

Odontoiatria Digitale

&

AI

Zelarino, 2 Marzo 2024

Ordine dei Medici e degli Odontoiatri Venezia

Dr. Marco Paoli - @marcopaolidds



Odontoiatria Digitale

è una disciplina che utilizza la tecnologia digitale per migliorare la diagnosi, il trattamento e la gestione dei pazienti odontoiatrici.



Sort by: **Best match**MY NCBI FILTERS

11,585 results

Page of 1,159

RESULTS BY YEAR

 **Artificial Intelligence in Dentistry: Chances and Challenges.**

1 Schwendicke F, Samek W, Krois J.

Cite [J Dent Res. 2020 Jul;99\(7\):769-774. doi: 10.1177/0022034520915714. Epub 2020 Apr 21.](#)[PMID: 32315260](#) [Free PMC article.](#) [Review.](#)Share **AI-based applications will streamline care, relieving the dental workforce from laborious routine tasks, increasing health at lower costs for a broader population, and eventually facilitate personalized, predictive, preventive, and participatory **dentistry**. ...Lastly ...**

Machine learning
I sistemi apprendono dai dati

Deep learning
forma avanzata di machine learning
basata su reti neurali artificiali profonde

area di ricerca e sviluppo

di sistemi informatici finalizzati ad

eseguire compiti che richiedono solitamente l'intelligenza umana

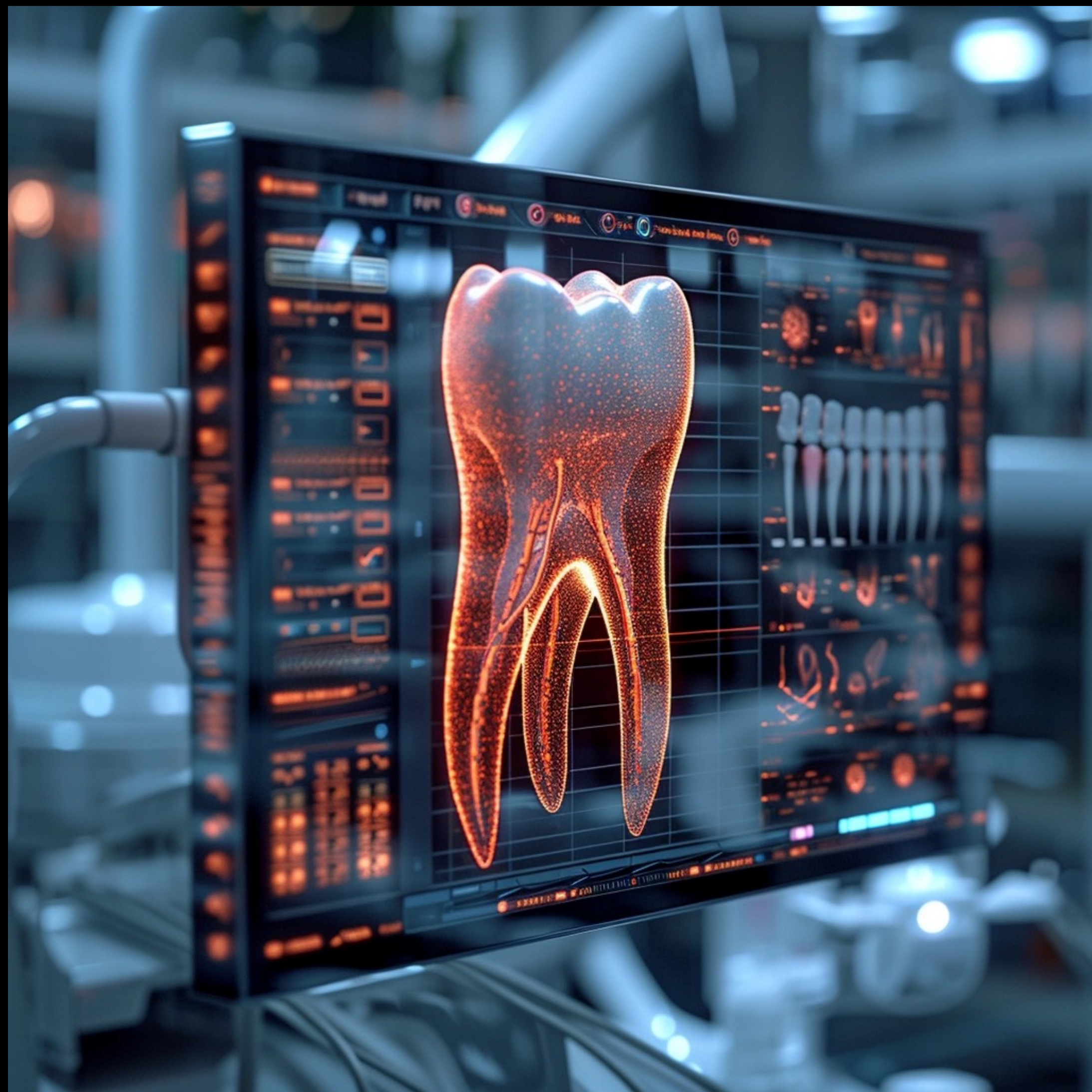


Digital Dentistry Society

Leader in Digital Science and Education







Ruolo dell'Intelligenza Artificiale in Odontoiatria



Applicazioni Pratiche

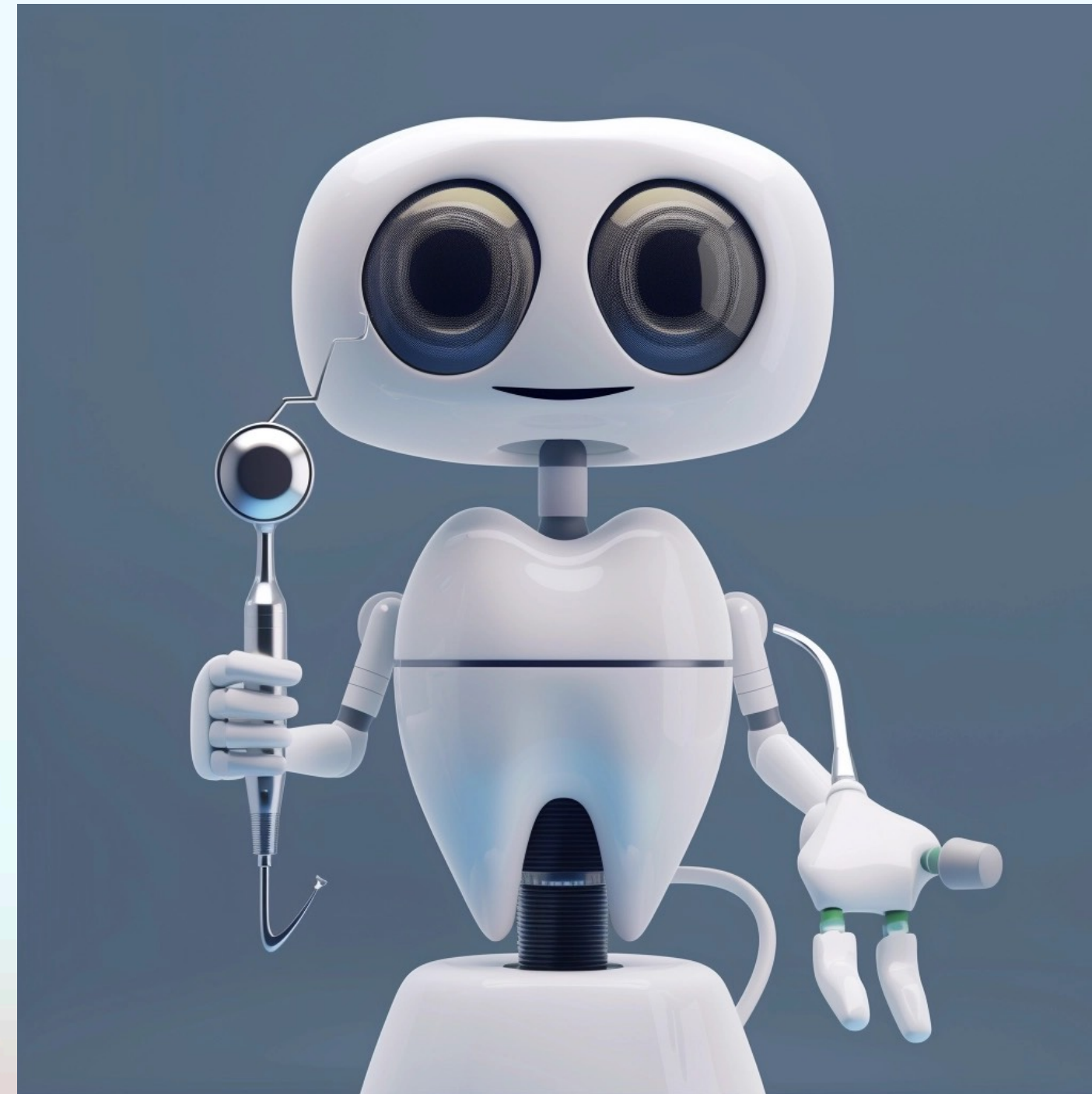
- Extra-cliniche
- Cliniche



BOT Segreteria

Risposta telefonica
24/7

Deviazione
chiamate urgenti
A cellulare

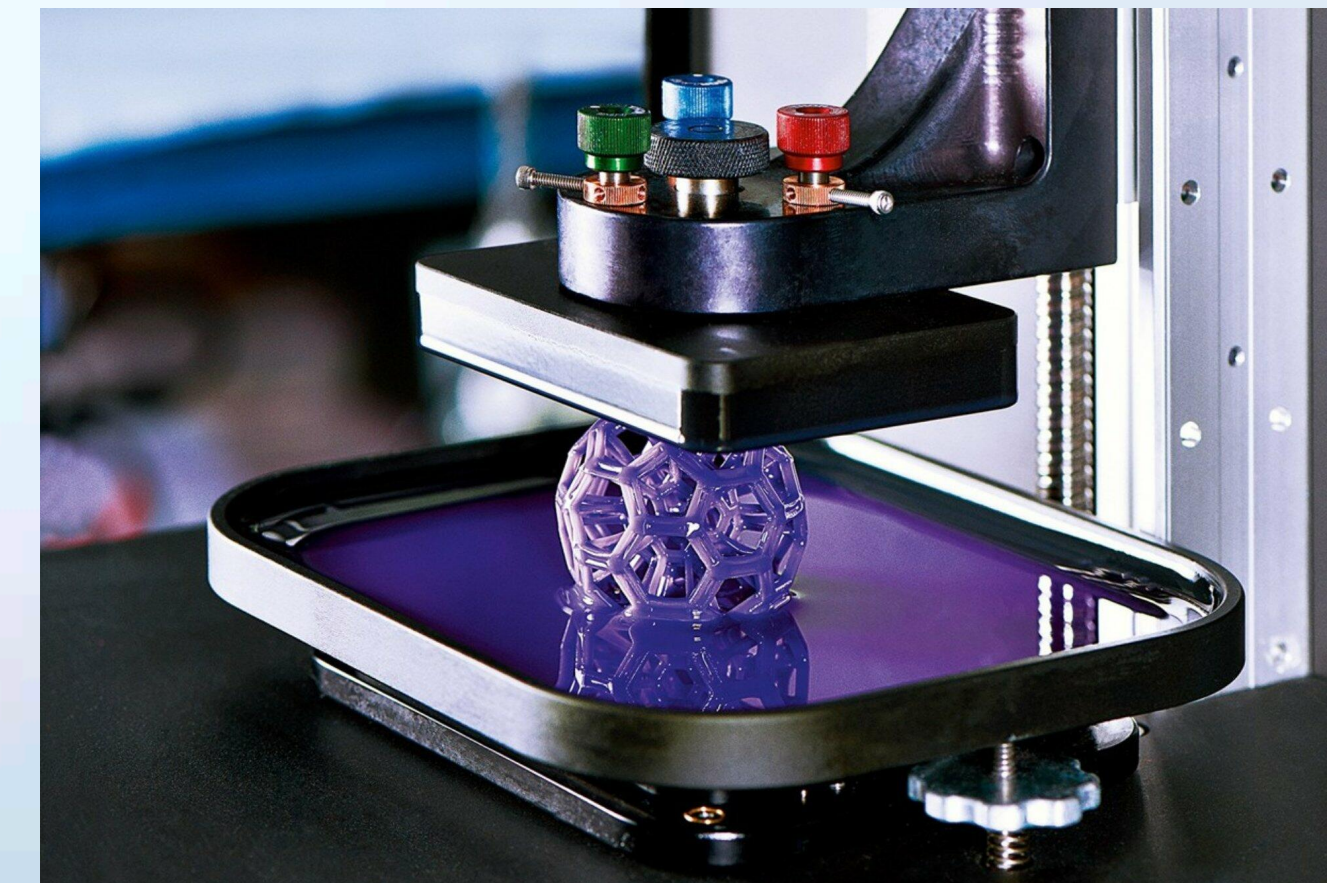
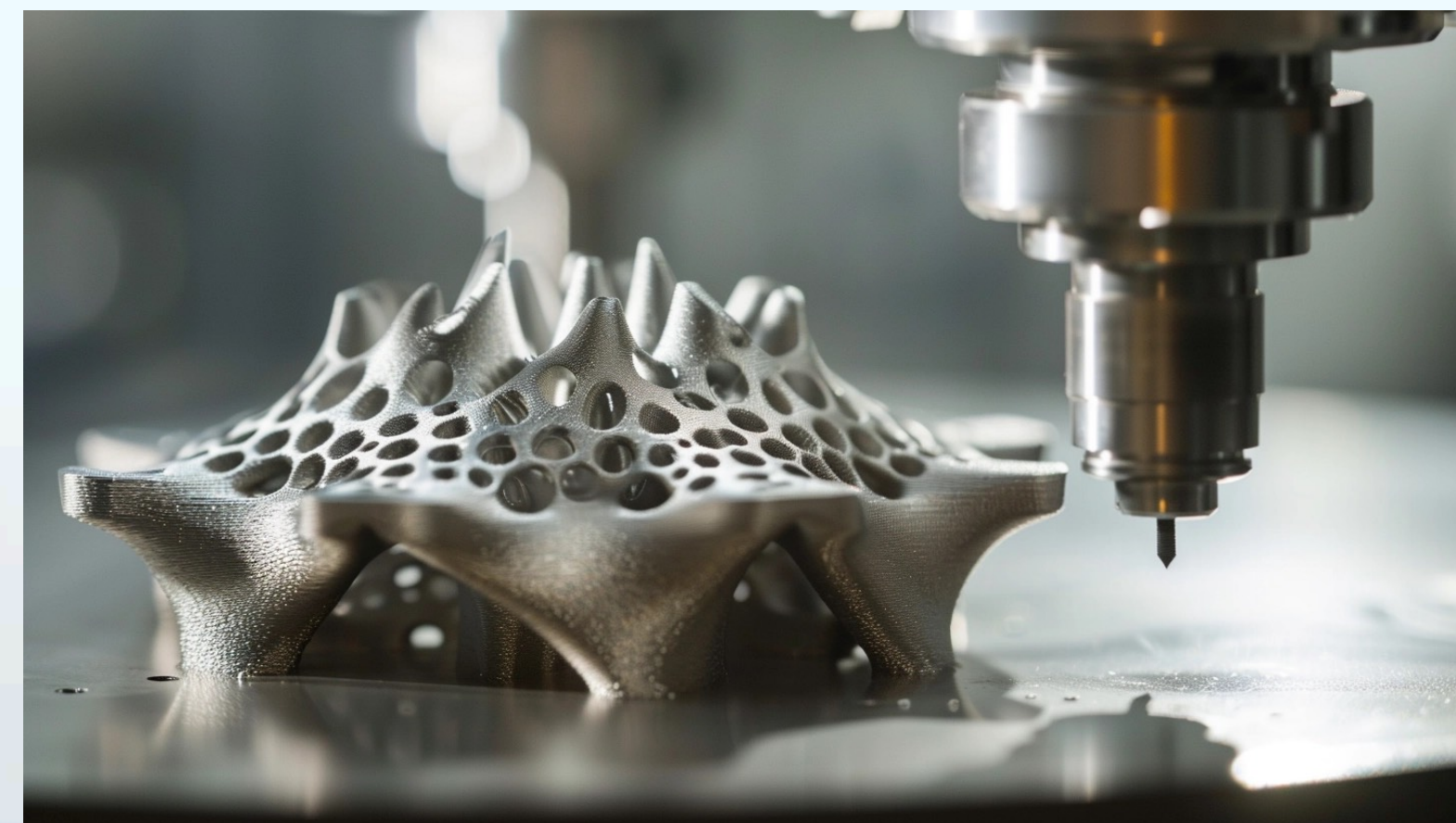


Invio remind
appuntamento
automatici

Risposte immediate
WhatsApp

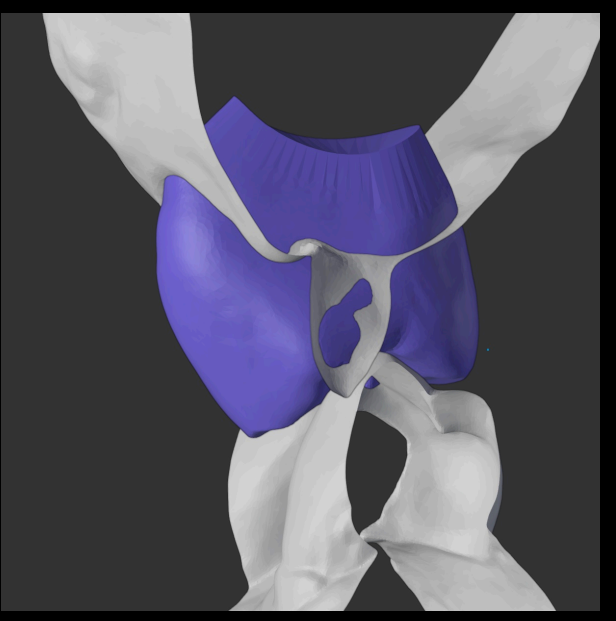
Strumenti del dentista digitale

- Scanner Intraorale
- Radiologia Digitale 3D
- Potente computer
- Fresatori
- Stampanti 3D
- Scanner Facciali, RegISTRAZIONI dei movimenti mandibolari



