



More than  
integrated workflows.  
Immediate digital  
tooth replacement.



# More than Guided Surgery.

## A fully integrated workflow.

Straumann's integrated workflow offers innovative benefits for implant planning and prosthetic rehabilitation – via an interdisciplinary team approach providing patients with an immediate tooth replacement solution.

Implant therapy has become an integral part of clinical dentistry, with ever increasing numbers of patients seeking treatment. Today's patients want functional and esthetic results, with few appointments. **What is your plan to provide patients a fast time-to-teeth with beautiful esthetics?**

Seamless collaboration within the treatment network is crucial for providing quality treatment and the best functional restoration for your patients. **How do you collaborate and exchange planning information to maximize treatment outcomes?**

Access to more treatment options with clear communication to your patients is essential for case acceptance. **How do you best educate your patients about your treatment options?**



IMMEDIATE CUSTOMIZED RESTORATIONS VIA PROSTHETICALLY DRIVEN IMPLANT PLANNING

P 2



MAXIMIZE TREATMENT OUTCOMES THROUGH FULLY DIGITAL COLLABORATIVE PLANNING

P 6



PRACTICE DIFFERENTIATION USING IMPLANT PLANNING SOFTWARE

P 8



EFFICIENCY DURING SURGICAL PROCEDURES WITH STRAUMANN® GUIDED SURGERY INSTRUMENTS

P 10

# More than implant planning.

## Immediate customized restorations.

Today's, patient expects both short treatment times and esthetic results. Straumann's integrated workflow allows clinicians and technicians to make the shift from surgically driven to **prosthodontically driven implant planning**, enabling you to provide immediate customized restorations that meet your patients' expectation.

