

# STRAUMANN® **TLC** IMPLANT SYSTEM

Confidence in all indications.



**iEXCEL\***

STRAUMANN®  
PERFORMANCE  
SYSTEM

*System overview*

# CONFIDENCE TO **PERFORM** IN ALL INDICATIONS

The Straumann® TLC is our new generation tissue level tapered implant designed with slim apex and the implant-abutment interface away from the bone. It respects the key biological principles of hard and soft tissue healing and significantly reduce the risk of inflammation and bone resorption. The winning combination of innovative design, SLActive® surface technology and Roxolid® high performance material allows for less invasive treatments and high primary and secondary stability even in compromised bone situations.

## PERFORMANCE THAT CARES



Straumann® SLActive® surface demonstrates 100 % implant survival rate, even in patients compromised by smoking, diabetes, or radiation therapy.<sup>1-3</sup>



Straumann® Roxolid® alloy is stronger and biologically superior to titanium enabling less invasive and bone preserving treatment options using smaller, stronger implants.<sup>4-7</sup>

86% of dentists that have placed TLC implants agree that it brings primary stability they need in healed site\*





Straumann® TLC is designed for you as the gateway to the world of Straumann® iEXCEL, our ultimate Dental Performance System. With Straumann® TLC and Straumann® iEXCEL, you're not just investing in versatility, simplicity, and efficiency – you're also investing to reach unparalleled levels of excellence in modern dentistry.



### **MORE TREATMENT OPTIONS**

Versatile portfolio with additional diameters and lengths.



### **SIMPLICITY AND EFFICIENCY**

Simple, but versatile portfolio featuring one prosthetic connection as well as shared instruments and prosthetics with Straumann® TLX.



### **PERI-IMPLANT HEALTH PRESERVATION**

Reduced risk of nesting bacteria and optimized cleansability with the connection at the soft-tissue level.

*“After using the TLC in various clinical indications, I can confidently say it meets the demands of contemporary implant dentistry. Most pertinently, it provides high primary stability and is suitable for all cases appropriate for Type 1 (immediate) protocols. I simply love it!”*

**Shakeel Shahdad, Periodontist and Prosthodontist, United Kingdom**

\*n=37, Jan 2024, Satisfaction survey with clinicians from Europe.

# SPARK YOUR EXCELLENCE

Straumann® TLC System highlights – innovative design to spark your excellence and perform in all indications.

## 1 PRECISE CORTICAL PREPARATION

Perfectly matching profile drills for accurate preparation of the crestal bone.

## 2 TAPERED DESIGN

Enables under-preparation of the bone and ensures high implant stability.