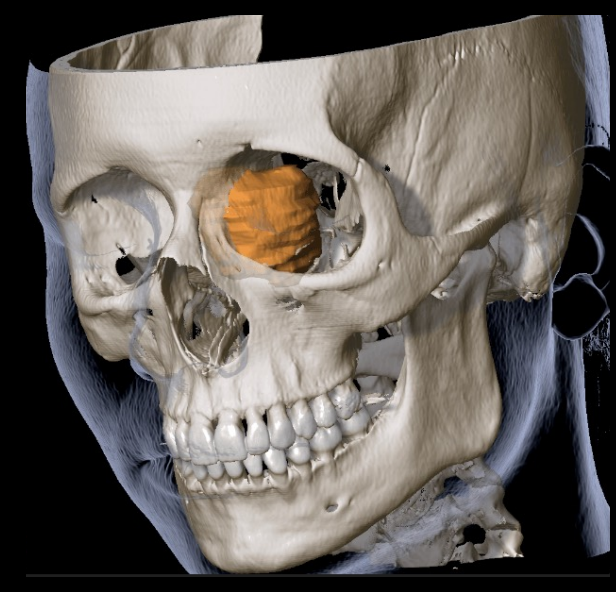
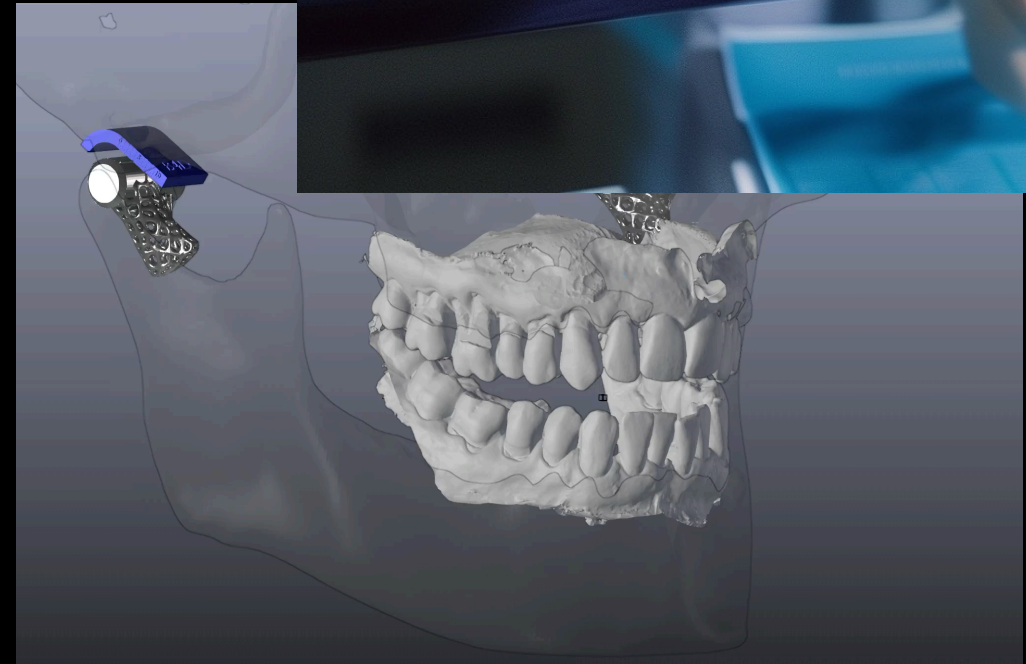


IOS (STL/PLY)
Rifinite o modelli virtuali



Wax-Up
Digitale
(Custom Mesh)

Articola



DICOM
E segmentazione con AI
3D



PAZIENTE VIRTUALE



FACIAL SCAN
OBJ

Librerie e
componentistica
protesica

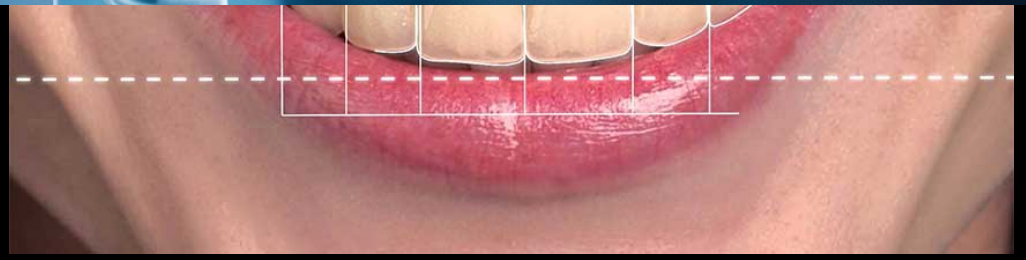
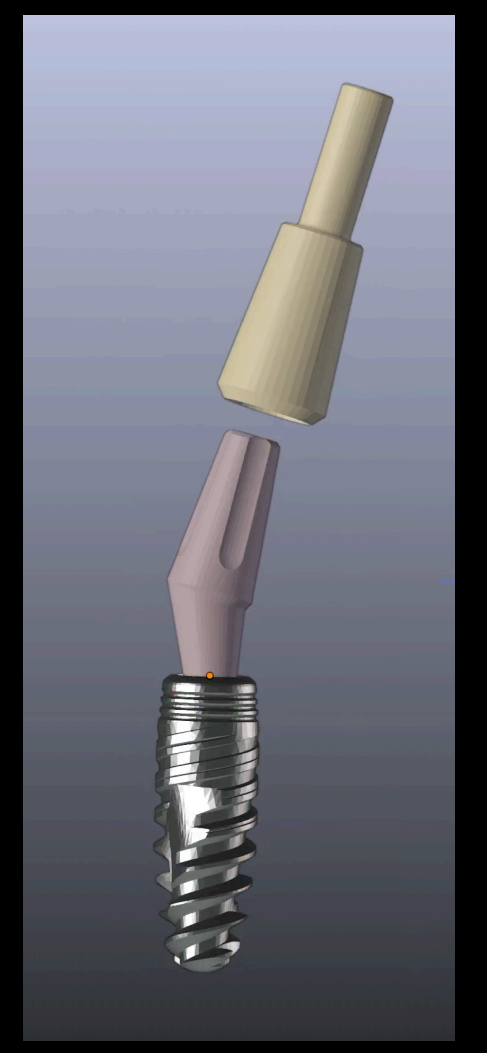
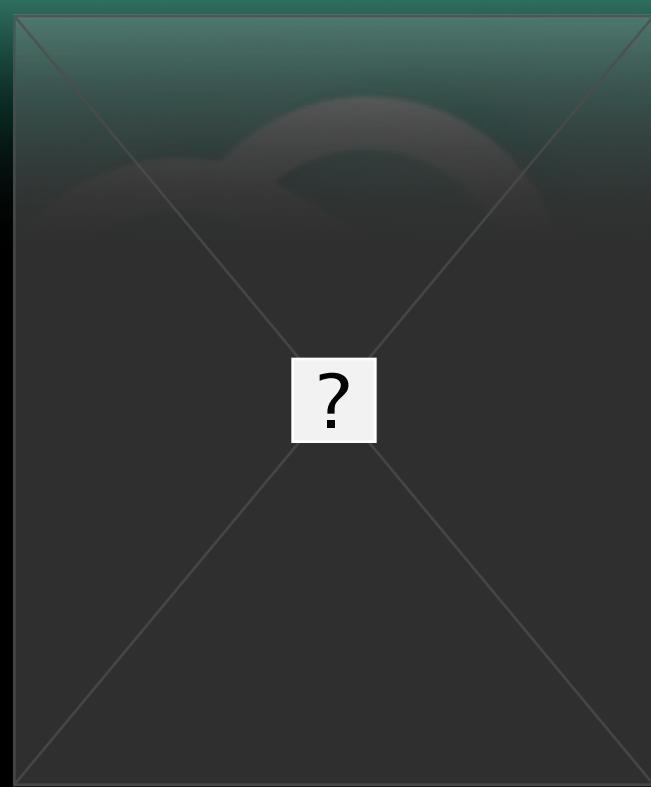
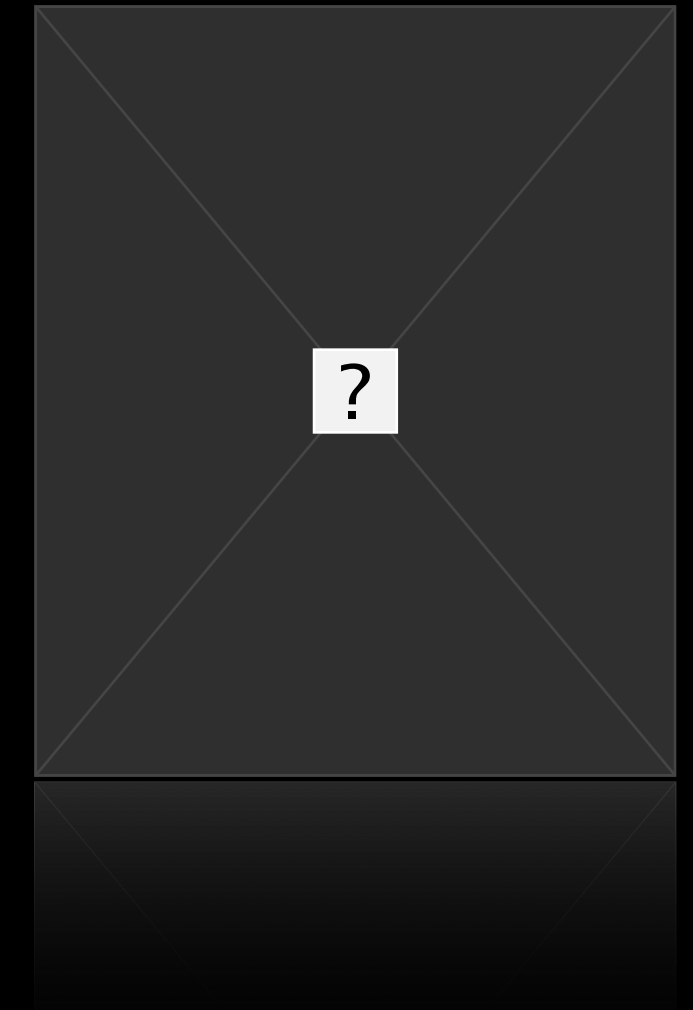


Foto del sorriso (2D)
Per DSD



About Us

SciSummary (Short for Science Summary) was founded in 2023 to make digestion of scientific articles easier. Using modern AI technology it summarizes articles, allowing you to understand them without having to read the full text.



Marzo 2023



Since March 2023, SciSummary has summarized over **150,000** papers from more than **60,000** users

Since March 2023, SciSummary has summarized over **500,000** papers from more than **230,000** users

Sett 2023

Feb 2024

Riconoscimento elementi dentari e report diagnostico di una full CBCT in meno di 10 minuti



Diagnocat
2017

+ 9 MLN

Nome paziente: Raia Milena ID paziente: 4 Età: 1
Data di nascita: 09/08/2022 Data scansione: 09/08/2022 Sesso: Altro

Medico generico: 11, 42, 32, 33, 34, 43, 44, 45, 13, 21, 23 Periodontista: 32, 33, 34, 35, 43, 44, 45, 48, 13, 21, 23
Odontotecnico: 12, 22, 23 Endodontista: 11, 32, 37, 48, 22, 23 Radiografia Intraorale: 11, 42, 32, 33, 34, 43, 44, 45, 13, 21, 23

Screening ortodontico

Nessuna discrepanza trovata

Condizioni di bassa probabilità ?

Dente 13

1 radice 100%, 1 canale 100%, Perdita ossea parodontale, moderata 96%, Riassorbimento orizzontale 90%, Segni di carie 97%, Dentina 64%, Radice 83%, Mesiale 58%, Distale 81%. + Aggiungi diagnosi
Aggiungi commento

Assiale Assiale Assiale Sagittale Front... Front...

Resetta dente Tutte le sezioni Open 3d viewer Approva

Dente 12

Frammento di radice 93%. + Aggiungi diagnosi
Aggiungi commento

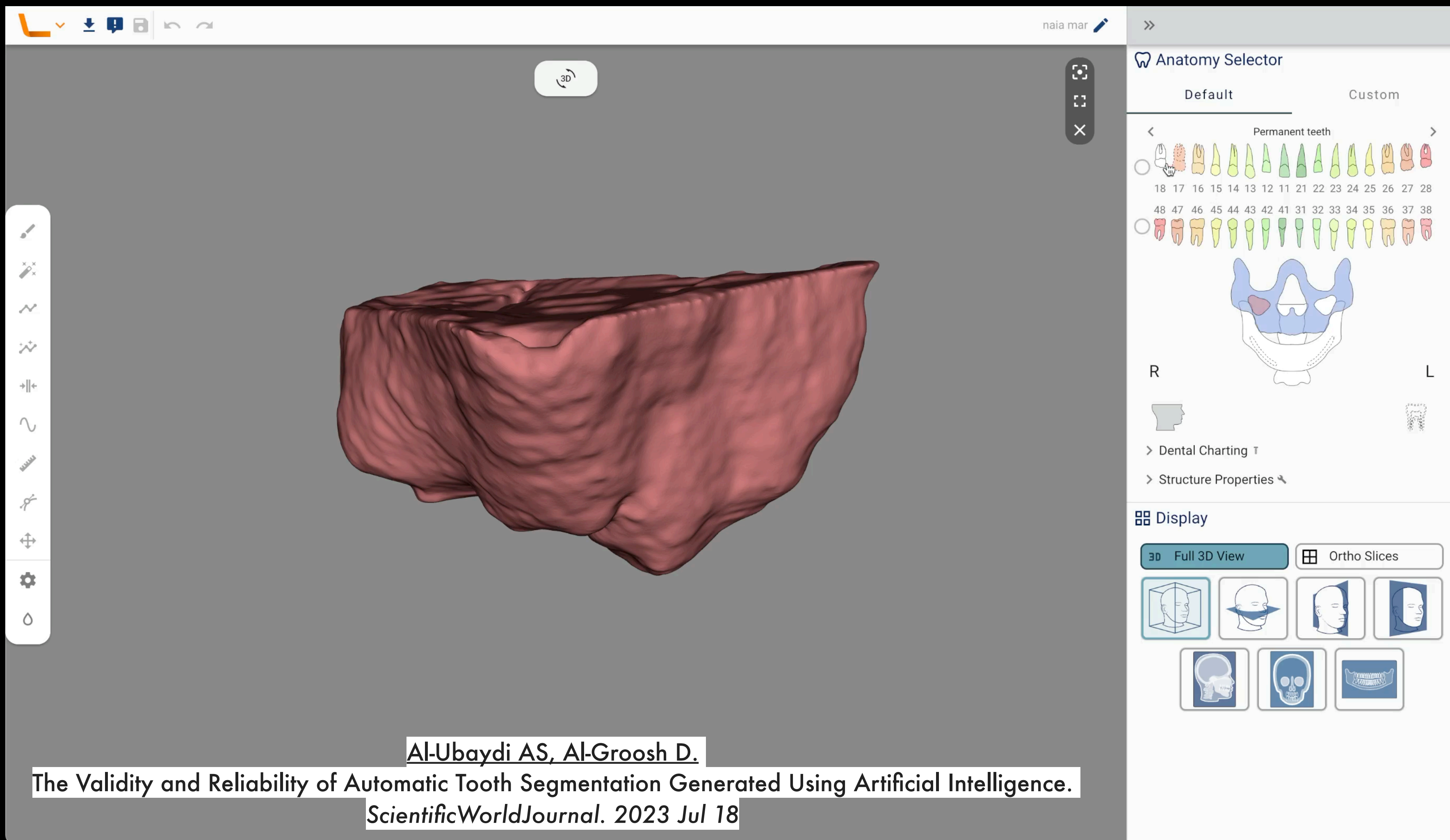
Assiale Assiale Assiale Sagittale Frontale Frontale

Risultati Riconvalida analisi Scegli regione di interesse

18	17	16	15	14	13	12	11	21	22	23	24	25	26	27	28
48	47	46	45	44	43	42	41	31	32	33	34	35	36	37	38

