



IDT Ireland

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***From Scan
to Plan
to Guide***

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Scan

We'll arrange
a CT or CBCT
Scan at one of
17 partner sites
from €150

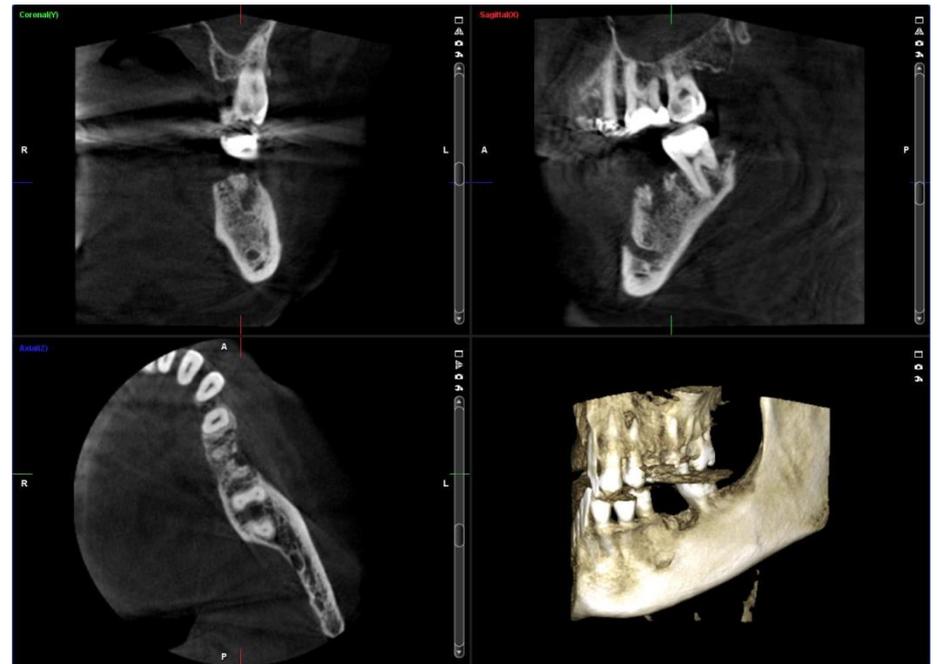




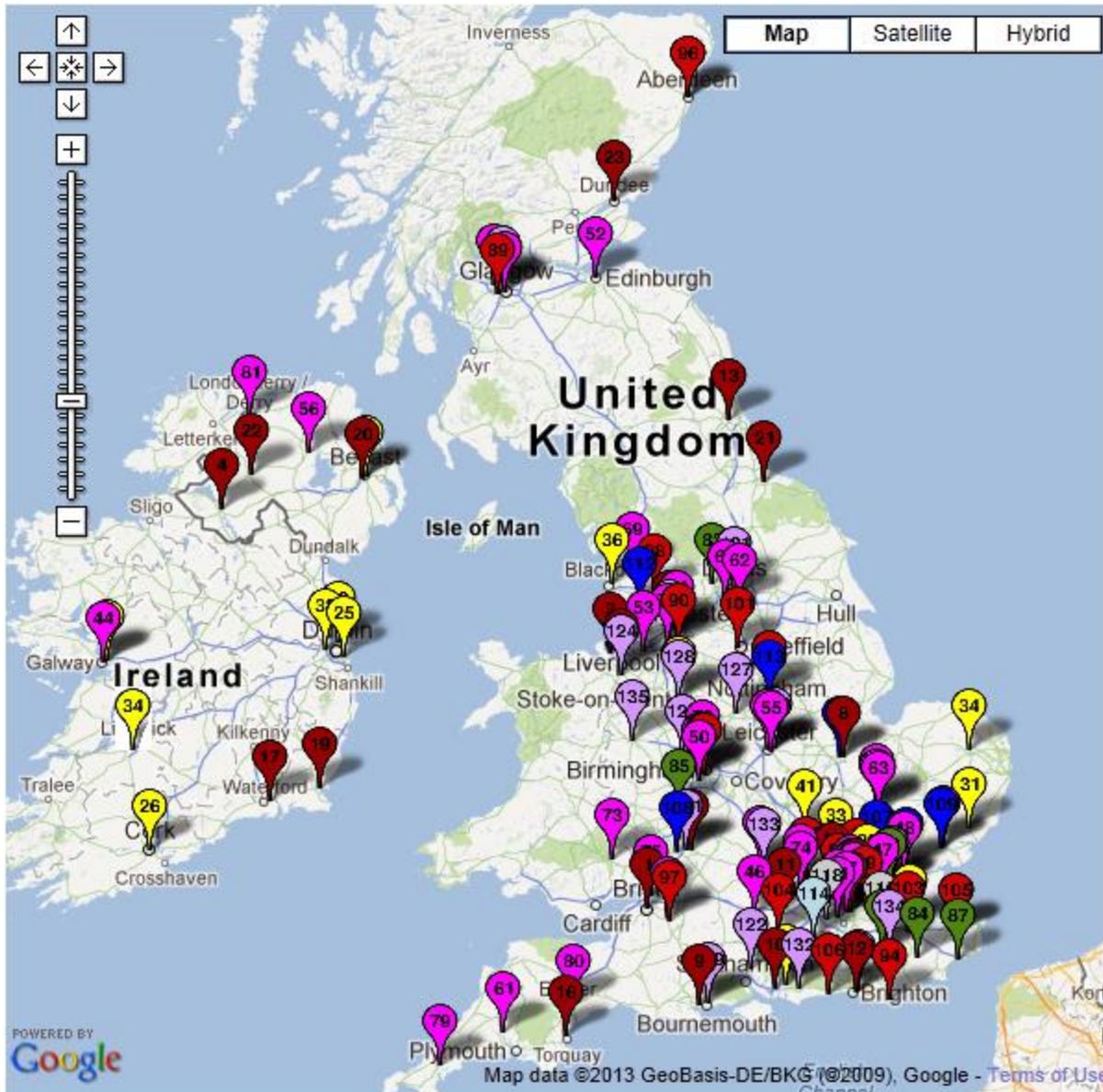
Planmeca ProMax 3D



NORTHBROOK CLINIC



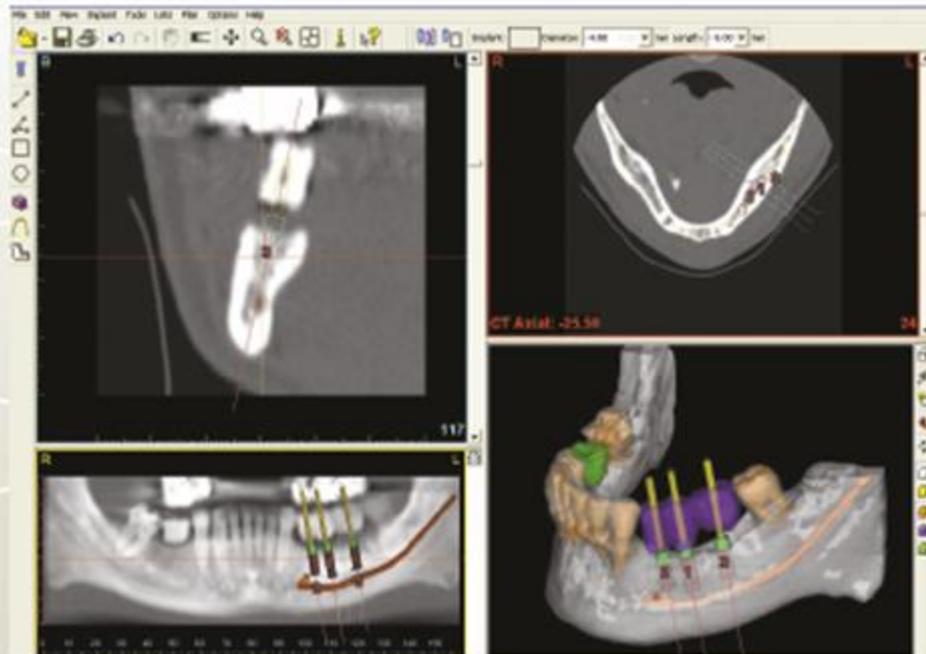
CBCT Scans taken at The Northbrook Clinic



