

IMPLANTOLOGY CONFIDENCE

Straumann®  
PURE Ceramic Implant System  
Discover natural PURE  
white. Love your smile.



 **straumann**



Straumann® PURE Ceramic Implant System  
Discover natural PURE white.  
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At a glance



What's in it for you?



Clinical cases



Summary

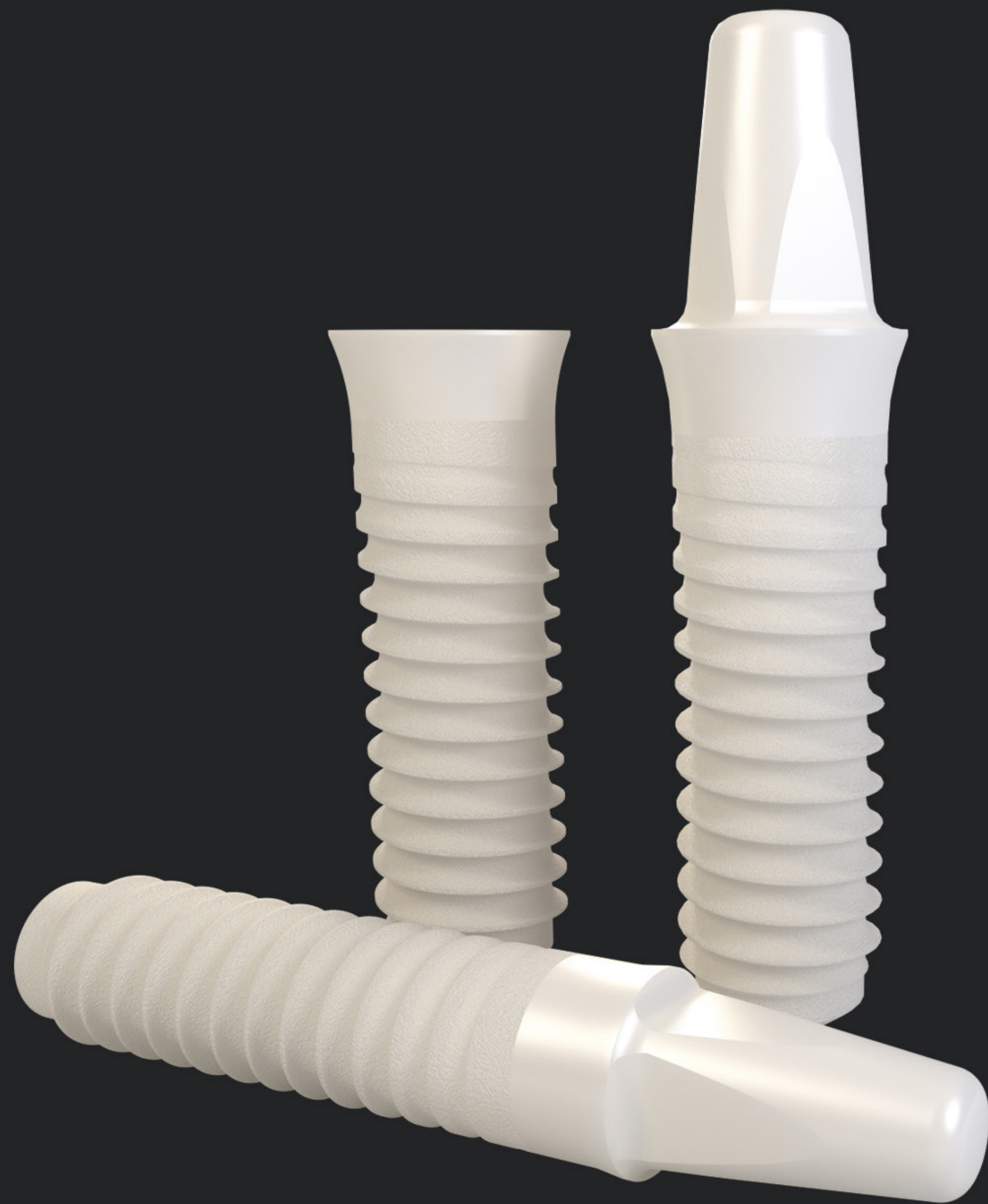


# At a glance

- Choose Straumann® PURE Ceramic Implant System for an esthetic, natural and strong treatment
- 12 years of relentless research and development (to comply with our Swiss premium quality standards)
- Available as
  - Monotype design, endosteal diameters of 4.1 mm and 3.3 mm
  - Two-piece design, endosteal diameter of 4.1 mm



# What's in it for you?



Outstanding esthetics

Outperforming quality

Exceptional surface

Flexibility

Workflow immediate customized esthetics

High predictability through precise diagnostic, planning and surgery

Confidence within a fully connected team

Immediate customized esthetics

Innovation



What's in it for you?

# Outstanding esthetics

- Ivory colored natural ceramic material
- More favorable soft tissue attachment around ceramic than around titanium, with blood circulation similar to that around natural tooth<sup>1,2</sup>
- Excellent esthetic outcomes in the esthetic zone after three year follow-up<sup>3</sup>



Demonstration: soft tissue reaction to the Straumann® PURE Ceramic Implant Monotype

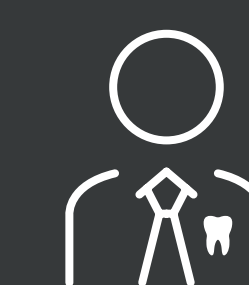


Clinical case with five year follow-up (Case courtesy of Dr. Gahlert)

<sup>1</sup> Kajiwaru N, Masaki C, Mukaibo T, Kondo Y, Nakamoto T, Hosokawa R. Soft tissue biological response to zirconia and metal implant abutments compared with natural tooth: microcirculation monitoring as a novel bioindicator. *Implant Dent* 2015;24(1):37-41

<sup>2</sup> Glauser R, Sailer I, Wohlwend A, Studer S, Schibli M, Schärer P. Experimental zirconia abutments for implant-supported single-tooth restorations in esthetically demanding regions: 4-year results of a prospective clinical study. *Int J Prosthodont*. 2004 May-Jun;17(3):285-90.