## 3 EXTENDED CUTTING FLUTES

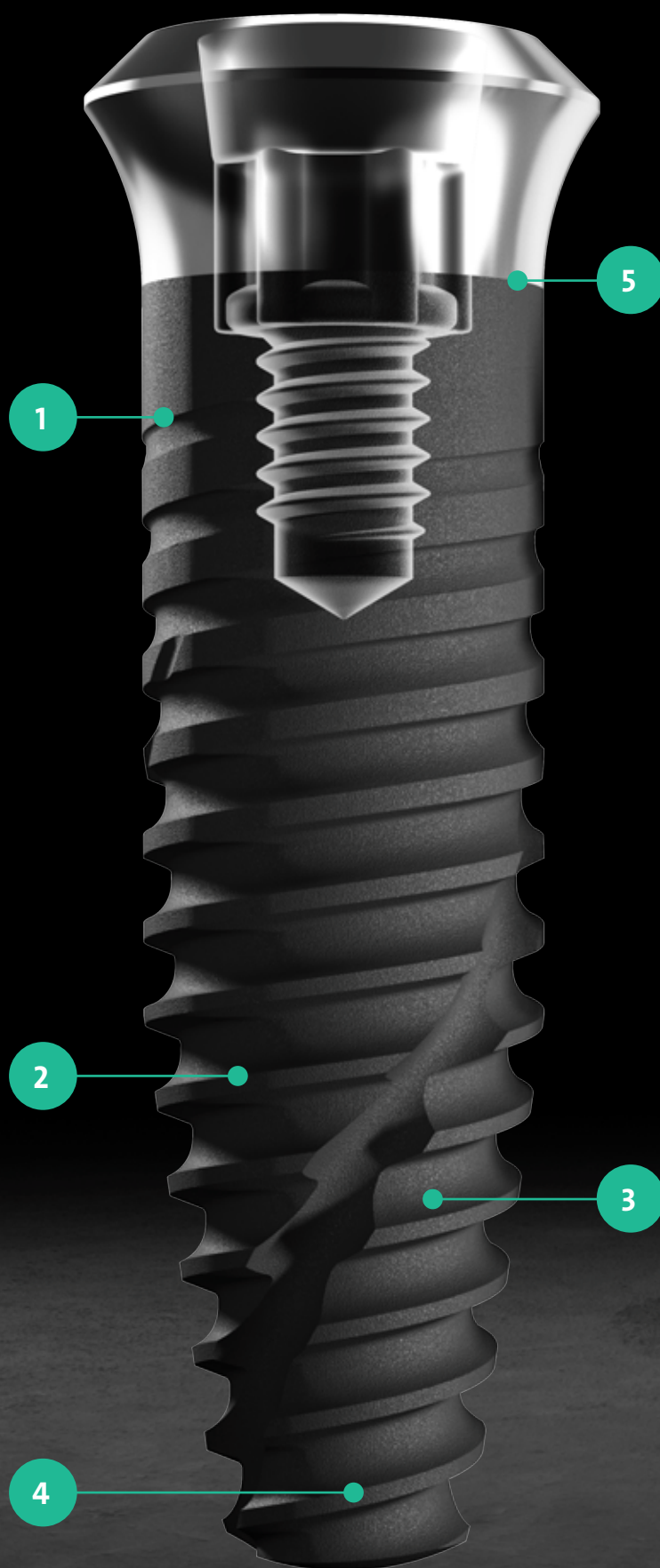
Self tapping properties remove the need for tapping.

## 4 SLIM APEX

For patient's limited anatomy, such as converging root tips, facial undercuts or narrow atrophied ridges.

## 5 MACHINED COLLAR NECK

Manages the healing of peri-implant tissue and preserves soft tissue that forms around the implant during healing phase.



# TORCFIT™ CONNECTION

Internal conical connection engineered for high strength and slim abutment designs.

*“After 5 years of using BLX, I can say that the TorcFit™ connection is awesome – crestal bone stability is outstanding.”*

Algirdas Puisys, Periodontologist, Lithuania



## STRENGTH OF TORX INDEX

- Allows transfer of high torques
- Six positions for flexible implant-abutment alignment

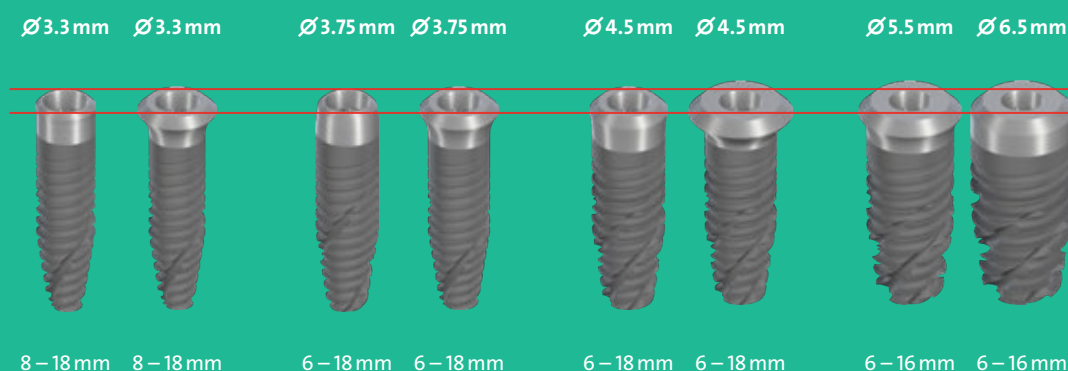
## PRECISE FIT OF 7° CONICAL CONNECTION

- Precise implant-abutment fit
- Abutment screw only engages in implant when the abutment is correctly seated
- Correctly seated abutments are secured with friction fit
- High mechanical stability and stress distribution

## ONE SIZE PROSTHETIC CONNECTION ACROSS ALL IMPLANTS

- One single driver for all implants
- Lower prosthetic inventory
- Simpler staff training