Plan

We'll help with
the treatment
planning

from €70



Guide

We'll make
the surgical
drill guide

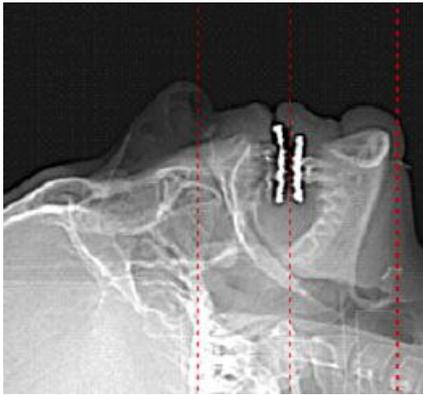
from €150



We support the following software:

- **Osirix™**
- **i-CATVision™**
- **Blue Sky Plan™**
- **In Vivo Dental™**
- **SIMPLANT™**
- **NobelGuide™**
- **coDiagnostiX™**

Dental (CB)CT Scans



- **Bony anatomy of Mandible, Maxilla, Zygomatic Arches**

- **Useful for:**

- **impacted, supernumerary and abnormal teeth**
- **root canals, root fractures**
- **planning dental implants**
- **periapical disease**
- **cleft palate assessment**
- **TMJ and airway analysis**

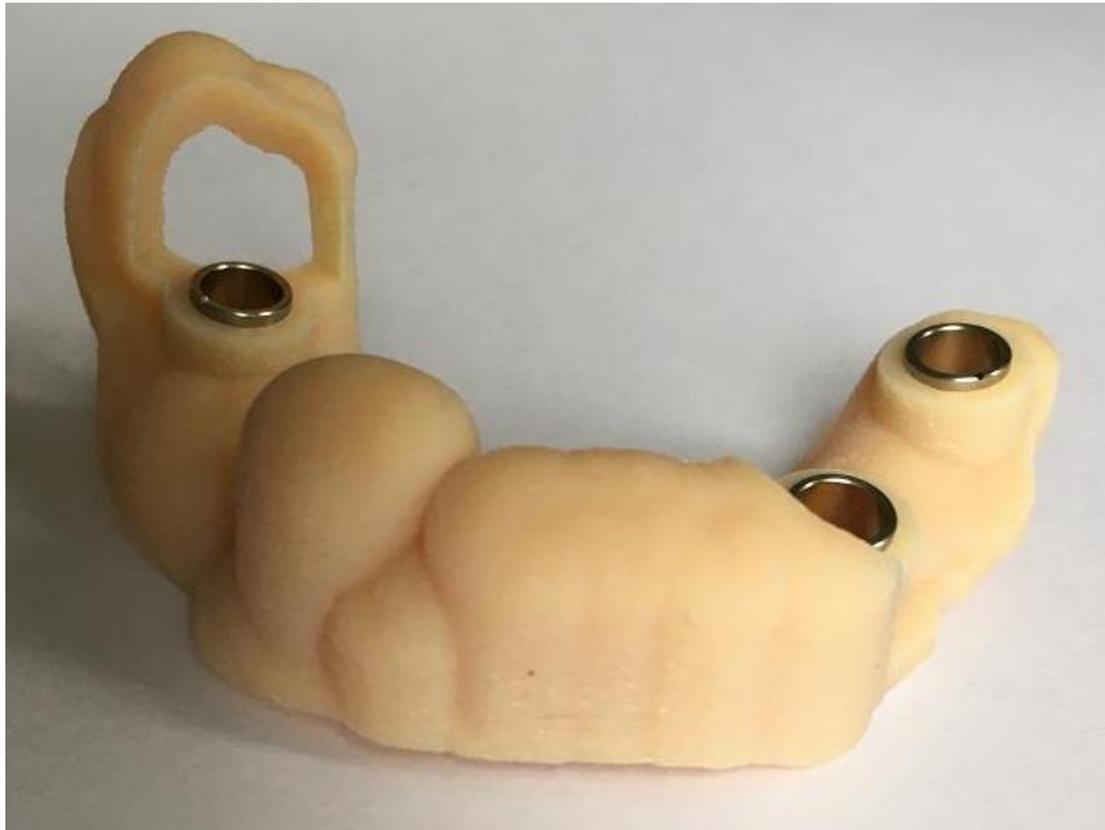


Restoration-Driven Implant Planning

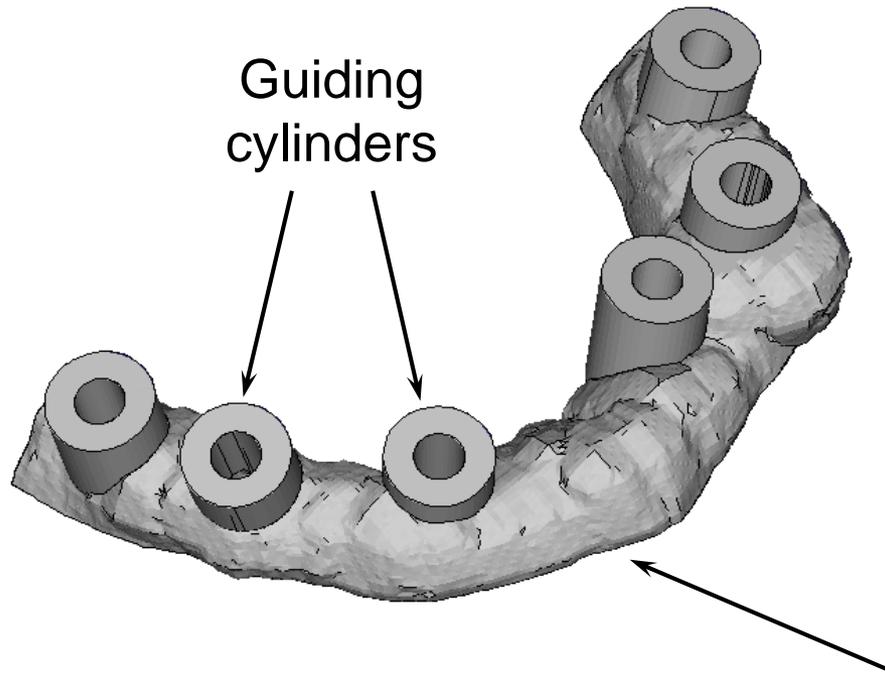
“Create a model of the desired result, then work backwards to determine how it can be achieved”

- ***Radio-Opaque Scanning Stents***
- ***3D Implant Planning Software***
- ***Surgical Drill Guides***

Surgical Drill Guides



Surgical Drill Guides



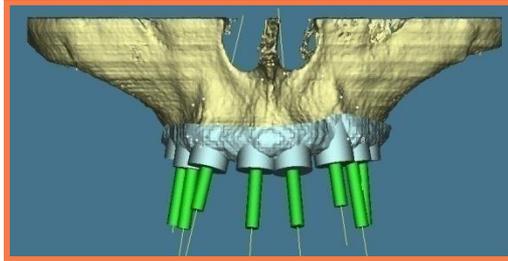
The guide controls:

- Position
- Orientation
- (Depth)

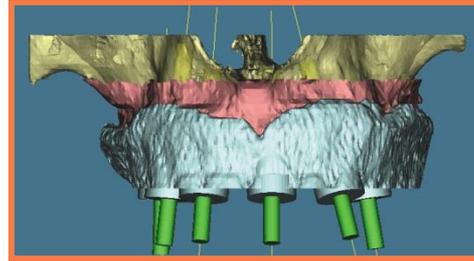
Guide can rest on:

- Bone
- Mucosa
- Teeth

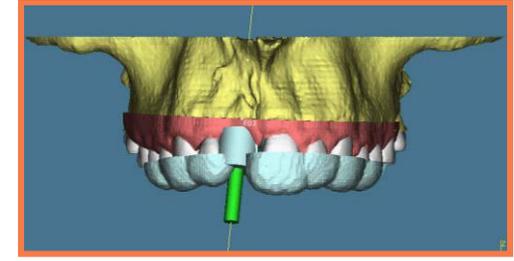
Guides can be supported on



Bone



Mucosa



Teeth

Bone Supported Guides:

- Bone crest must be clearly visible in the CT images and $\geq 3\text{cm}$ long

Mucosa Supported Guides:

- Patient must be scanned with a radio-opaque scanning stent in place

Tooth Supported Guides:

- Tips of teeth must be clearly visible in the CT images
- A recent and accurate plaster cast will be required

Need to think about the Guide before you request the CT Scan!