### IMMEDIATE PROTOCOLS PROVIDE IMPROVED QUALITY OF LIFE TO YOUR PATIENTS



**FUNCTION** with immediate fixed restorations.



**ESTHETICS** thanks to CAD/CAM-based, patient-specific restorations.

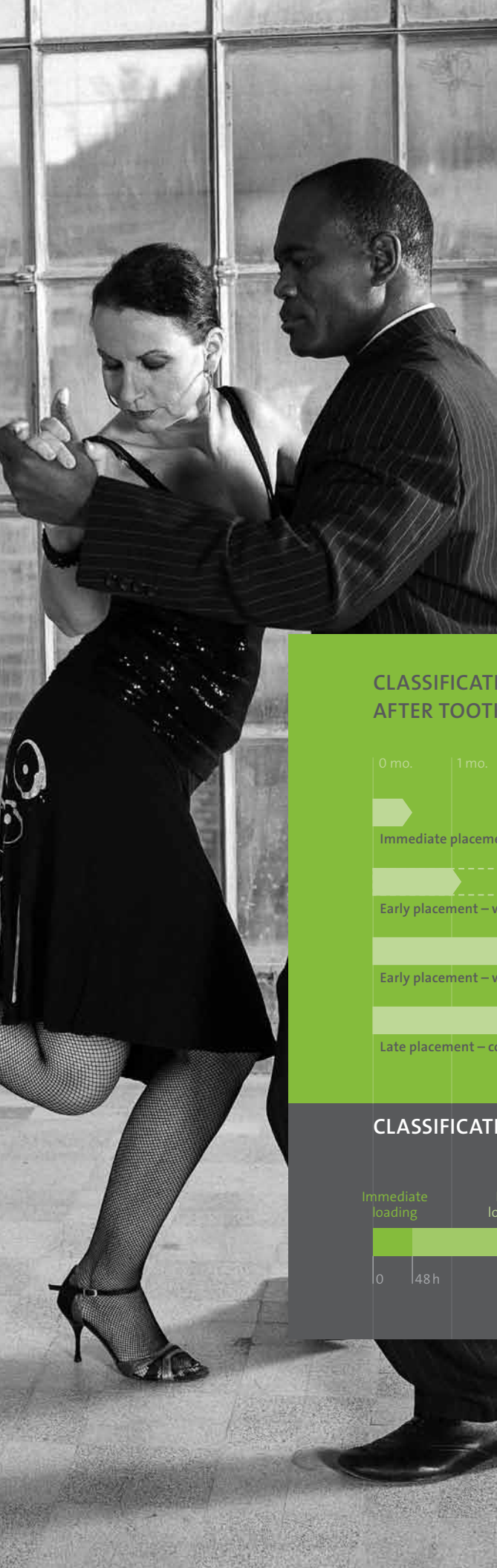


**COMFORT** through reduction of postoperative discomfort caused by removable interim prostheses.

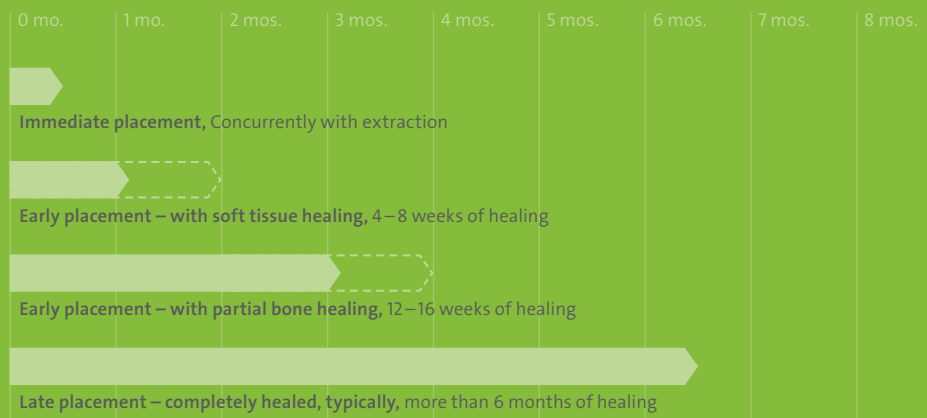
### IMMEDIATE PLACEMENT – IMMEDIATE LOAD

Scientific literature uses various descriptive terms for the time points of implant placement after tooth extraction and loading protocols. Currently, the most commonly used definition is based on the 3<sup>rd</sup> ITI Consensus Conference (2003).<sup>1,2,3</sup>

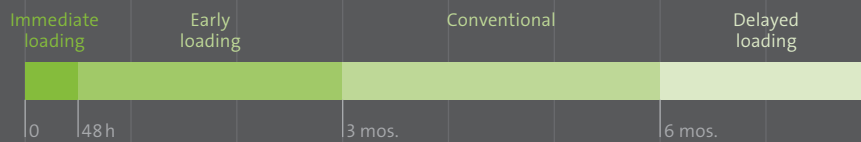
Implant placement timing after tooth extraction and loading protocols are defined in the latest ITI consensus statements and clinical recommendations as predictable protocols depending on variables, which should be approached with caution and by experienced clinicians only.<sup>3,4</sup>



### CLASSIFICATION FOR THE TIMING OF IMPLANT **PLACEMENT** AFTER TOOTH EXTRACTION<sup>3</sup>



### CLASSIFICATION FOR **LOADING** PROTOCOLS<sup>1,2,3</sup>



**IMMEDIATE CUSTOMIZED ESTHETICS:  
CODIAGNOSTIX® MEETS STRAUMANN® CARES® X-STREAM™**

Integration of coDiagnostiX® with Straumann® CARES® Visual and the Straumann® CARES® X-Stream™ workflow\* offers access to new restorative options in a fully digital and model-free workflow.

The Straumann® CARES® X-Stream™ restorative solution is delivered before the surgery and provides the ideal conditions for immediate customized esthetics.



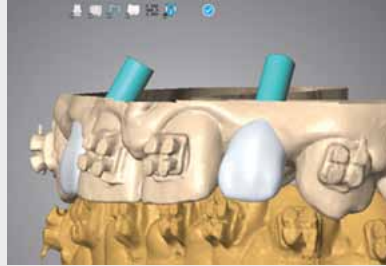
\*CARES® X-Stream™ workflow allows laboratories to design and order the abutment and restorative component in one project in CARES visual software.



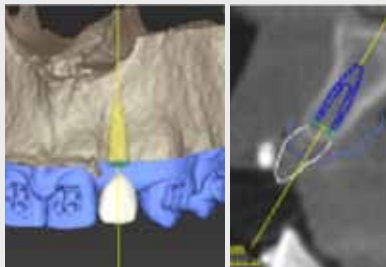
**CLINICAL CASE EXAMPLE**



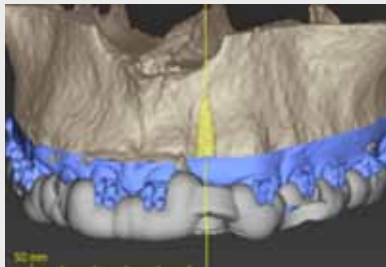
17 year old female in good overall health with a congenitally missing tooth #10. Orthodontist had taken serial cephs over 6 months and noted that skeletal growth was complete.



The design tools in the CARES software were used to create the ideal tooth using The Golden Ratio. This opened a diastema on the lateral of the implant, giving the team the confidence to place the implant and allow the orthodontist to finish treatment during healing.



