More than integrated workflows.
Immediate digital tooth replacement.
Learn more about how Straumann’s integrated workflow offers innovative benefits for implant planning and prosthetic rehabilitation—with an interdisciplinary team approach that provides patients with an immediate tooth replacement solution.

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

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

Access to more treatment options with a clear communication to patients is essential for their acceptance. How do you best communicate in order to convince your patients that you are the provider of choice?

**IMMEDIATE CUSTOMIZED RESTORATIONS THANKS TO PROSTHETICALLY DRIVEN IMPLANT PLANNING**  P 2

**MAXIMIZE TREATMENT OUTCOMES THROUGH COLLABORATIVE PLANNING – FULLY DIGITALLY**  P 6

**PRACTICE DIFFERENTIATION USING IMPLANT PLANNING SOFTWARE**  P 8

**EFFICIENCY DURING SURGICAL PROCEDURES THANKS TO STRAUMANN® GUIDED SURGERY INSTRUMENTS**  P 10
More than prosthetically driven implant planning.
Immediate customized restorations.

Nowadays, patients expect both short treatment times and beautiful esthetic results. Straumann’s integrated workflow helps clinicians and technicians make the shift from surgically driven to prosthetically driven implant planning, enabling you to provide immediate customized restorations that fulfill your patients’ expectation for a beautiful smile at the time of surgery.

PROVIDE IMPROVED QUALITY OF LIFE TO YOUR PATIENTS WITH IMMEDIATE PROTOCOLS

The patient-centered benefits of immediate protocols have a positive effect on the patients’ quality of life:

- **FUNCTION** with immediate fixed restorations.
- **ESTHETICS** thanks to CADCAM-based, patient-specific restorations.
- **COMFORT** through reduction of the postoperative discomfort caused by removable interim prostheses.

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 3rd ITI Consensus Conference (2003)¹,²,³. 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 only²,⁴.
CLASSIFICATION FOR THE TIMING OF IMPLANT PLACEMENT AFTER TOOTH EXTRACTION³

<table>
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<tr>
<th>0 mo.</th>
<th>1 mo.</th>
<th>2 mos.</th>
<th>3 mos.</th>
<th>4 mos.</th>
<th>5 mos.</th>
<th>6 mos.</th>
<th>7 mos.</th>
<th>8 mos.</th>
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<td>Immediate placement, Concurrently with extraction</td>
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<td>Early placement – with soft tissue healing, 4–8 weeks of healing</td>
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<td>Early placement – with partial bone healing, 12–16 weeks of healing</td>
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<td>Late placement, More than 6 months of healing</td>
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CLASSIFICATION FOR LOADING PROTOCOLS¹,²,³

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<tr>
<th>Immediate loading</th>
<th>Early loading</th>
<th>Conventional/delayed loading</th>
<th>Delayed loading</th>
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<tr>
<td>0 48 h</td>
<td>3 mos.</td>
<td>6 mos.</td>
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¹,²,³
IMMEDIATE CUSTOMIZED ESTHETICS:
CODIAGNOSTIX™ MEETS STRAUMANN® CARES® X-STREAM™

With the full integration of coDiagnostiX™ in Straumann® CARES® Visual with Straumann® CARES® X-Stream™ products, the Straumann integrated workflow offers efficient access to new restorative options in a fully digital and model-free workflow.

- All components for guided surgical procedures and guided implant placement—with a customized healing abutment or immediate customized temporization— are delivered, so that the patient can leave immediately after surgery with a smile.
- The Straumann® CARES® X-Stream™ restorative solution is delivered before the surgery and provides the ideal conditions for immediate customized esthetics.

Variobase® for crown

Variobase® for bridge/bar

CARES® Abutment, Titanium or Zirconium

+CARES® crown

+CARES® bridge

+CARES® crown

* Application and material availability might differ from country to country. Please contact your local subsidiary/distributor for more details about the availability of your abutment/material combination.
WORKFLOW

1. CBCT without Rx template → First intraoral scan
2. Surgical and prosthetic planning in 3D → Printing of Surgical guide and fabrication of immediate CADCAM temporization
3. Guided surgery → second intraoral scan and immediate CADCAM temporization
4. Conception of CADCAM final prosthetic rehabilitation
5. CADCAM final prosthetic rehabilitation

CLINICAL CASE EXAMPLE

Prosthetic project design in Straumann® CARES® Visual.