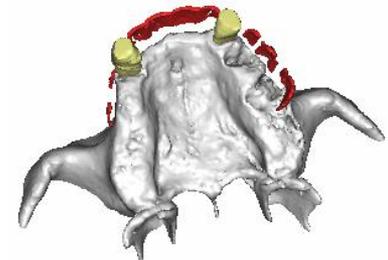
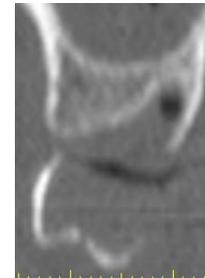
Radio-Opaque Scanning Stents



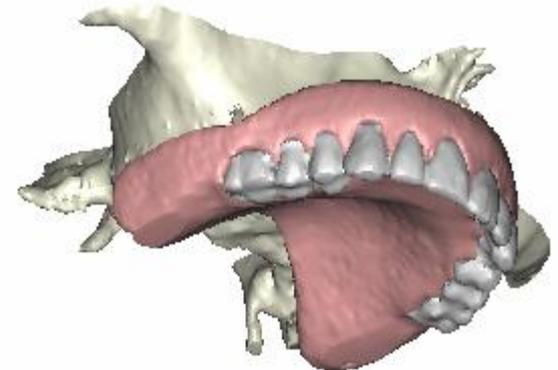
- Gives inter-arch stability for the patient during the scan
- Opens the bite slightly (a few mm) using occlusal stops
- Position and size of the desired restoration can be visualised in the CT images
- If the maxilla and mandible are scanned together the 3D image will illustrate the inter-arch relationship.

Making a Scanning Stent

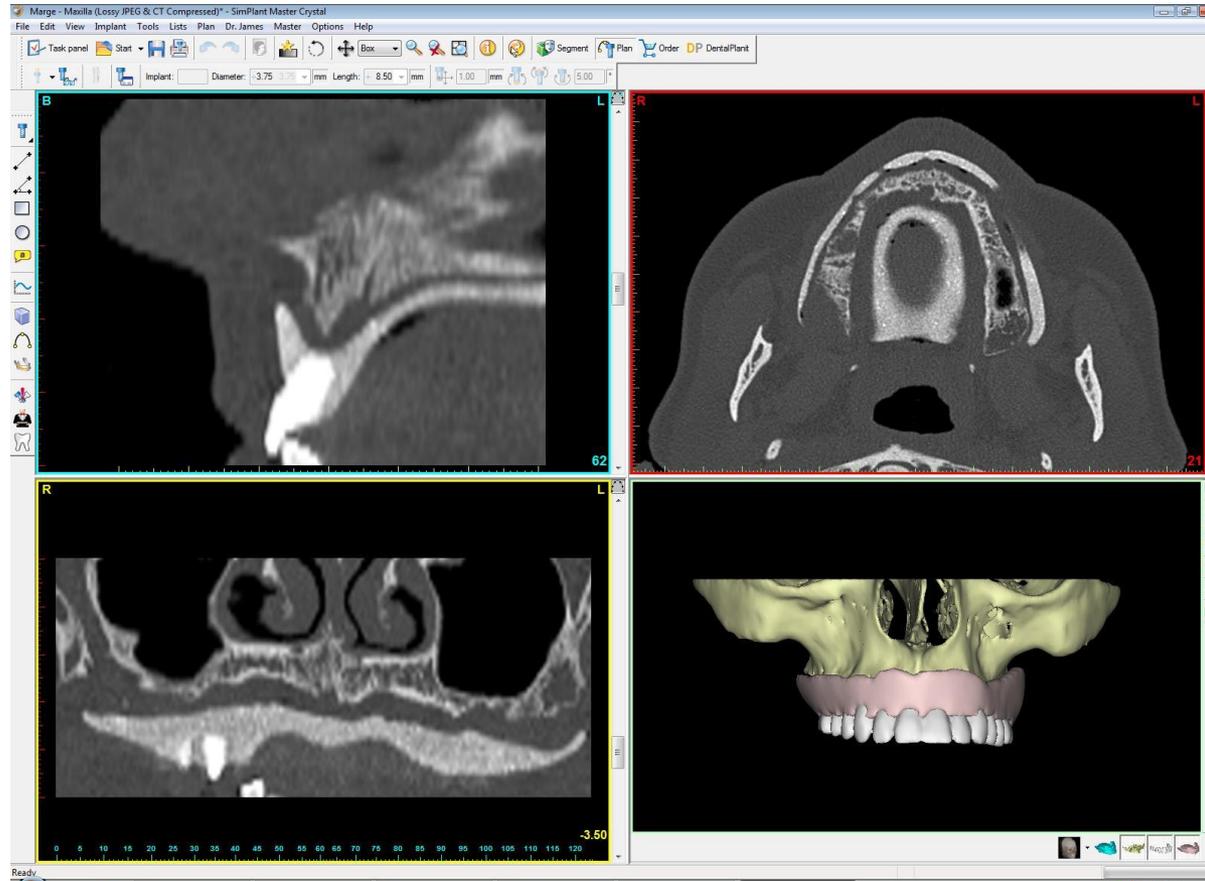
- **Plastic and clear acrylic does not show up on a CT scan.**
- **To make it show up, you can:**
 - **mix barium sulphate with the acrylic**
 - **paint barium sulphate on the surface**
 - **use radio-opaque teeth**
 - **use markers made from a radio-opaque material**
 - lab putty
 - gutta percha
 - glass ionomer
- **use a dual-scan technique.**



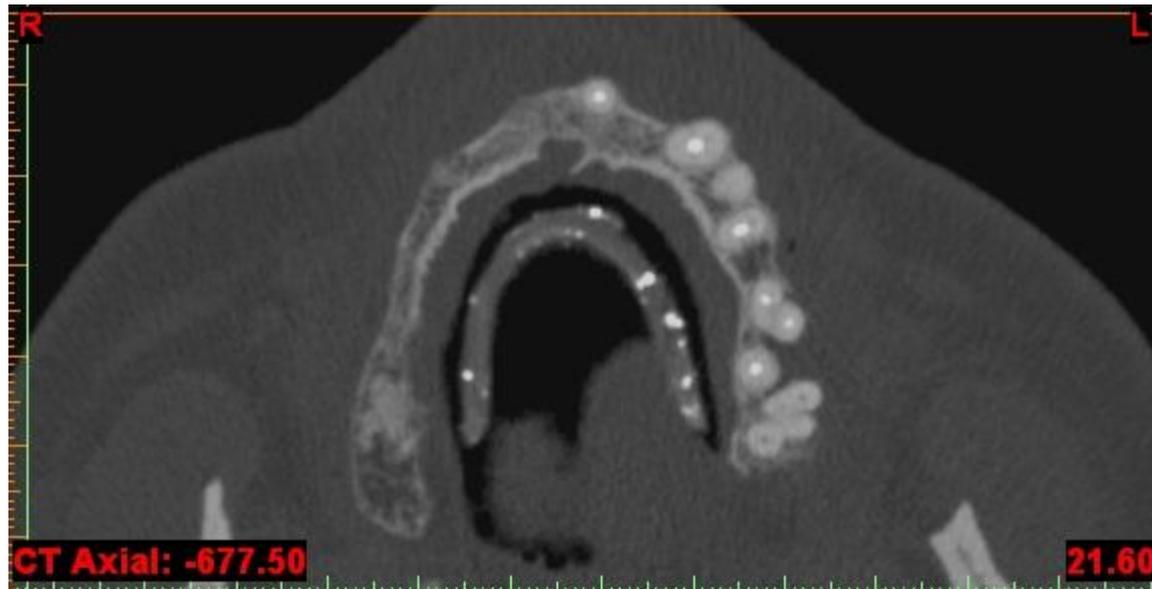
- **We recommend using a barium sulphate-acrylic mix for both the radio-opaque teeth and the baseplate.**
- **Use 15% barium sulphate in the teeth and 10% barium sulphate in the baseplate. This allows the teeth to be picked out separately.**
- **An accurate fitting stent with radio-opaque baseplate is usually the best option for mucosa-supported surgical drill guides.**



