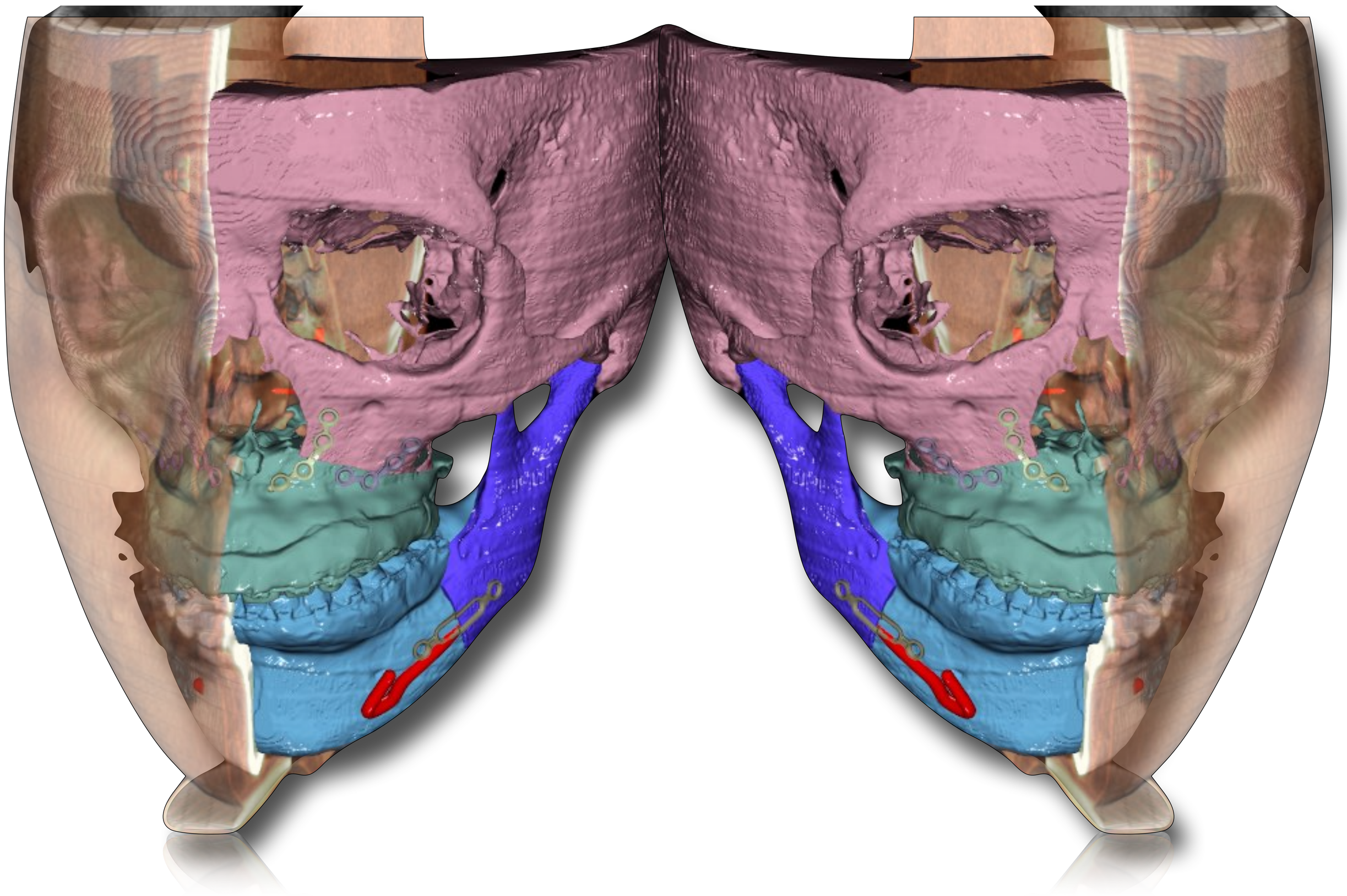
FACEGIDE™

the best digital guide solution for
orthognathic surgery



MEGA'GEN
For Lifetime Smiles

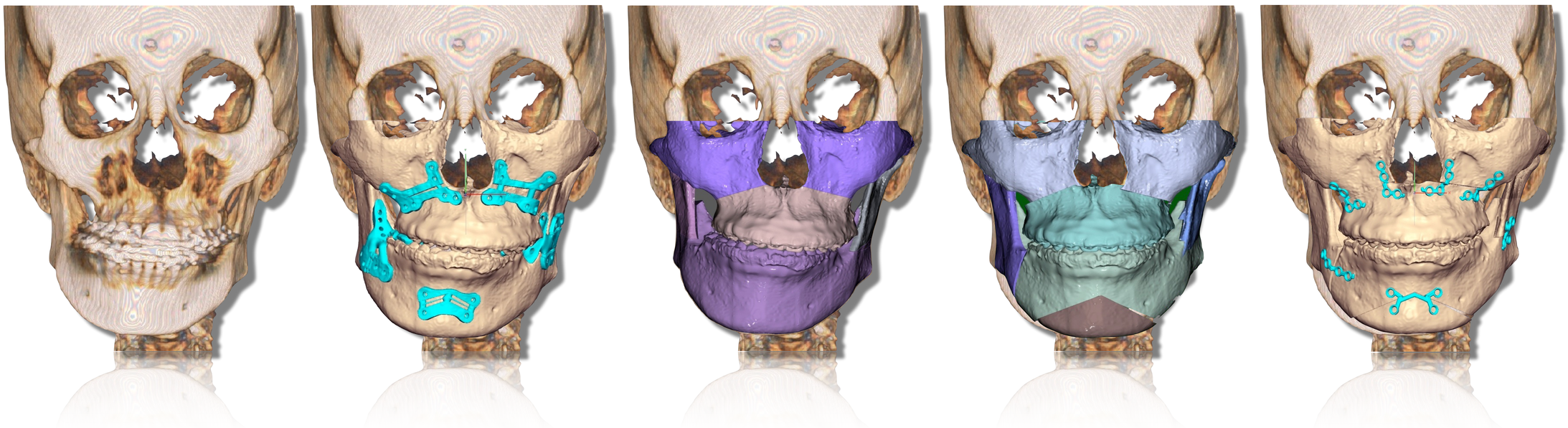
FACEGIDE™

extensive analysis for perfect results

R2GATE
is innovative implant diagnostic software that analyses the oral condition to show the best option for implant treatment

FACEGIDE
uses this same cutting-edge technology, and takes it one step further into maxillofacial surgery

As a result,
advanced software options provide accurate bone and tissue analysis, allowing precision planning for safe, predictable, and high-quality orthognathic surgery

