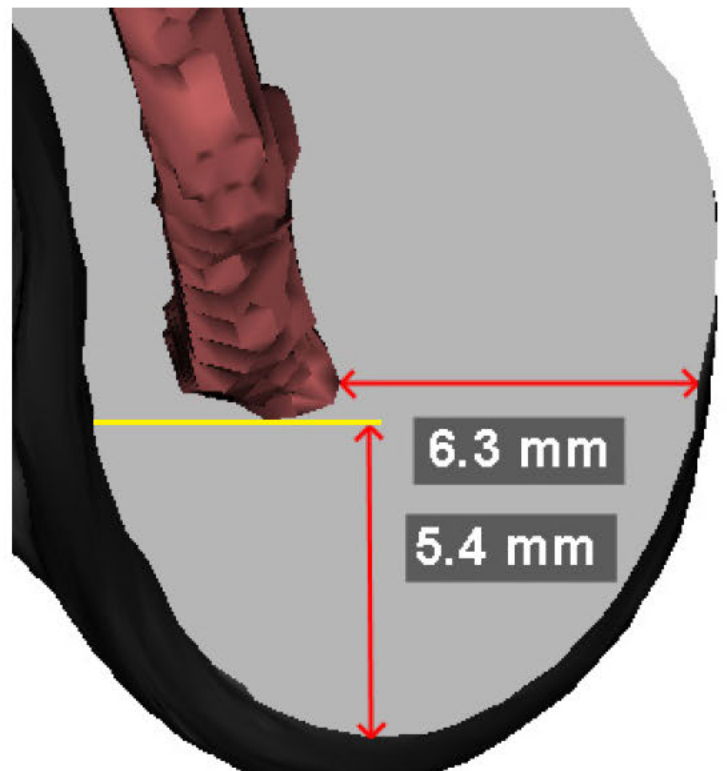
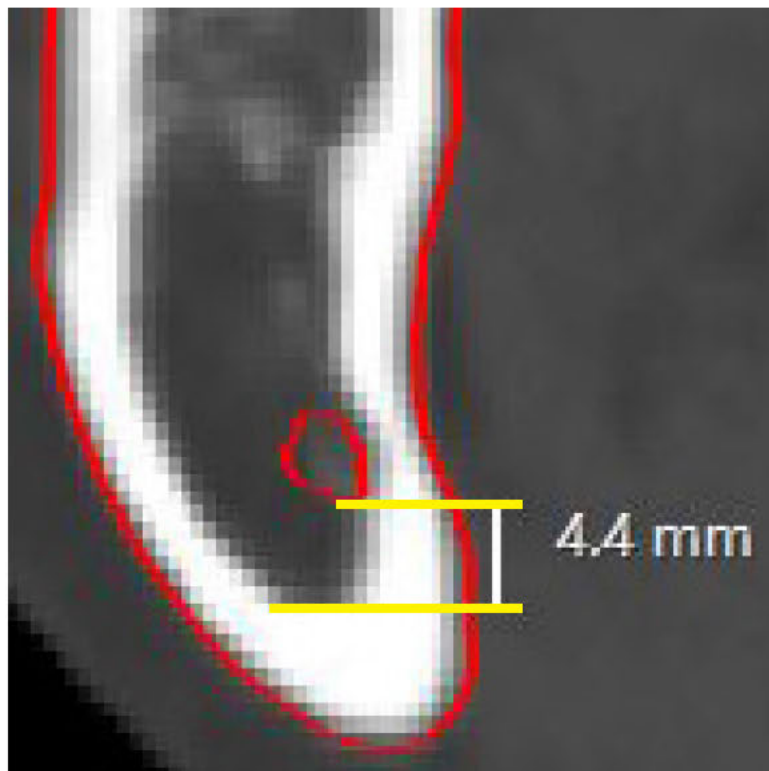