<sup>3</sup> Bormann KH, Gellrich NC, Kniha H, Schild S, Weingart D, Gahlert M. A Prospective Clinical Study to Evaluate the Performance of Zirconium Dioxide Dental Implants in Single Tooth Gaps in the Maxilla and Mandible: 3-Year Results. Publication in preparation 2017.





What's in it for you?

## Outperforming quality

- Made from high-performance zirconia ceramic (Y-TZP) with higher fatigue strength than grade-4 titanium implants<sup>4,5</sup>
- Every single PURE Implant<sup>\*/\*\*</sup> has to undergo a proof test before it leaves the Straumann<sup>®</sup> production facility
- Unique precautions ensure an unprecedented level of quality assurance and ultimate safety
- Excellent clinical performance with 97.5 % survival and success rate after three years<sup>\*\*6</sup>



\* PURE Ceramic Implant (two-piece) \*\* PURE Ceramic Implant Monotype

<sup>4</sup> Bormann KH, Gellrich NC, Kniha H, Dard M, Wieland M, Gahlert M. Biomechanical evaluation of a microstructured zirconia implant by a removal torque comparison with a standard Ti-SLA implant. Clin Oral Implants Res. 2012;Oct;23(10):1210-6. doi: 10.1111/j.1600-0501.2011.02291.x. Epub 2011 Nov 14.

<sup>5</sup> Institut Straumann AG, Straumann<sup>®</sup> PURE Ceramic Implants: A 100 % proof test ensures reliable implant strength. 03/14 490.028/en/B/001. [www.straumann.com](http://www.straumann.com).

<sup>6</sup> Bormann KH, Gellrich NC, Kniha H, Schild S, Weingart D, Gahlert M. A Prospective Clinical Study to Evaluate the Performance of Zirconium Dioxide Dental Implants in Single Tooth Gaps in the Maxilla and Mandible: 3-Year Results. Publication in preparation 2017.