Prosthetically driven implant plan in coDiagnostiX based on prosthetic proposal and the bony anatomy (inset)



Digital Drill Guide Designed to the final surgical protocol and to accommodate ortho brackets



Treatment Planning from coDiagnostiX™ Software is imported into CARES Visual and used to convert the prosthetic design to an immediate provisional



Printed digital drill guide with Surgical Sleeve Provisional is designed via the CARES X-Stream solution. (PMMA polycon ae luted to a Straumann Variobase Abutment)



Printed Surgical Guide with implant in place through the guide



Digital provisional placed at the time of surgery. Image taken at 3 weeks post-surgery



The Plan and the Outcome



Final prosthesis delivered

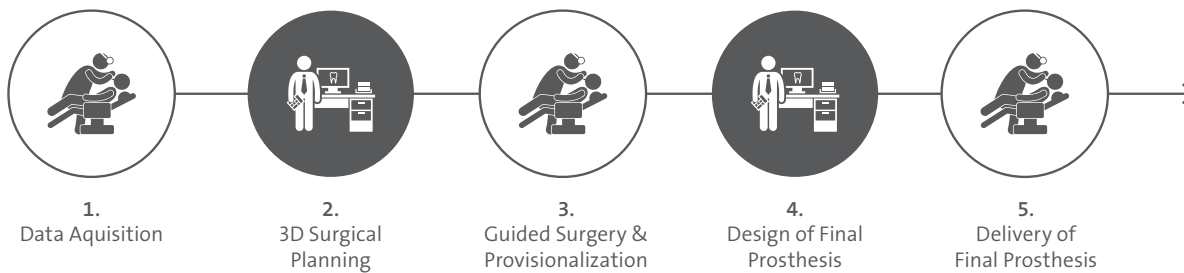


# More than a digital workflow.

## Maximize treatment outcomes.

The critical link remains the relationship with the dental practice and dental lab. Straumann's integrated workflow enhances the interdisciplinary team approach to maximize treatment outcomes.

### WORKFLOW



### REAL-TIME COLLABORATION WITH DWOS SYNERGY™

The workflow between coDiagnostiX® and Straumann® CARES® Visual is completely seamless with DWOS Synergy™. Transfer your coDiagnostiX® implant plan to CARES® Visual and receive the restorative plan from the lab technician. Both applications provide complete data visualization in order to achieve real-time surgical and restorative case planning.

**Digital case sharing by CaseXchange™** – coDiagnostiX®, caseXchange™, an interactive case-sharing platform, ensures that expectations of all participants, including the patient, are met.



Straumann® CARES® Visual:  
Restorative planning software



coDiagnostiX®:  
surgical planning software





## PREDICTABILITY THROUGH PRECISE DIAGNOSTICS, PLANNING AND SURGERY

**Achieve predictable results** – Detailed 3D diagnostics provide a complete 360° view of the patients anatomy, reducing uncertainties associated with conventional planning and 2D radiographs.

**Digital Transfer of Surgical Protocol** – Seamless communication between coDiagnostiX and iChiropro transfers the surgical protocol to the drilling unit creating an efficient workflow for your surgical team.



coDiagnostiX® for iPad®:  
treatment plan visualization



iChiropro Drilling Unit

# More than implant planning software. A practice differentiator.

Transparent and effective communication about available treatment options is crucial to increase patient acceptance. Enhance your patient's trust and confidence in your treatment approach, and, in the process, differentiate your dental practice.

## INCREASE TREATMENT ACCEPTANCE

**Patient communication** – Sophisticated visualization features helps to explain the advantages of the different options in a patient-friendly way.

**Predictable pricing options** – Pre-planning the restoration from root to tooth including custom prosthetics and other necessary procedures makes it possible to accurately present treatment costs to the patient.

**Immediate treatment protocols** – Whether in fresh extraction sockets or in immediate loading protocols, guided surgery helps to achieve predictable implant positioning.

**Flapless surgery** – 3D Treatment Planning provides precise visualization of the anatomy. Together with precise drilling templates, reliable, flapless surgery is at your disposal.