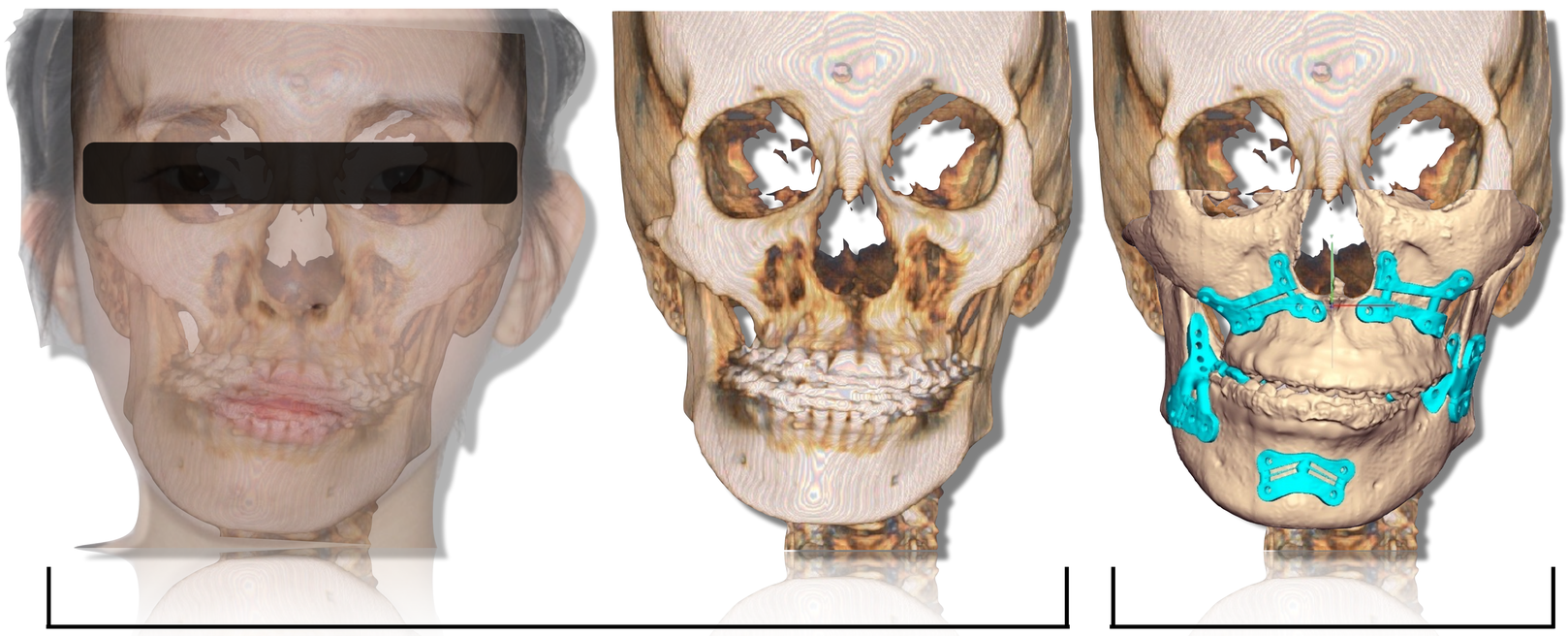


Safe/ accurate/ minimally invasive / predictable/ efficient/ patient-oriented

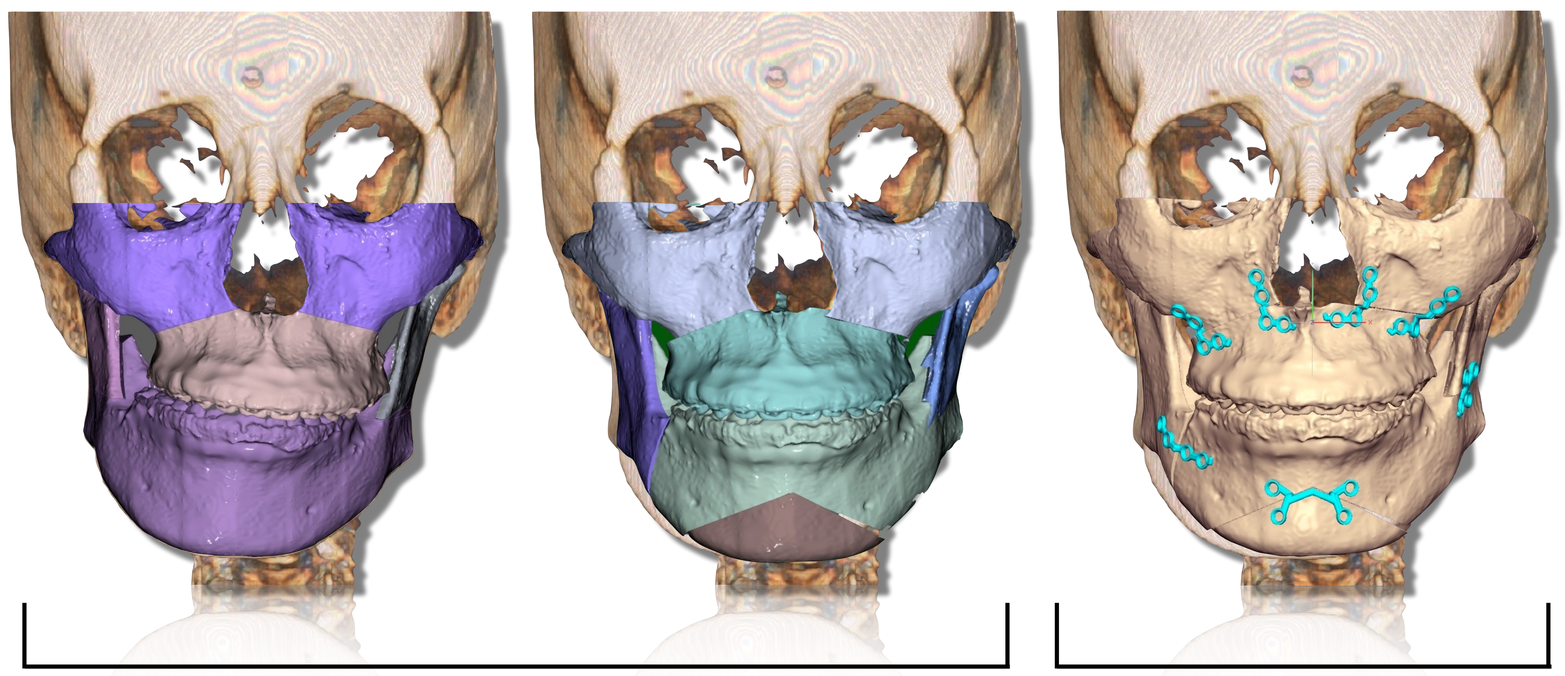
CONTENTS

FACEGIDE™

...an **intuitive** and **sophisticated** digital simulation procedure that minimizes the clinical risks via a guided solution for safe and **effective** surgical results



R2GATE planning ▶ **SAW-GUIDE**



Virtual surgery ▶ **FACE-PLATE**

CBCT and **model data** are used for precise pre-operative planning, including pre-diagnosis, a virtual osteotomy according to the oral surgeon's desired technique, and virtual orthognathic surgery

Importantly, this allows the oral surgeon to identify and anticipate variables that may occur during surgery

Once the surgical plan is confirmed, a **SAW-GUIDE** and **FACE-PLATE** are provided to facilitate precise orthognathic surgery within a shorter time and with minimized risks and post-operative complications

MEGA'GEN
For Lifetime Smiles

The best digital guide solution for orthognathic surgery

Turning imagination into reality

FACEGIDE™ planning

opening the door for digital orthognathic solutions

As the first digital implant guide solution in Korea, R2GATE is now applying its experience and expertise to open a new era of digital orthognathic solutions

CBCT data is converted to an STL format to enable a virtual osteotomy & fixation procedure
Plus, CT data is used to analyze the movement and provide wafers