Prosthetically driven implant planning in coDiagnostiX™ integration with the digital wax-up from Straumann CARES® Visual.

Design of the digital drill guide in coDiagnostiX™.

Printed digital drill guide, with the Straumann® CARES® X-Stream™ solution (Straumann® Variobase® abutment and temporary crown).

Guided surgical procedure and guided implant insertion.

Treatment planning transferred to the patient’s mouth in a single session. Initial CARES® X-Stream™ Variobase® abutment and temporary crown are in place.

Pictures with the courtesy of Dr. Imbert Patrice (Toulouse, France) and laboratory HTD, Jerome Vaysse (Toulouse, France)
More than a digital workflow.  
Maximize treatment outcomes through collaborative planning.

Many new restorative materials and technological options have been introduced in the last years. Still, the critical link is the synergistic relationship with the dental practice and lab to work within a collaborative environment in order to provide the best tooth replacement therapy to the patient. Straumann’s integrated workflow enhances the interdisciplinary team approach to maximize treatment outcomes.

MORE CONFIDENCE WITHIN A FULLY CONNECTED TEAM

Real-time collaboration with DWOS Synergy™ – The workflow between coDiagnostiX™ and Straumann® CARES® Visual is completely seamless with DWOS Synergy™. Transfer your coDiagnostiX™ implant planning 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™ – As an interactive communication platform for online case-sharing with other coDiagnostiX™ users, caseXchange™ ensures that the expectations of all participants, including the patient, are met.

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HIGHER PREDICTABILITY THROUGH A PRECISE DIAGNOSTIC, PLANNING AND SURGERY

**Achieve predictable results** – Detailed 3D diagnostics provide a complete 360° view of the patient situation anatomy (e.g., quality and quantity of bone), reducing uncertainties associated with conventional planning and 2D radiographs, even in advanced surgical indications.

**Master clinical parameters** – The comprehensive treatment plan from both implant and prosthetics planning, combined with a 3D printed surgical guide helps to perform fully guided surgeries with peace of mind.
More than implant planning software.  
A practice differentiator.

Transparent and effective communication about available treatment options is crucial to increase patient acceptance. With the Straumann® integrated workflow, you can enhance your patient’s trust and confidence, provide additional treatment options, and, in the process, differentiate your dental practice.

**DESIGNED TO INCREASE TREATMENT ACCEPTANCE**

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

**Predictable pricing options** – With guided surgery, pre-planning the restoration from root to tooth, including custom prosthetic components and other required procedures, makes the overall costs of the treatment more predictable.
ACCESS TO MORE TREATMENT OPTIONS

Immediate treatment protocols – Whether in fresh extraction sockets for immediate implantation or in immediate loading protocols, guided surgery helps to achieve precise drilling for predictable implant positioning and enhanced primary stability.

Reliable access to minimally invasive surgery – Guided surgery provides a precise visualization of the anatomy (nerve position, bone volumes, etc.). Together with precise drilling templates, the information needed for a reliable, minimally invasive surgery is at your disposal.
More than efficiency during the surgical procedure. 

**Straumann® Guided Surgery.**

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

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

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 for more treatment options (e.g. designing and producing engaging provisional CARES® restorations prior to the surgery).
Glossary

CLASSIFICATION AND DESCRIPTIVE TERMS FOR TIMING OF IMPLANT PLACEMENT AFTER TOOTH EXTRACTION³

<table>
<thead>
<tr>
<th>Classification</th>
<th>Descriptive terminology</th>
<th>Desired clinical outcomes</th>
</tr>
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<tbody>
<tr>
<td>Type 1</td>
<td>Immediate placement</td>
<td>Placement of an implant into a tooth socket, concurrently with extraction.</td>
</tr>
<tr>
<td>Type 2</td>
<td>Early placement – with soft tissue healing (typically 4 to 8 weeks of healing)</td>
<td>A post-extraction site with healed soft tissues but without significant bone healing.</td>
</tr>
<tr>
<td>Type 3</td>
<td>Early placement – with partial bone healing (typically 12 to 16 weeks of healing)</td>
<td>A post-extraction site with healed soft tissues and with significant bone healing.</td>
</tr>
<tr>
<td>Type 4</td>
<td>Late placement (more than 6 months of healing)</td>
<td>A fully healed socket.</td>
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CLASSIFICATION AND DESCRIPTIVE TERMS FOR LOADING PROTOCOLS²

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, in a period of 3 to 6 months.

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

REFERENCES