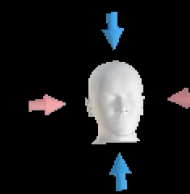
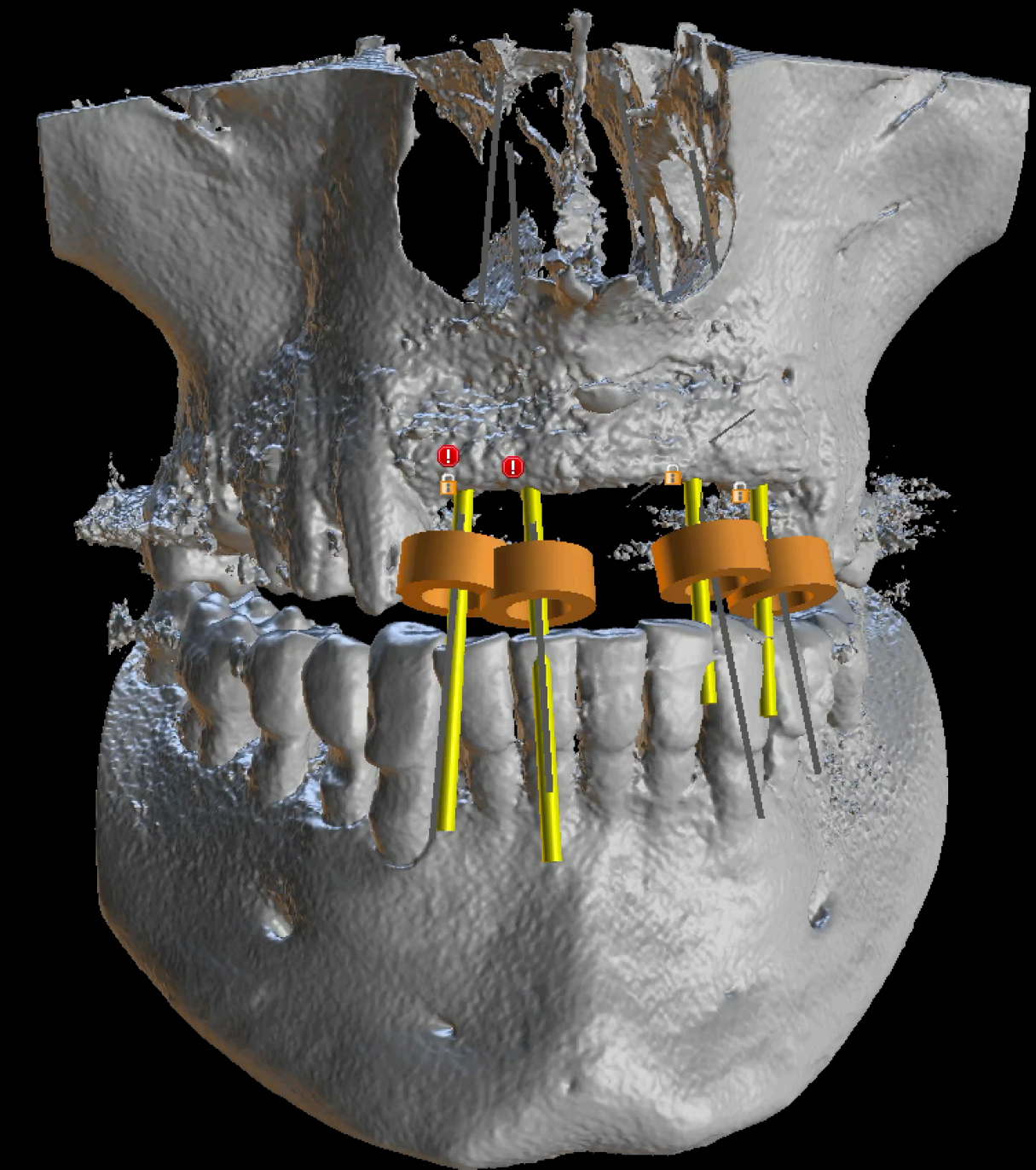
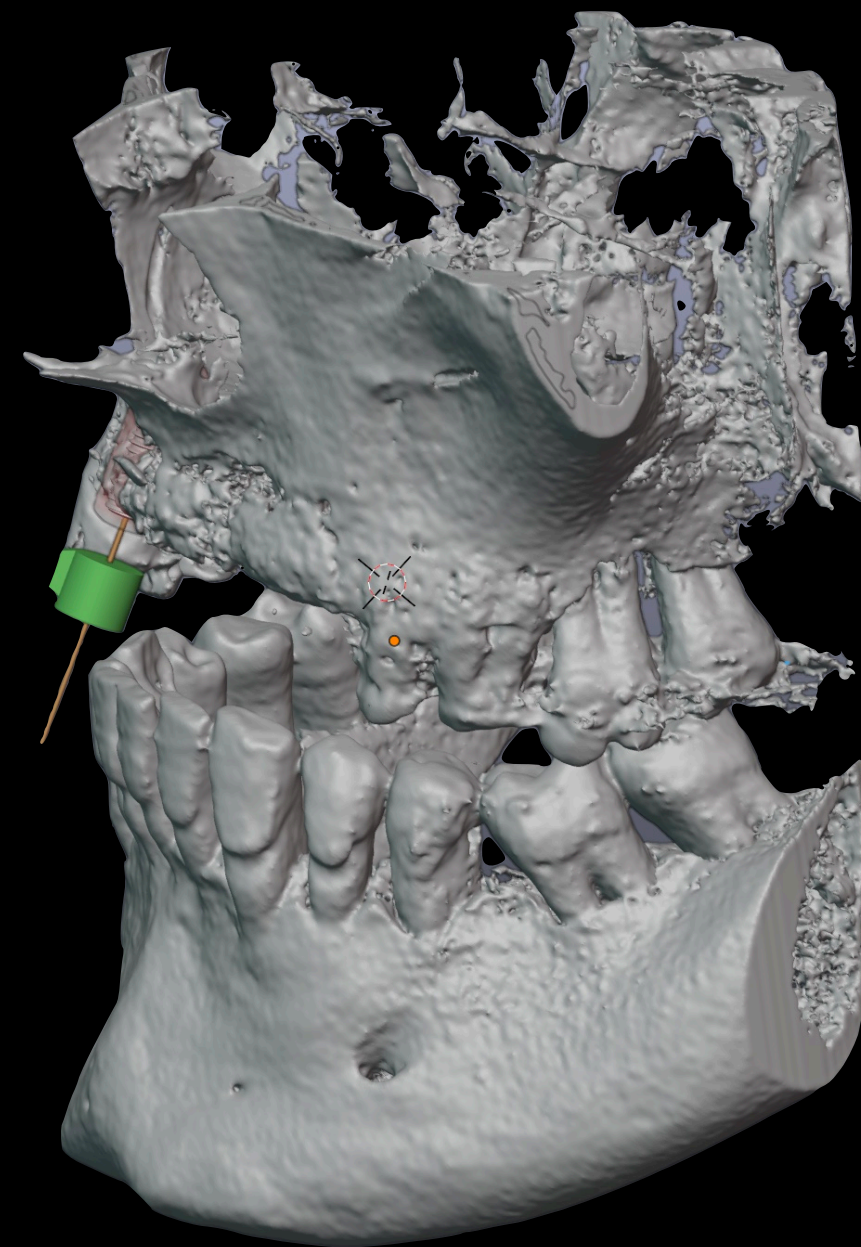
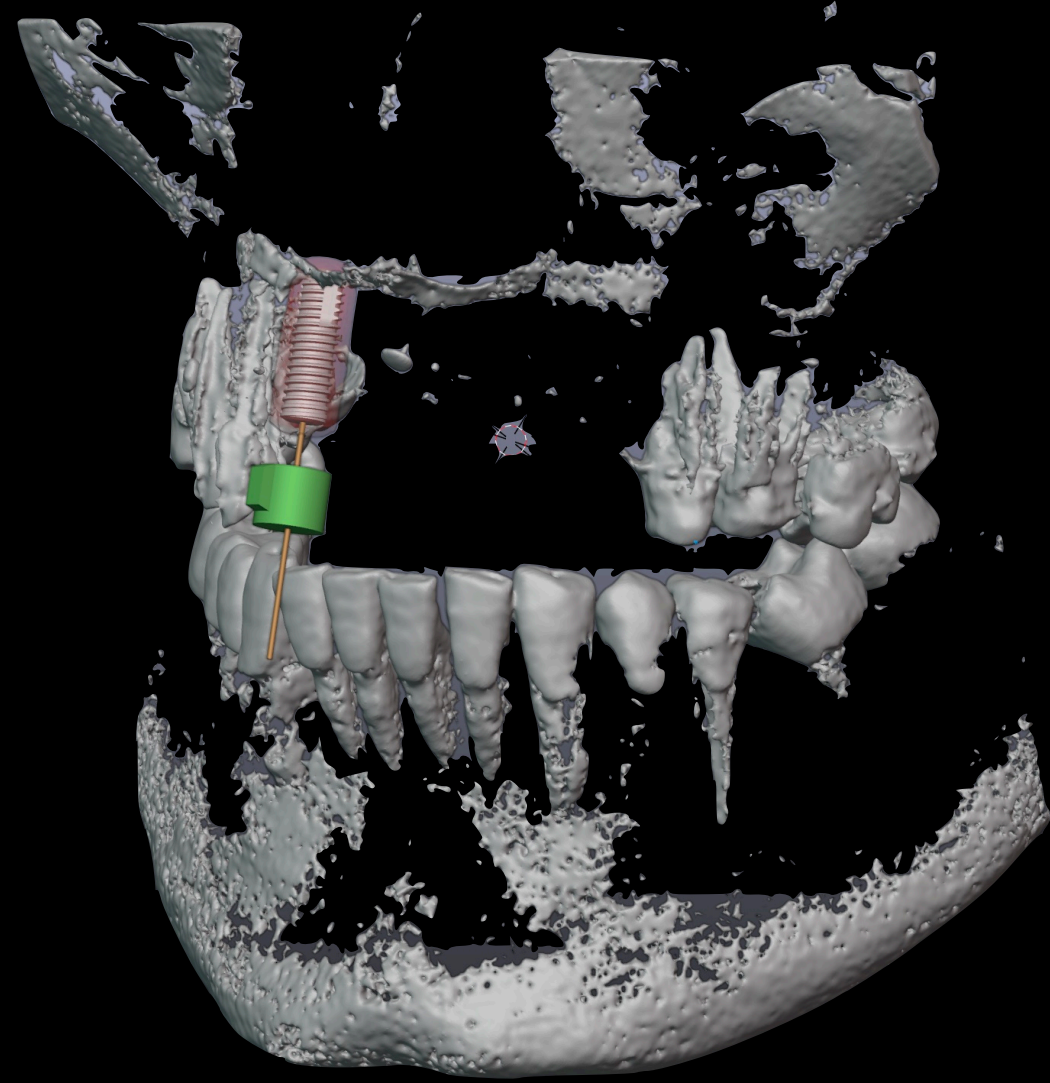
■ Denti sani ■ Trattato ■ Denti malsani ✗ Mancante

Segmentazione della CBCT eseguita dall'Intelligenza Artificiale in meno di 5 minuti

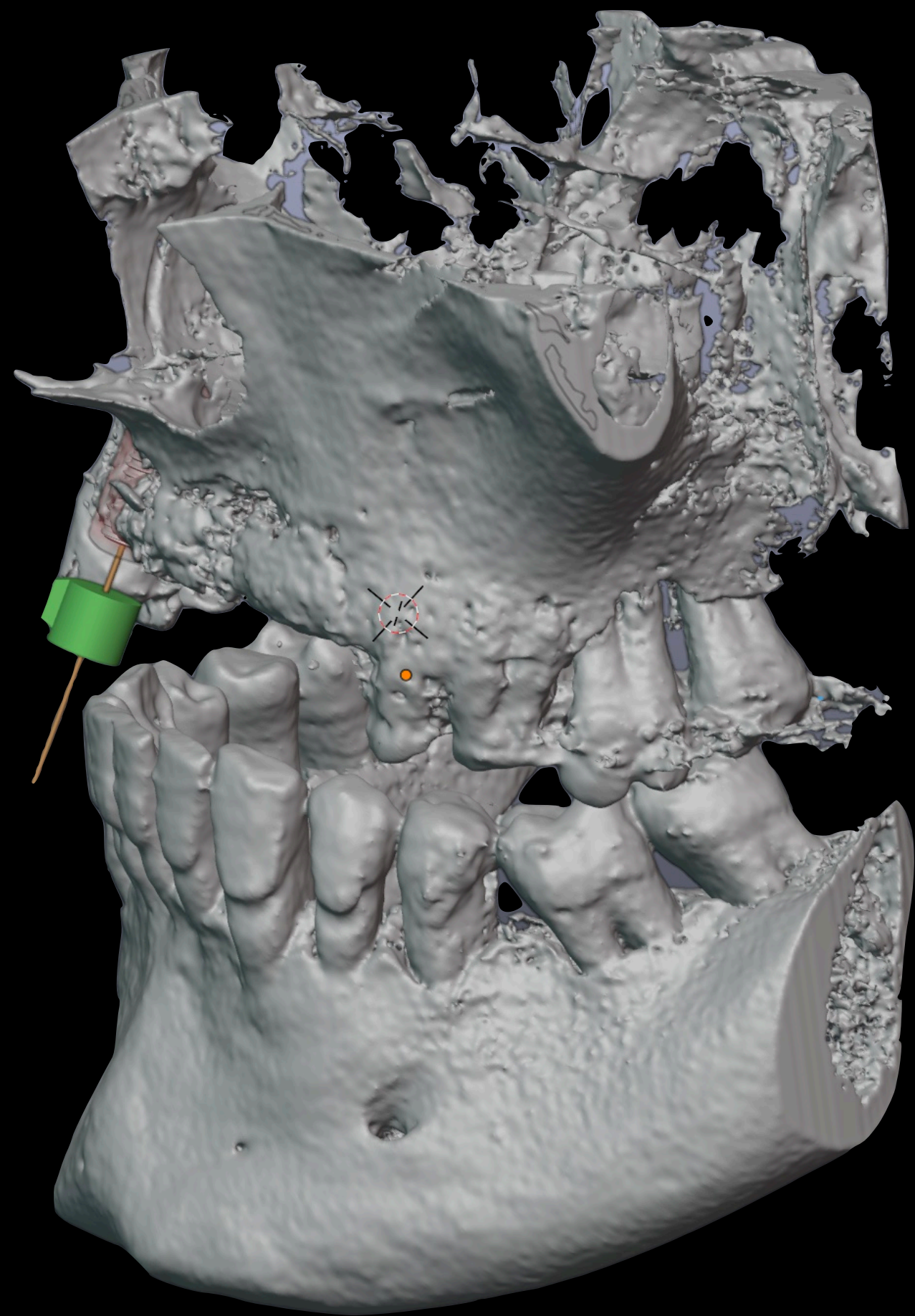


Relu
2019

La segmentazione di un file DICOM (Digital Imaging and Communications in Medicine) si riferisce al processo di individuazione e delineazione di strutture o regioni di interesse all'interno delle immagini mediche memorizzate in formato DICOM

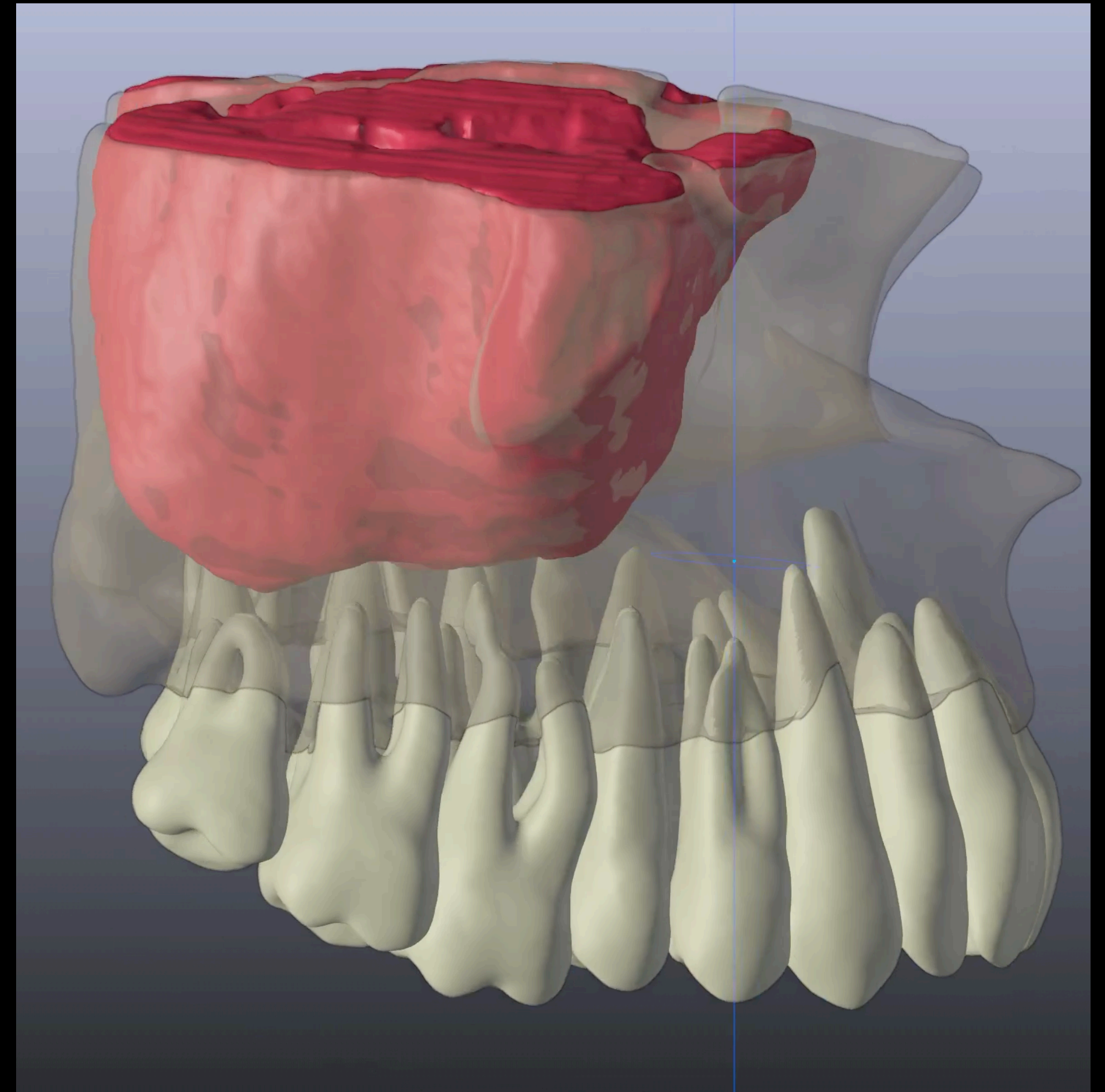


Segmentazione fatta a mano



5 mesi fa

Segmentazione fatta da AI



Oggi

7 minutes challenge

Studio del caso e pianificazione del percorso chirurgico e protesico a priori



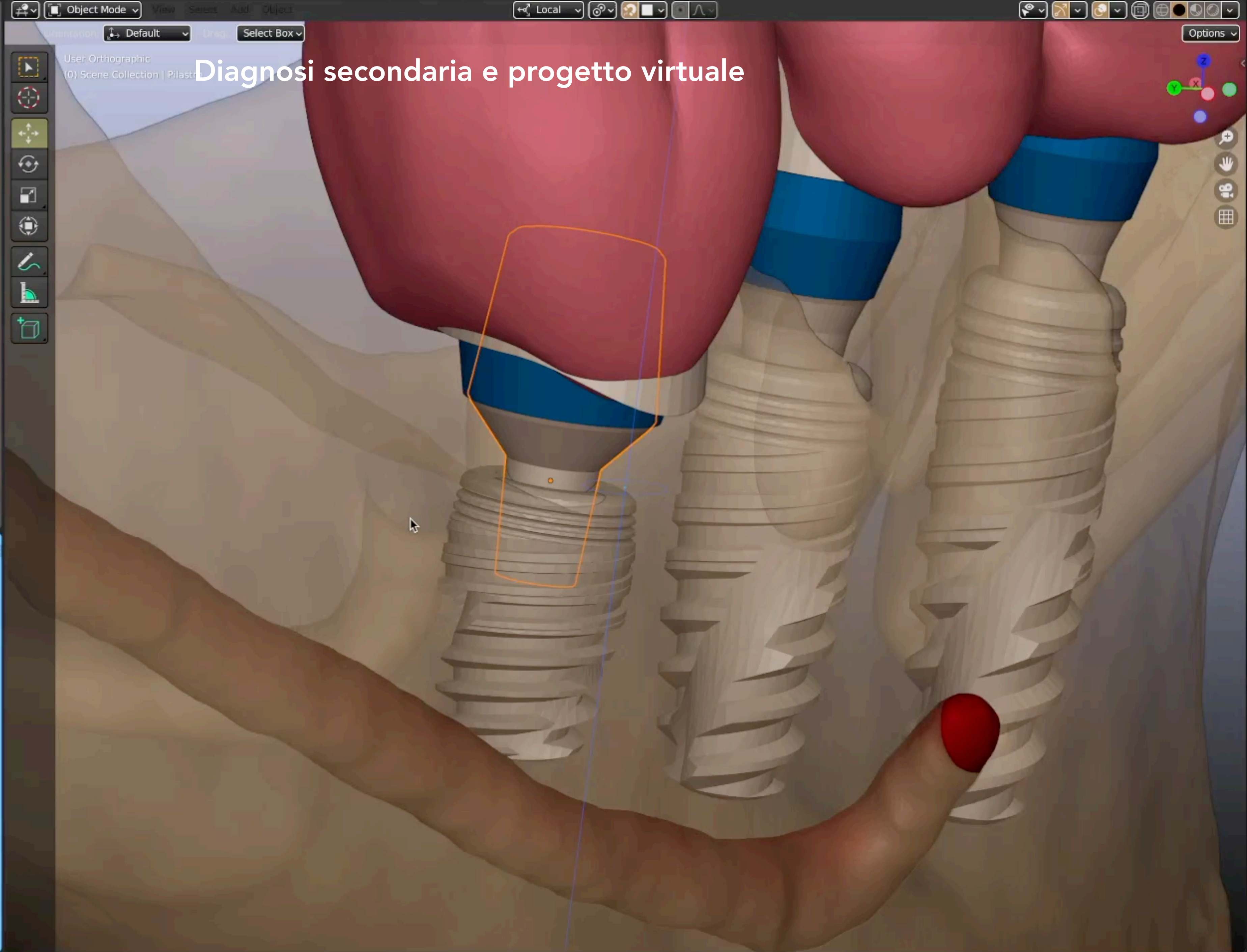
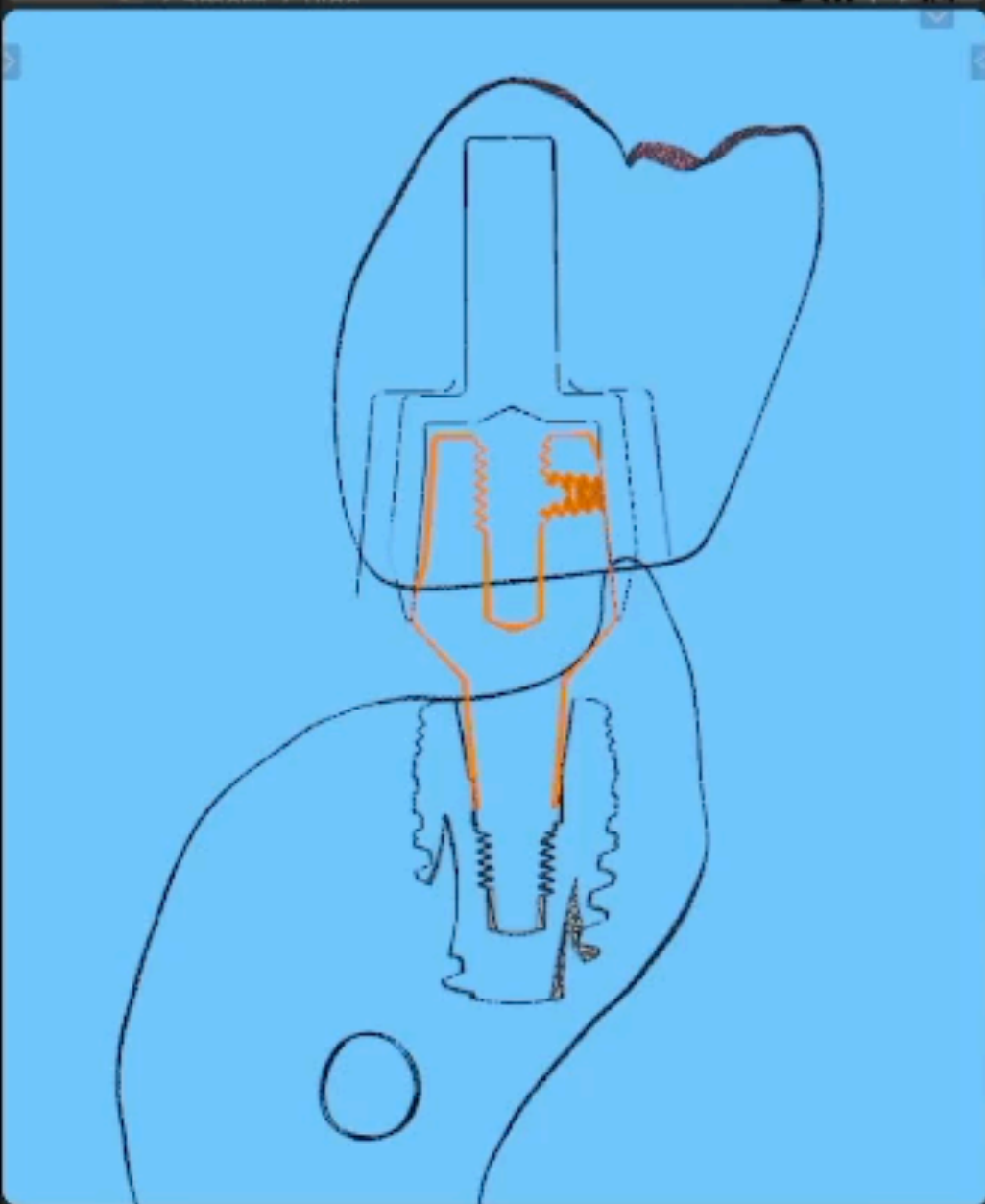
**Completamento
diagnostico**