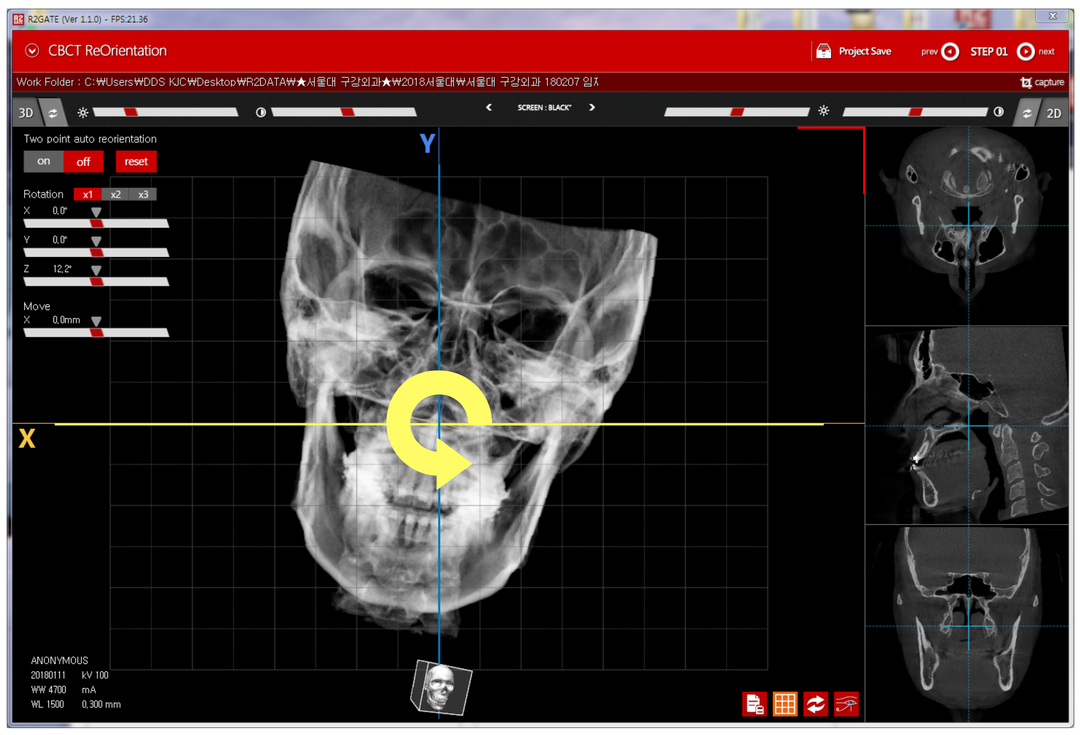
CBCT Reorientation™

How accurate is your view of your patient's condition?

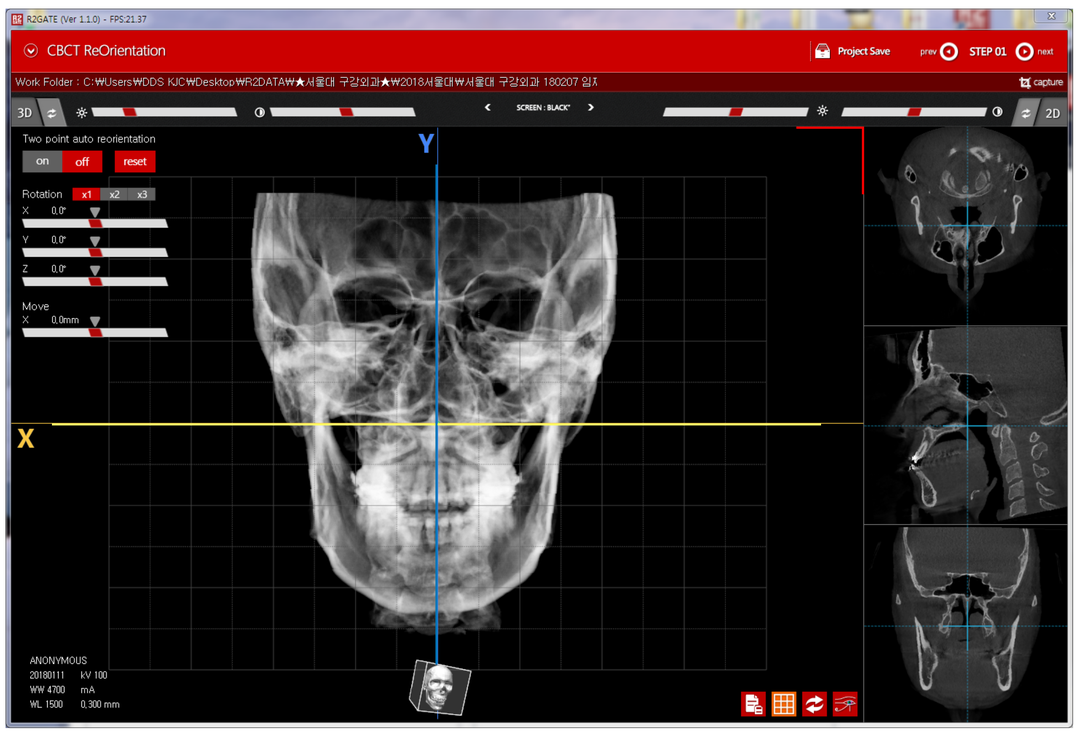
Successful surgery requires accurate preoperative diagnosis and precise surgical planning

CT analysis errors caused by slight patient movement can have a significant impact on the final surgical outcome

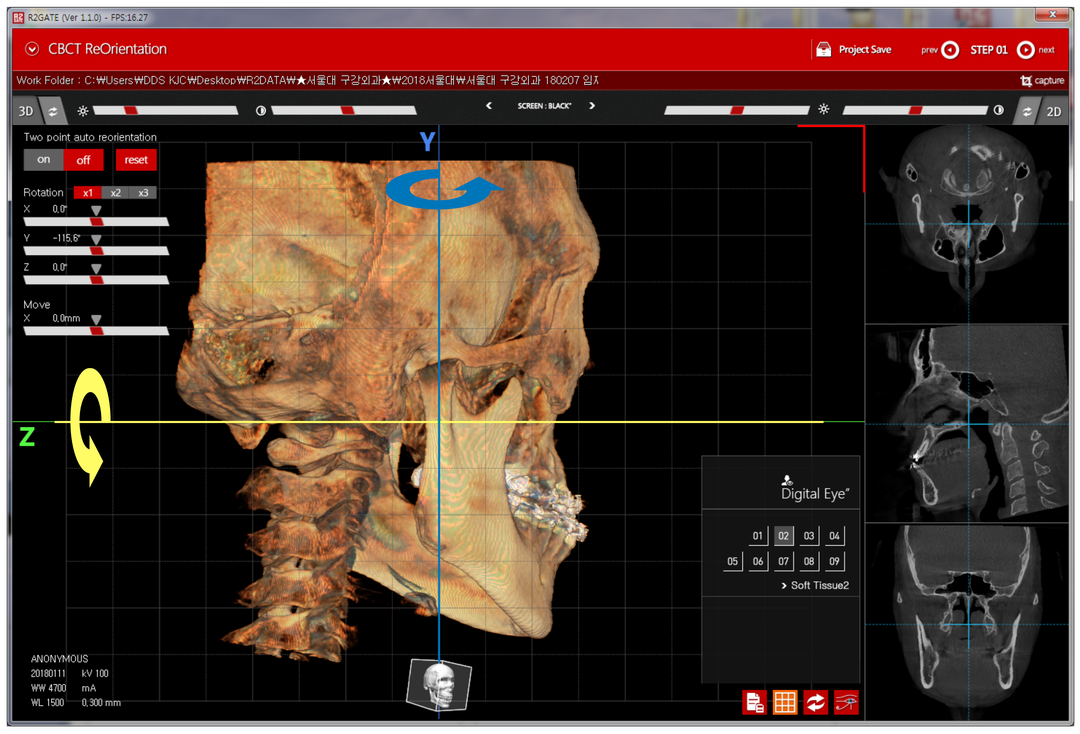
The CT ReOrientation function of R2GTE corrects any patient position error during the CT scan to provide the best data for a precise diagnosis