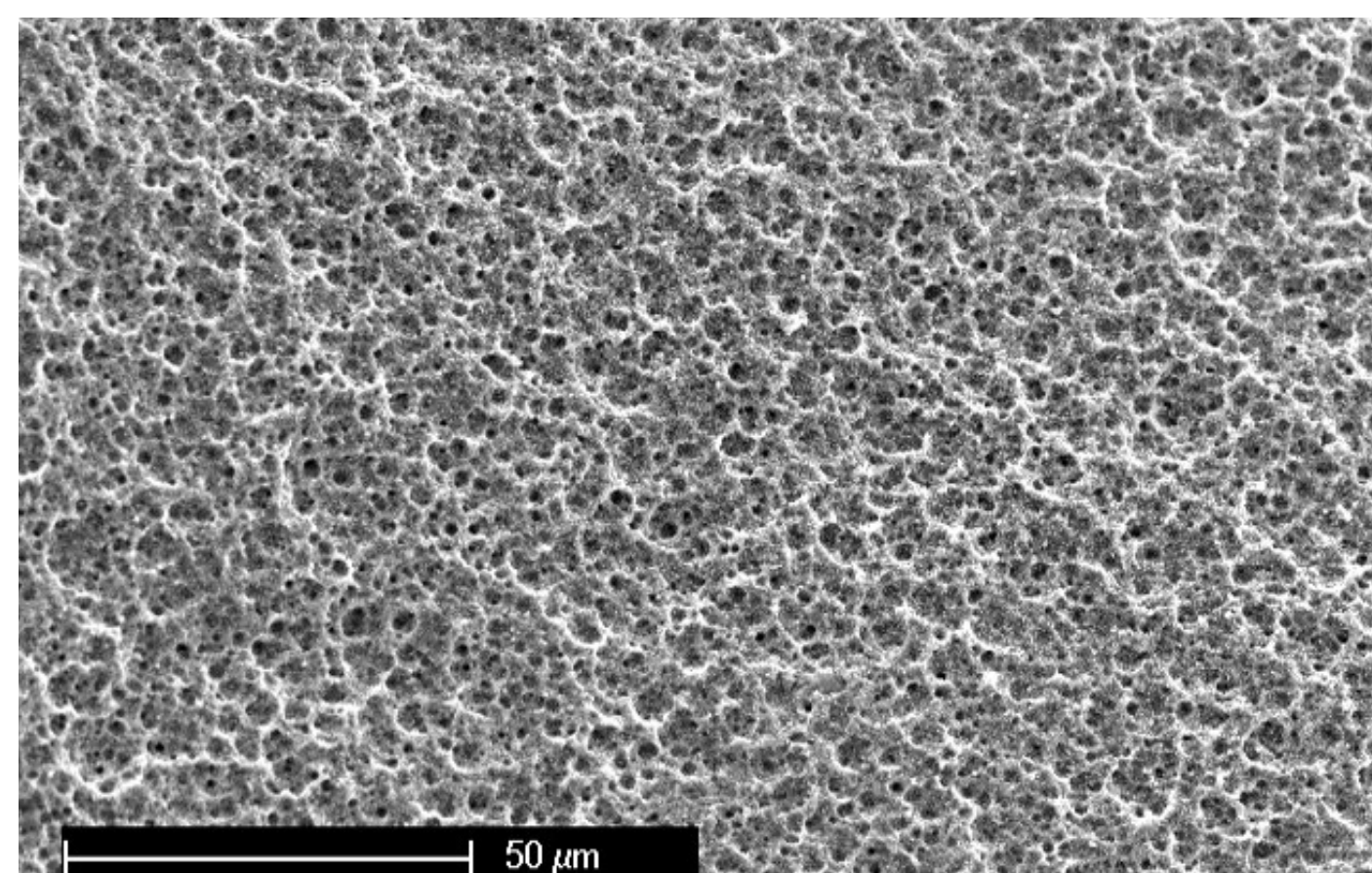




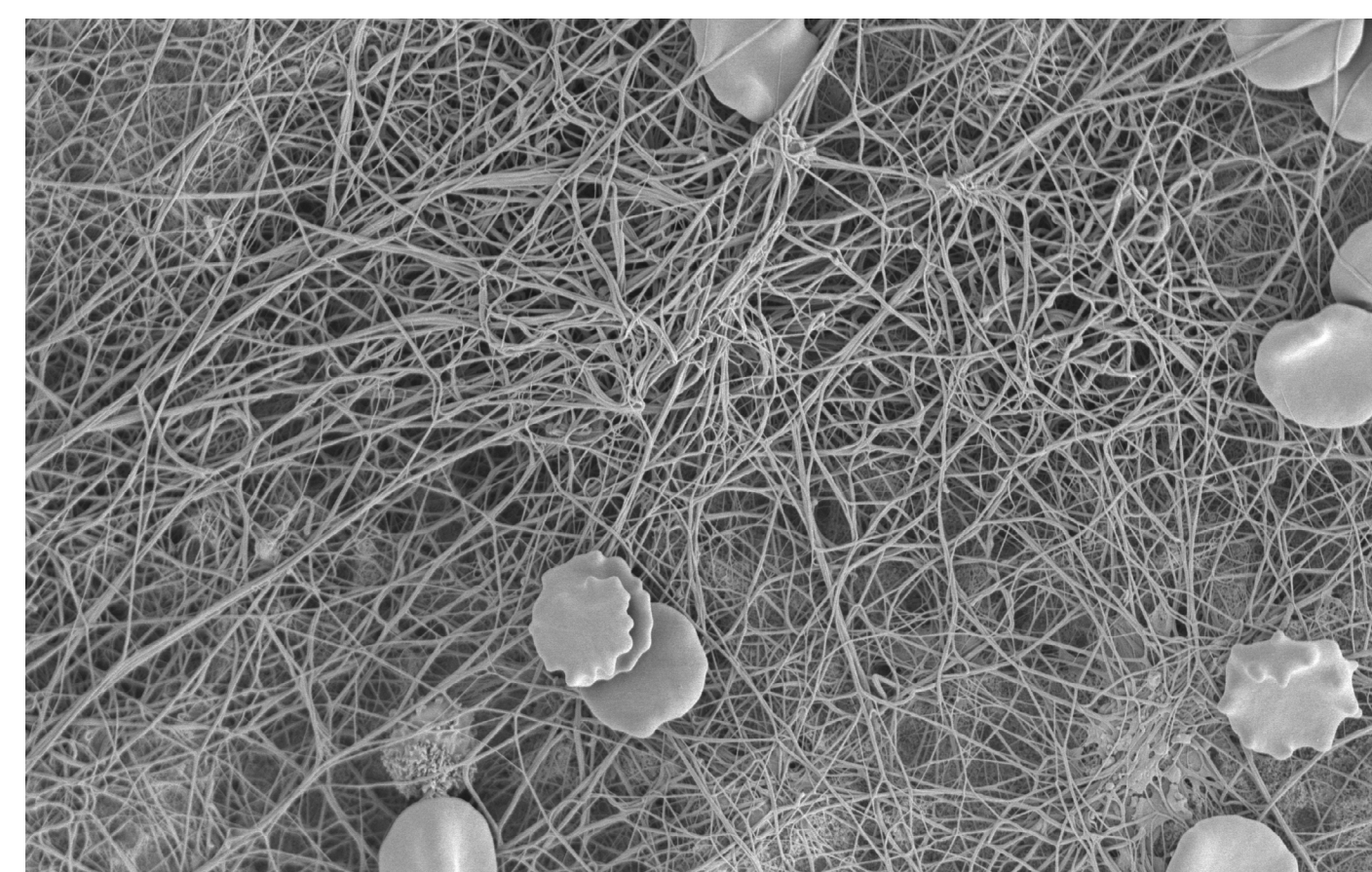
What's in it for you?