**Analisi volumi tissutali
Necessità aumenti tessuti
duri e o molli**

**Possibilità di comunicare
con il paziente e con i
collaboratori**

Diagnosi secondaria e progetto virtuale

- Segmentation
- Nerve
- Segmented teeth
- Abutment_Sleeves
- Implants
- Inserts
- Sleeve_Copy
- Components
- Parts_List
- Wax-Ups
- Drill_Lengths
- Hole_Cutters
- Guide_Cutters
- Implant_Component_List
- Offset_Model
- Angle
- Cylinders
- DetectLower
- OffsetModelLower
- Sleeves
- PassiveModelLower
- ModelTypes
- LayerTypes
- DetectLayer
- Peripheral_Roll
- Cutting_Layer
- Metal_Insert_List
- Sleeve_For_Insert

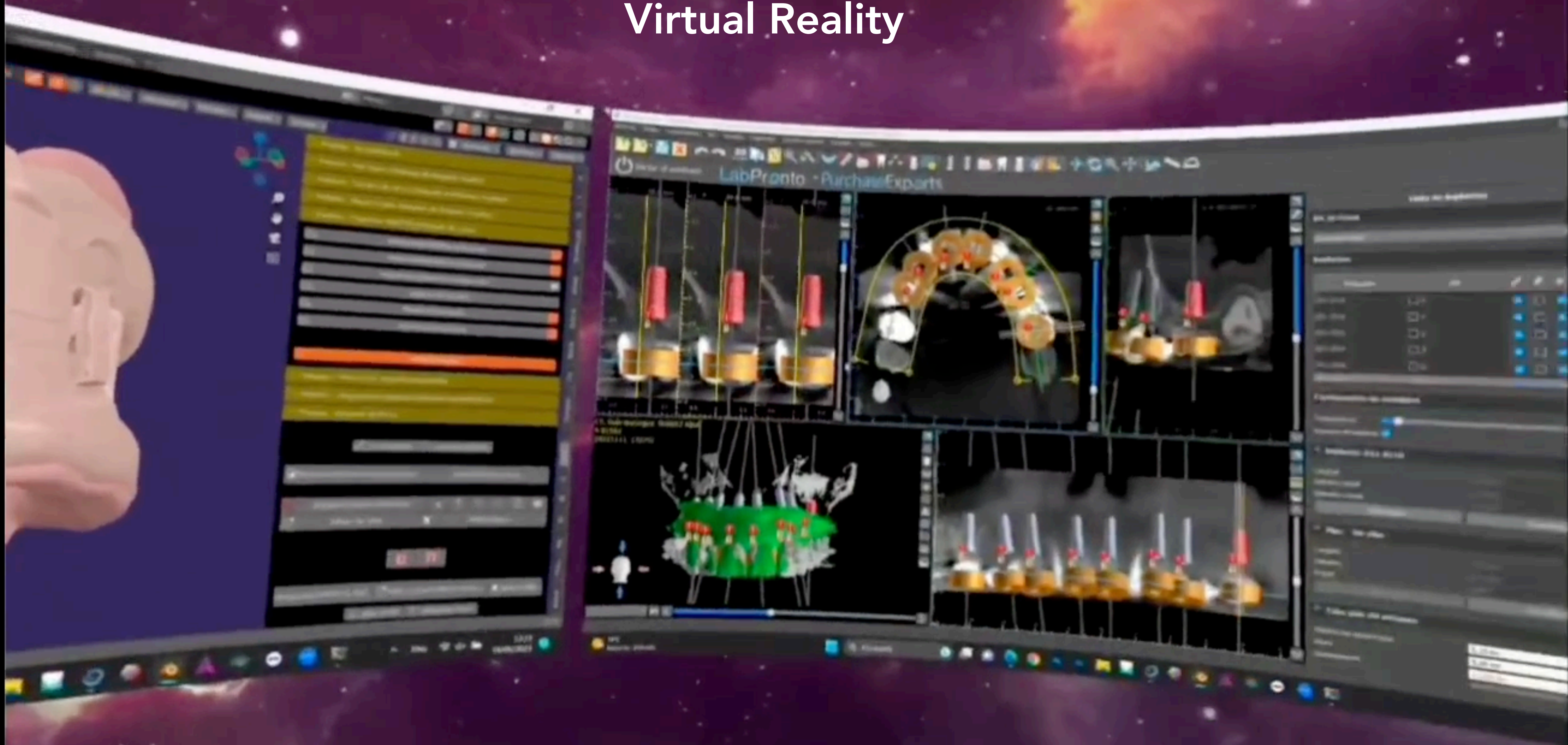


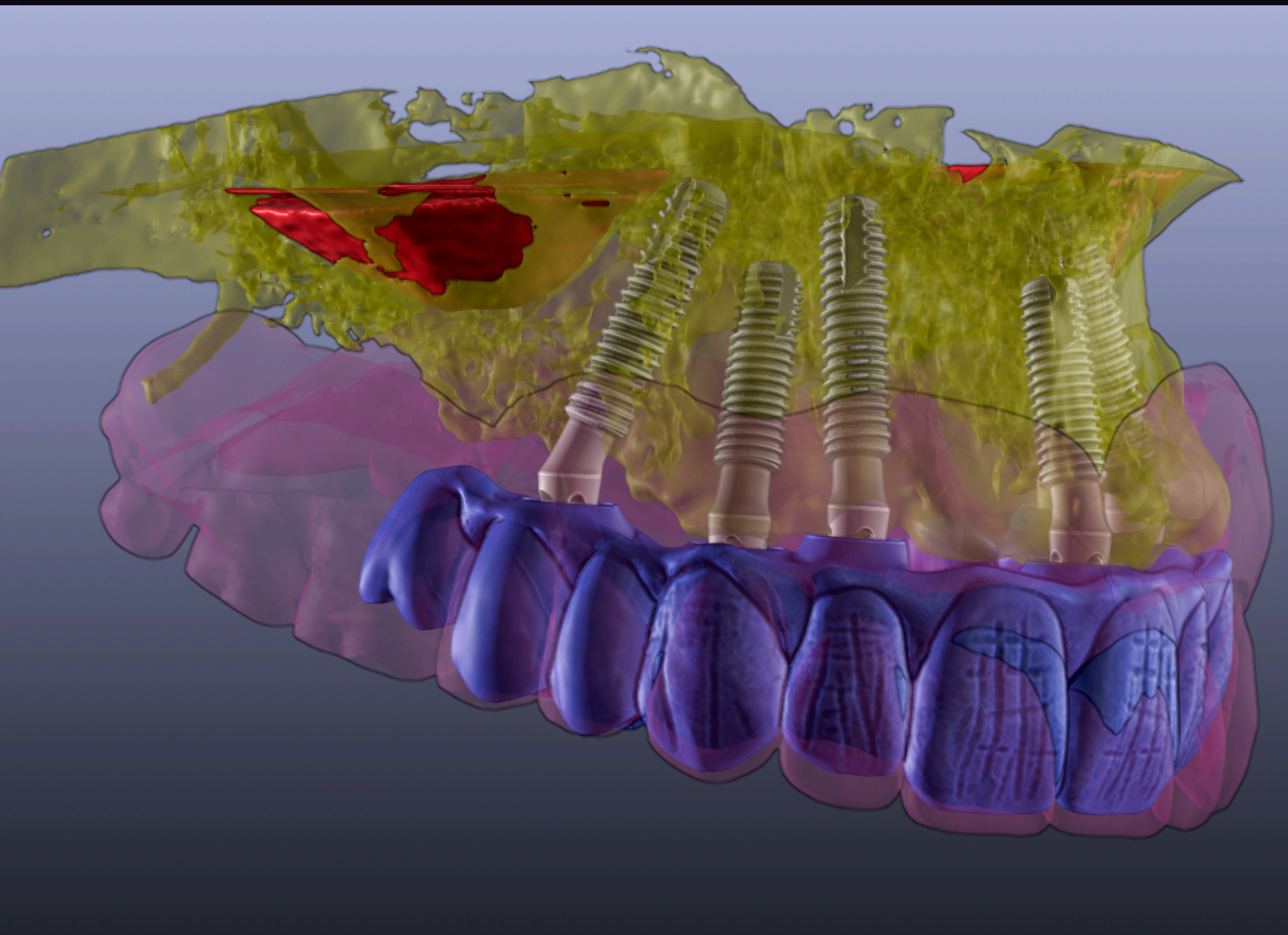
A close-up photograph of a woman with long dark hair wearing a VR headset. Her hands are holding the sides of the headset. The VR screen is black and displays the text 'Comunicazione e realtà virtuale' in white. The background is dark with blue and purple lighting. The woman is wearing a light-colored, possibly white or light blue, long-sleeved top.