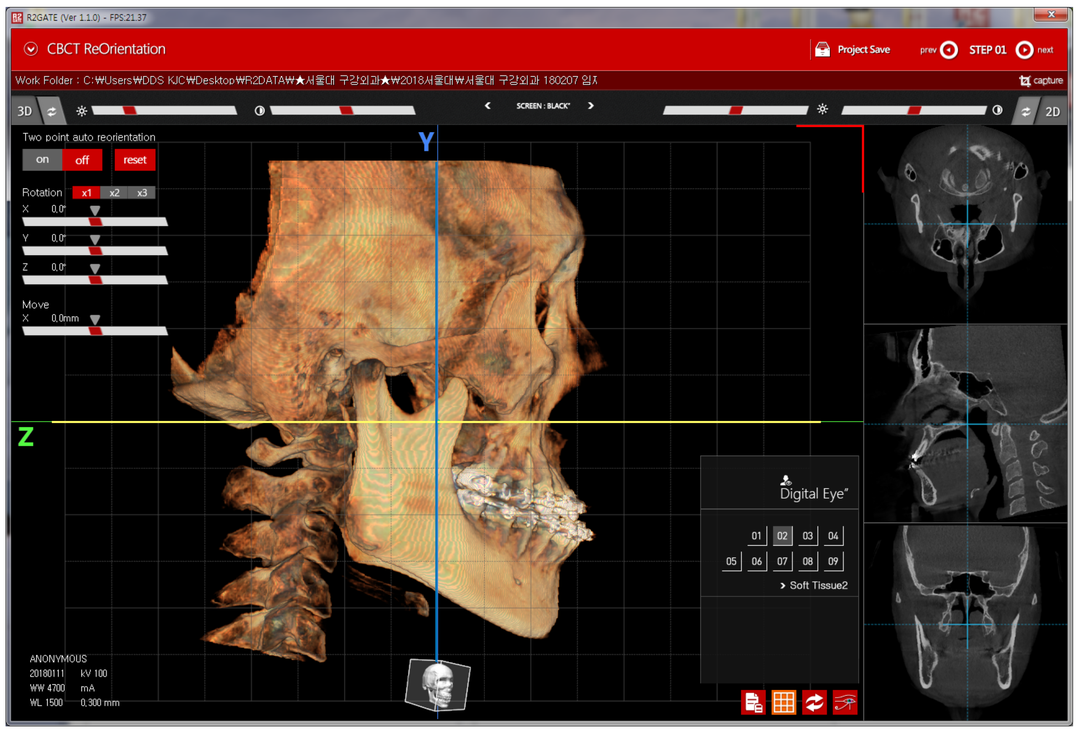


[BEFORE ReOrientation]



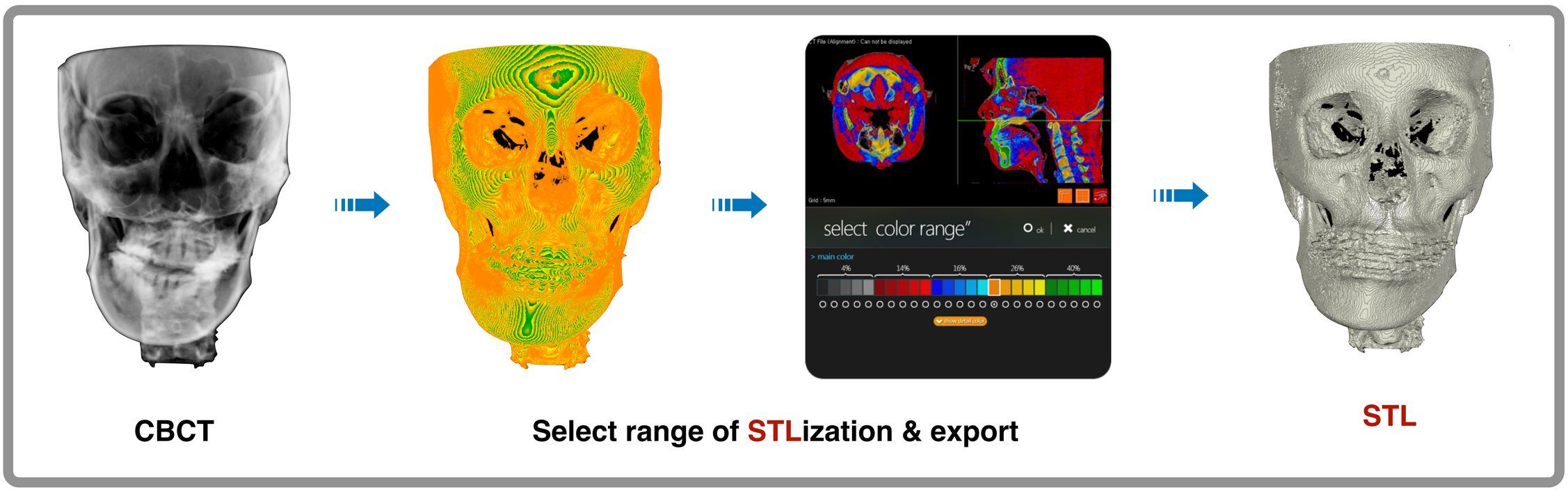
[AFTER ReOrientation]



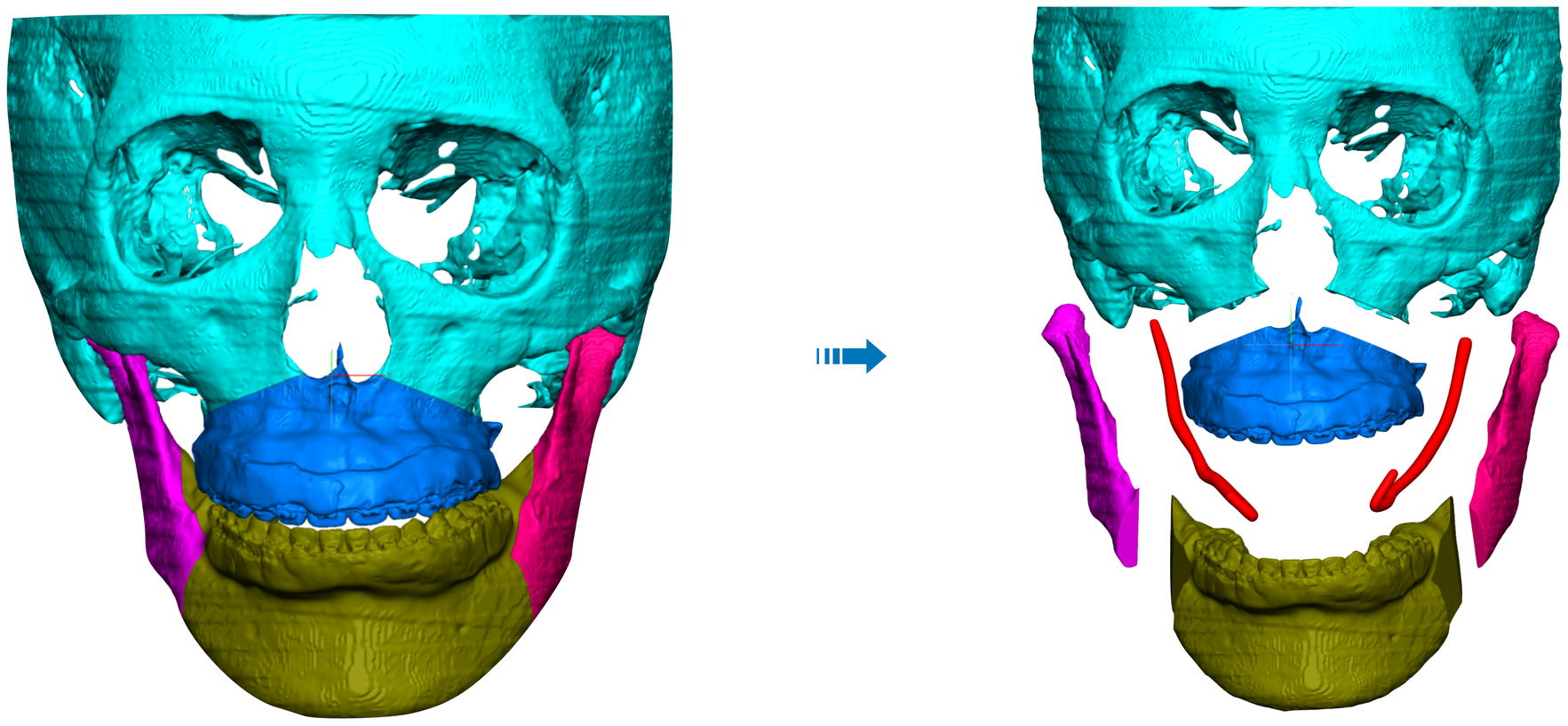


STLization™

R2GATE converts CBCT data into processable STL data, which allows a precise 3D simulation