## Exceptional surface

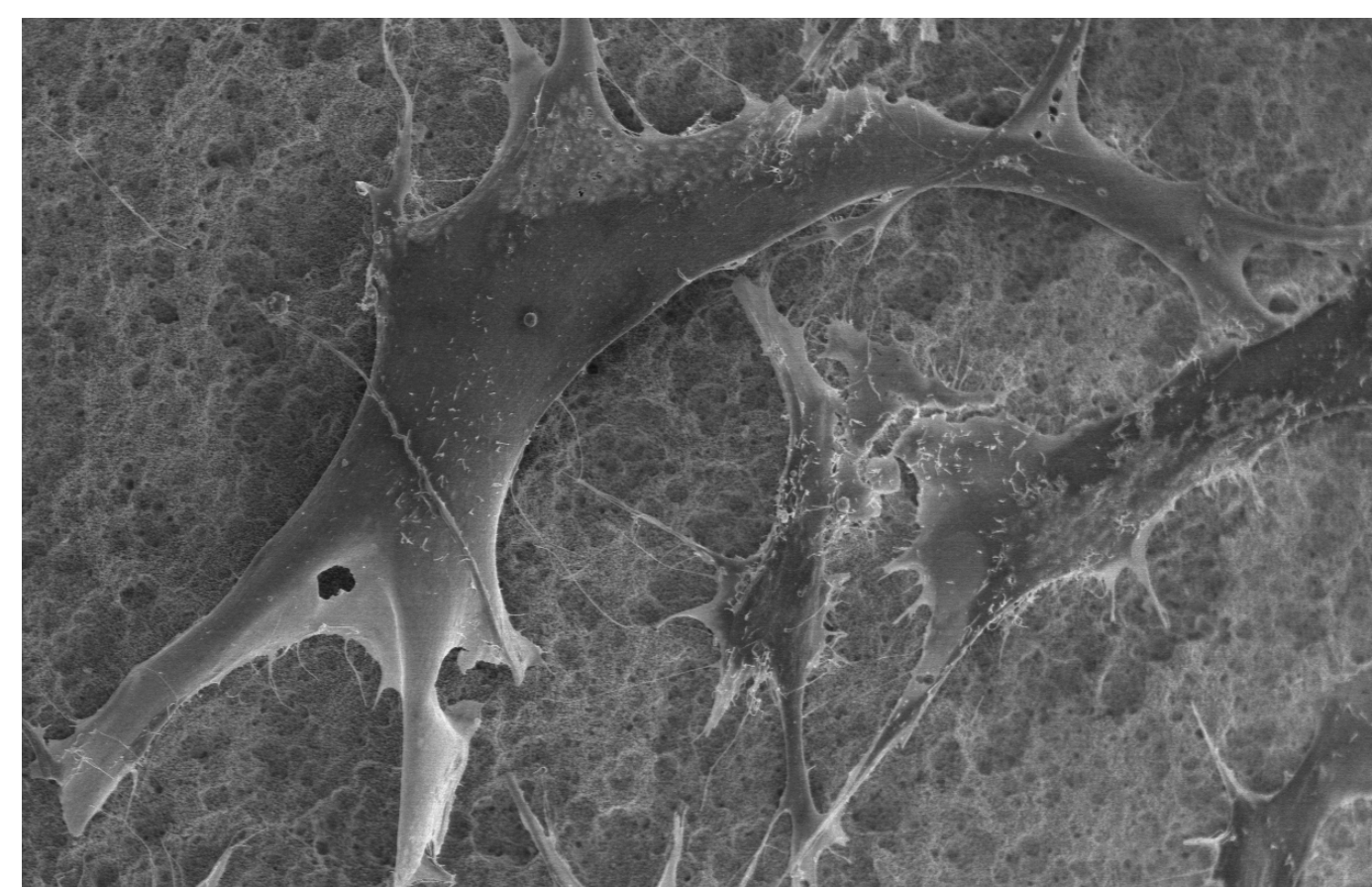
- ZLA<sup>®</sup>, similar in macro and micro roughness to the original Straumann<sup>®</sup> SLA<sup>®</sup> surface
- Revolutionary osseointegration properties: Healing time comparable to well established SLA<sup>®</sup>7-9
- Less plaque attachment – an important factor for long-term implant success<sup>10</sup>



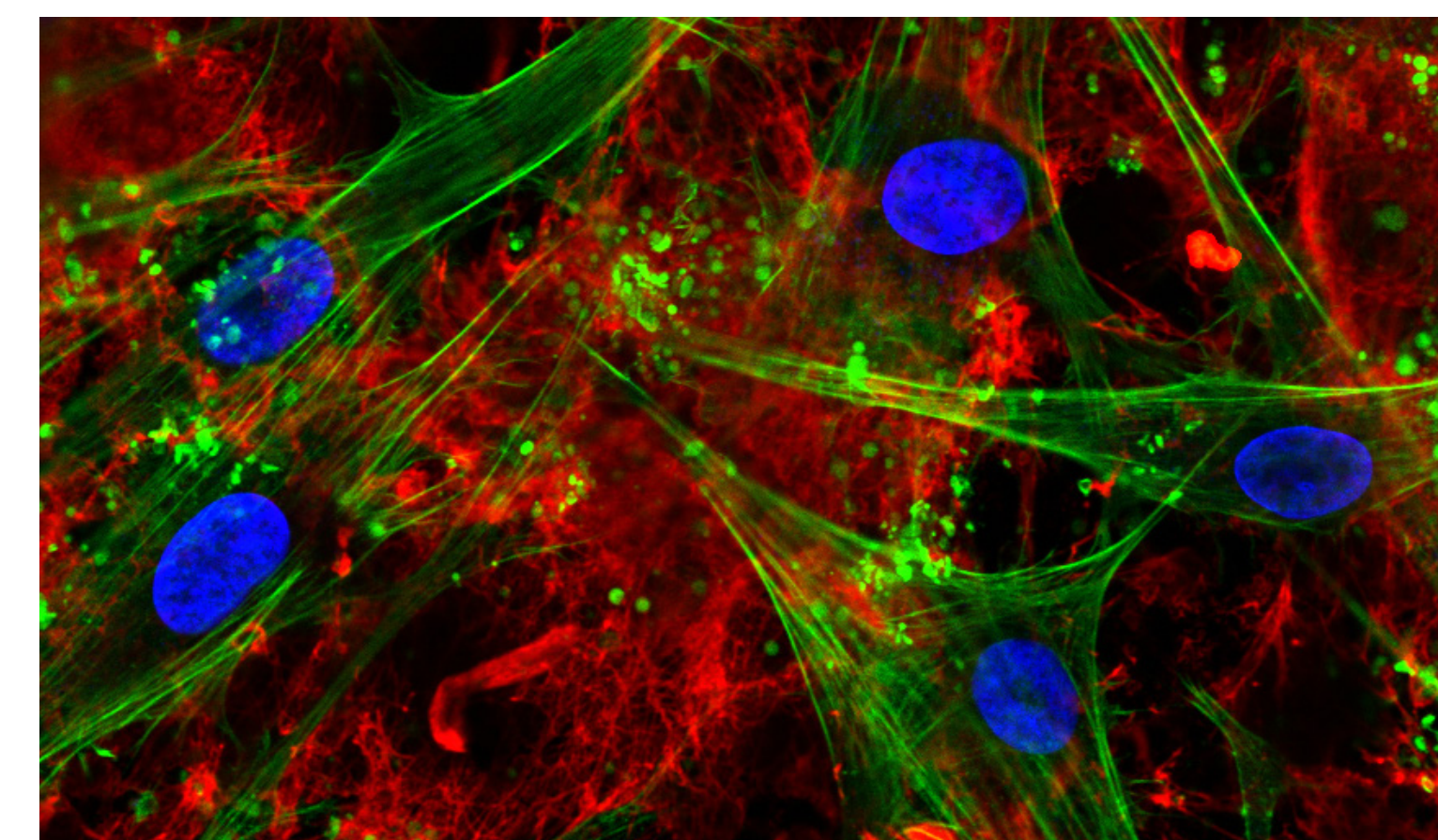
Straumann ZLA<sup>®</sup>



Enhanced fibrin network formation on top of the ZLA<sup>®</sup> surface\*



Bone cells growing on ZLA<sup>®</sup> surface (in-vitro study Empa)