**Comunicazione e
realtà virtuale**

VR per la pianificazione implanto-protesica

Virtual Reality

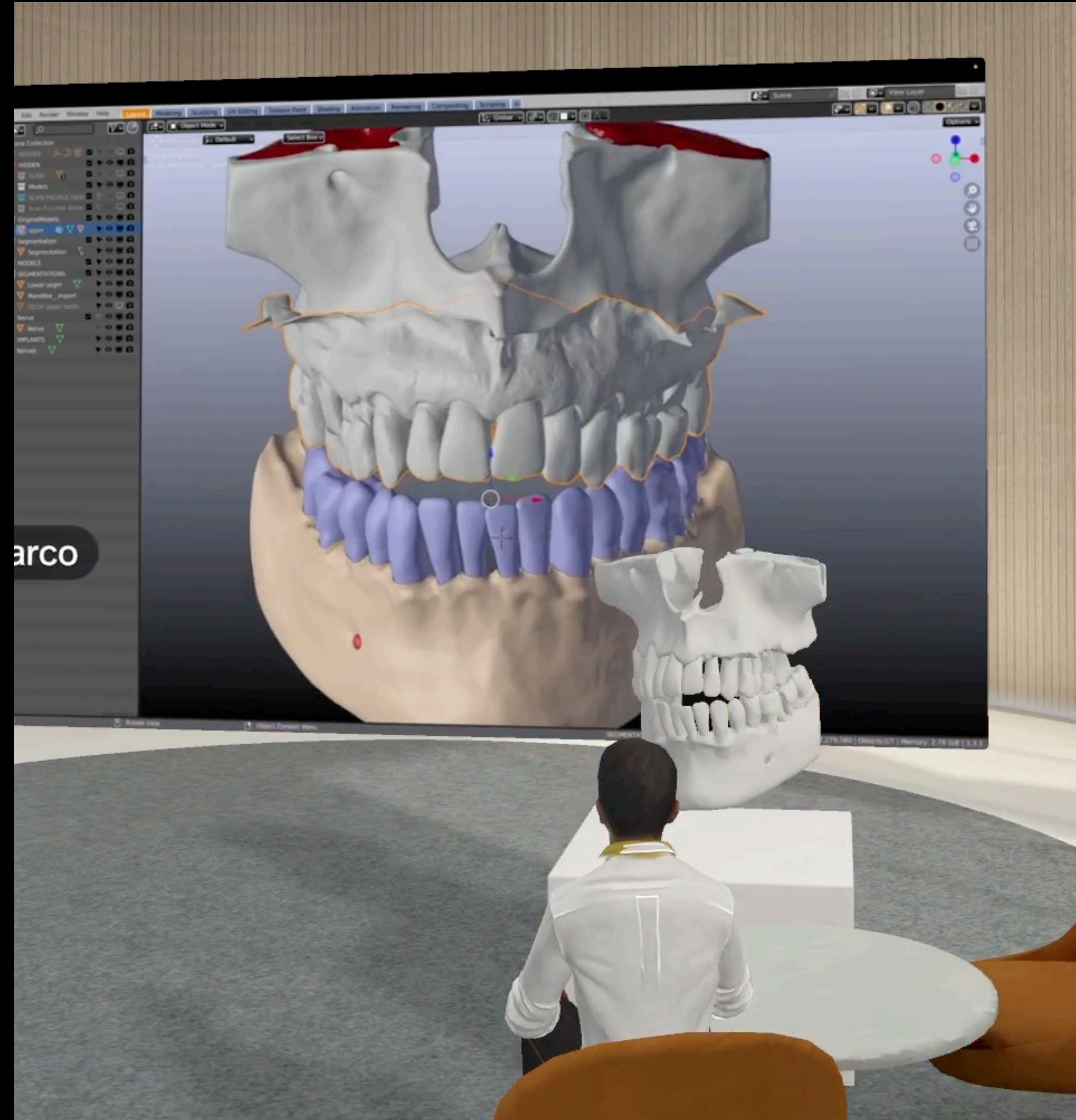




Discussione del piano di riabilitazione nel Metaverso

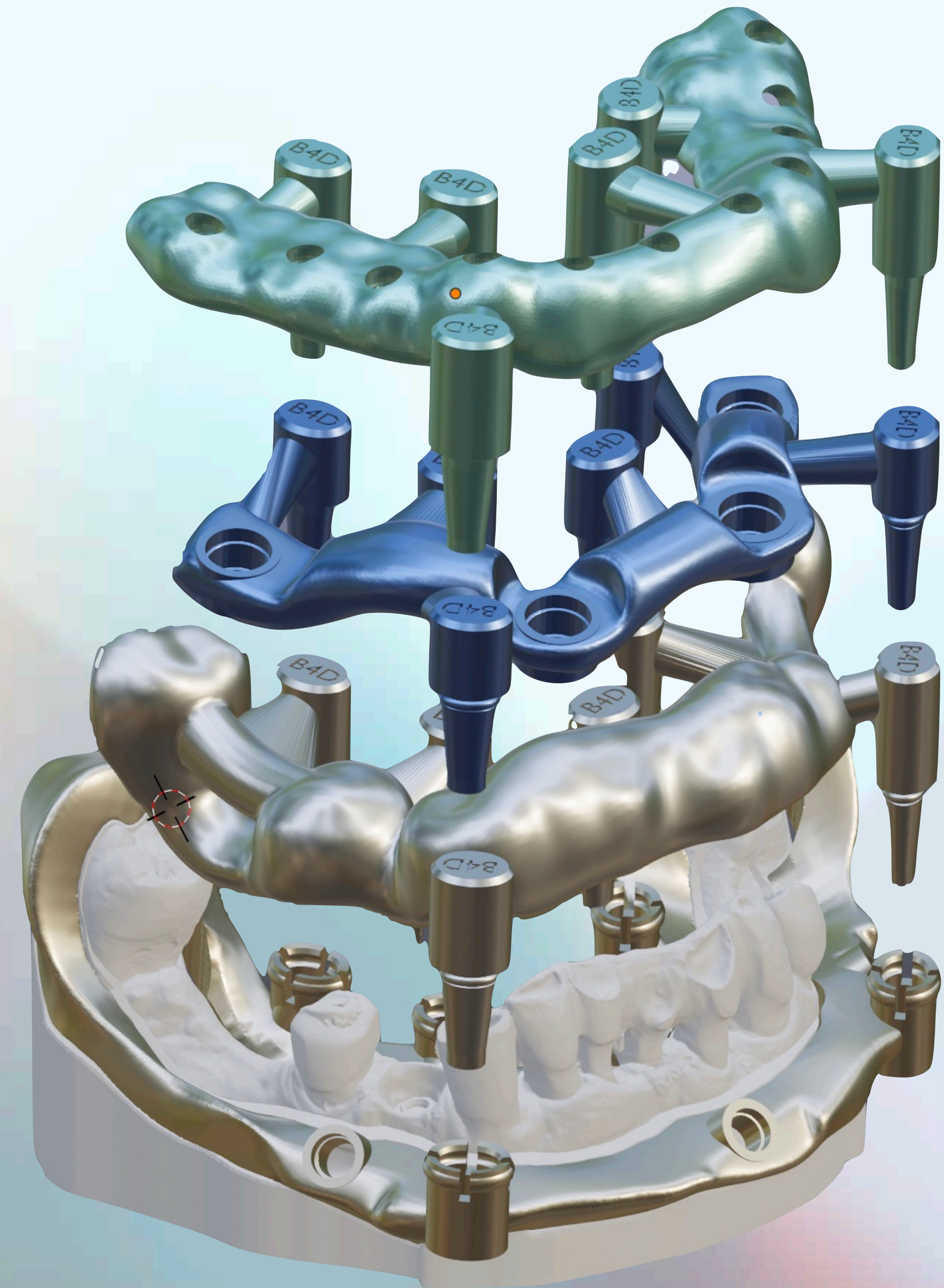


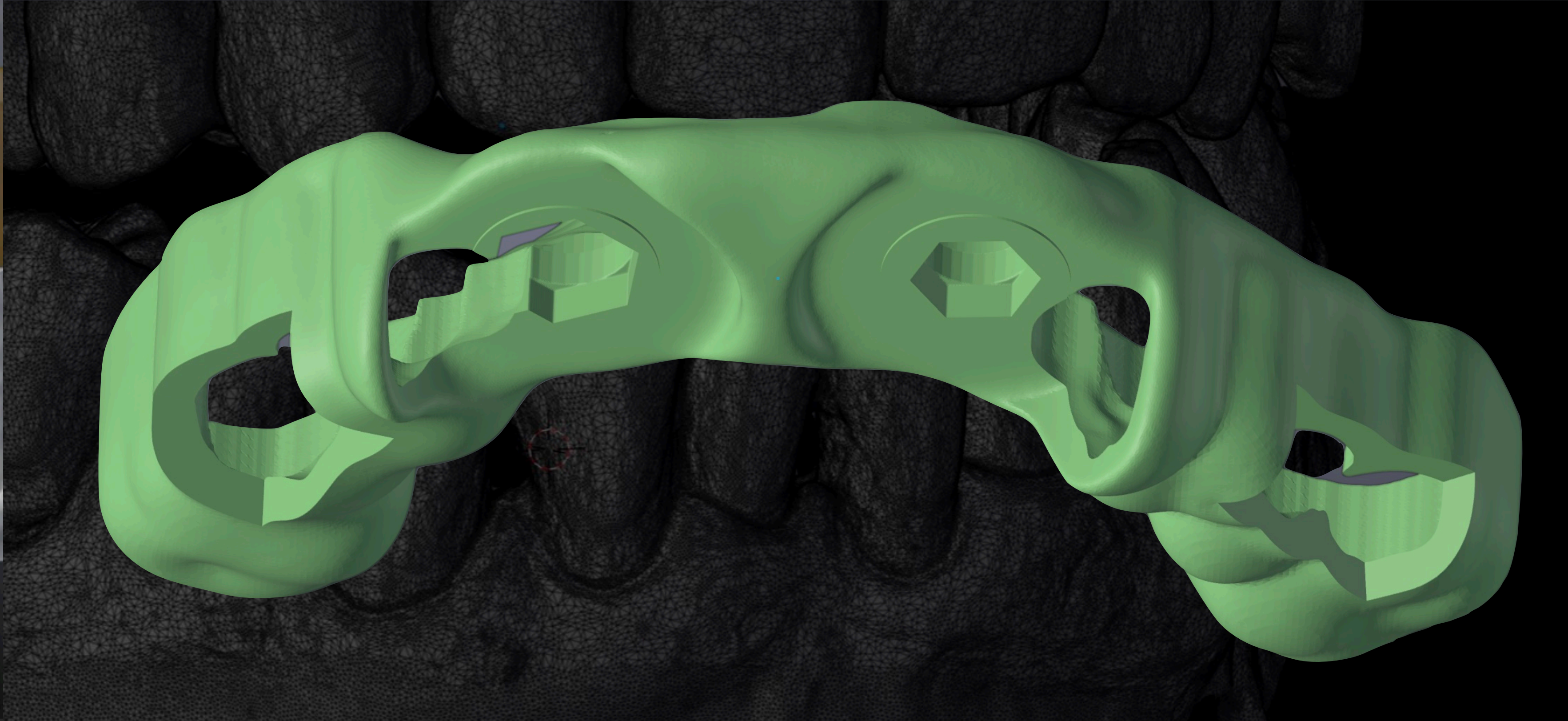
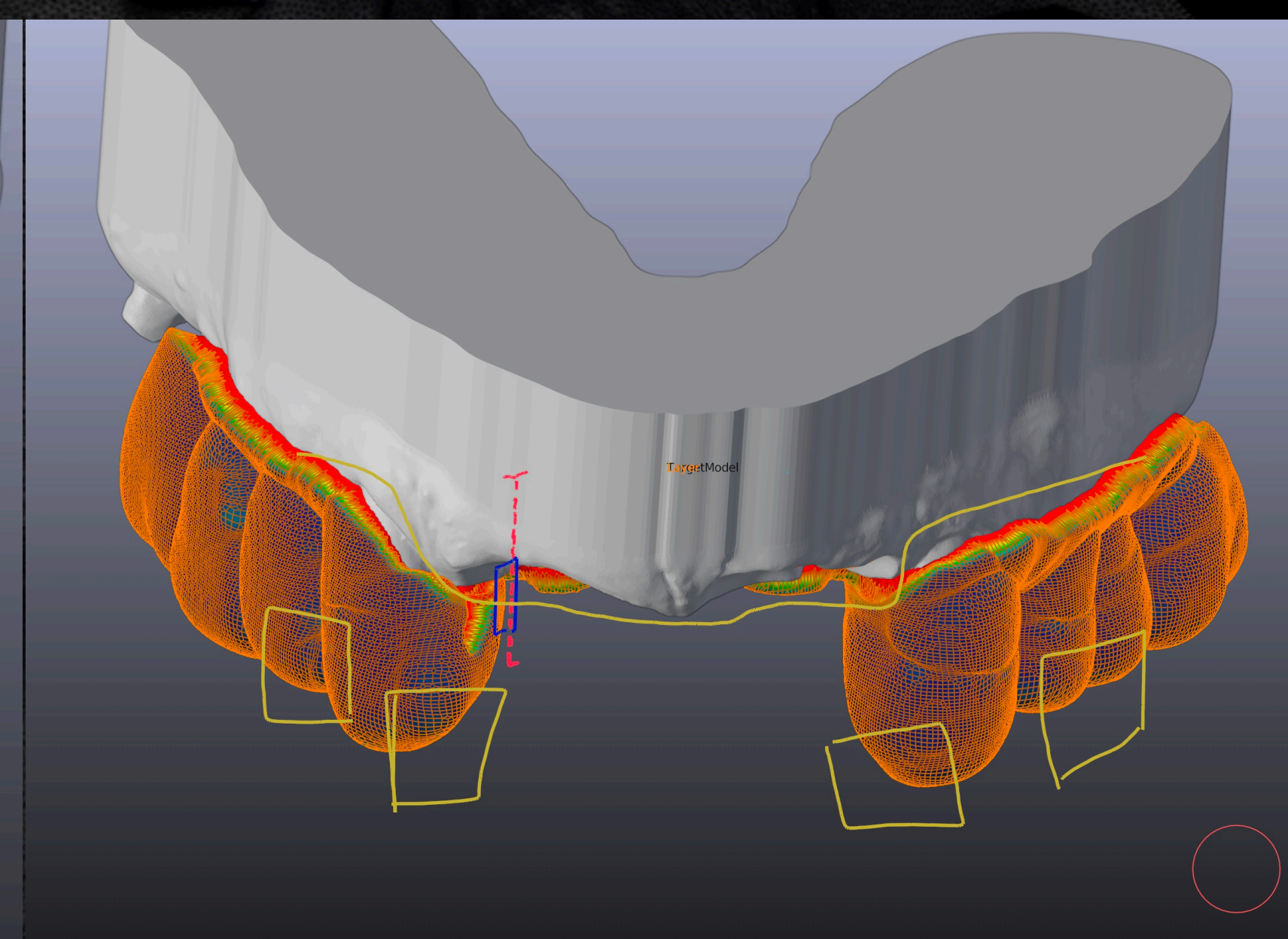
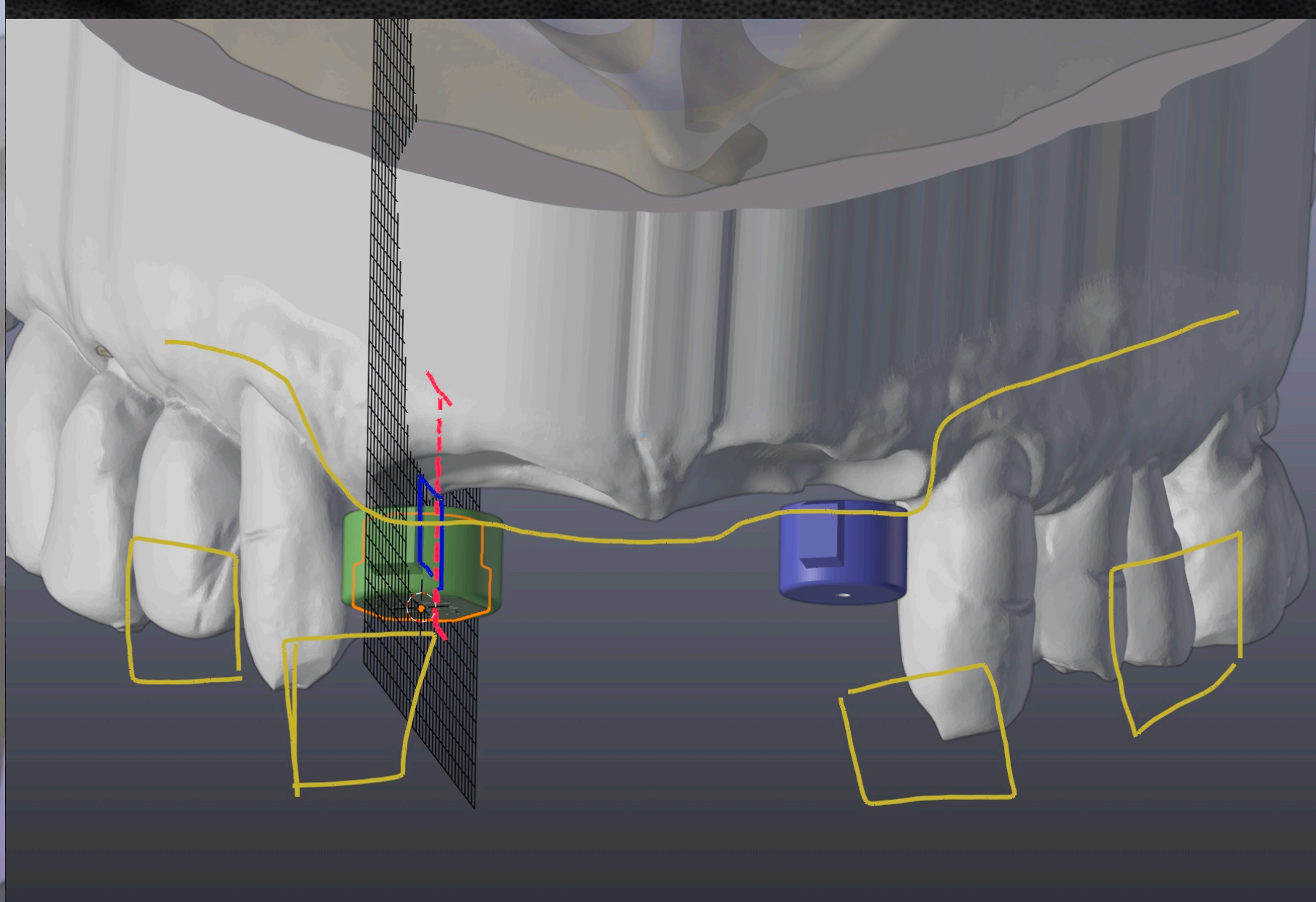
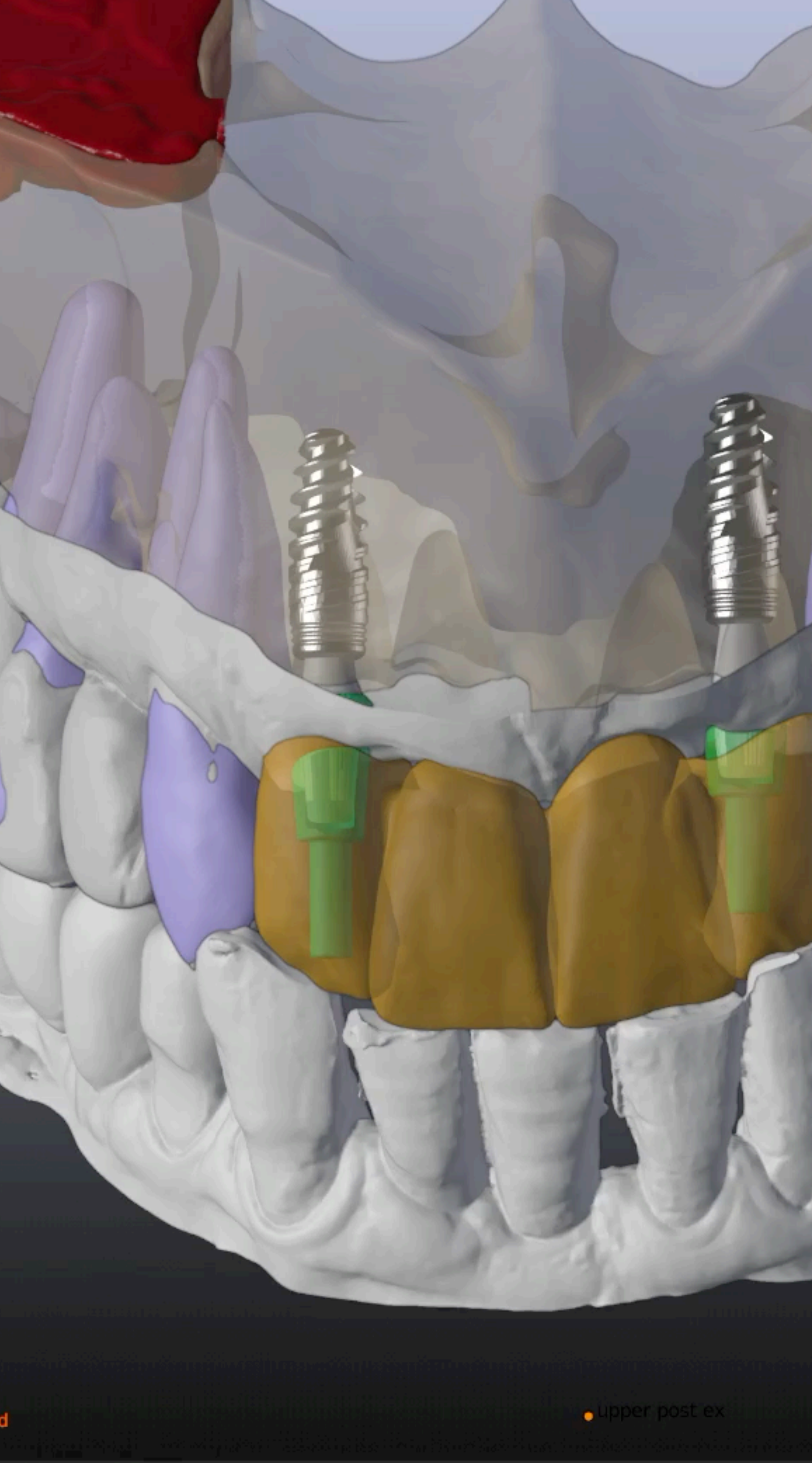
Dr. Marco