Virtual Osteotomy



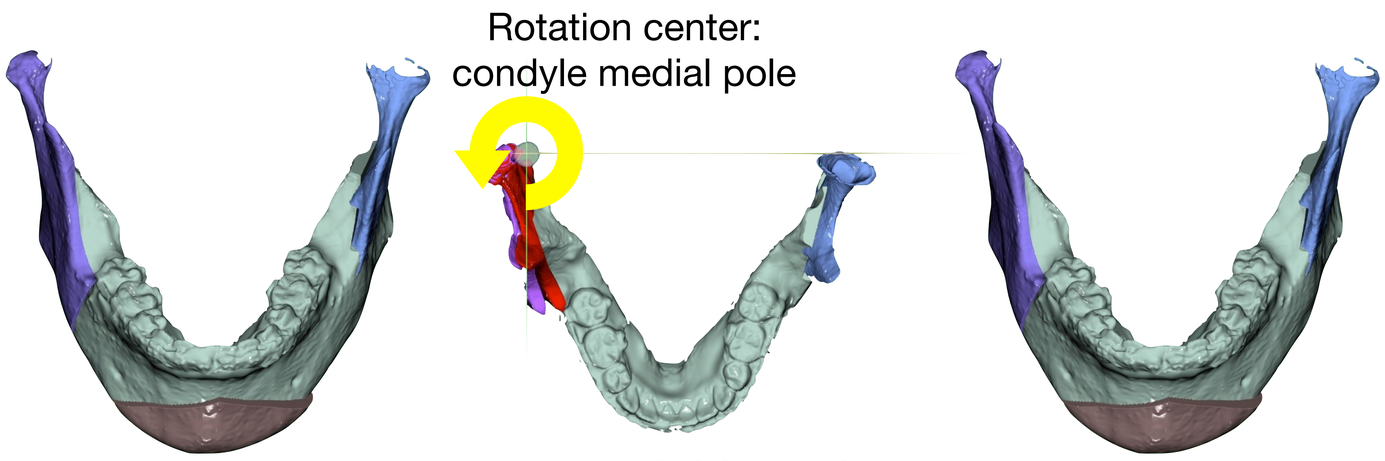
- The resulting skull data can be freely osteotomized according to the technique preferred by the oral surgeon
- The osteotomy position, range, and amount can all be adjusted depending on the patient characteristics
- During upper & mandibular osteotomies, an osteotomy line can be formed considering the main anatomical structure of concern
- Combining the osteotomy segments verifies the anatomical changes that will occur during bone deletion and bone movement, enabling a feasible and precise surgical plan

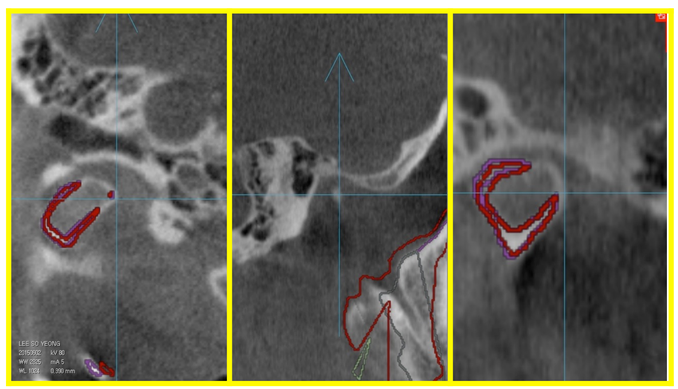
Turning imagination
into reality

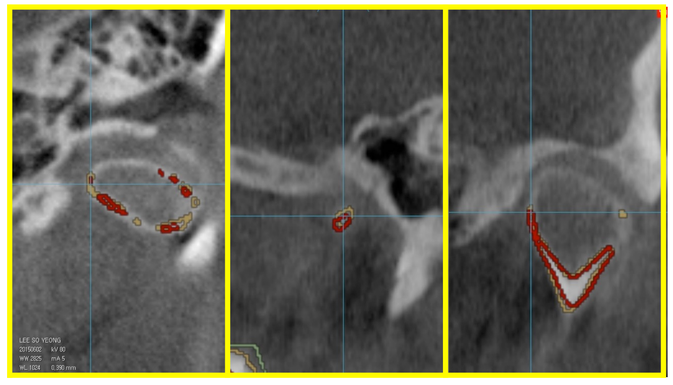
TMJ position control

Prediction of TMJ position & 3D rotational movement of mandibular condyle

- The key advantage of FACEGIDE virtual surgery is for predicting and analyzing rotational movements
- The virtual surgery allows free rotation and movement of the osteotomy to demonstrate the axial motion
- Predicting the postoperative position of the mandibular condyle and new rotation axis also allows a visible surgical prognosis