Nerve to Distal Mandible Measurements

Patient's Left

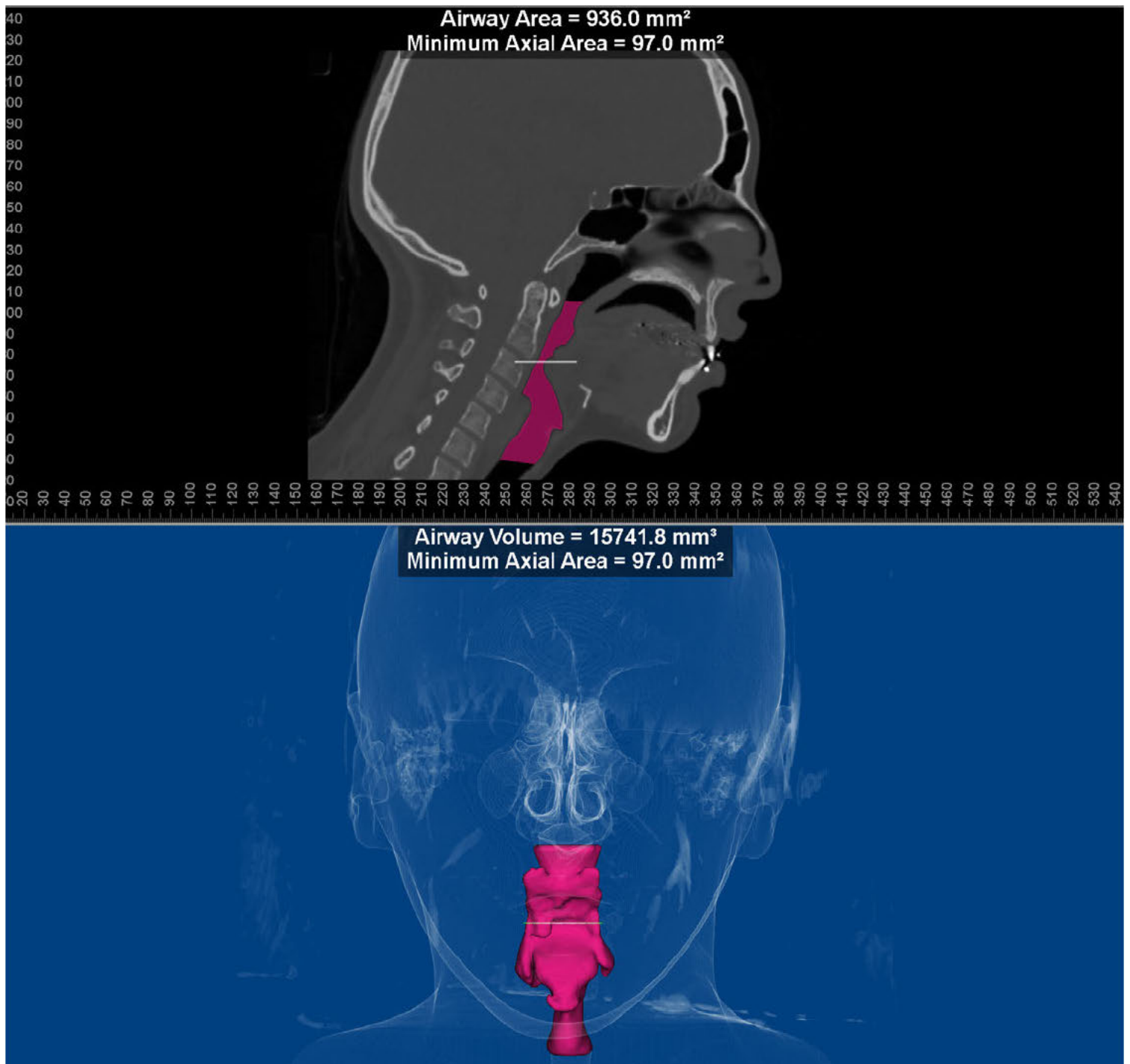


Patient's Right



Measurements are approximate.