Good Stent



Bad Stent



**Terrible
Stent**

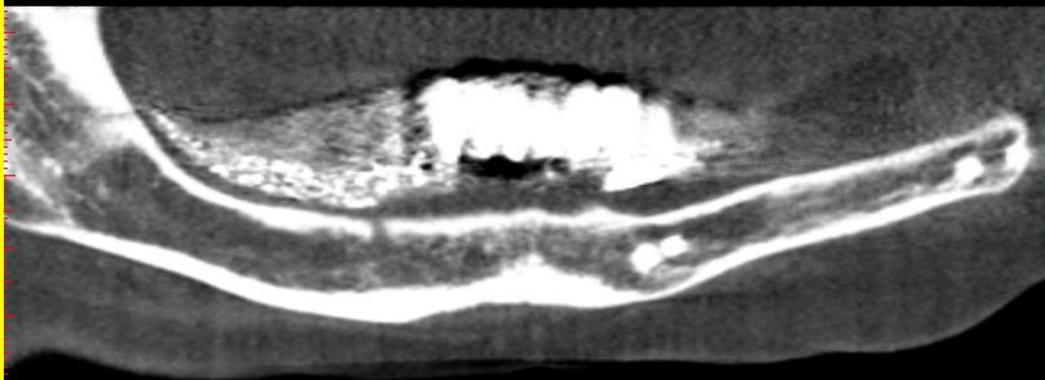


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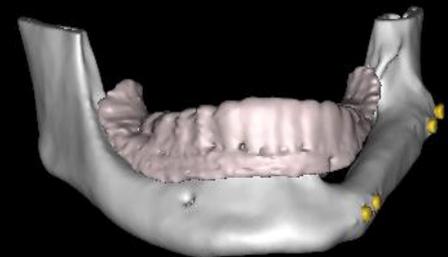
CT Axial: -25.38



R



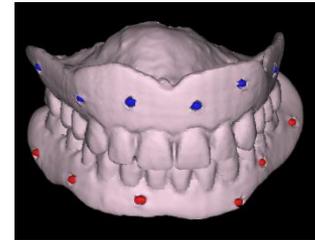
0.75



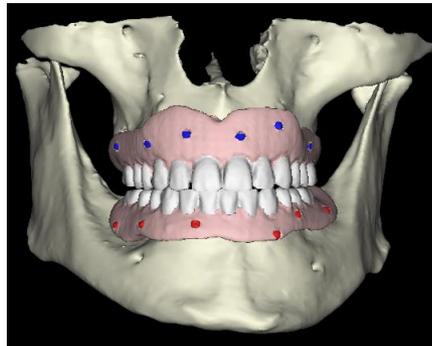
Dual Scan Technique

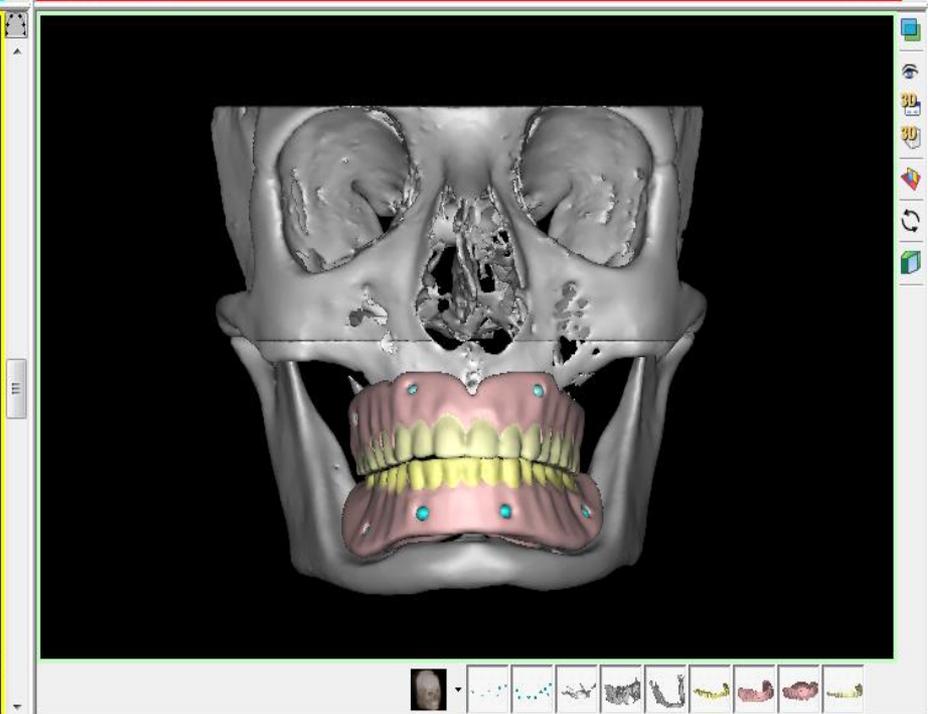
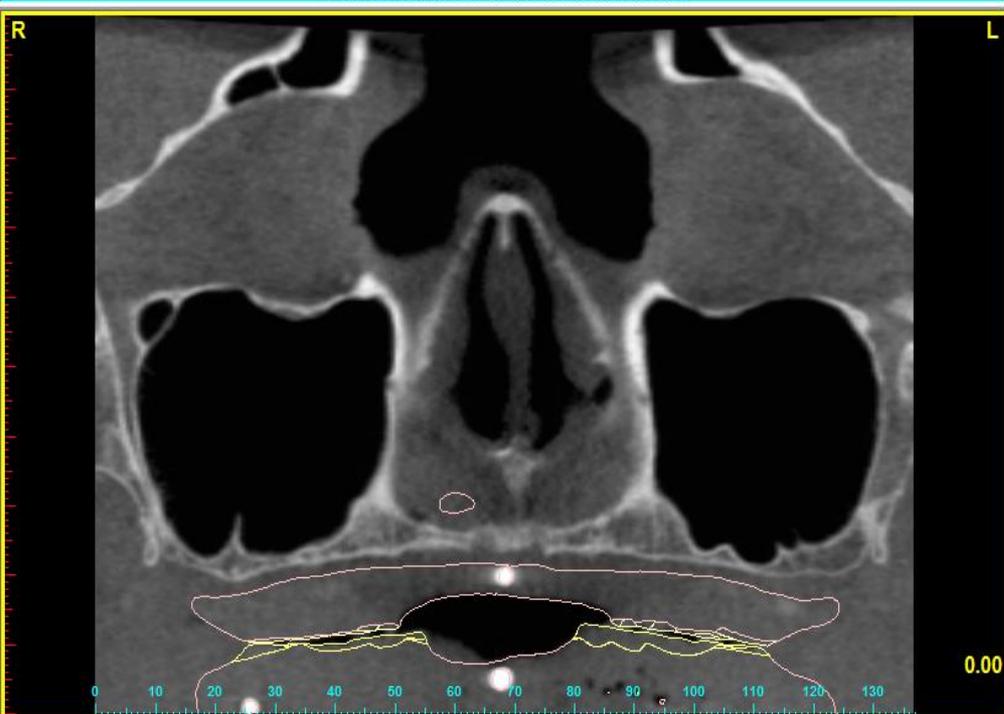
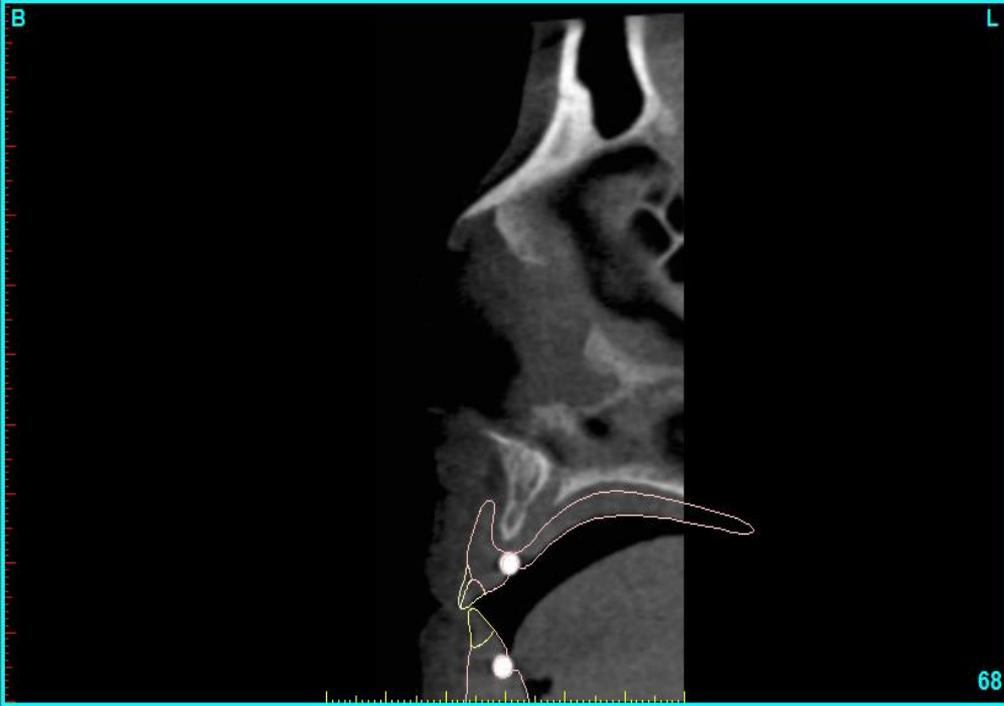