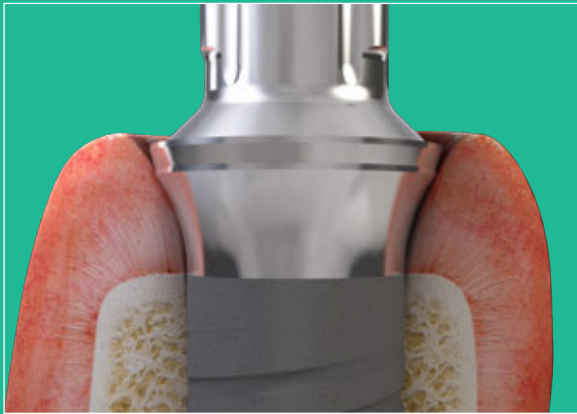
## VERSATILE PORTFOLIO FOR MORE TREATMENT OPTIONS



- Reduced invasiveness with Ø3.75 mm implant for all tooth positions
- Additional 5.5 and 6.5 mm implant diameters
- Short 6 mm implant lengths
- Available in two neck designs (flared and straight)

# EXCELLENCE THROUGH COMPLETE PROSTHETIC PORTFOLIO

ALL INDICATIONS AND DIGITAL WORKFLOWS.



## Ease of handling

- Simple abutment placement and visibility at the soft-tissue level
- Easy handling of direct-to-implant restorations



## Patient comfort

- Elevated collar with platform above gingiva means no push back seating prosthetics and no discomfort removing healing abutments





## **STRAUMANN® VARIOBASE®**

Our Variobase® portfolio provides efficient production without compromising restorative flexibility. Available with angled screw-channel options and in various heights for single-tooth to edentulous indications. The specially designed rotational locks offer an increased bonding surface for maximum reliability.



## **PRE-MILLED ABUTMENT BLANKS**

Pre-milled abutment blanks enable in-house manufacturing of one-piece custom abutments. With a pre-machined original Straumann® connection, precision and reliability are assured.



## **CUSTOMIZED PROSTHETICS**

Customized Prosthetics ensure ultimate restorative outcomes, with the abutment emergence profile and shape specifically designed for your patient. The screw-retained bar and bridge offer angle correction to solve the most demanding cases.



## **SCREW RETAINED ABUTMENTS (SRA) FOR BRIDGES AND FULL ARCH**

Simplicity of the direct to implant protocol with Screw Retained Bridges and Bars or using Straumann® Variobase® Bridge/Bar. Up to 40° compensation of divergence between two implants.



## **STRAUMANN® NOVALOC® RETENTIVE SYSTEM**

Unique combination of ADLC-coated abutments and PEEK matrix inserts ensure low friction and excellent durability. The system accommodates up to 60° implant divergence, and offers multiple abutment heights and six retention strengths.