Patient's View

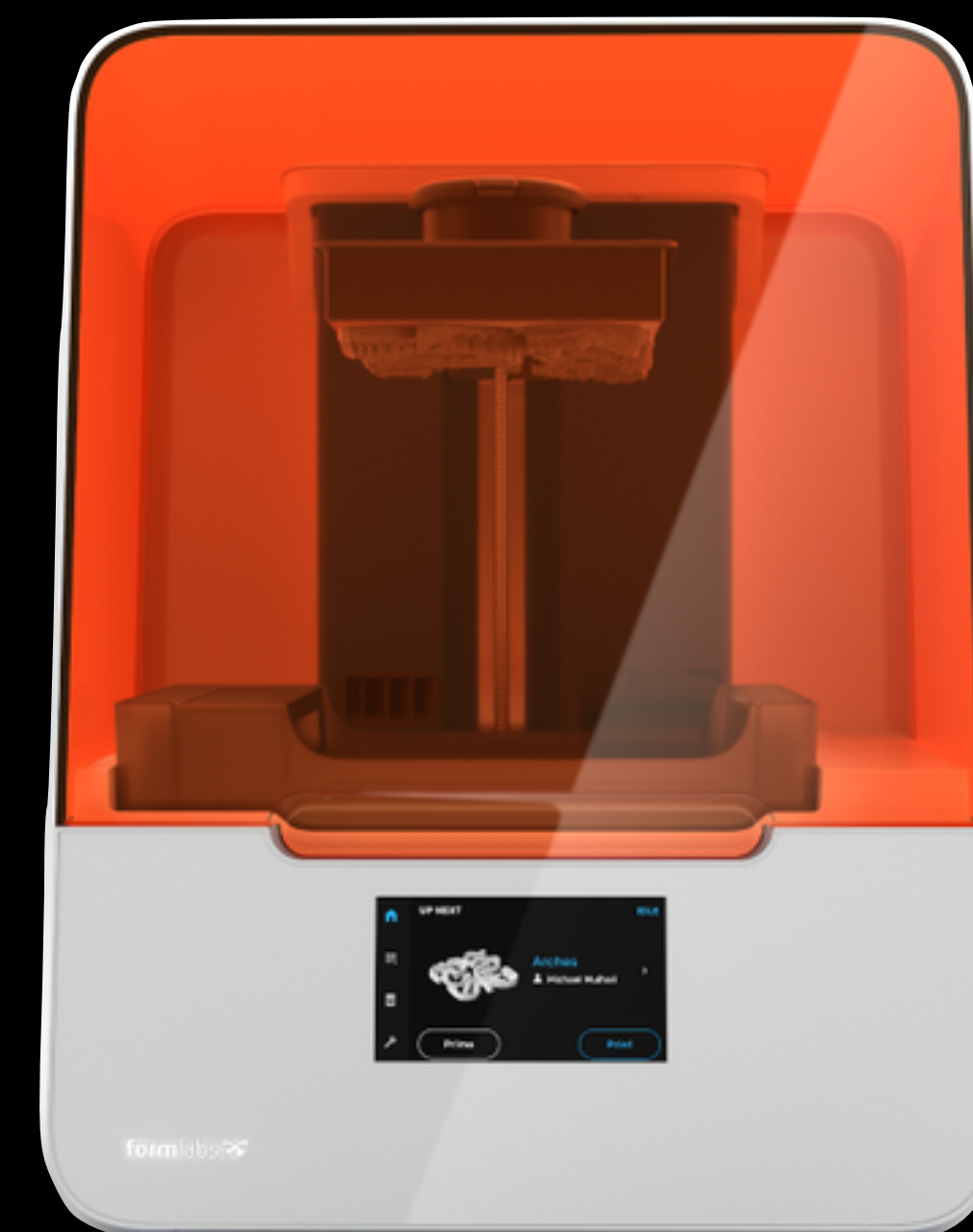
Chirurgia
implantare
computer-guidata

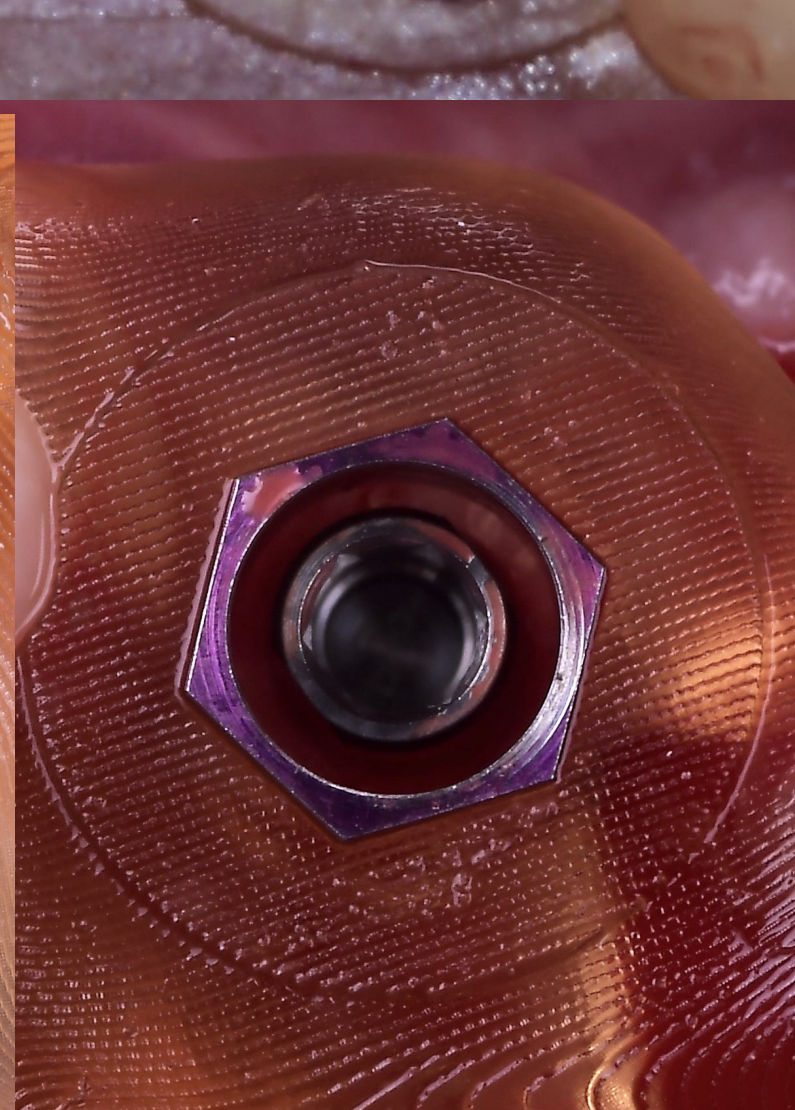
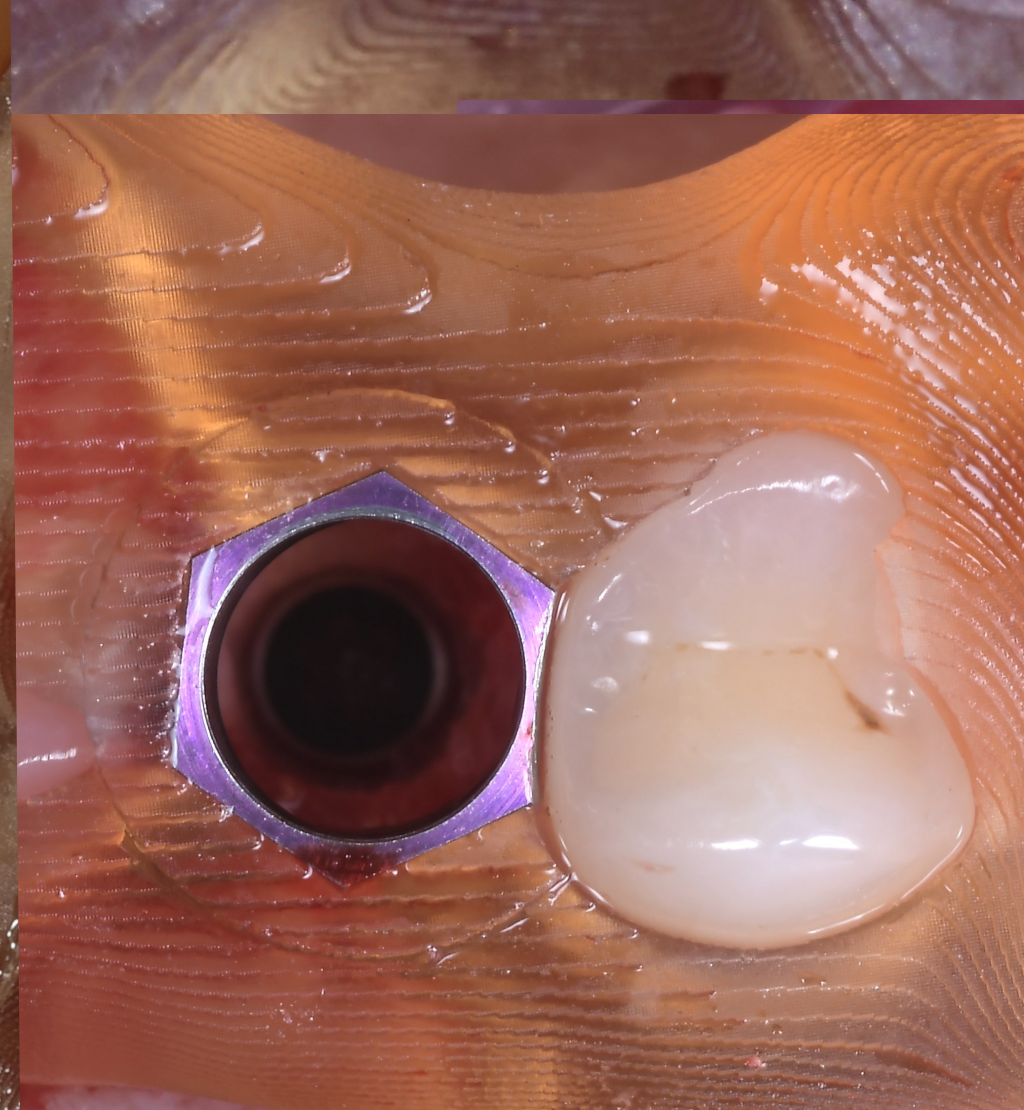
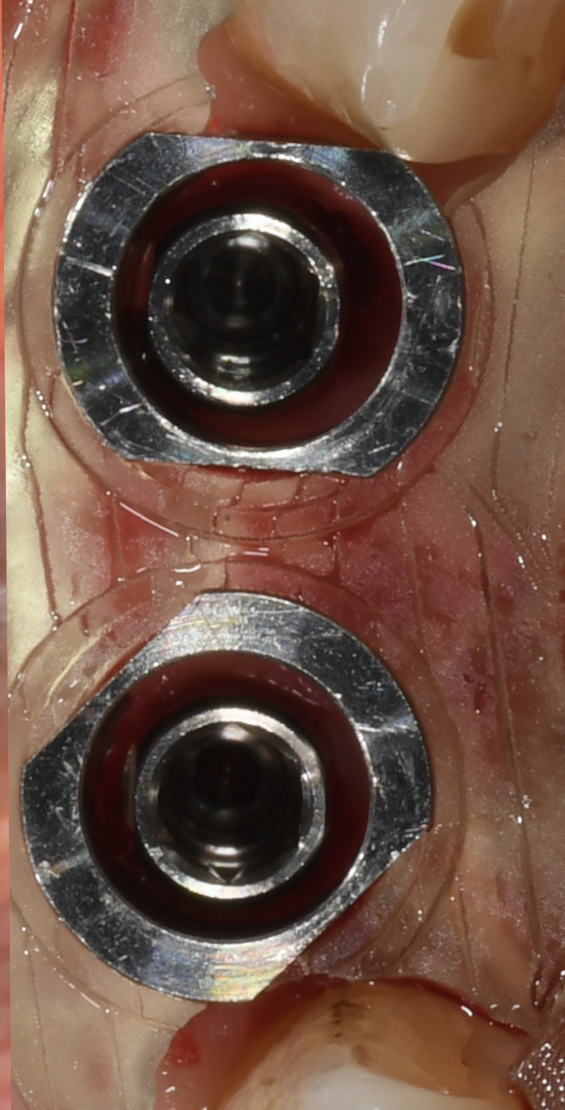
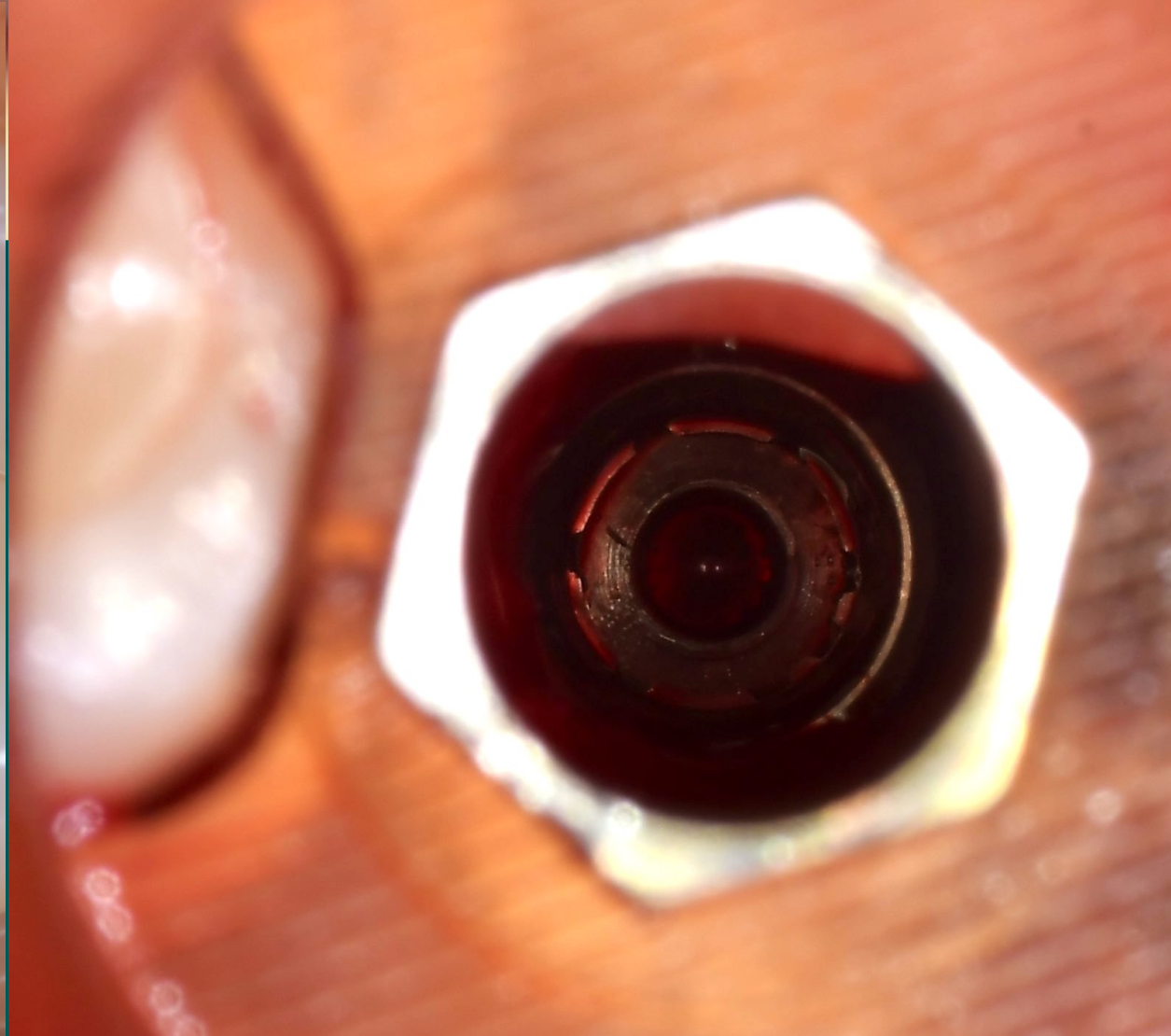
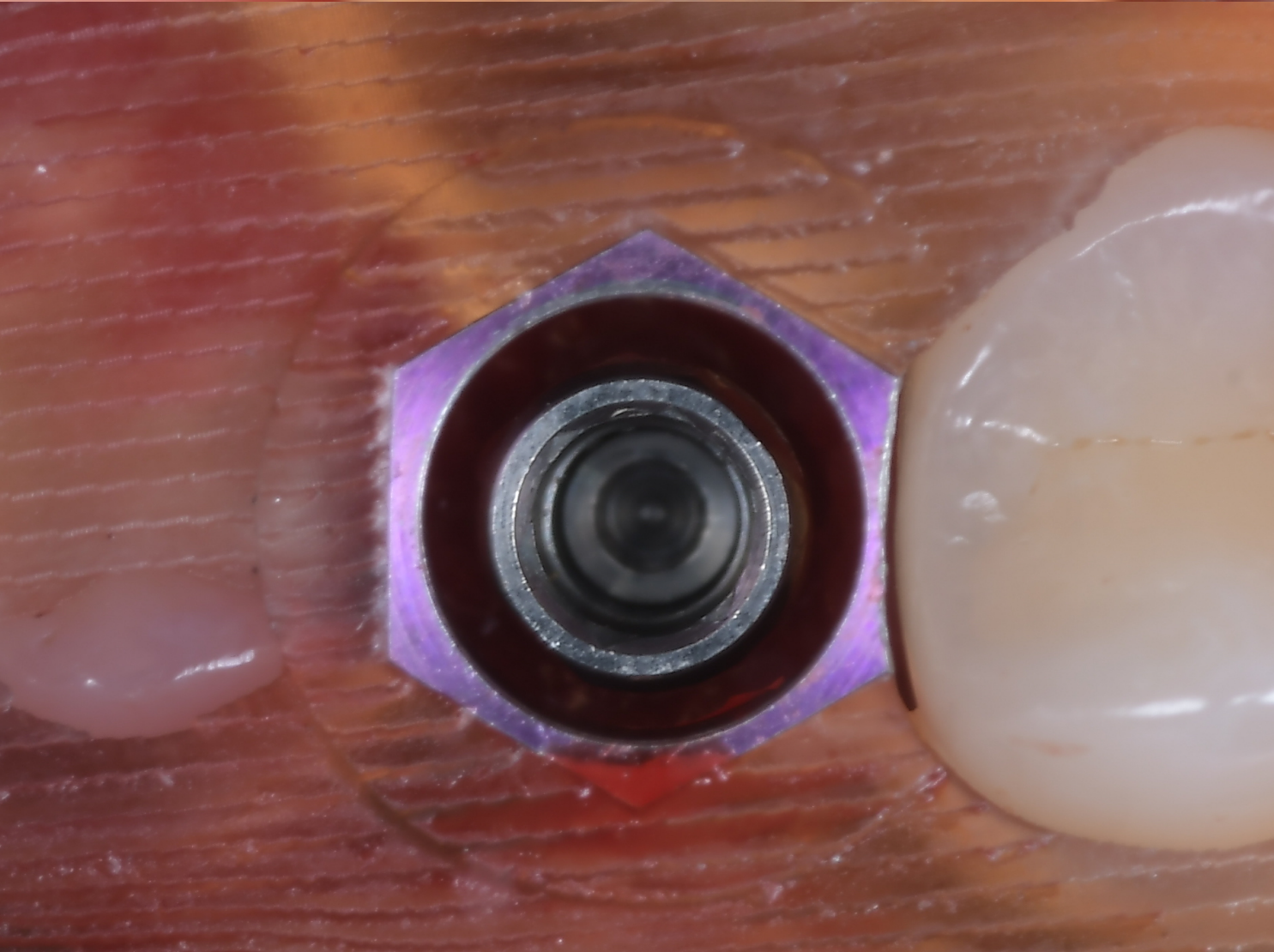
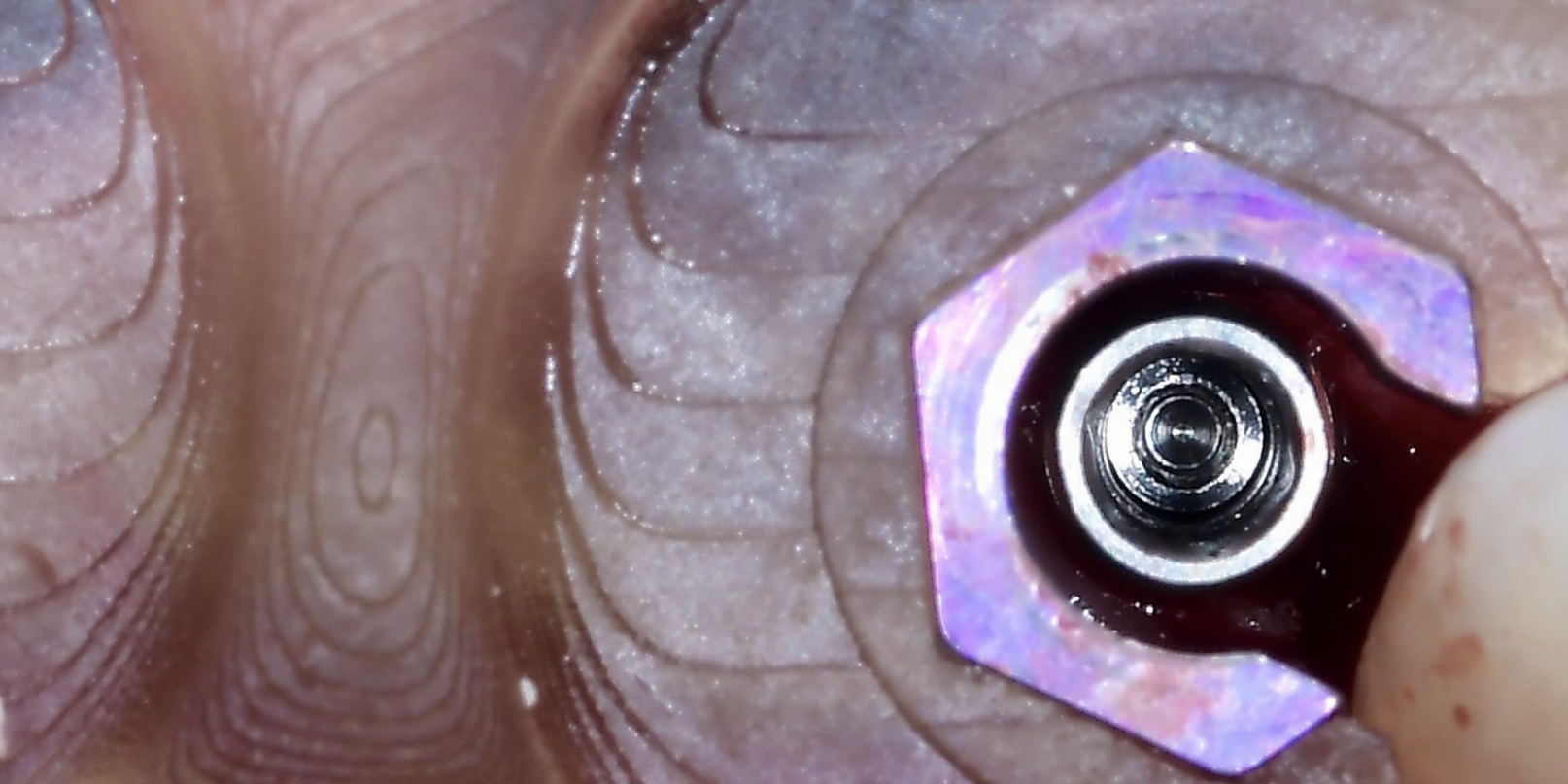
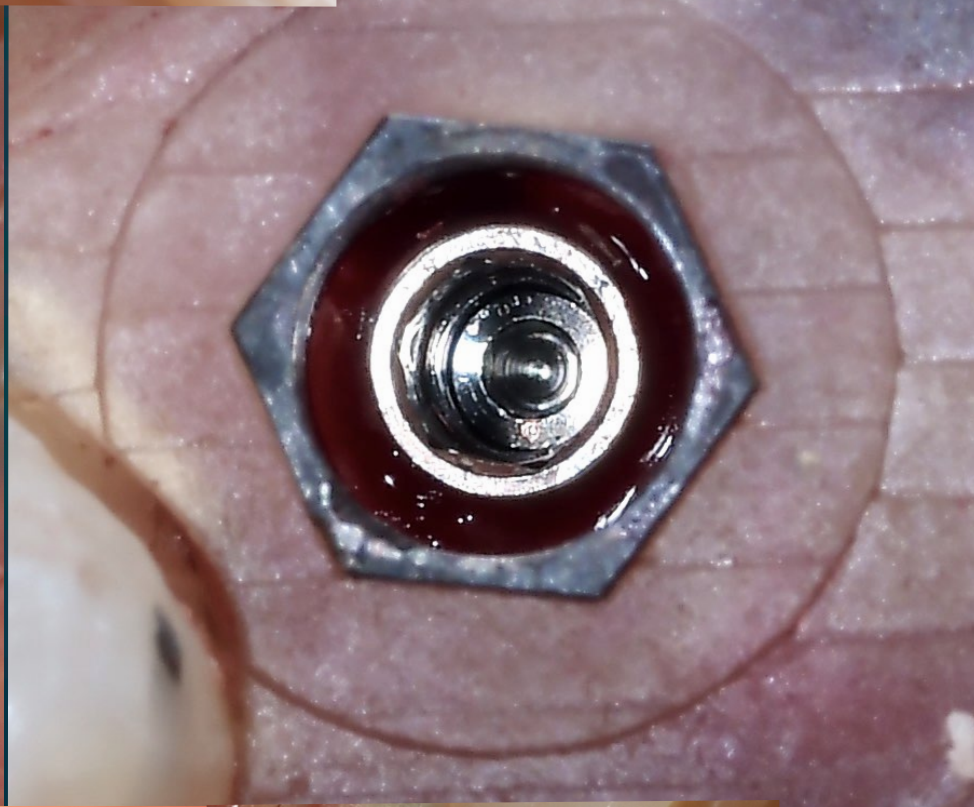
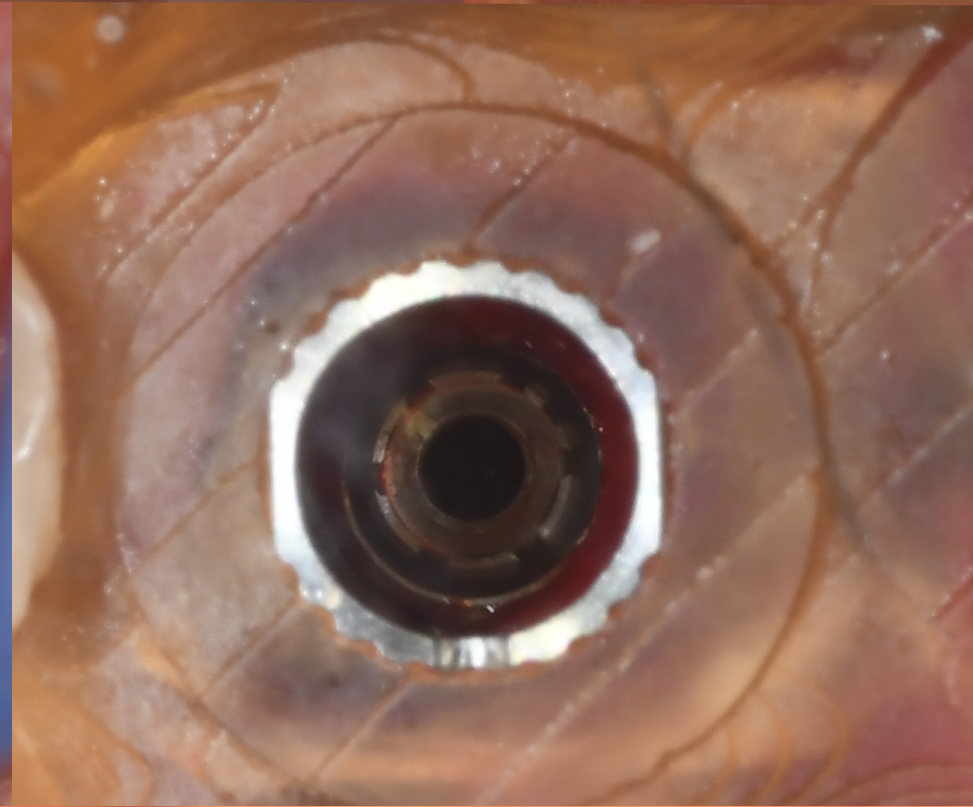
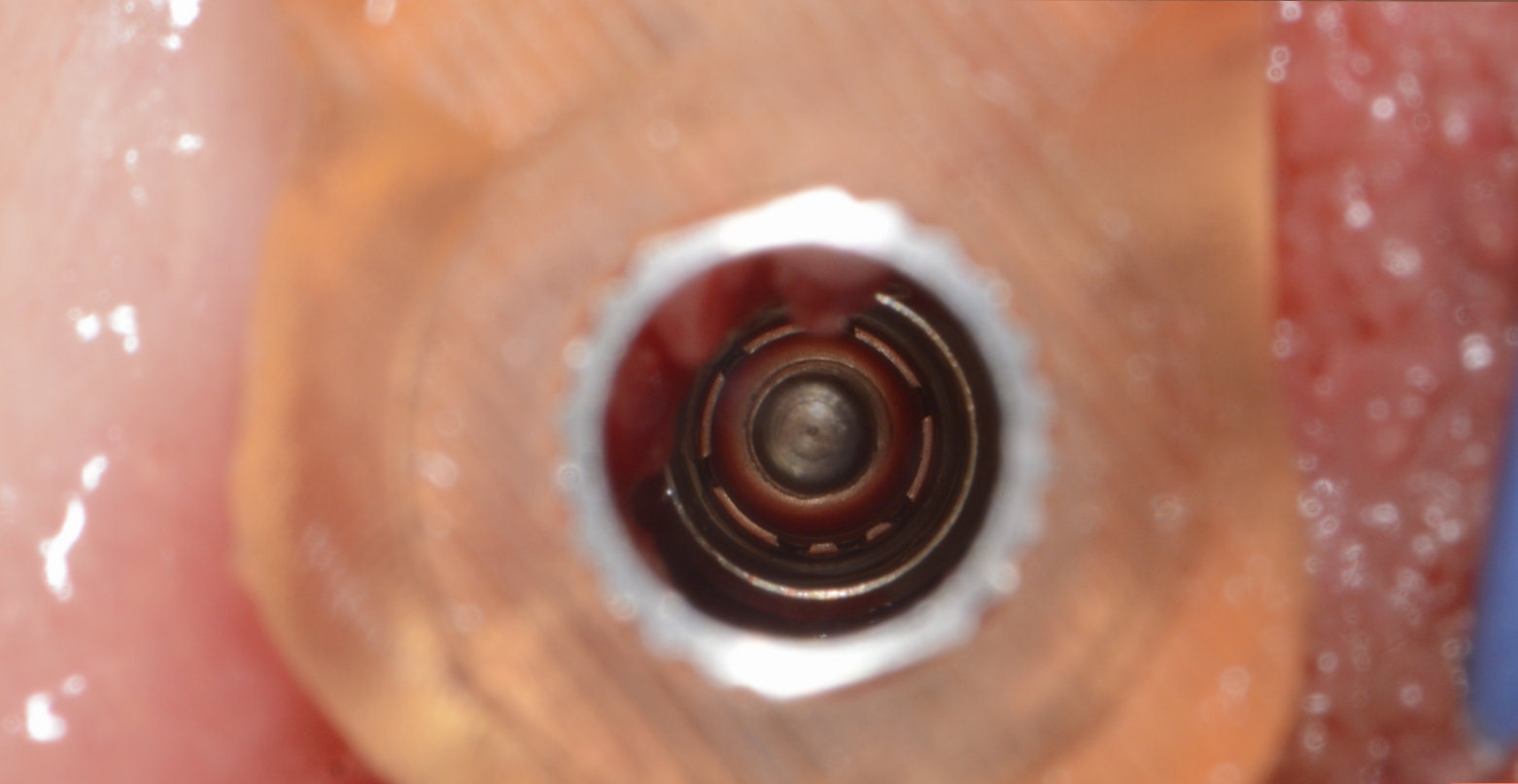
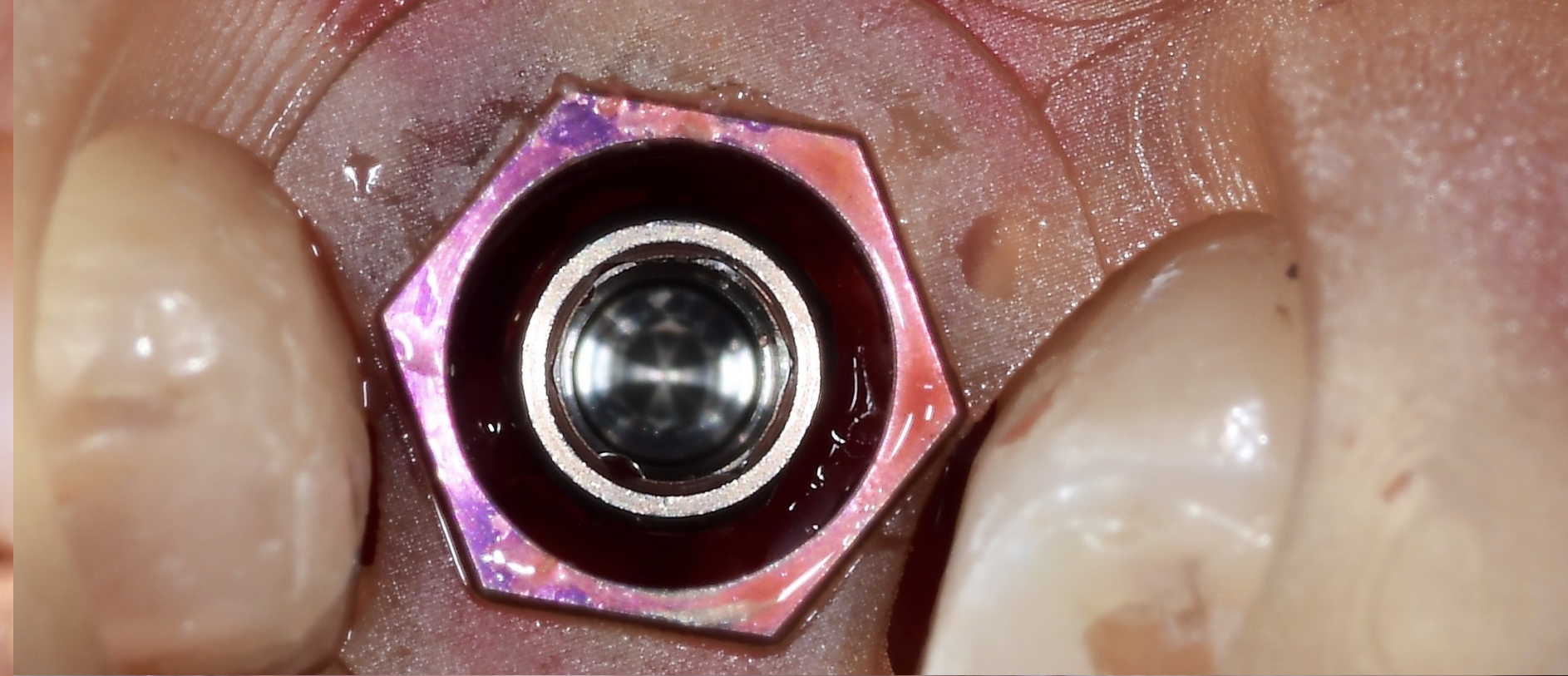
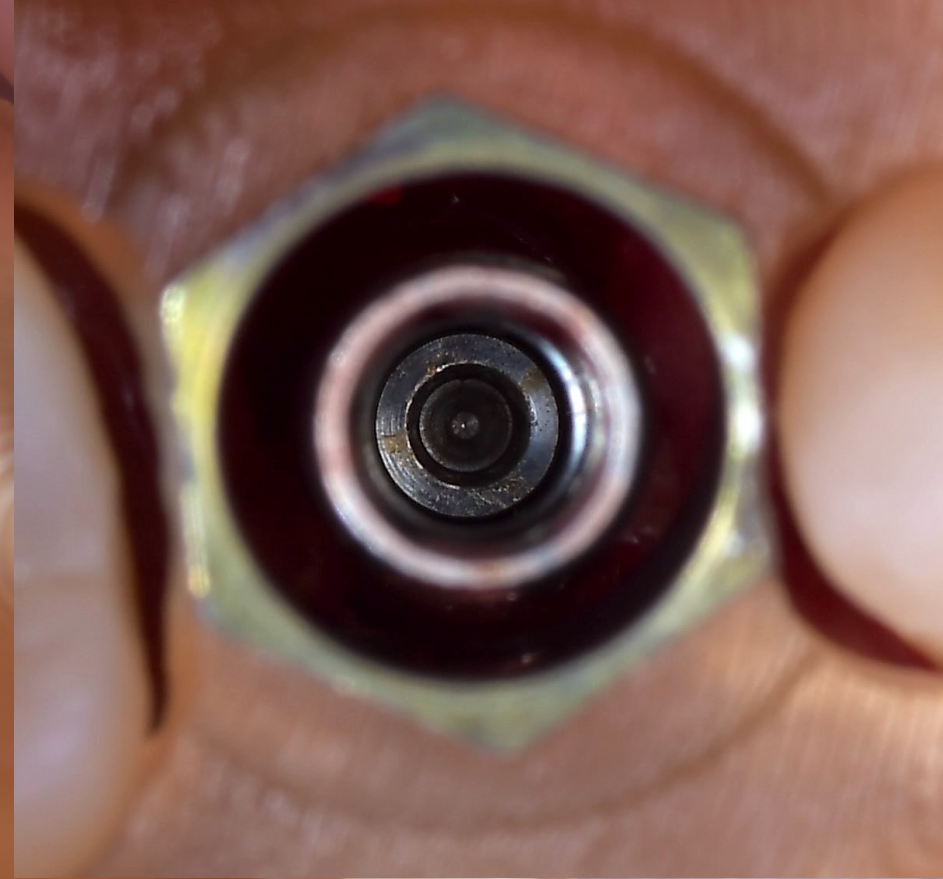
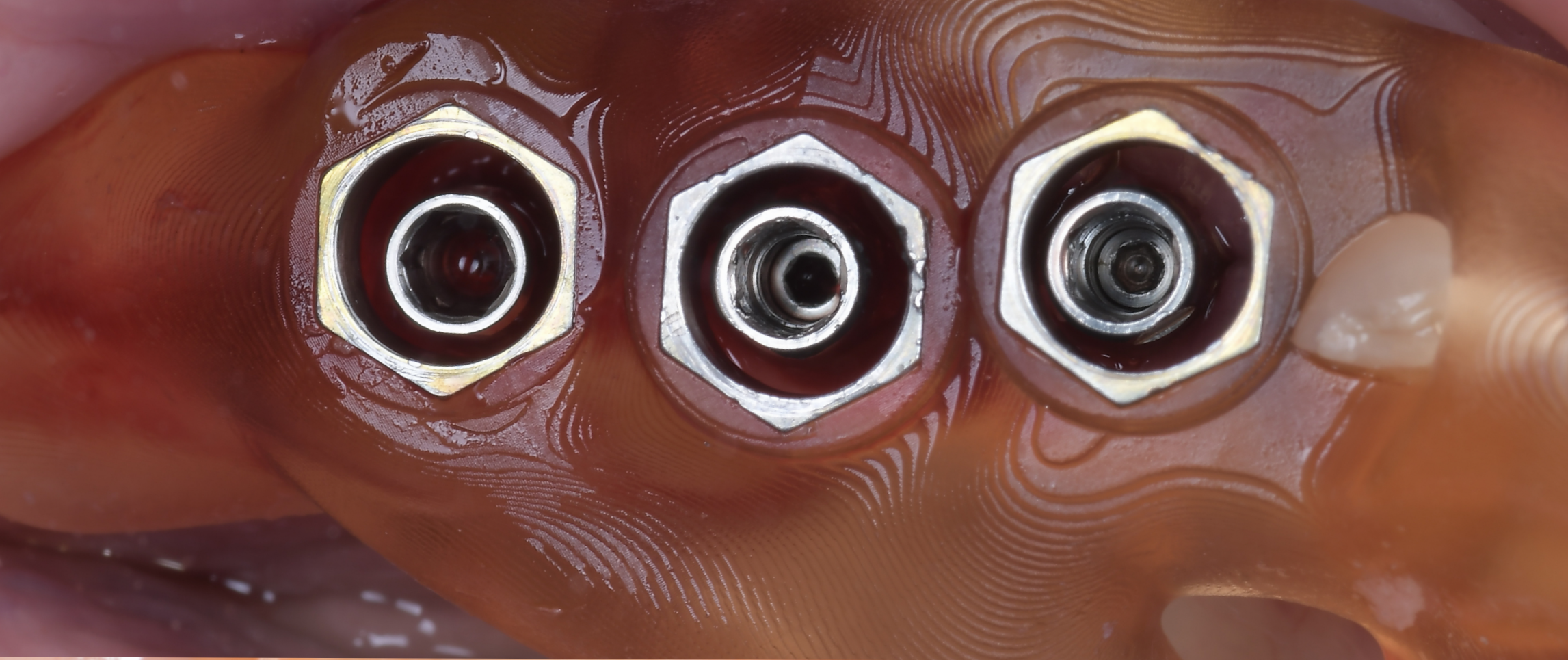