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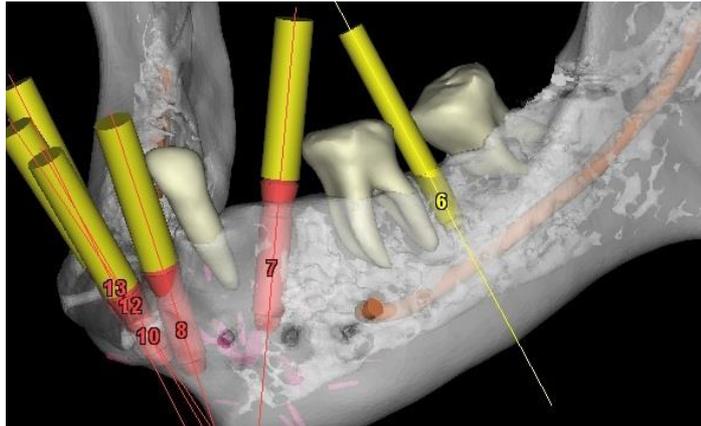
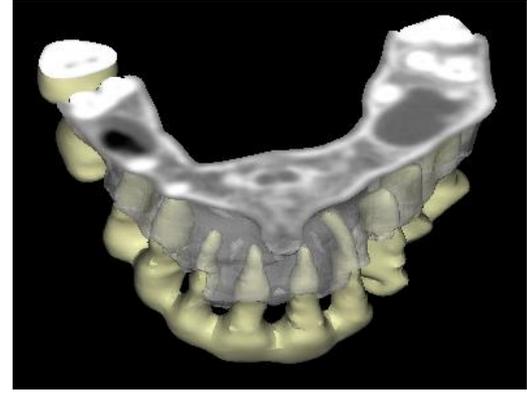
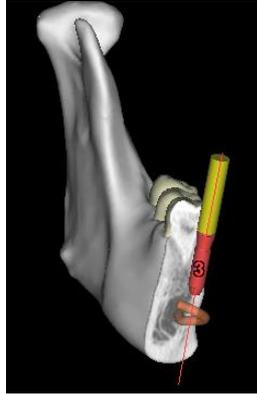


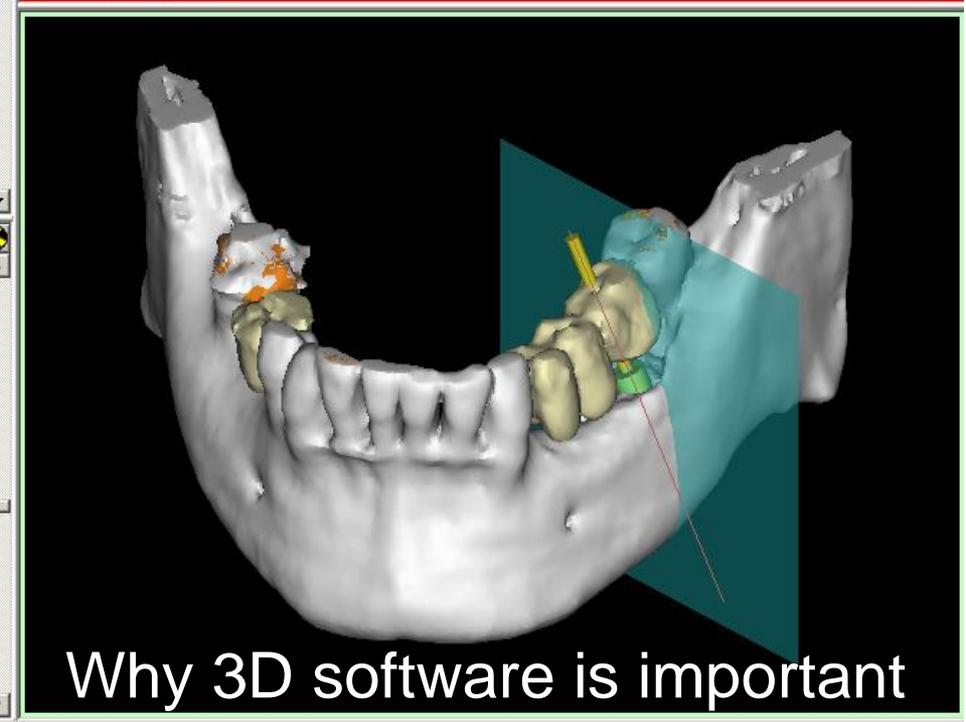
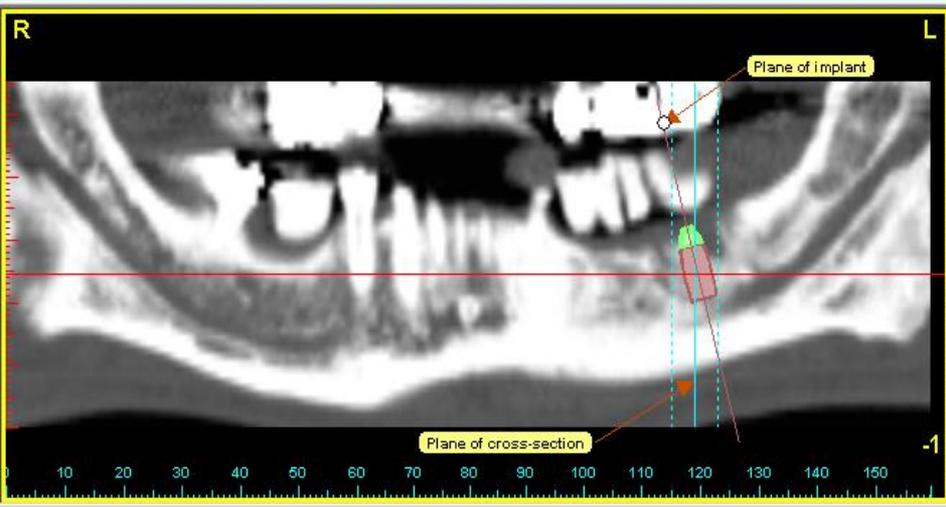
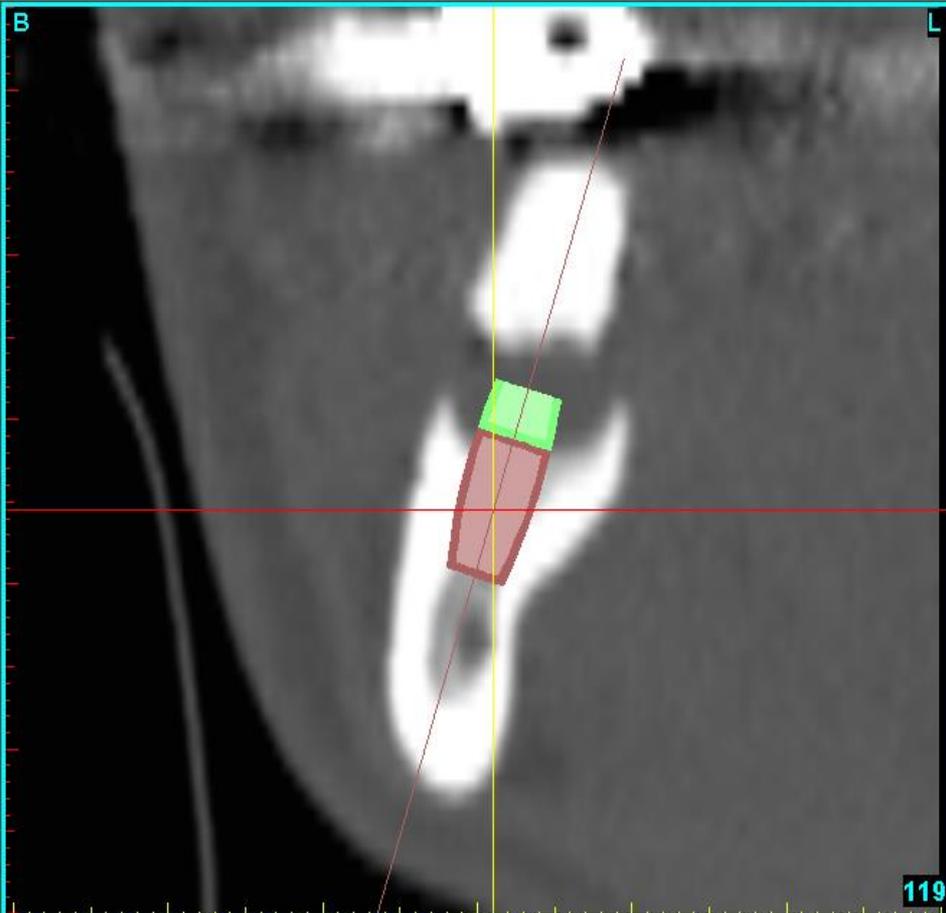
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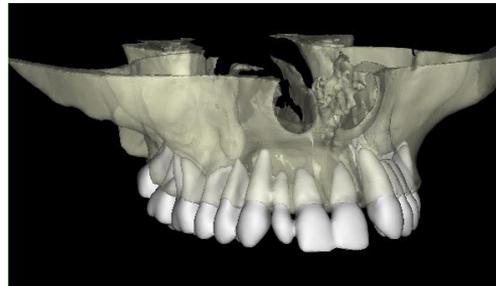
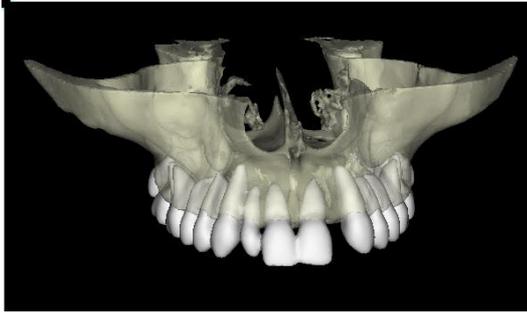