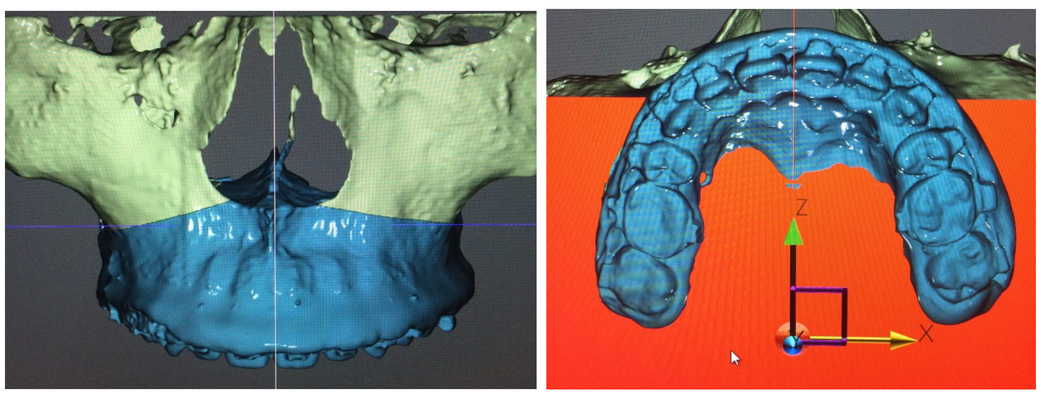




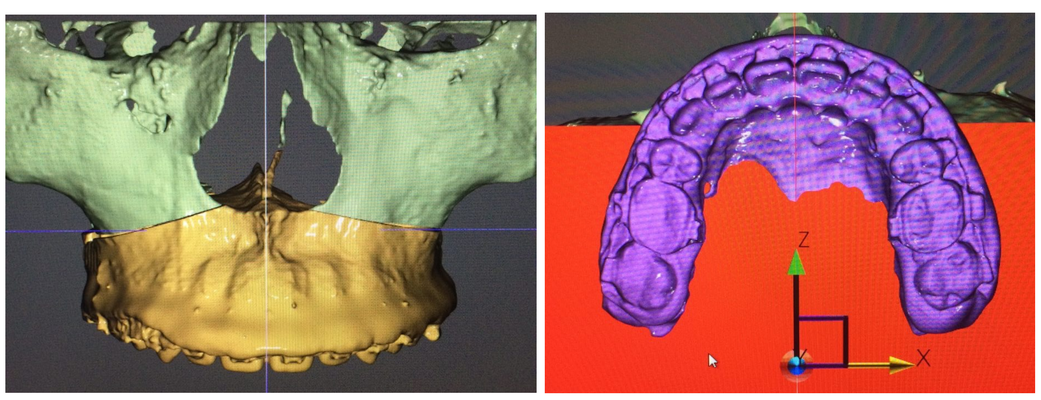


Digital Yaw control & analysis

Intuitive solution for correcting asymmetric arch

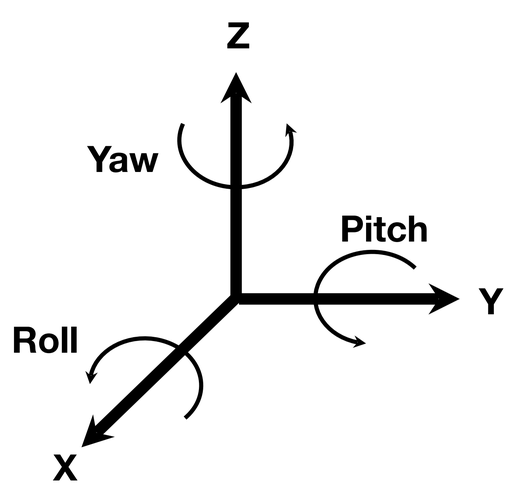


BEFORE yaw correction



AFTER yaw correction

- Yaw control by fine-tuning the asymmetric arch position during planning is critical for setting the post-operative mid-line and esthetic recovery
- Yaw control is easy to miss with conventional 2D CT diagnostics, yet can be precisely adjusted in 3D, resulting in a more accurate prognosis