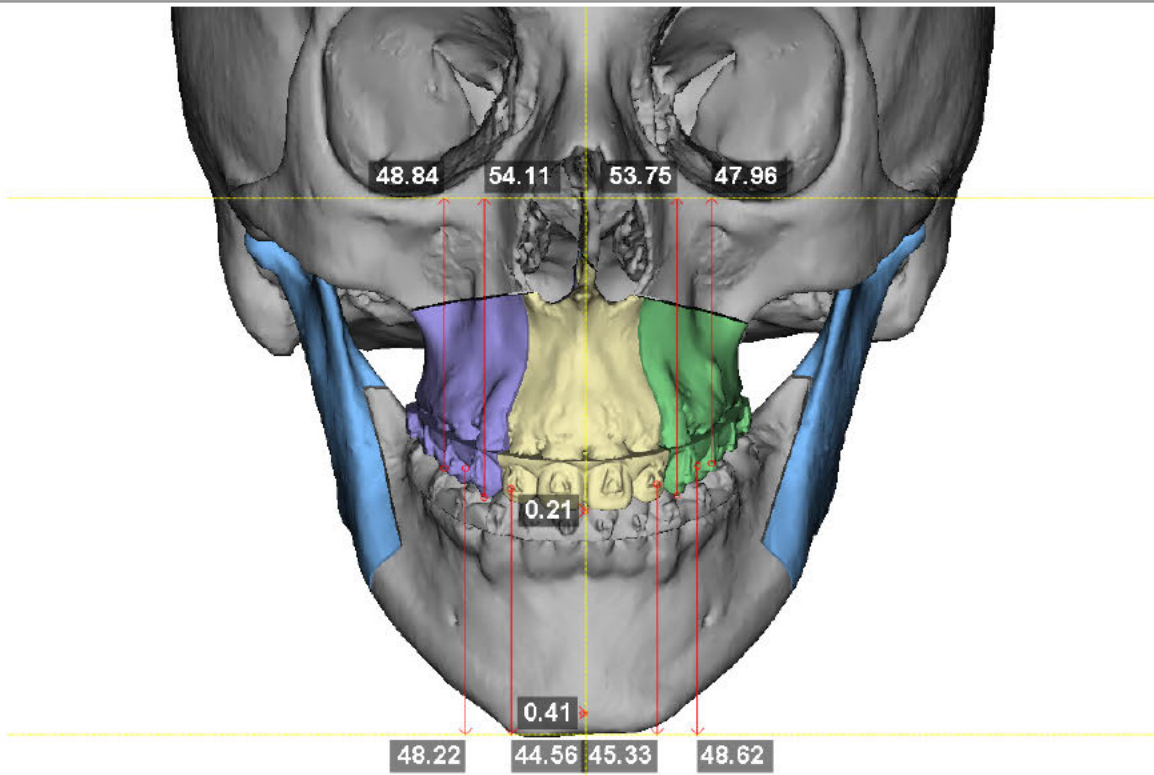
Airway Analysis



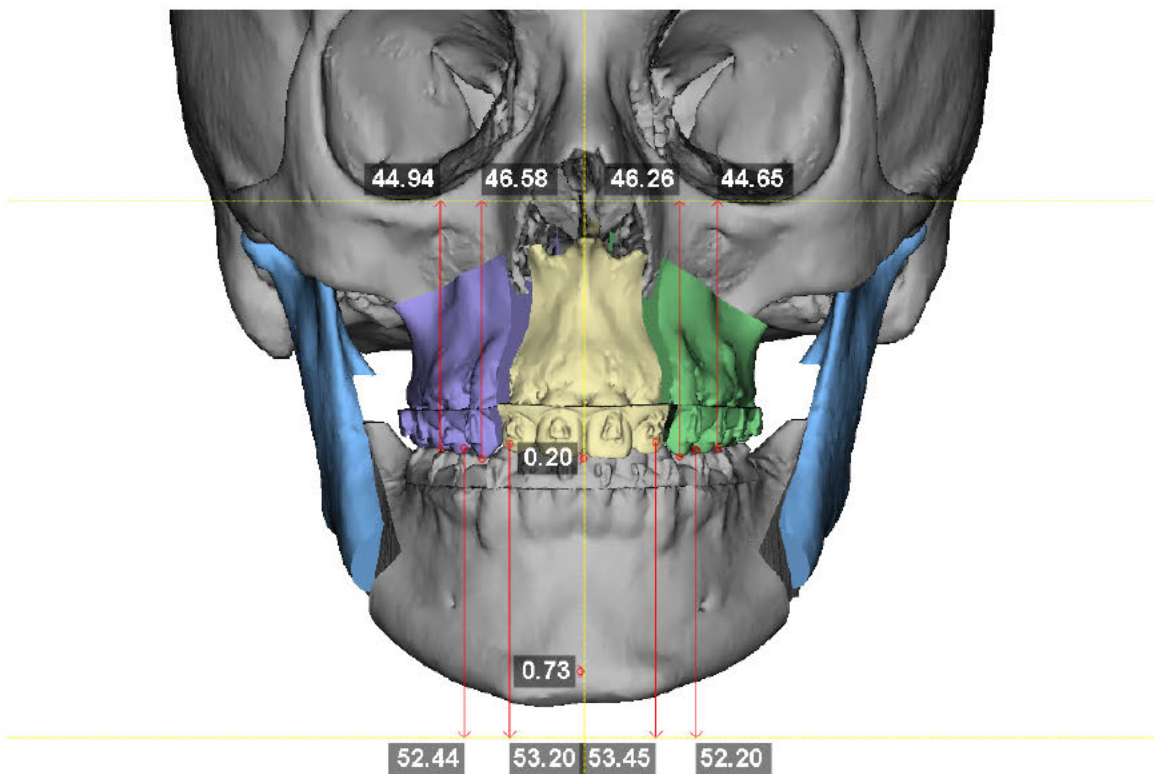
The minimum axial area at any point throughout the airway is represented by the white line. This area is the smallest 2-dimensional slice across a true horizontal and has a value of 97.0 mm². The volume of the 3-dimensional airway shown in pink has a value of 15741.8 mm³.