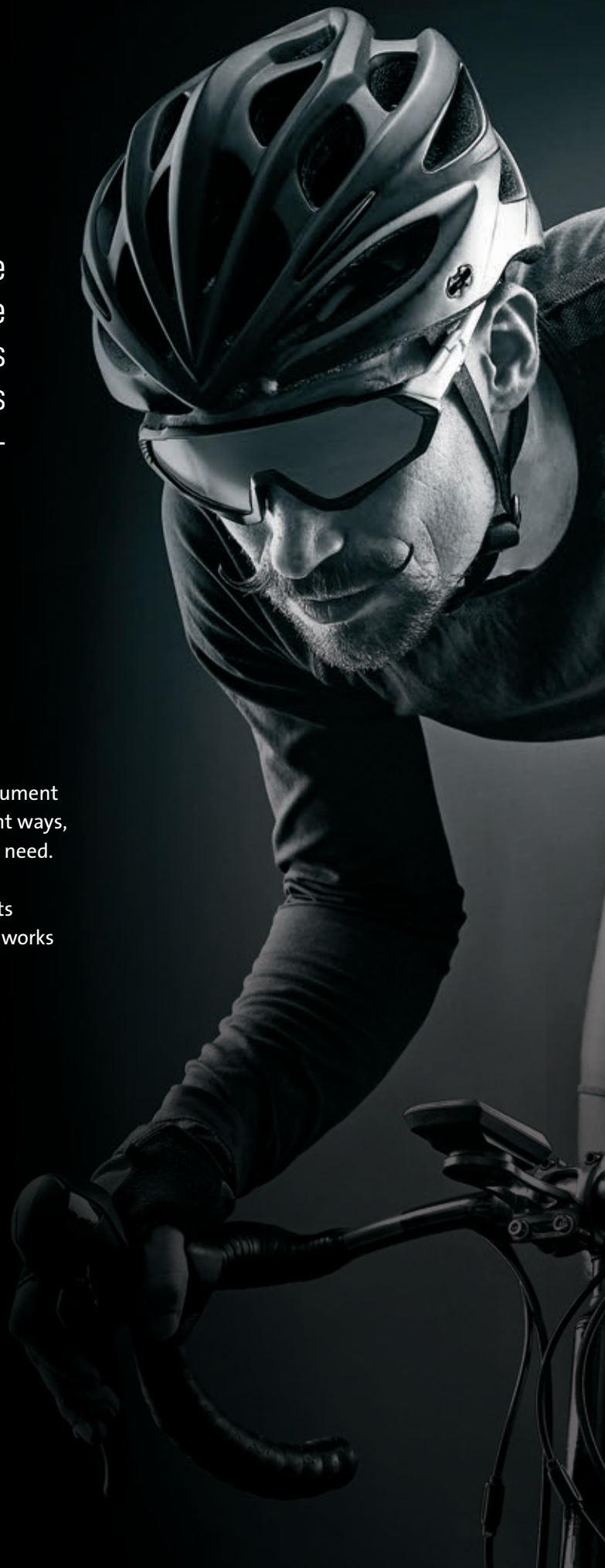
# CUSTOMIZE AS NEEDED

Our award-winning Modular Cassette is a customizable instrument cassette designed to blend into your clinic's daily workflow, allowing surgeons and assistants to work together efficiently.

## STRAUMANN® MODULAR CASSETTE

The Straumann® Modular Cassette is a compact instrument set which can be assembled and combined in different ways, allowing you to customize your kit with the tools you need.

- Module A: for universal and prosthetic instruments
- Module B: for workflow and drills – one insert that works with all iEXCEL implants
- Module C: add-on for guided surgery (handles) or a simple box for auxiliaries





# STRAUMANN® VELODRILL™

Low temperature drilling and shared instrumentation  
for freehand and guided surgery.

- Pilot-to-final guided surgery protocol shortens chair time
- Minimizes heat generation and avoids overheating surrounding tissues
- Precise depth control with single use drill stops



# EXCEL WITH THE STRAUMANN® DIGITAL WORKFLOW FROM SINGLE UNIT TO FULL-ARCH

The Straumann® digital workflow empowers your growth with a comprehensive range of straightforward and open solutions, streamlining and upgrading your workflow for the final benefit of your patients. You can confidently rely on a single provider for all your implant procedures.

## SCANNING

Straumann SIRIOS™



## PATIENT ENGAGEMENT

Smilecloud



 smilecloud

## TREATMENT PLANNING

coDiagnostiX®



Smile in a Box®

 smilecloud

INTERDISCIPLINARY COLLABORATION

### STRAUMANN SIRIOS™\*

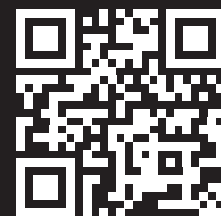
Go beyond image capturing and open the door to digital dentistry with Straumann SIRIOS™; with ultimate accuracy and a revolutionary scanning performance, it is specifically designed to unlock streamlined digital workflows.

### SMILECLOUD

Captivate your patients through natural biometric smile design and effectively engage your network with the potential of interdisciplinary workflows. Start today with Smilecloud!

### CODIAGNOSTIX®

Unlock the potential of treatment planning with coDiagnostiX® including AI-powered data preparation, visualization and automated tooth extraction designed to efficiently access immediate treatments.



Discover the Straumann® solutions for digital workflow.



## FLEXIBILITY

From single unit to edentulous cases, with our solutions you have the right tools to streamline your workflow.



## PREDICTABILITY

Boost your confidence with digital treatment planning and guided procedures designed to achieve predictable results.



## EFFICIENCY

Implement streamlined workflows that are designed to promote speed and quality in your treatment.