Confocal laser scanning microscopy visualizing seeded bone cells and pronounced fibrin network on the ZLA<sup>®</sup> surface after incubation in human whole blood. Fibrin network (red), actin cytoskeleton (green), nuclei (blue)\*

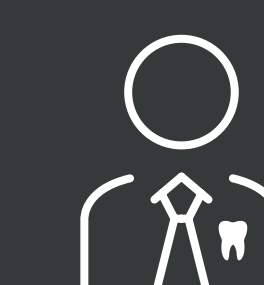
\* M. Rottmar et al., manuscript in preparation

7 Bormann KH, Gellrich NC, Kniha H, Dard M, Wieland M, Gahlert M. Biomechanical evaluation of a microstructured zirconia implant by a removal torque comparison with a standard Ti-SLA implant. Clin Oral Implants Res. 2012 Oct;23(10):1210-6. doi: 10.1111/j.1600-0501.2011.02291.x. Epub 2011 Nov 14.

8 Gahlert M, Roehling S, Sprecher CM, Kniha H, Milz S, Bormann K. In vivo performance of zirconia and titanium implants: a histomorphometric study in mini pig maxillae. Clin Oral Implants Res. 2012 Mar;23(3):281-6. doi: 10.1111/j.1600-0501.2011.02157.x.

9 Gahlert M1, Röhling S, Wieland M, Eichhorn S, Küchenhoff H, Kniha H A comparison study of the osseointegration of zirconia and titanium dental implants. A biomechanical evaluation in the maxilla of pigs Clin Implant Dent Relat Res. 2010 Dec;12(4):297-305. Doi: 10.1111/j.1708-8208.2009.00168.x.

10 Roehling S, Astasov-Frauenhoffer M, Hauser-Gerspach, Braissant O, Woelfler H, et al., In Vitro Biofilm Formation On Titanium And Zirconia Implant Surfaces, J Periodontol. 2016 Oct 7:1-16. [Epub ahead of print] DOI: 10.1902/jop.2016.160245



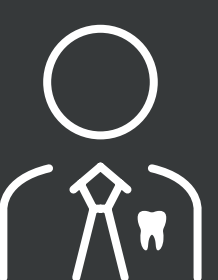


What's in it for you?

## Flexibility

- Choose your preferred implant shape (monotype or two-piece) and workflow (conventional or fully digital)
- Various prosthetic options available\*
- 100 % metal-free restoration possible\*\*
- Proven Straumann® surgical protocol, no additional surgical instruments needed
- Suitable for guided surgery<sup>\*/\*\*</sup> and guided implant placement\*

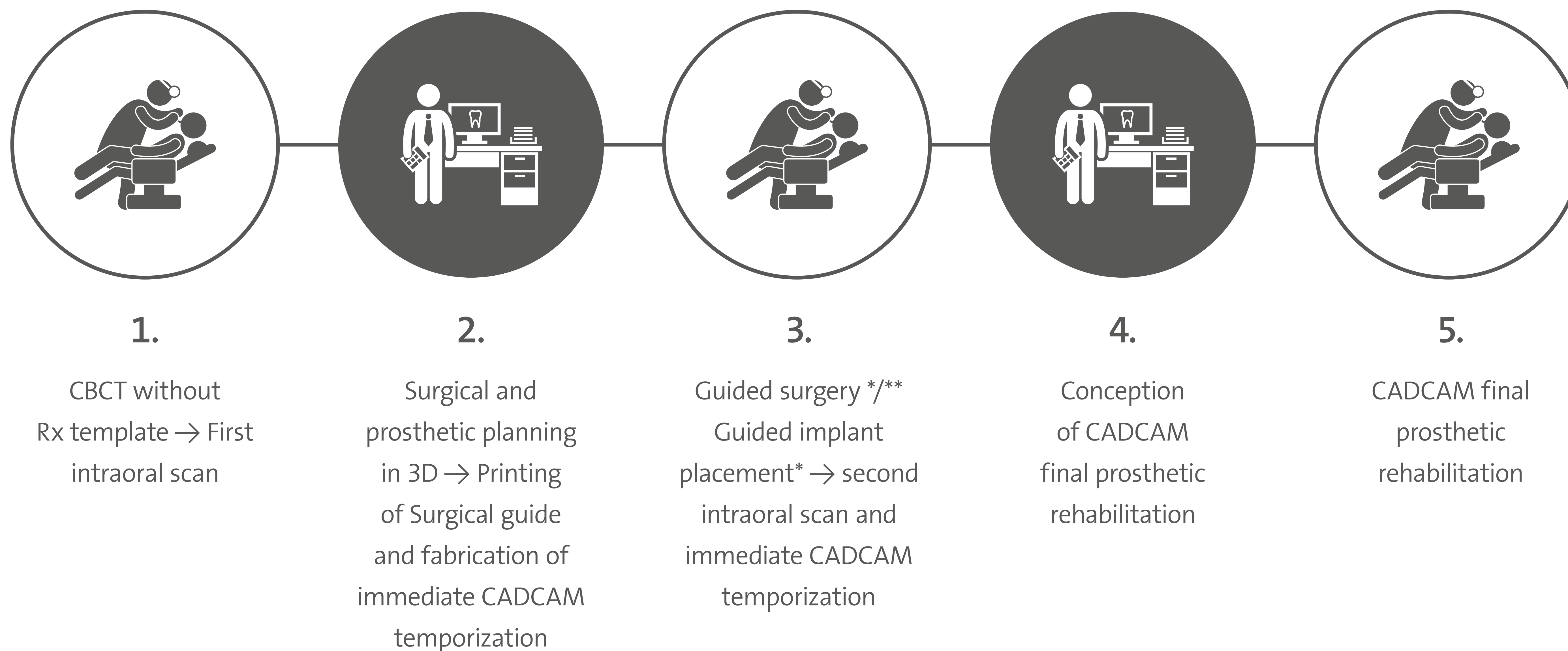
\* PURE Ceramic Implant (two-piece) \*\* PURE Ceramic Implant Monotype





What's in it for you?