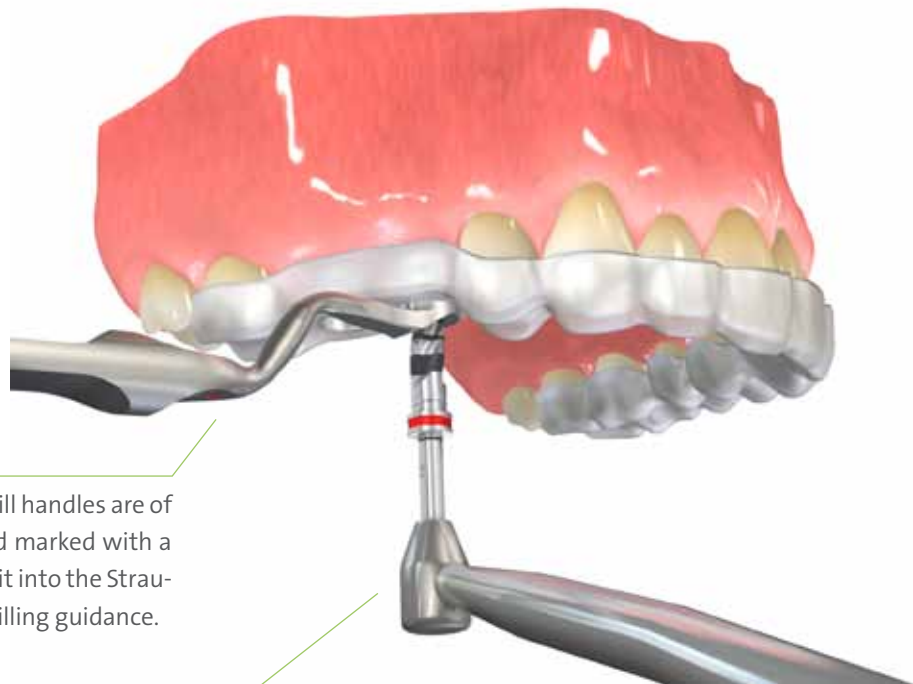




# More than efficiency.

## Straumann® Guided Surgery.

Straumann® Guided Surgery is used for a fully guided implant bed preparation in combination with a surgical template. The Straumann surgical protocol provided by the planning software increases efficiency and helps to save chair time during the surgical procedure.



**Straumann® Drill Handles** – The drill handles are of ergonomic design, color-coded and marked with a symbol. The drill handle cylinders fit into the Straumann® Sleeve to ensure precise drilling guidance.

**Straumann® Guided Drills** – The guided drills are designed with a collar for a physical depth control.



**Orientation for bone level implants:**  
thanks to the implant rotational markers on the surgical template, the marking on the bone level guided transfer piece allows you to visualize the implant connection position. This enables more treatment options (e.g. designing and producing CARES® restorations prior to the surgery).

**Guided transfer piece:**  
the guided transfer piece fits the surgical sleeve and ensures a fully guided implant insertion by providing physical depth control with the stop key.



# Glossary

## CLASSIFICATION AND DESCRIPTIVE TERMS FOR TIMING OF IMPLANT PLACEMENT AFTER TOOTH EXTRACTION<sup>3</sup>

Classification	Descriptive terminology	Desired clinical outcomes
Type 1	Immediate placement	Placement of an implant into a tooth socket, concurrently with extraction.
Type 2	Early placement – with soft tissue healing (typically 4 to 8 weeks of healing)	A post-extraction site with healed soft tissues but without significant bone healing.
Type 3	Early placement – with partial bone healing (typically 12 to 16 weeks of healing)	A post-extraction site with healed soft tissues and with significant bone healing.
Type 4	Late placement (more than 6 months of healing)	A fully healed socket.

## CLASSIFICATION AND DESCRIPTIVE TERMS FOR LOADING PROTOCOLS<sup>2</sup>

### Immediate loading

A restoration placed in occlusion with the opposing dentition within 48 hours of implant placement.

### Early loading

A restoration in contact with the opposing dentition and placed at least 48 hours after implant placement but not later than 3 months afterward.

### Conventional loading

The prosthesis is attached in a second procedure after a healing period of 3 to 6 months.

### Delayed loading

The prosthesis is attached in a second procedure that takes place sometime later than the conventional healing period, greater than 6 months.

### Immediate restoration

A restoration inserted within 48 hours after implant placement but not in occlusion.

## REFERENCES

- 1 Hämmerle CH, Chen ST, Wilson TG Jr. Consensus statements and recommended clinical procedures regarding the placement of implants in extraction sockets. *Int J Oral Maxillofac Implants* 2004; 19 (suppl): 26–28.
- 2 David L. Cochran, Dean Morton, Hans-Peter Weber. Consensus Statements and Recommended Clinical Procedures Regarding Loading Protocols for Endosseous Dental Implants. *Int J Oral Maxillofac Implants*. 2004; 19 Suppl: 109-13.
- 3 Chen S, Buser D. Implants in post-extraction sites: A literature update. In: Buser D, Belser U, Wismeijer D (eds). *ITI Treatment Guide*. Vol 3: Implants in extraction sockets. Berlin: Quintessence, 2008.
- 4 Gallucci GO, Benic GI, Eckert SE, Papaspyridakos P, Schimmel M, Schrott A, Weber HP. Consensus statements and clinical recommendations for implant loading protocols. *Int J Oral Maxillofac Implants*. 2014; 29 Suppl: 287-90





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