## EXCELLENCE POWERED BY AI

Our solutions are infused with AI to empower you to achieve your goals with efficiency and speed.

### SURGERY

### SECONDARY SCANNING

### CUSTOMIZED PROSTHETIC DESIGN & MANUFACTURE

Straumann® iEXCEL Performance System



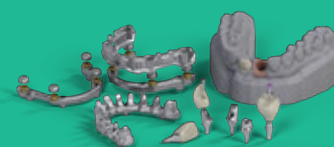
Straumann SIRIOS™



RevEx™



Straumann® UNIQ



### SMILE IN A BOX®

Outsource planning, design, and/or manufacturing and access immediate treatment protocols without requiring additional hardware and software investments.

### STRAUMANN® REVEX™ SCANBODY

Capture full-arch implant positions to enable a full-arch workflow from temporary to final restoration. RevEX™ provides greater patient comfort, with fewer visits.<sup>9-11</sup>

### STRAUMANN® UNIQ\*

Use a premium service to outsource the planning, design, and manufacturing of your custom implant prosthetics on demand, based on your specific needs.

\* The availability varies by region; contact local team for details.



# EMPOWERING YOU TO **EXCEL**

Straumann® iEXCEL is our ultimate Dental Performance System. Versatility of four implant designs (BLC, TLC, BLX, TLX) in a single system. Simplicity of one prosthetic connection. Integrated digital workflows and services that help save your time.

## TRUE CLINICAL VERSATILITY

With one instrument set that works with all four implant designs you can choose your implant option even during surgery.

### BLX AND TLX: EXCEL IN IMMEDIACY

Featuring Dynamic Bone Management, our unique implant design makes immediate protocols achievable and predictable – even in challenging extraction sites, defective sites, or soft bone.

### BLC AND TLC: CONFIDENCE TO PERFORM IN ALL INDICATIONS

Our new generation of tapered implants with slim apices are designed for less invasive treatments, efficient insertion and high primary stability.



**iEXCEL\***

STRAUMANN®  
PERFORMANCE  
SYSTEM

## SIMPLICITY YOU'LL LOVE

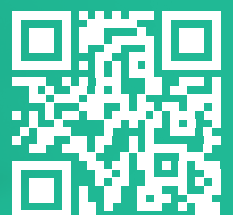
One TorcFit™ connection for all four implant designs sharing the same connection diameter for all prosthetics. Profit from restorative simplicity with a complete range of Straumann® original stock and customized prosthetics.

## CONNECTED DENTISTRY TO EMPOWER EXCELLENCE

Our system offers integrated digital workflows and services designed to deliver predictable, efficient and high-quality outcomes, from single to full-arch indications.



Discover  
Straumann® iEXCEL





# STRAUMANN® REGENERATIVE SOLUTIONS

# MASTER ANY CHALLENGE

A black and white photograph showing a hand in the upper right, releasing a cloud of white powder or smoke that drifts upwards and to the left. The background is dark and textured. In the bottom left corner, a portion of a white, futuristic-looking device is visible, featuring a circular disc and some mechanical components.







## TOOTH PRESERVATION

Natural teeth are unique and, as dental professionals, we strive to preserve them as long as possible. Untreated inflammation can advance to periodontitis and potentially result in tooth loss.

Straumann® Emdogain® is a central part of our solution to support the effective regeneration of the periodontium and accelerate the healing to help maintain natural teeth.



## IMPLANT SITE MANAGEMENT

The right amount of hard and soft tissue is key for successful dental implant placement. Our solution includes a comprehensive biomaterials portfolio to support tissue regeneration for optimal implant placement conditions.



## IMPLANT PRESERVATION

Healthy peri-implant tissues are vital to preserve the placed implant. Untreated inflammation can advance to peri-implantitis and potentially result in implant loss. Straumann® GalvoSurge® is a central part of our solution to support the effective regeneration of hard and soft tissue to help maintain dental implants.