# Workflow immediate customized esthetics



\* PURE Ceramic Implant (two-piece) \*\* PURE Ceramic Implant Monotype

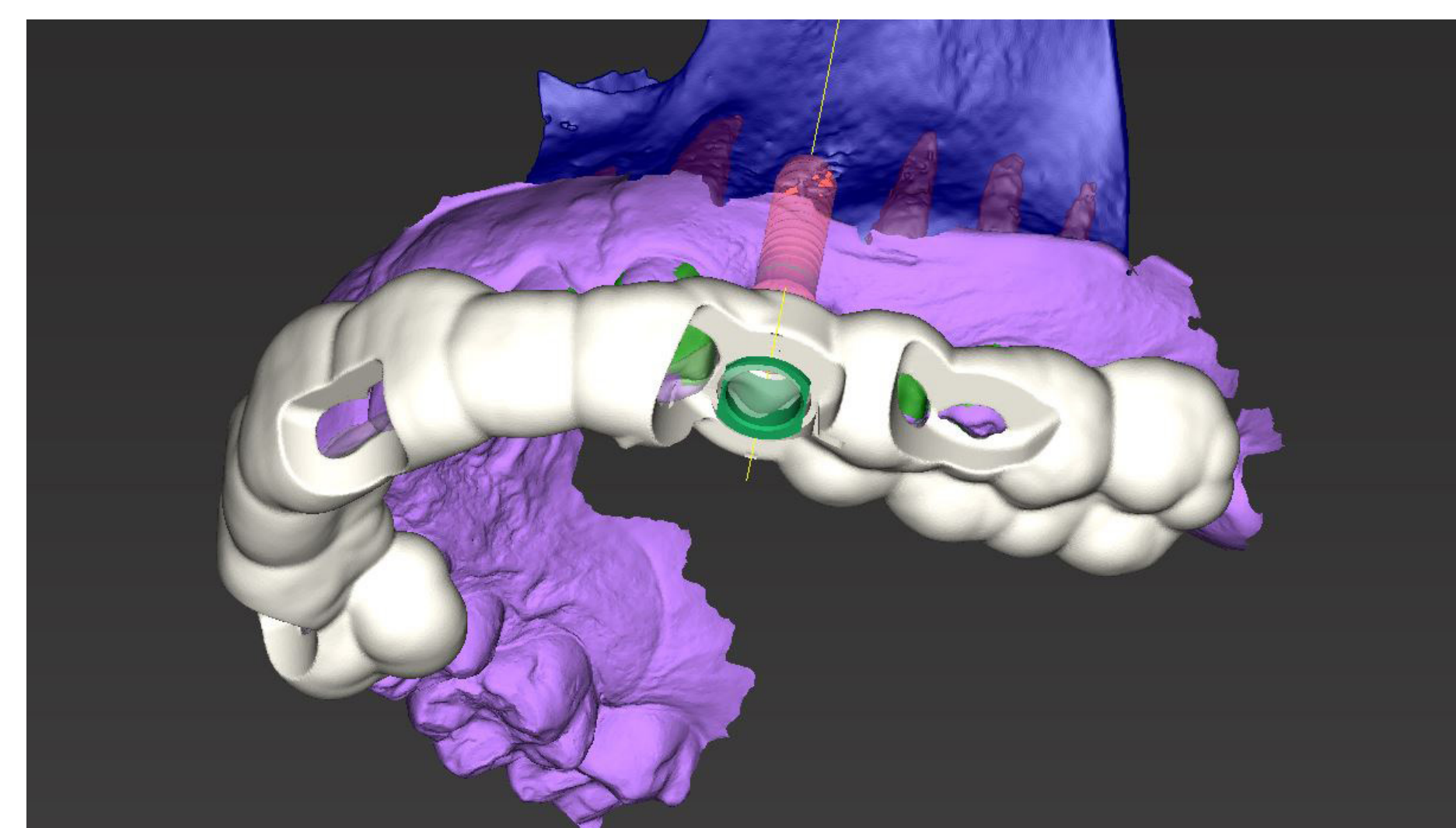
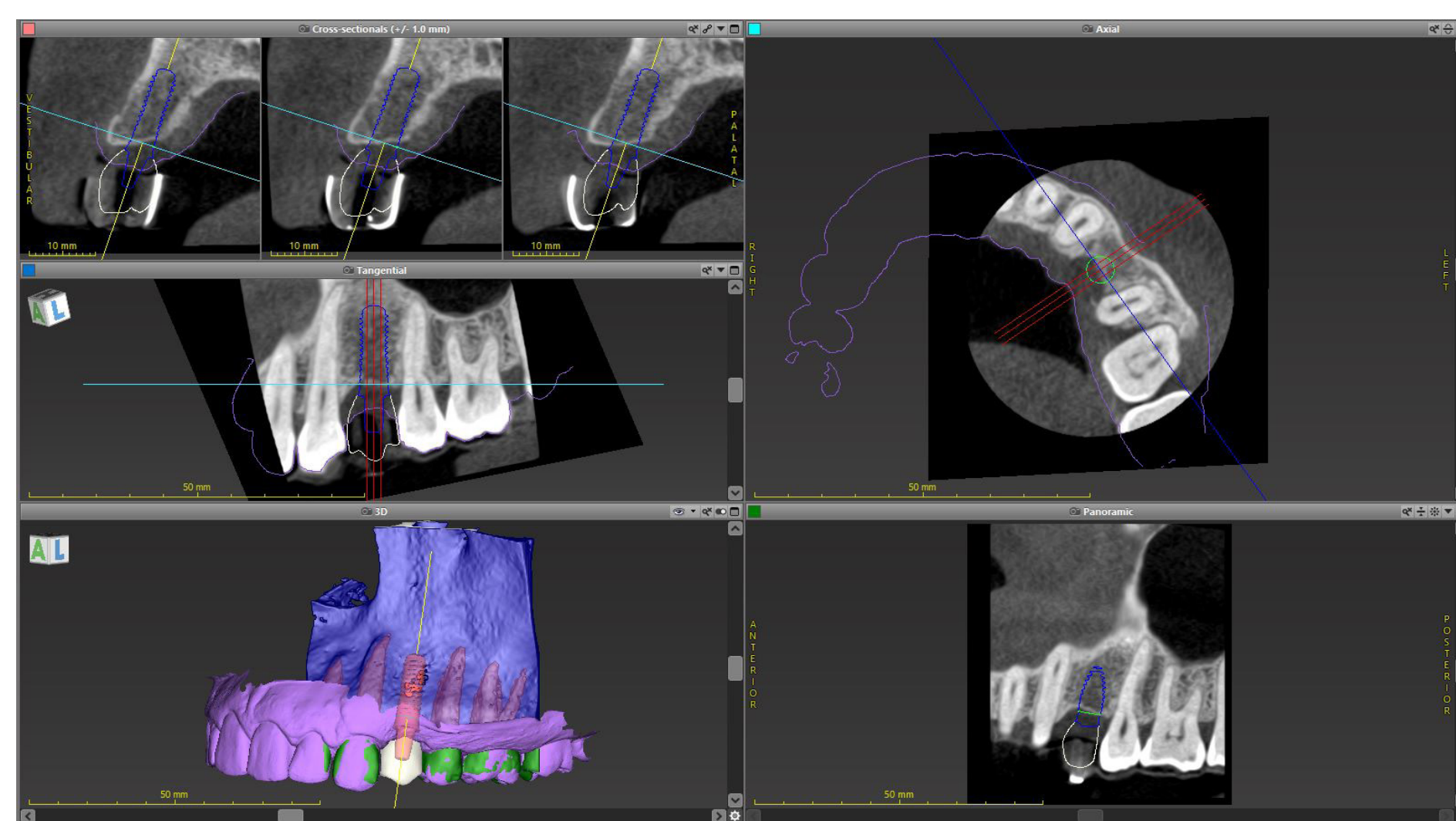
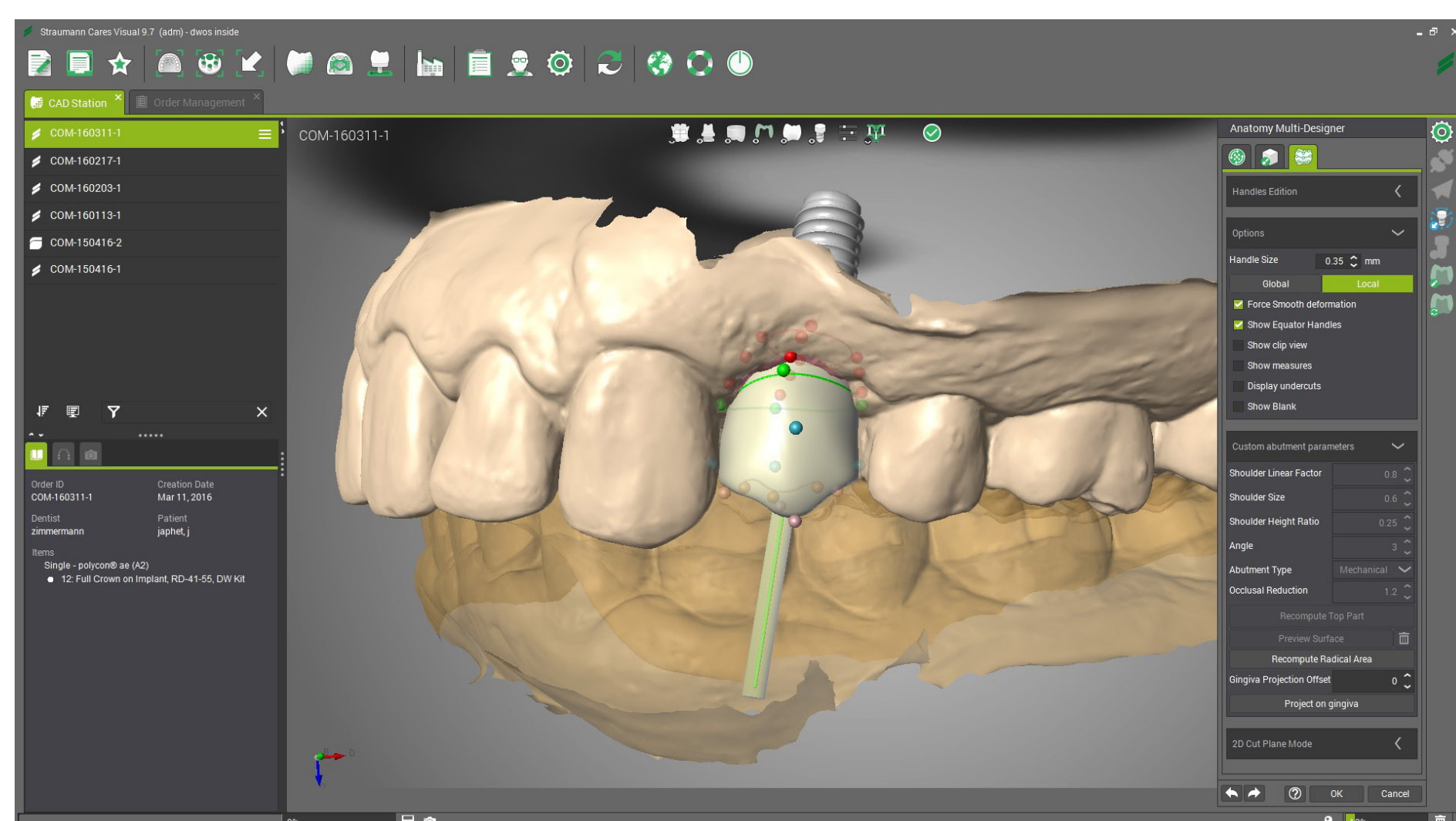




What's in it for you?