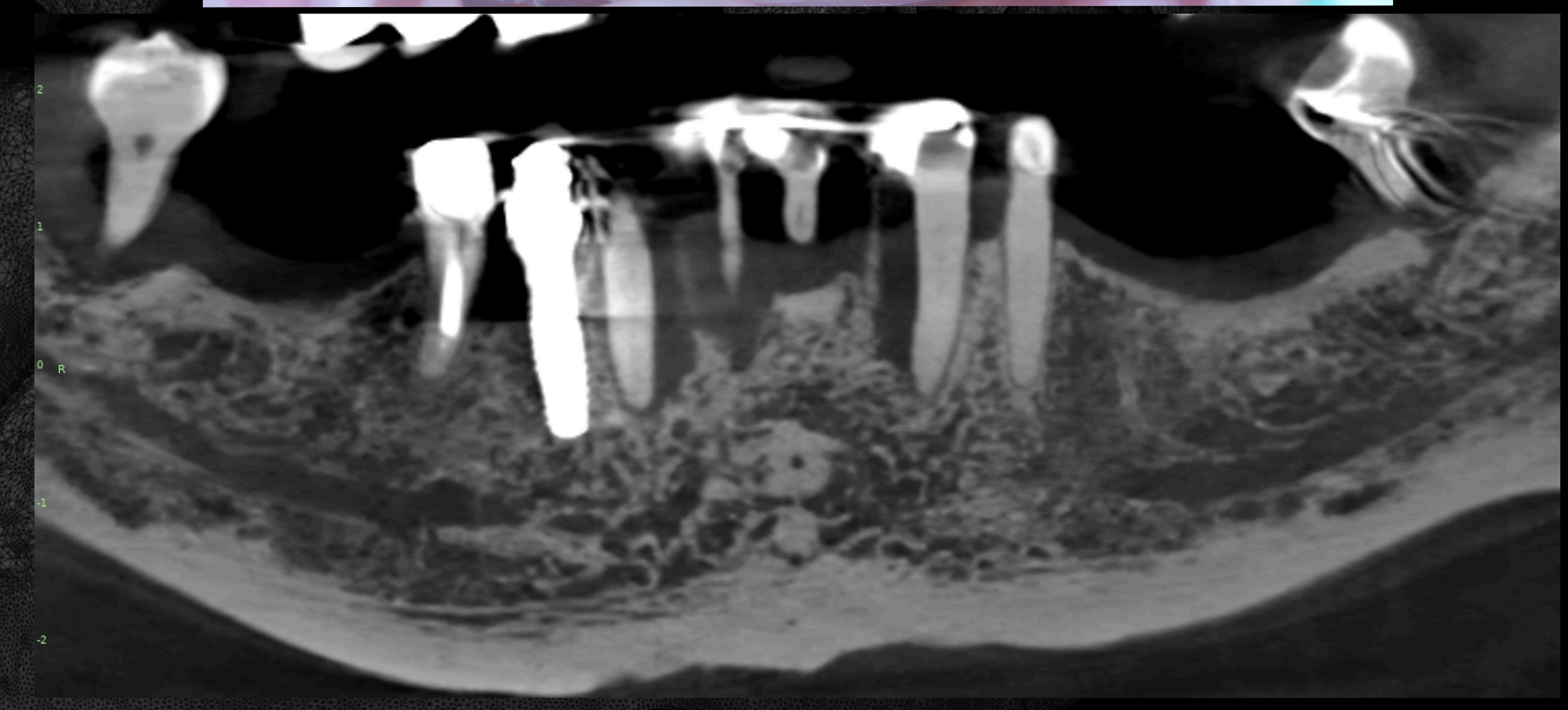


NESTING

(CREAZIONE DEI SUPPORTI PER LA STAMPA 3D)