Cant Analysis

Preoperative Position

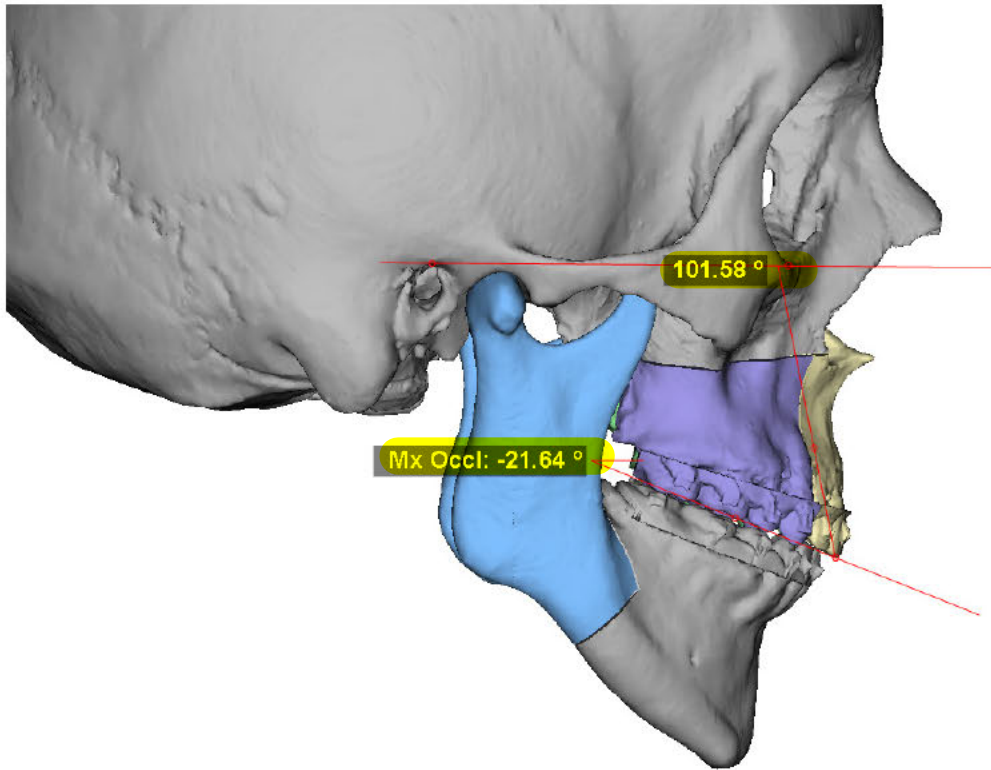


Postoperative Position

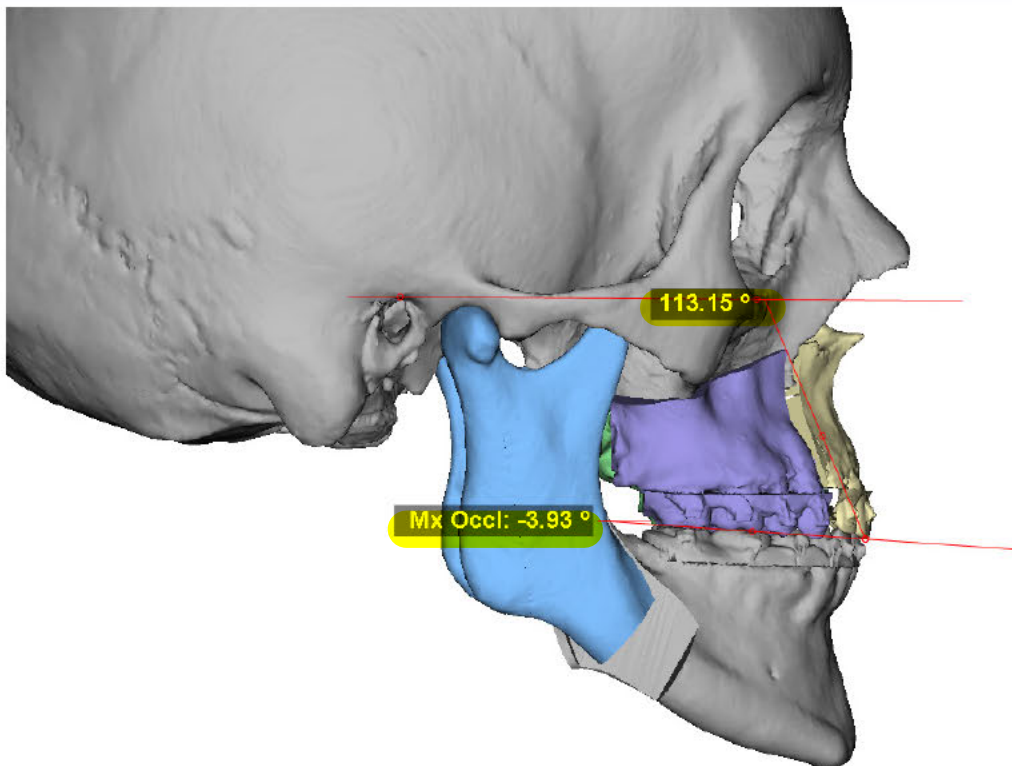


Occlusal Plane Angle Analysis

Preoperative Position



Postoperative Position



Soft Tissue Analysis

Preoperative Position



Postoperative Position



Soft tissue simulation is for reference only and may not reflect what will be seen after the time of surgery.

Occlusal Overlap Color Map