# GALVOSURGE® DENTAL IMPLANT CLEANING SYSTEM

- **Speed:** effectively removes biofilm from the implant surface in just 2 minutes
- **Reliability:** provides optimal conditions for bone regeneration
- **Safety:** offers a minimally invasive treatment process to successfully treat peri-implantitis without implant removal



# DRIVEN TO EXCEL

FOR YOU AND YOUR PATIENTS

A comprehensive array of products, solutions, and services made Straumann® a leader in the global market for implant, restorative, and regenerative dentistry. With a focus on digital, seamless workflows, Straumann® provides an end-to-end, customer-centric treatment experience. An integrated ecosystem enhances efficiency, convenience, and collaboration, supporting dental professionals with secure data storage and sharing, and leveraging evidence-based and data-driven processes.

Available in more than 100 countries, the Straumann® brand is associated with Swiss quality, precision, and innovation, fostering confidence among dental professionals, supported by the world's largest global scientific network and a partnership with the International Team for Implantology (ITI).





Straumann® is the flagship brand of the world's largest implant manufacturer group – the Straumann Group. Renowned as one of the most iconic brands in dentistry, we have a long-standing legacy of pioneering significant advancements in the field. We are at the forefront of expanding the scope of dental care by relentlessly and consistently providing excellence and transformational innovation to a global community of forward-thinking dental professionals.





# CLINICAL CASES

## Guided surgery for immediate implant placement in the anterior zone after the fracture of a conventional bridge

Three apically tapered Straumann® TLC® implants (Ø4.5 mm × 12 mm) SLActive® Roxolid® were used. Initially, a temporary denture was utilized. Subsequently, a provisional PMMA milled bridge was used for soft tissue modeling. Finally, a monolithic zirconia screw-retained bridge was fabricated on Variobase abutments.



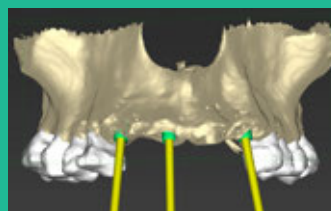
Shakeel Shahdad



Initial Situation



Pre Operative X-ray



Pre operative CBCT with implant plan



Fully guided flapless implant placement surgery after teeth extraction



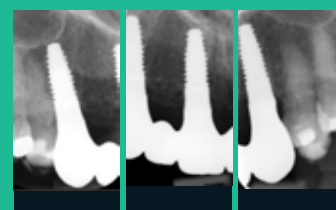
Final implant position with healing abutment



Soft tissues at the time of delivery of definitive screw-retained prosthesis



Final restoration 6 m review



Follow up 6 m peri-apical radiograph

## Lower molar tooth replacement in healed site

Utilizing digital planning for the replacement of a lower molar tooth in a healed site to establish a prosthetically-driven implant position. Conducting free-hand surgery for the placement of an apically tapered Straumann® TLC implant, Ø4.5mm × 10 mm SLActive®, Roxolid®. Following a healing period of 14 weeks, the digitally fabricated screw-retained crown is delivered.



Dr. Alessandro Perucchi



Dr. Cristian Scognamiglio



Intraoral situation of right lower quadrant



Digital planning to establish a prosthetically-driven implant position



Full-thickness flap was raised to allow access to the bone and evaluate the local anatomy. Alignment pin placed to check the 3D position of the osteotomy and preparation depth.



Implant in final position



Radiographical control after insertion of dental implants.



Scanbody for digital impression



Definitive screw-retained crown in position after 14 weeks



Radiograph of final crown on Variobase® abutment screw-retained in final position

## Lower full arch surgery involved removal of old implants

Followed by immediate placement of 4 Straumann® TLC implants, Ø 3.75 mm × 10 mm (44, 42, 32), Ø 3.75 mm × 12 mm (34) SLActive®, Roxolid® and immediate temporary restoration.



Louwrens Swart



Pre Operative X-ray, the diagnosis revealed that implants had to be explanted



Initial intraoral situation of the lower jaw showing 20 years old implants



Implants removal



Osteotomy preparation



Straumann® TLC Implant placement, 3.75 mm × 10 mm (44, 42, 32), 3.75 mm × 12 mm (34), SLActive®, Roxolid®



Healing abutment



Radiographic control



Loading within 48 hours, provisional restoration

# STRAUMANN® TLC – CONFIDENCE IN ALL INDICATIONS.



Discover  
Straumann® iEXCEL

The new generation tissue level implant:

- Winning combination of innovative design, Roxolid® material and SLActive® surface
- TLC is your gateway to the world of Straumann® iEXCEL, our ultimate Dental Performance System

## REFERENCES

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