# High predictability through precise diagnostic, planning and surgery

- Achieve predictable results
- Detailed 3D diagnostics
- Reduce uncertainties
- Even in advanced surgical indications



What's in it for you?

## Confidence within a fully connected team

- Real-time collaboration with DWOS Synergy™
- Transfer your coDiagnostiX® implant planning to CARES® Visual
- Receive the restorative plan from the lab technician
- Digital case sharing by caseXchange™
- Case-sharing with other coDiagnostiX® users via caseXchange™



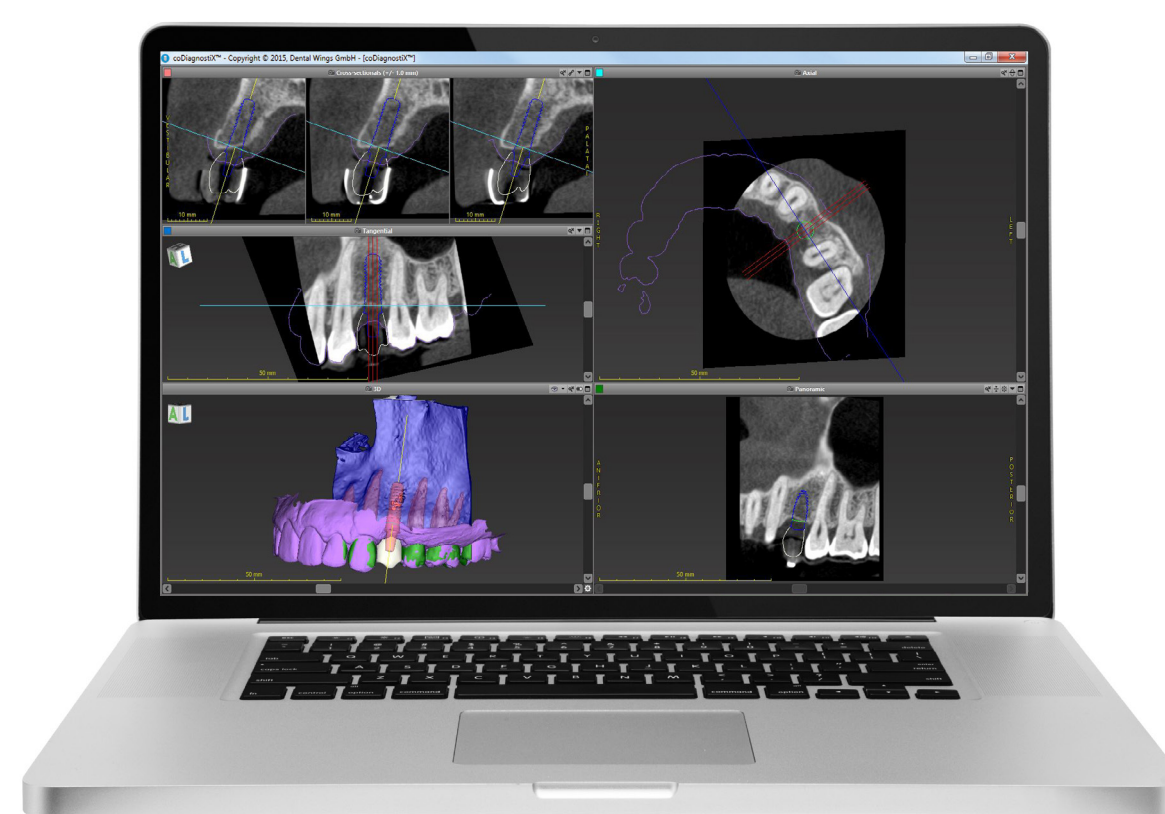
What's in it for you?

# Immediate customized esthetics

- Have your customized provisional at the time of implant placement
- Ensure a highly esthetic gingiva conditioning and favorable soft tissue formation
- Restore your patient's confidence



Straumann® CARES® Visual:  
Restorative planning  
software



coDiagnostiX®:  
surgical planning software



coDiagnostiX® for iPad:  
treatment plan visualization





What's in it for you?

## Innovation



Preferably ceramic implants



Preferably metallic implants

- Patients would prefer a ceramic implant over a titanium implant even when this means higher treatment costs and longer treatment time<sup>11</sup>
- New designed inner connection – Abutments especially developed for the Straumann® PURE Ceramic Implant

<sup>11</sup> Roehling S, Engelhardt-Woelfler H, Gahlert M. Full ceramic implants as an alternative to titanium? A demographic evaluation in Switzerland and Germany. Publication in preparation 2017.



# Clinical Cases



**Richard Zimmermann**

DDS

UT School of Dentistry San Antonio, Texas



**Stefanie Seitz**

DDS

UT School of Dentistry San Antonio, Texas



# Summary

- Offer your patients a natural and highly esthetic solution
- Benefit from favorable soft tissue attachment around zirconia implants
- Ensure reliable and correct implant placement
- Collaborate in a fully digital team
- Have the provisional at the time of implant placement
- Differentiate your practice with innovative solutions

