



## Introduction:

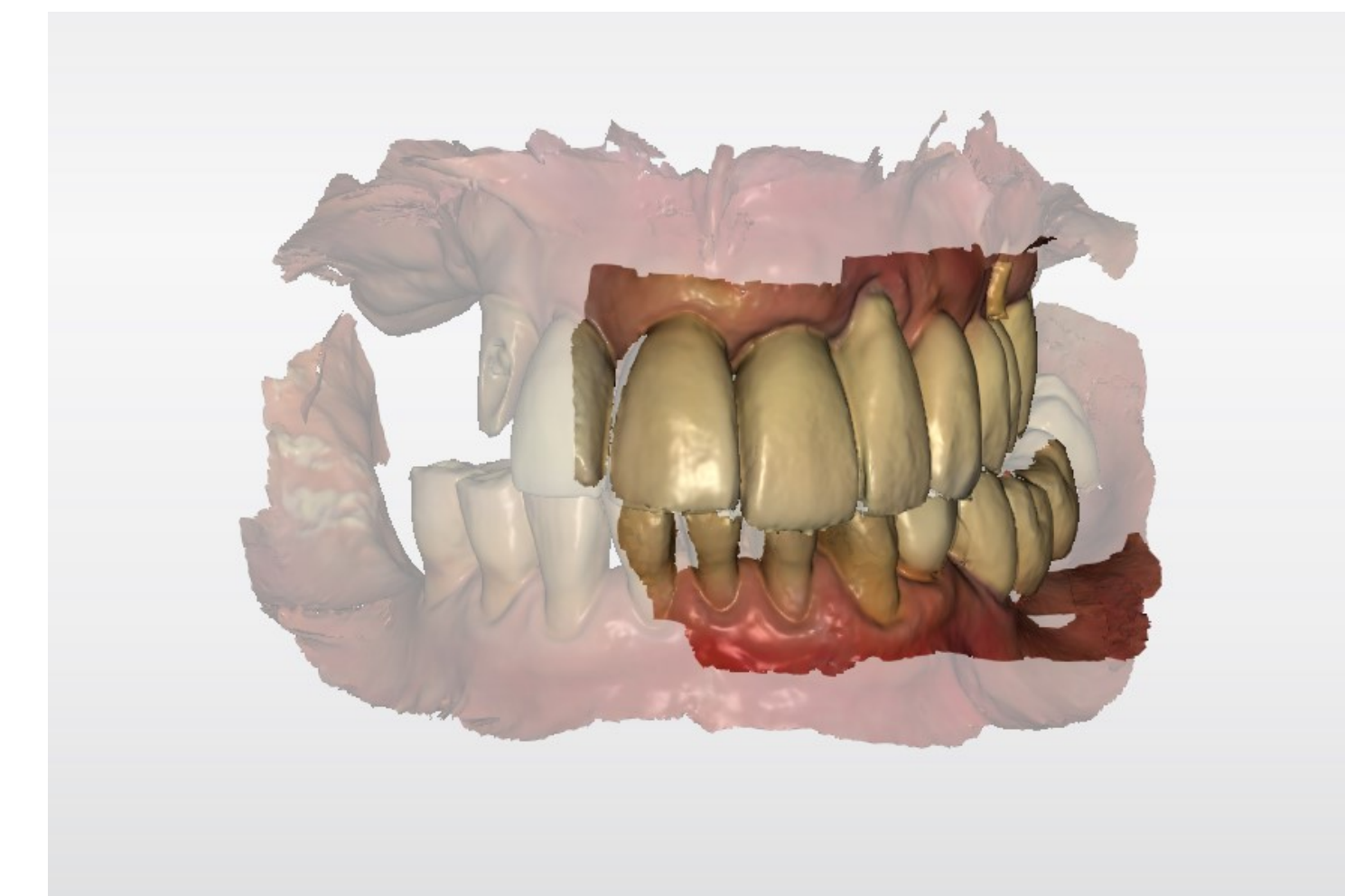
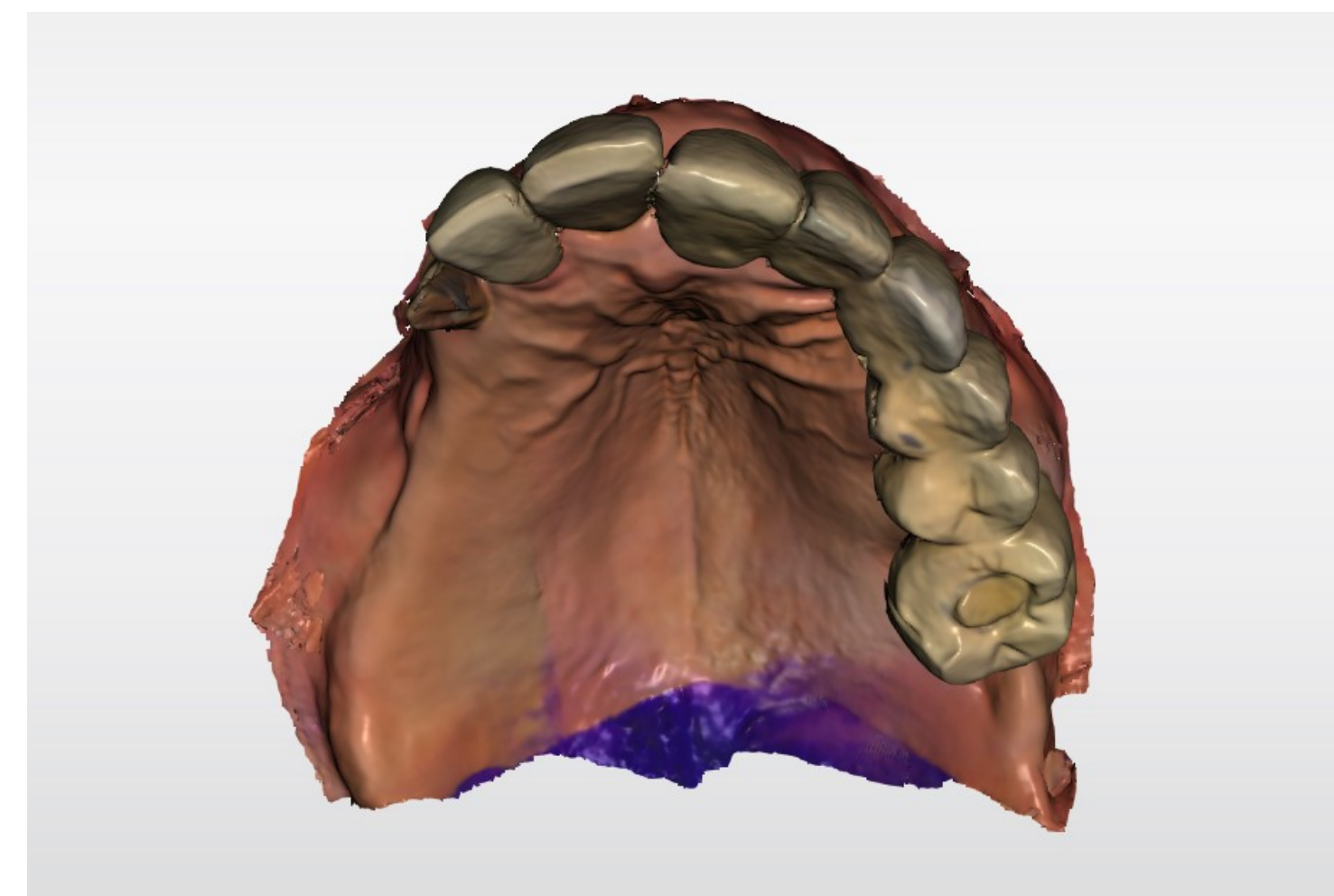
Advances in digital dentistry expedite fabrication of immediate dentures. Implementation of intra-oral scans eliminate the risk of unintentional extraction of highly-mobile teeth during conventional impression procedures, and can reduce the number of appointments.