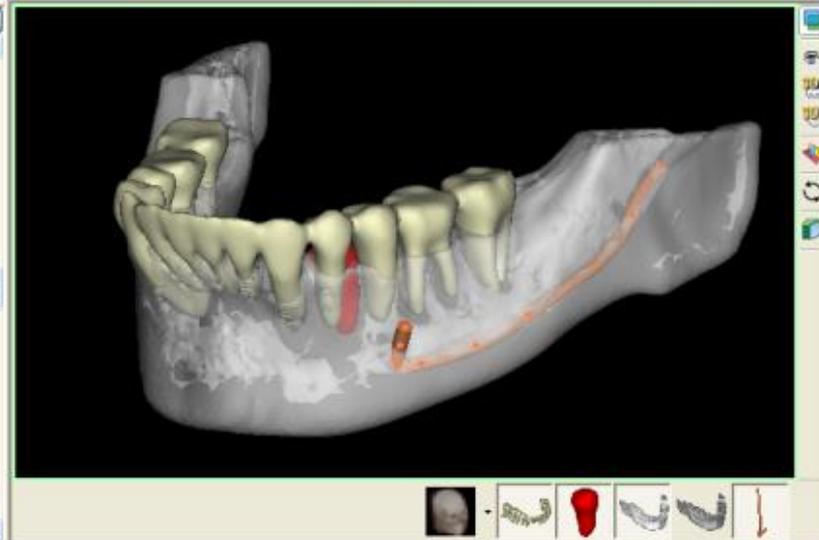
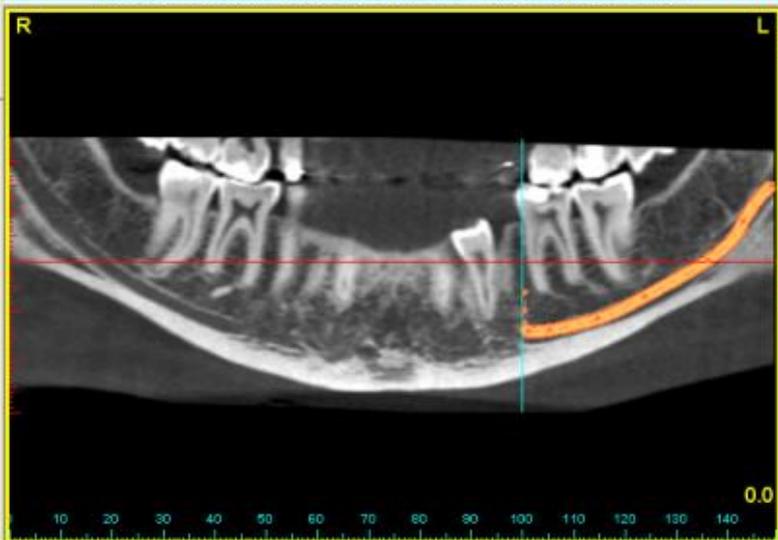
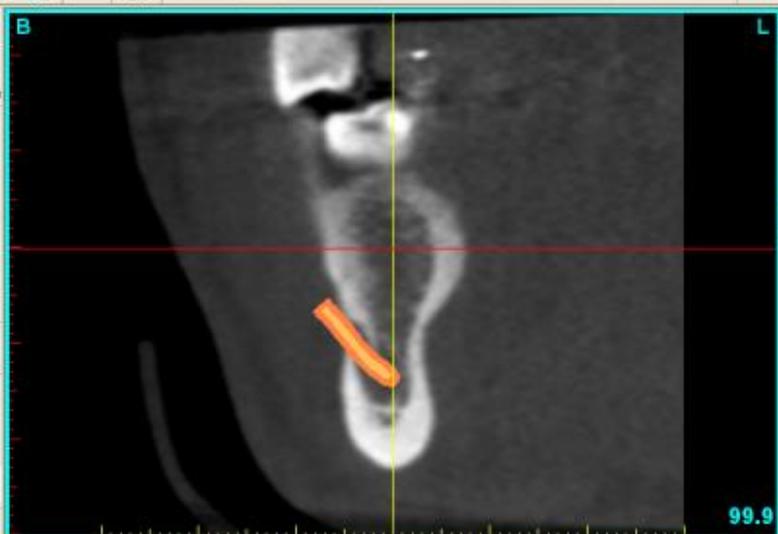
3D Implant Planning Software