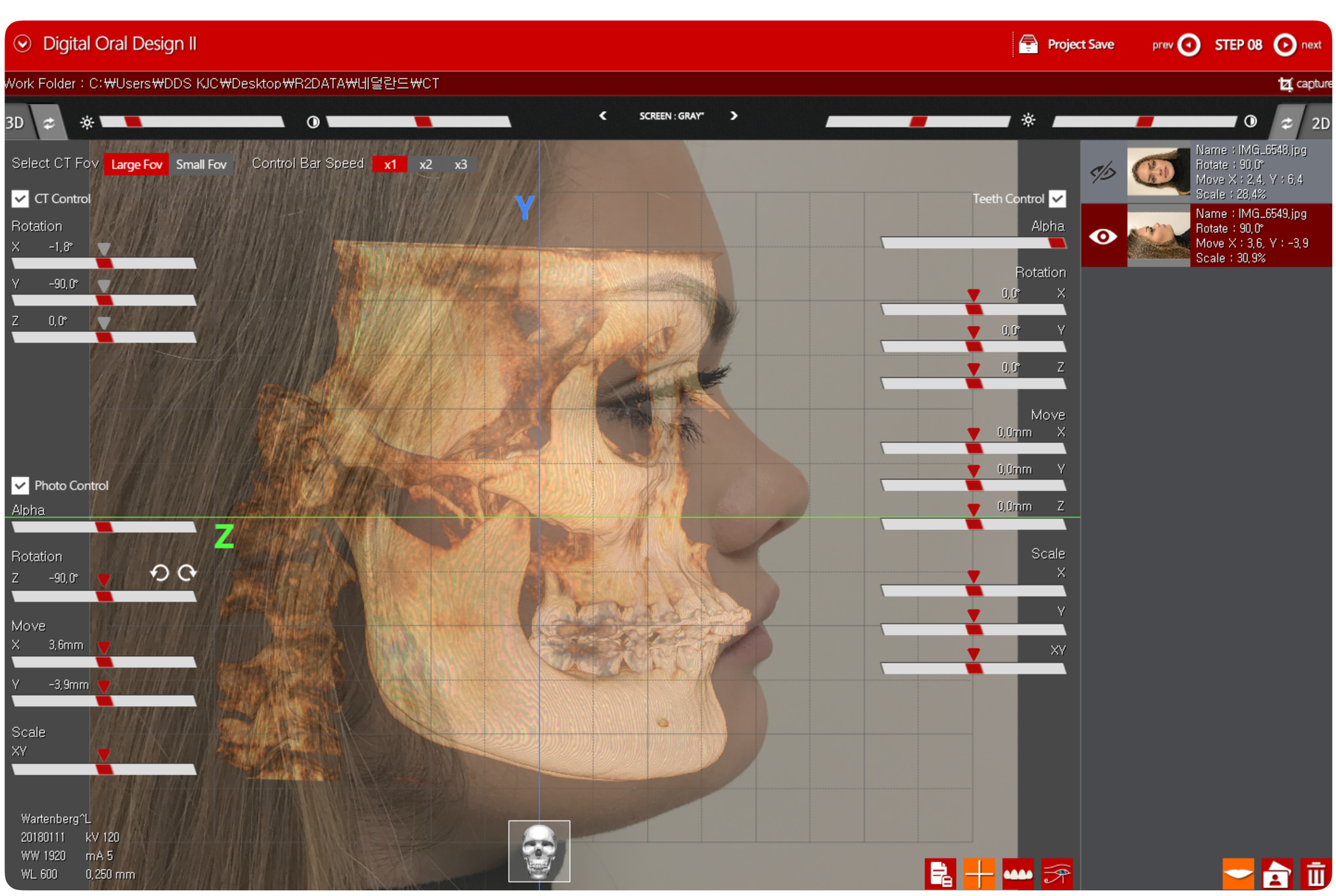


Face Analyzer™

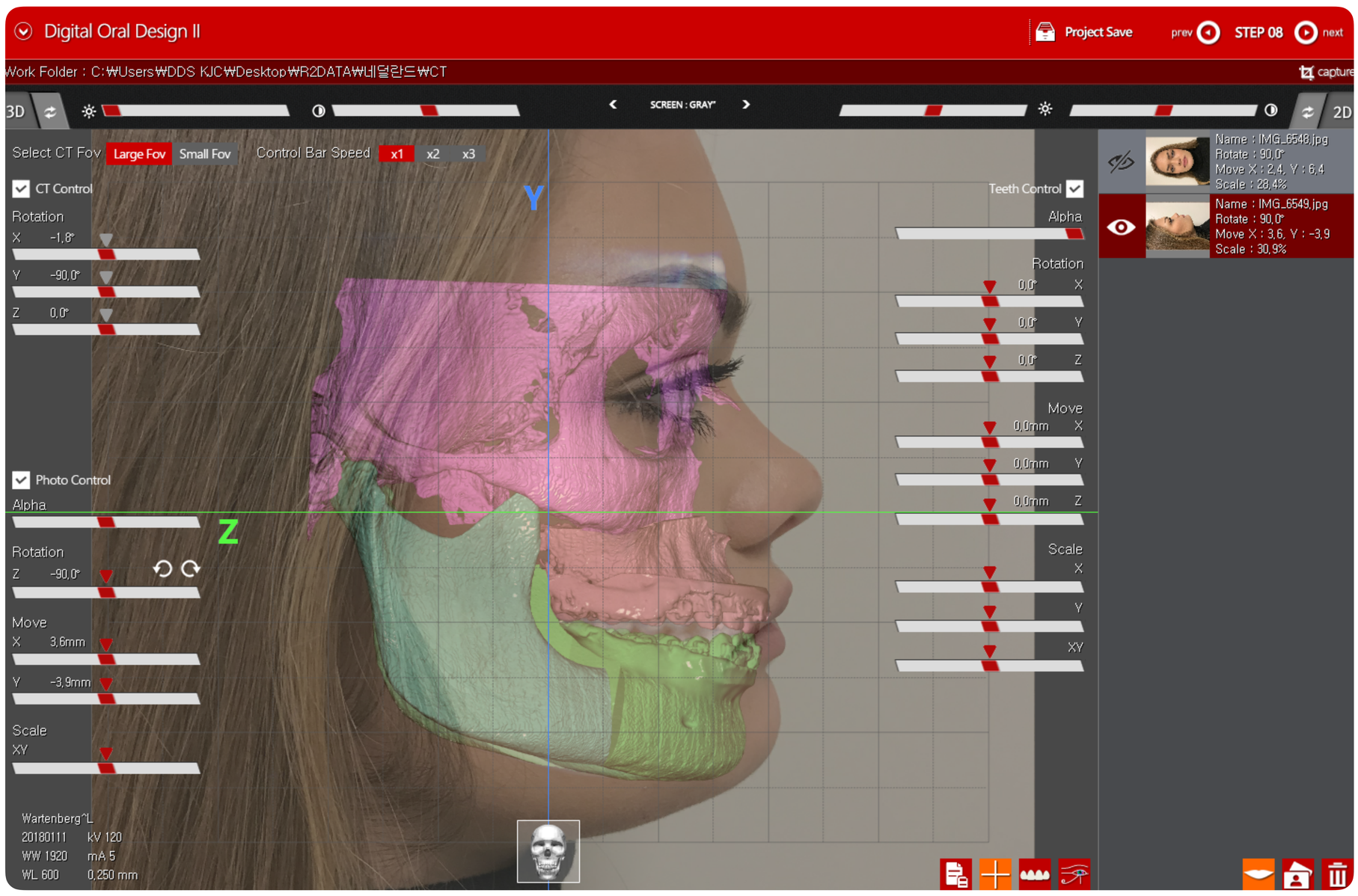
another step forward in digital orthognathic diagnosis

The R2 photo analyzer matches a patient's photo with their CBCT data, providing the oral surgeon with many clues for predicting the facial changes after surgery

[Preoperative]



[Postoperative]

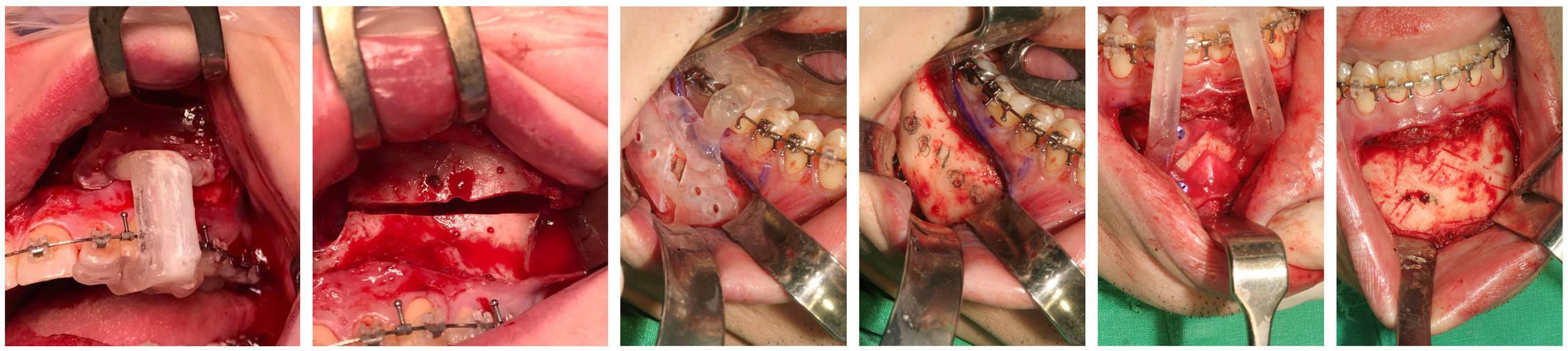


R2 GATE Turning imagination into reality

SAW-GUIDE™

safer, faster & minimized errors

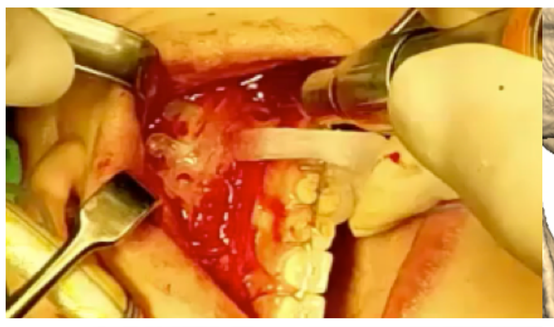
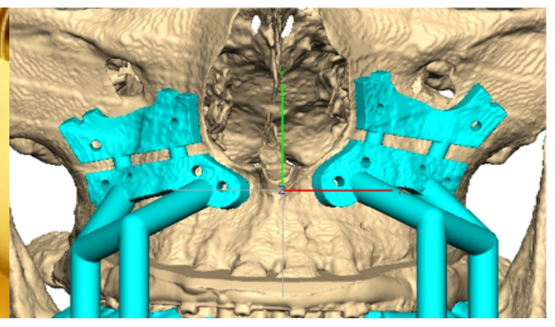
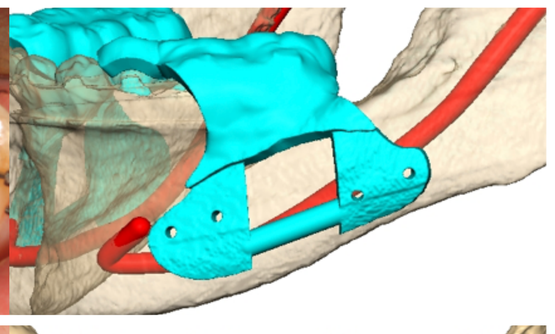
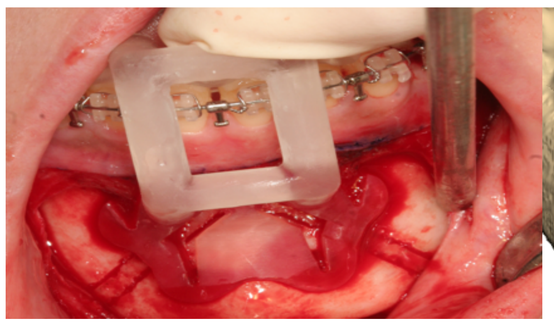
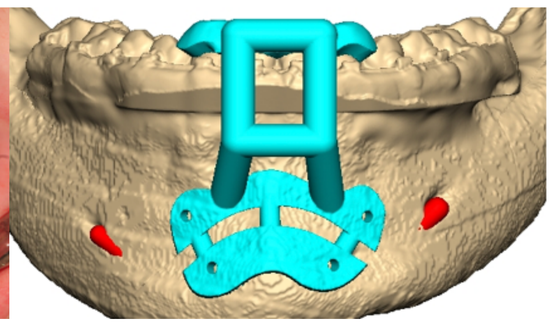
SAW-GUIDE is created according to the osteotomy position determined by the pre-operative virtual surgery and surgical method selected by the oral surgeon



Using drilling guide holes, SAW-GUIDE provides a fast and precise set-up position, allowing the osteotomy process to proceed quickly and safely, while minimizing the error range and any variables that may occur during the osteotomy