## Technique:

Max. and mand. scans were acquired from an intra-oral scanner, OVD was established with a putty matrix during buccal scan. The .STL files were used to digitally “extract” remaining max. teeth. Denture teeth selection (Vita Vionic Vigo) and base were digitally designed, following prosthodontic principles.

## Discussion

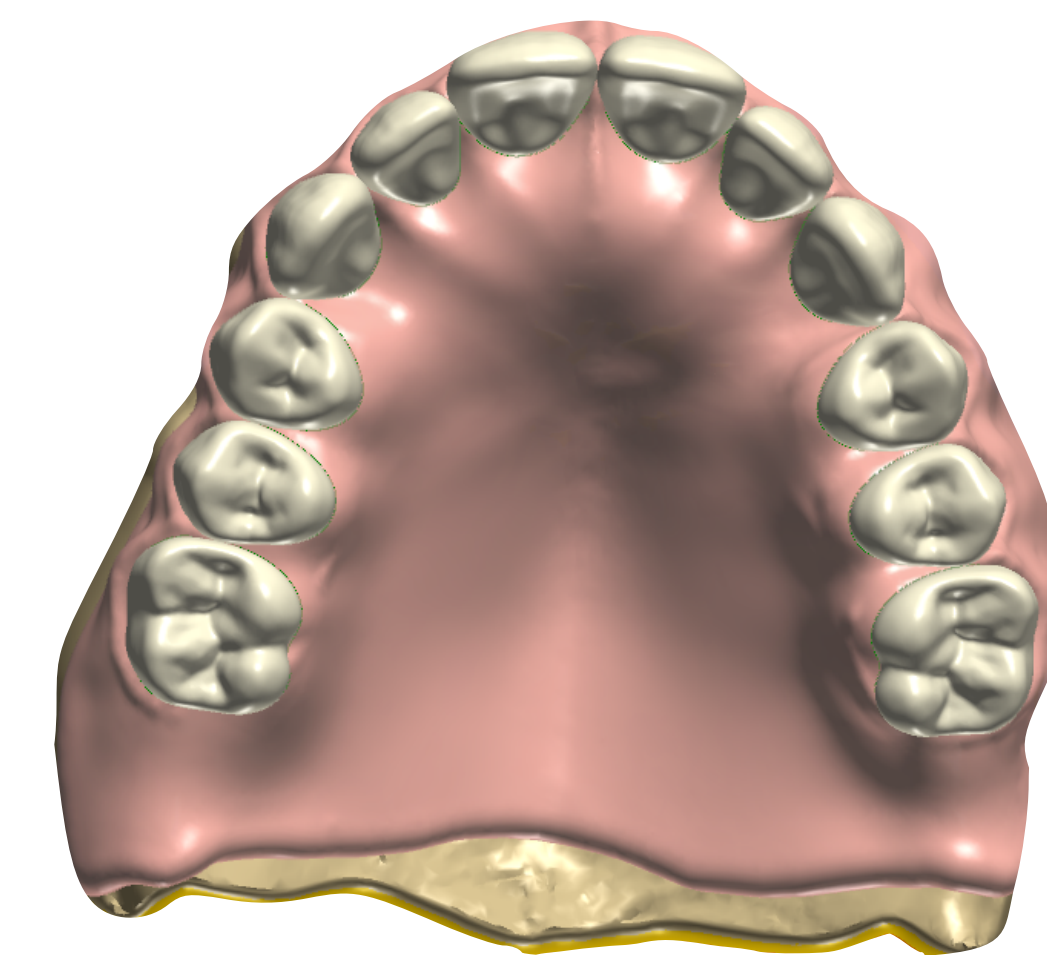
Improvements of IOS facilitate digital impressions of soft and hard tissues, making digital workflows for immediate dentures a viable alternative. Combining high-quality acrylic teeth and 3D printed resin bases can replace multi-step analog fabrication processes without esthetic compromises.



## Case Report:

A 70 year-old female with high esthetic concerns and chronic periodontitis with hopeless prognosis of remaining maxillary teeth was clinically evaluated. The patient was diagnosed as class IV according to the ACP Prosthodontic Diagnostic Index.

Clinical steps and fabrication of a digital maxillary interim immediate complete denture are described.



Denture base was 3D printed (Lucitone Digital Print™, Dentsply Sirona), and acrylic teeth were bonded manually at predetermined positions. The denture was polished and delivered immediately following extraction of max. teeth.



## Conclusion

More clinical studies on the long-term success of digital dentures are still needed. Interim immediate denture is a valid indication to implement digital workflows in clinical and fabrication process.

## References

1. Oh K, Kim J, Moon H: Two-visit placement of immediate dentures with the aid of digital technologies. J Am Dent Assoc 2019;150(7):618-623.
2. Fang J, An X, Seung-Mi Jeong, et al: Digital immediate denture: A clinical report. J Prosthet Dent 2018;119:698-701