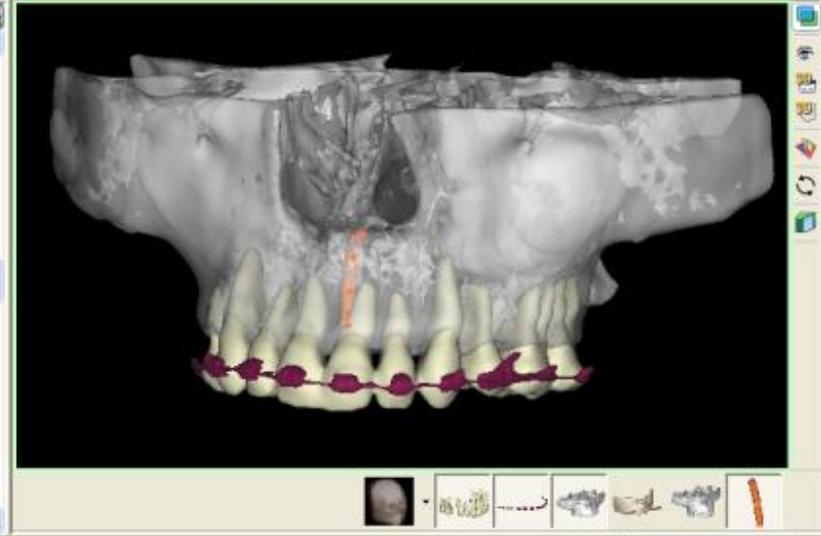
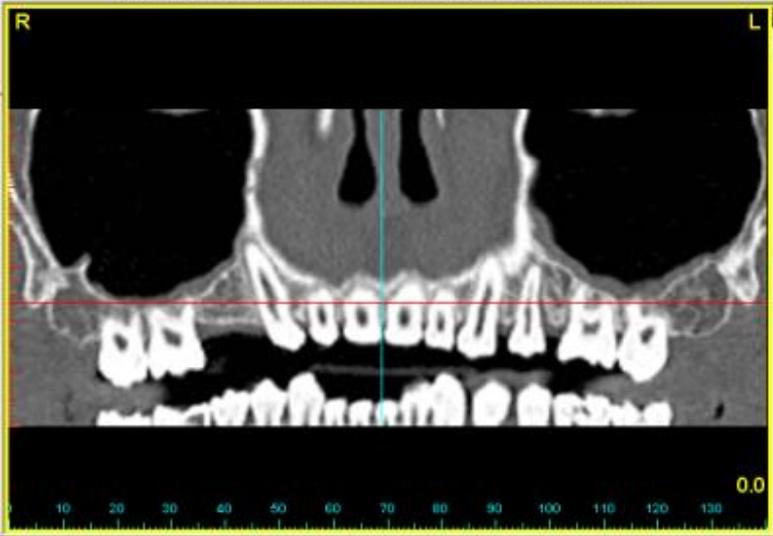
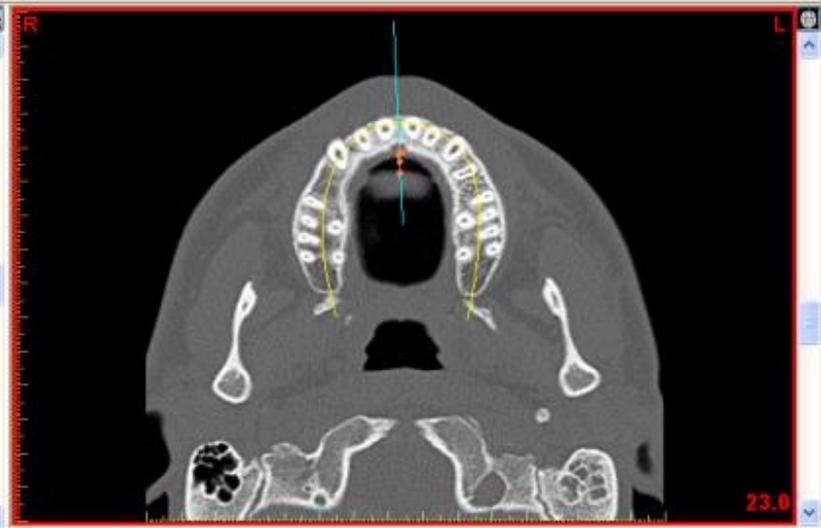
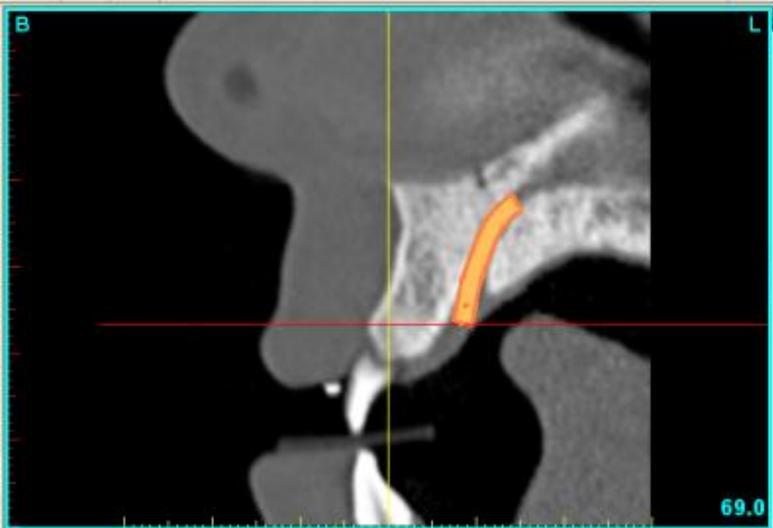