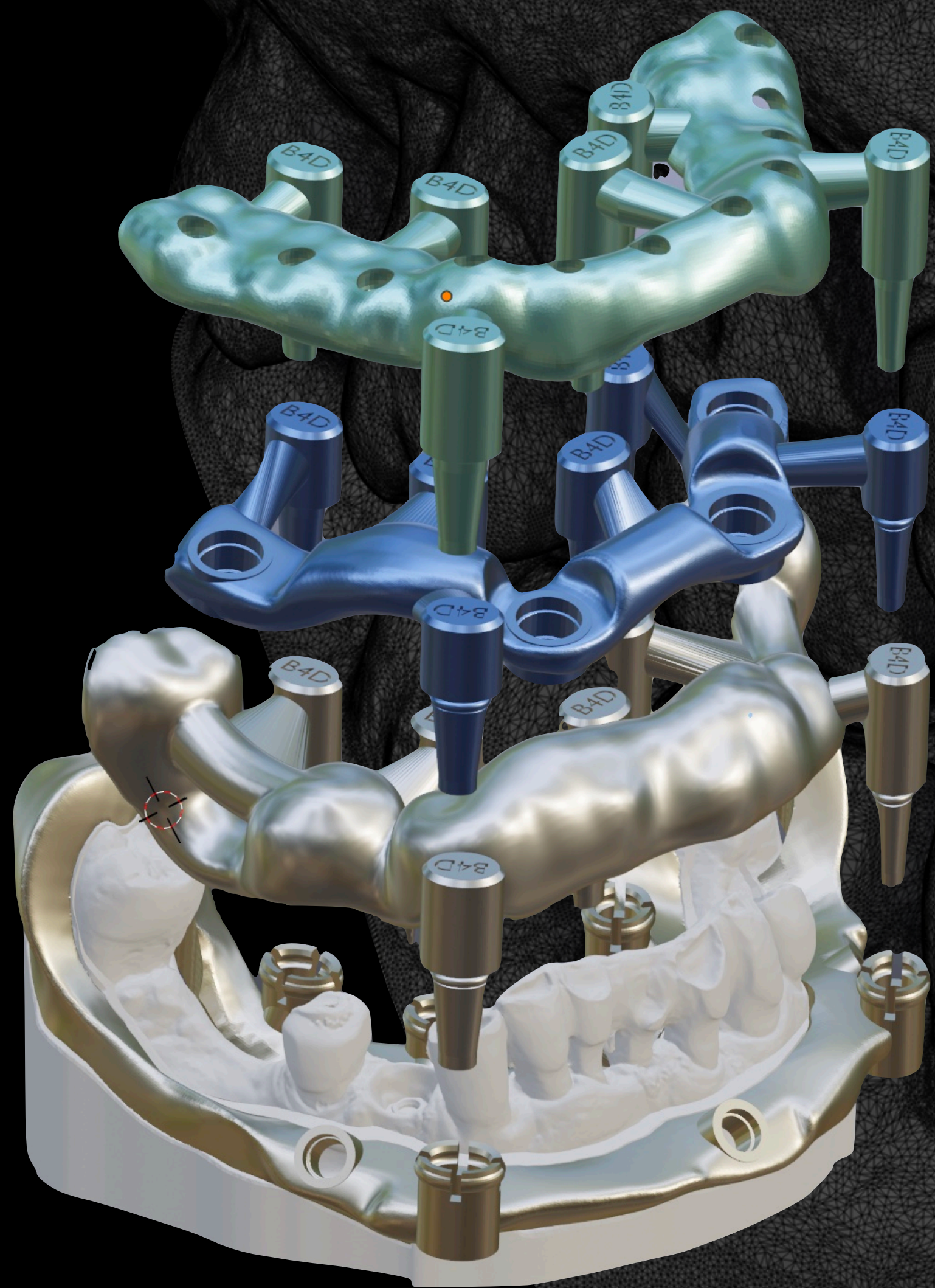






Full Digital WorkFlow

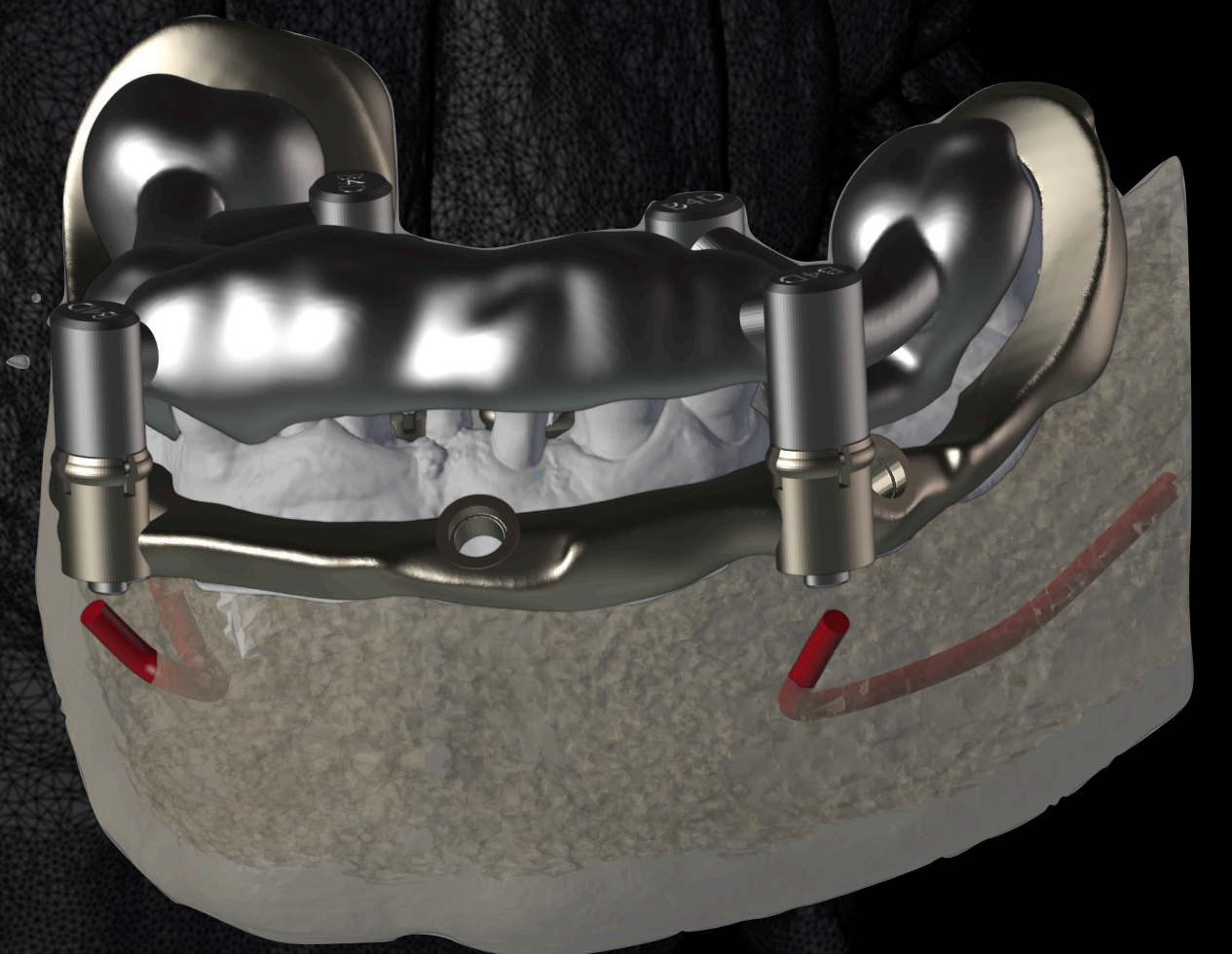
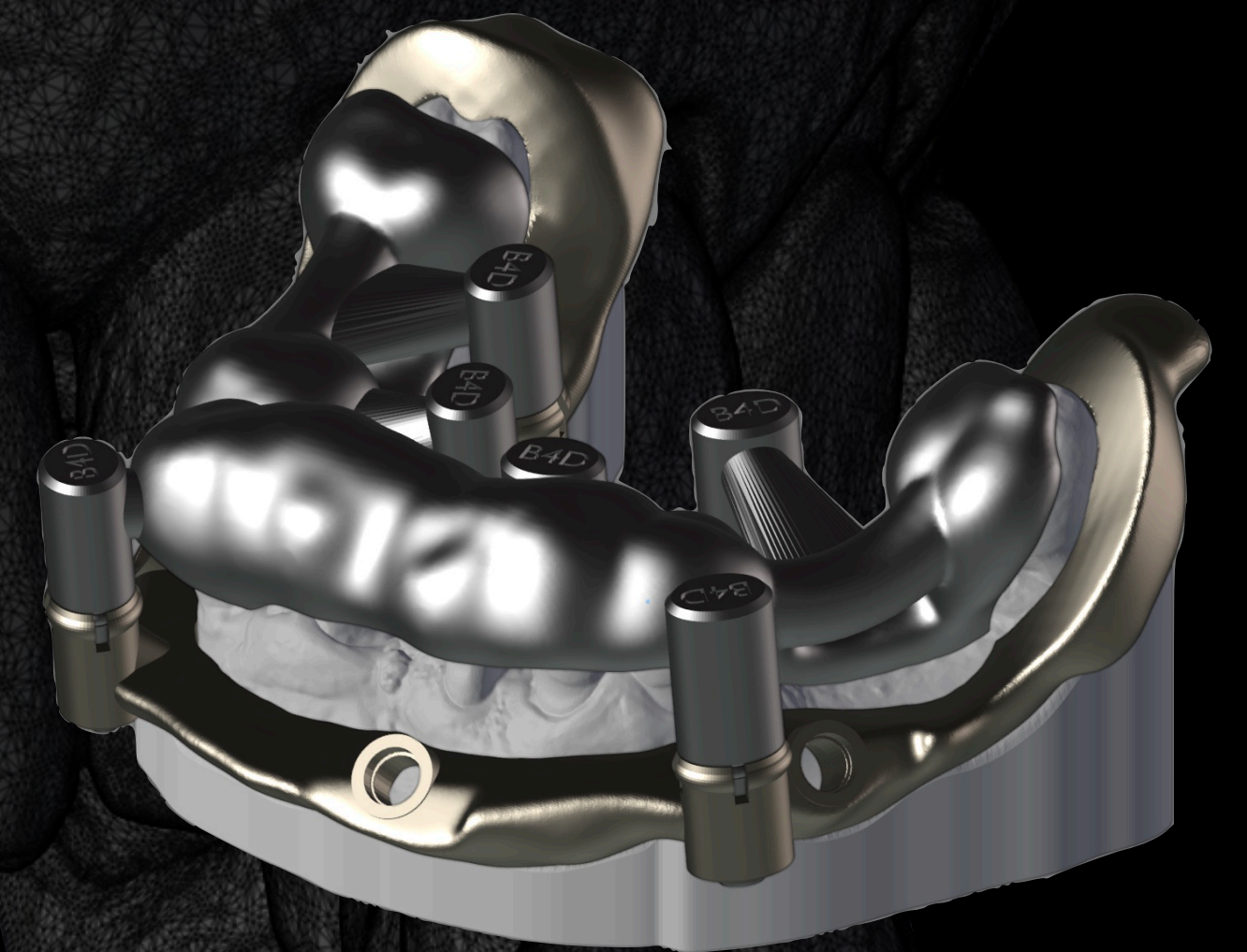
Dima Scomponibile - Stackable Guide



ia)

Dima di Posizionamento (quaternaria)

Dima Primaria



Full Digital WorkFlow

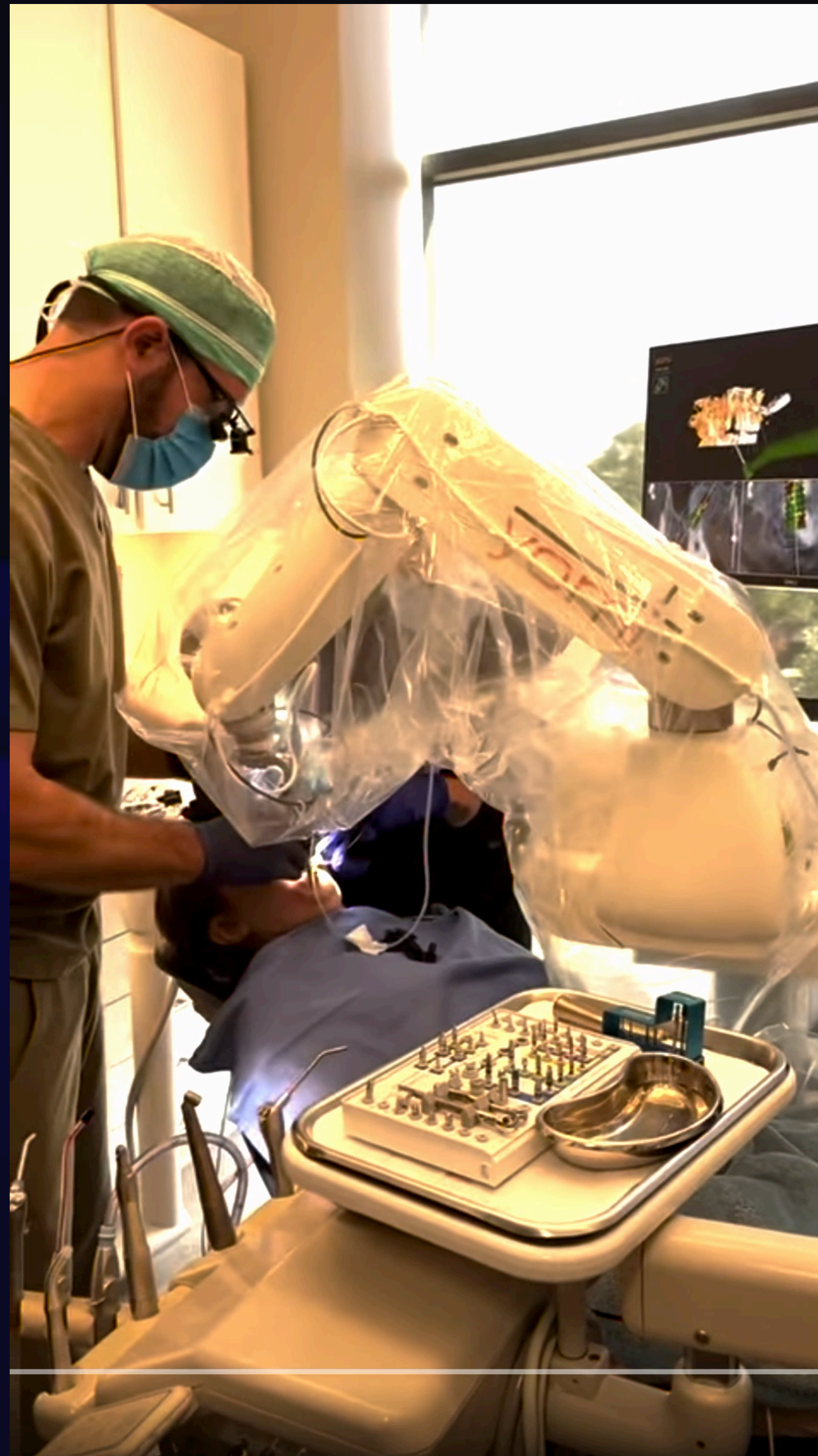
Dima Scomponibile - Stackable Guide

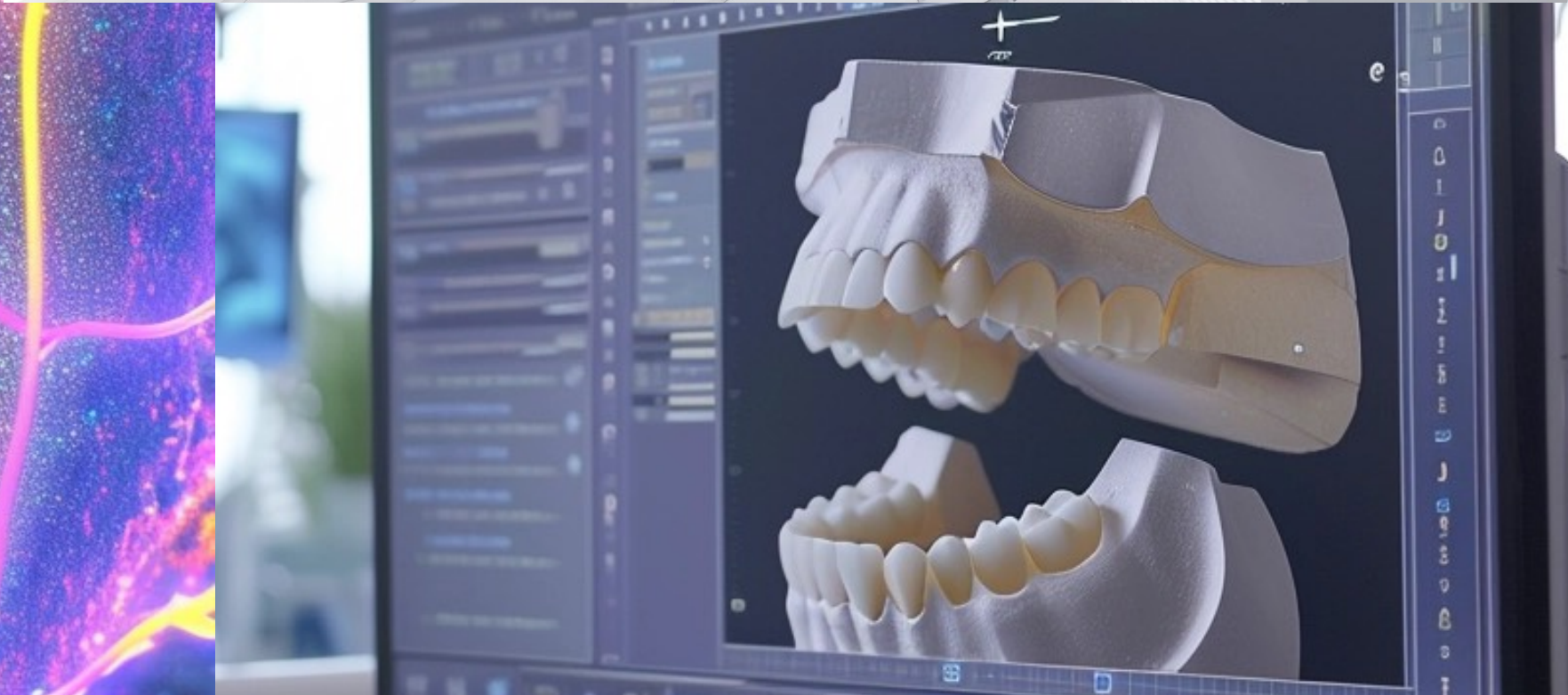






Chirurgia implantare ROBOTICA





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