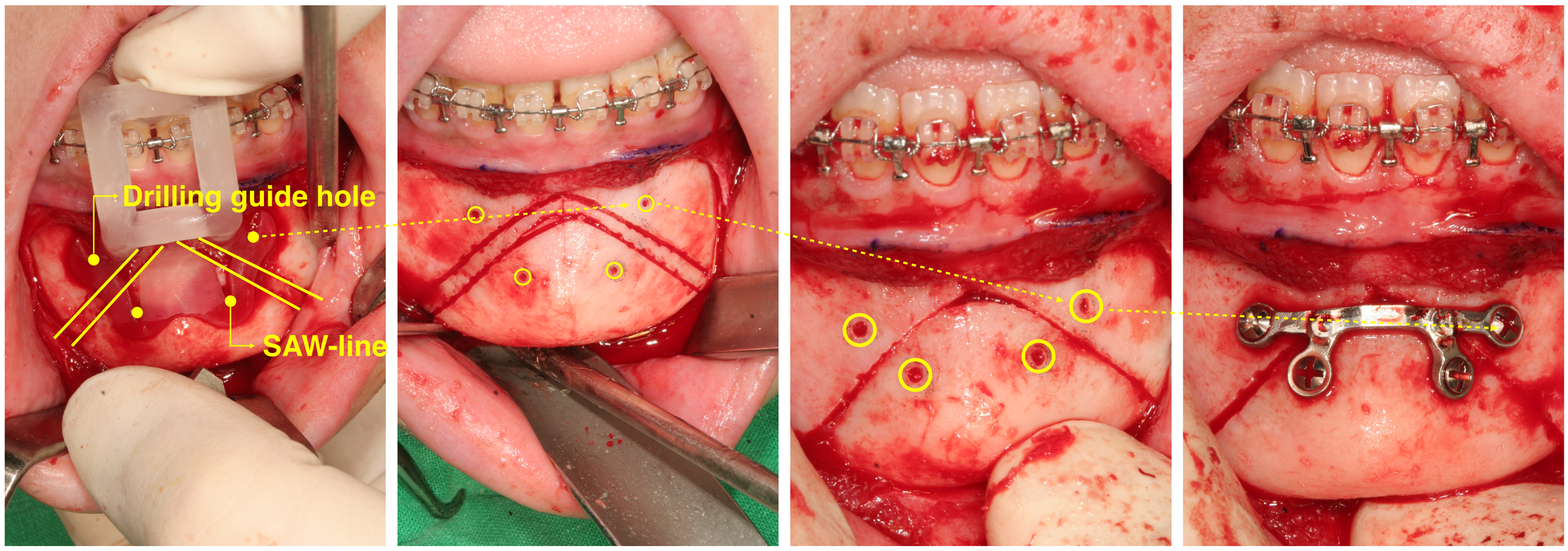
Adaptable

SAW-GUIDE can be adapted for various osteotomy methods, and also designed to protect key anatomical areas

Upper SAW	Le Fort I		
Lower SAW	BSSRO IVRO Inverted-L		
Genio SAW	Genio plasty		

FACE-PLATE™

no bone-fitting procedure & includes precision indicator



As FACE-PLATE is created using the patient's CBCT data, it can be fixed to the bone surface with **minimum deformation** (banding or cutting)

FACE-PLATE uses the same fixation holes as used for the SAW-GUIDE osteotomy, so **no additional drilling** is required

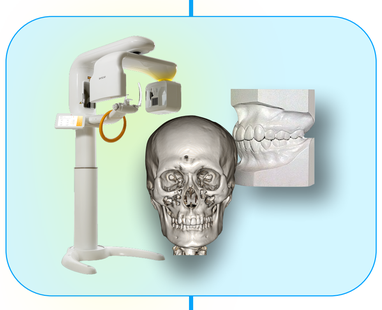
Matching the pre-formed fixation holes with FACE-PLATE also provides an **additional indication of accuracy,** allowing correction for more precise outcomes

Turning imagination
into reality

Order process

Chair-side preparation & order

1



- CBCT
- Model fabrication
- Surgery plan
- Send to R2 FACE-GIDE team

Treatment planning

2

- CBCT reorientation
- Model scan
- Merge STL with Dicom
- STL converting
- Nerve tracing
- Virtual surgery

Surgeon's confirmation

- Virtual surgery confirmation

2 Day

- Be sure to fix in final occlusion position

- Send compressed CBCT by E-mail

- For segmental maxillary case, send original model with split model

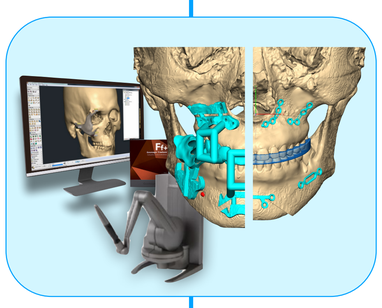
MEGA'GEN
For Lifetime Smiles

Design

Manufacturing

Delivery

4

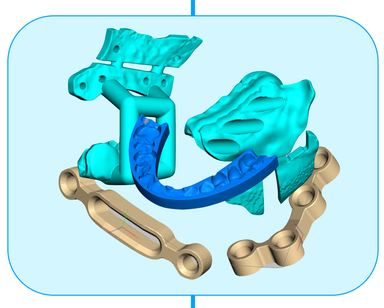


- Design FACE-GIDE
- SAW-GUIDE
- FACE-PLATE
- Wafer (intermediate, final)

5

- 3D Printing
- Milling

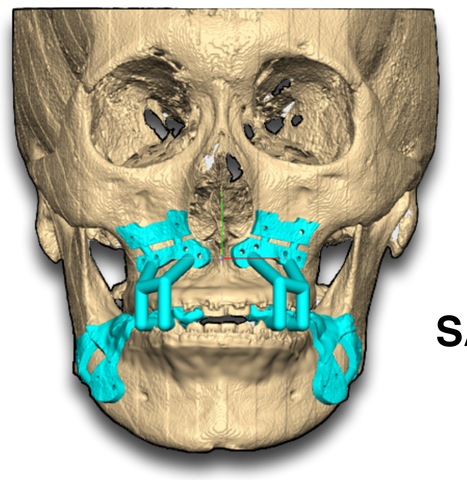
6



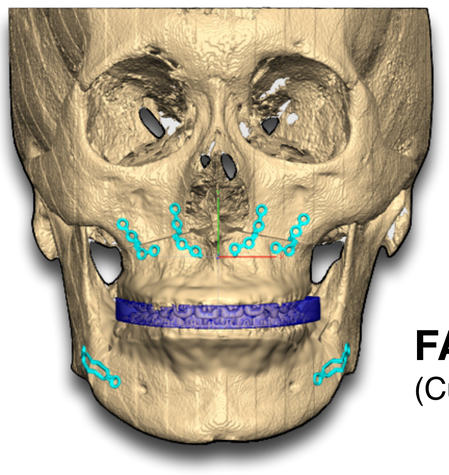
- Packing
- Send to hospital

2 Days

3 Days



SAW-GUIDE



FACE-PLATE
(Customized plate)

FACEGIDE™

using cutting-edge technology for digital orthognathic solutions!

Advanced software options provide accurate bone and tissue analysis,
allowing precision planning for safe, predictable, and high-quality orthognathic surgery

Open new road for digital

Safety, Efficiency, Reasonable

R2 GATE

MEGA'GEN
For Lifetime Smiles

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R2 GATE

Turning imagination
into reality

FACEGIDE™

perfecting orthognathic surgery

FACEGIDE™
We serve the vision and safety

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MEGAGEN
For Lifetime Smiles

R2 GATE **Turning imagination into reality**

MEGA'GEN For Lifetime Smiles

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