Segmentation





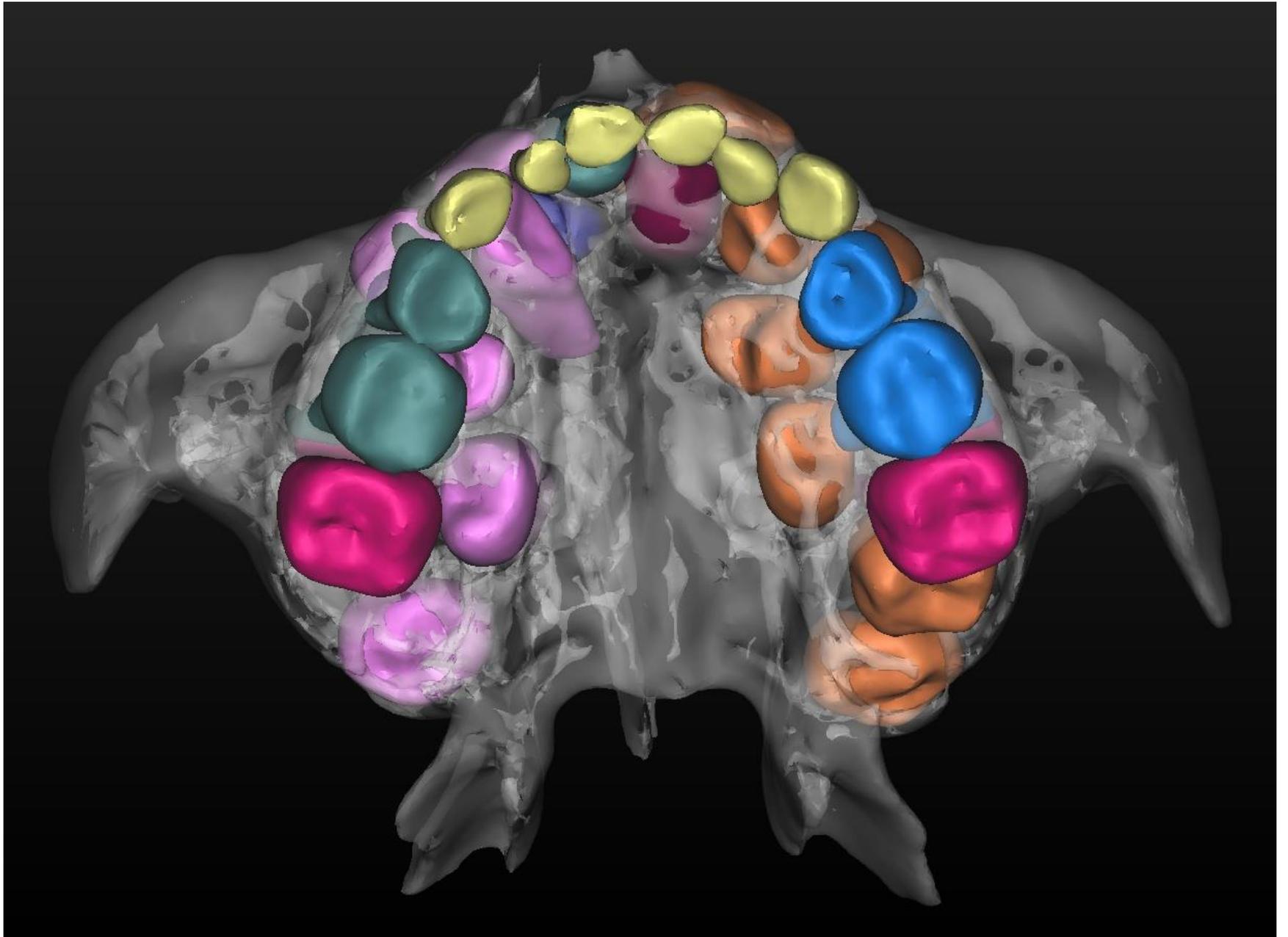


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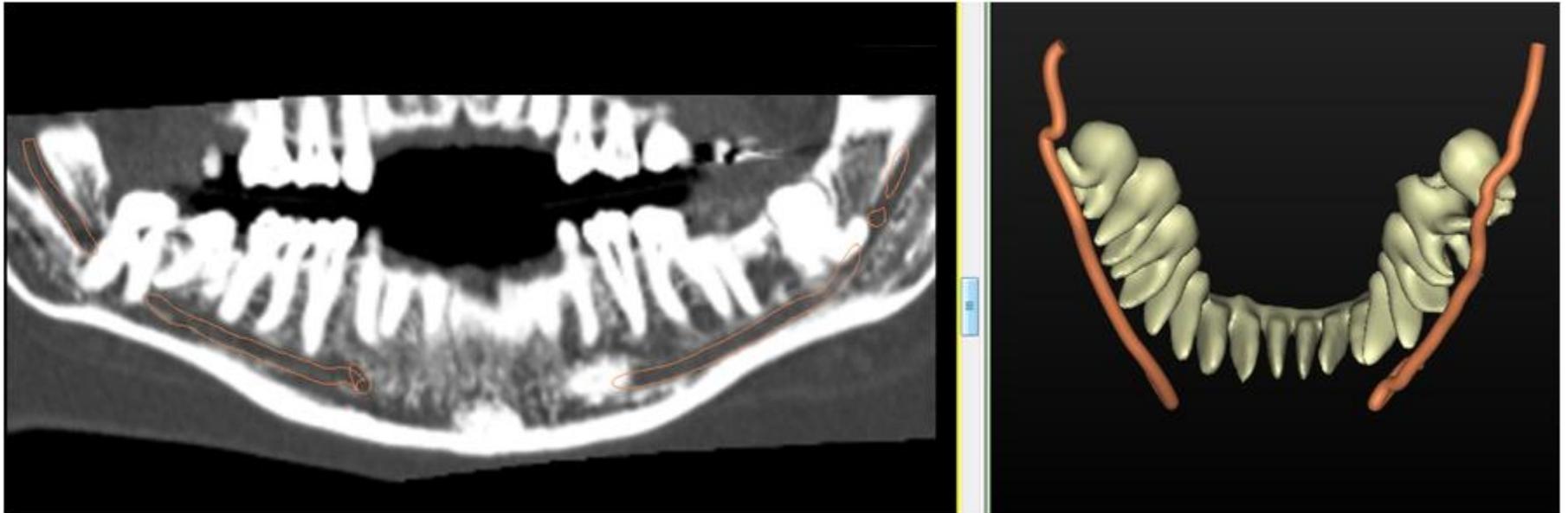
Hyperdontia



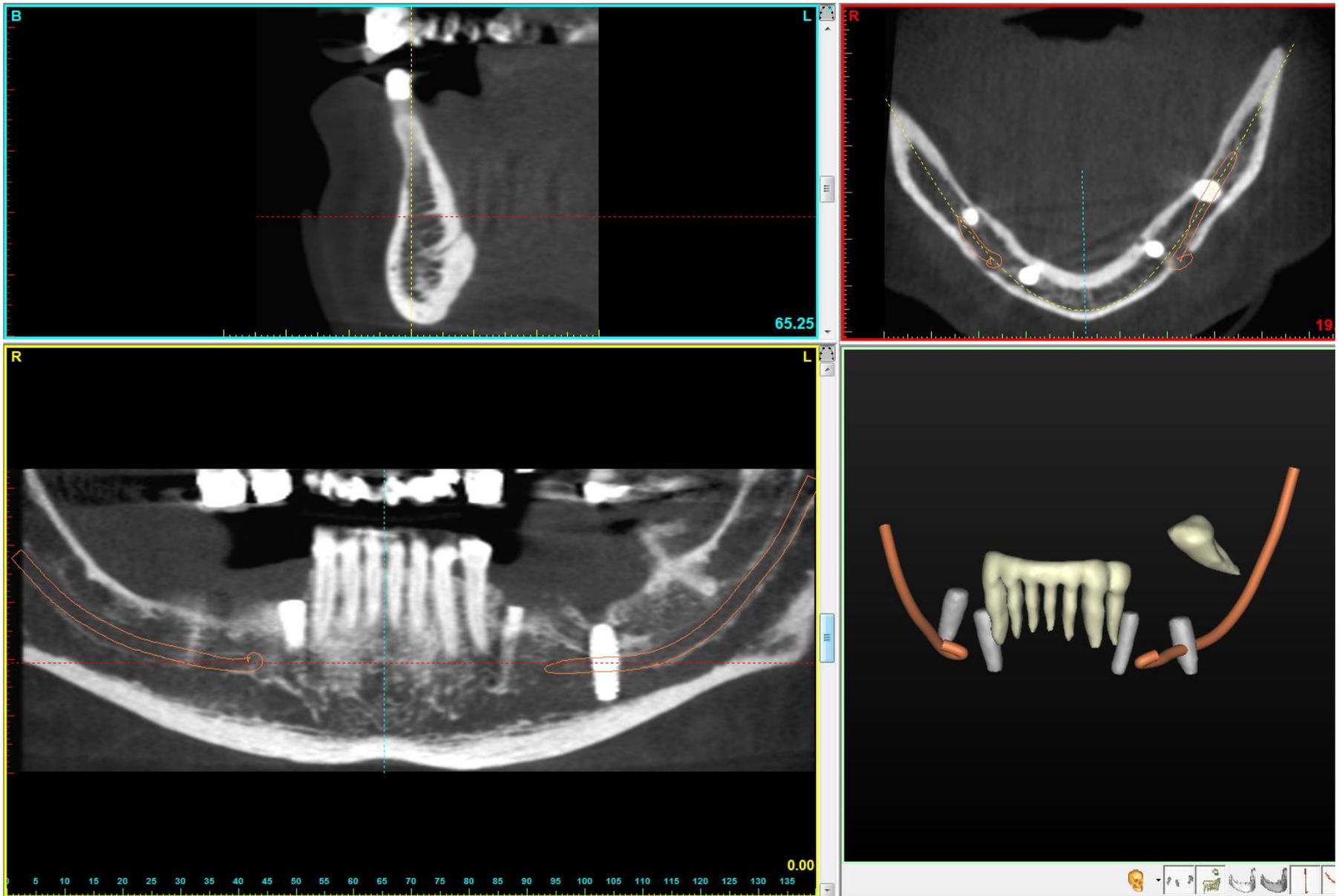
Courtesy of Nicolette Schroeder



Third Molars



Courtesy of Barry Dace



Take the CT Scan first, do the surgery second (not the other ways around)!