

Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

Issue 1/2025





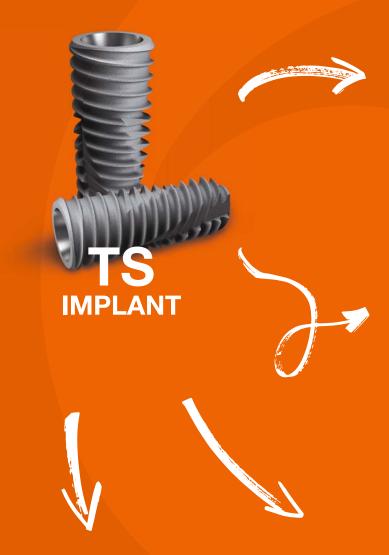
# IN IMPLANT TREATMENT

European Consensus Conference updated guide

EDI News | 20th European Consensus Conference (EuCC) updates its guideline | Certification exam for EDA Expert in Implantology | Impressions of IDS 2025 | Europe | History of German-Czech relations in the 19th and 20th centuries | Waste management and sustainability in dentistry | Does the prohibition of third-party ownership for medical and dental practices derive from European law? | Case Studies Rehabilitation of severe maxillary ridge atrophy with short mandibular implants | Immediate implant placement using the Socket Shield Technique | Fully guided immediate implant restoration in the aesthetic zone

## **Tailored Solutions for Every Case**

# **OSSTEM TS IMPLANT**













# Nothing is as reliable as change

For the 20<sup>th</sup> time, the European Consensus Conference (EuCC), under the auspices of the BDIZ EDI, has produced a guideline on a current topic in implant treatment. In 2025, the paper from 2019 was updated. It contains new findings backed up by scientific studies. In view of demographic change, it is important that the management of diseases is also brought up to the latest scientific standards for implant therapy.

We all know that the outcome of implant therapy depends on the health status of the patient, including medication and nutritionals status and the planned procedures and prosthetic restorations. We also know that implants require a physiological bone metabolism, something that is not given in the presence of several systemic diseases such as osteopetrosis, osteodystrophia deformans or fibrous dysplasia. Patients receiving proton pump inhibitors (PPI) or serotonin reuptake inhibitors (SRI) exhibit higher rates of implant failure. Conflicting results have also been reported regarding the effect of glucocorticoids and NSAIDs on implant treatment outcomes. Bone metabolism can also be affected by medication, smoking habits or nutritional status. In addition, low level of cholecalciferol (vitamin D3) may compromise osseointegration and graft regeneration or lead to progressing peri-implantitis. But we should always be aware that the most common problems after implant placement are caused by periodontal diseases.

The new practical guide also shows that findings that were incontrovertible just a few years ago can change quickly. For the BDIZ EDI, it is therefore necessary to continually update the state of the art in order to provide implant professionals with a reliable tool for dealing with implant surgery and implant prosthetic treatment.

As moderator of the 2025 European Consensus Conference, Professor Jörg Neugebauer pointed out the changes to the previous paper in 2019. "It was important for this year's EuCC to point out the need to develop specific and therefore patient-related treatment strategies. The restrictive approach to osteoporosis is also outdated. A meta-analysis by Lemos CAA et al. from 2023 motivated the members of the EuCC to use the cautiously optimistic wording that there is 'no increased general risk with osteoporosis'."

In their conclusion, the international EuCC summarised that dental implants are reliable treatment options for restoring patient function and aesthetics. Careful case selection is necessary by considering not only the oral findings alone. Due to the great variability of implant designs and surgical and prosthetic procedures proposed, the individually suggested parameter should be followed to avoid complication. The most important conclusion of the committee: all procedures should be performed by treatment providers with the requisite up-to-date expertise and training.

This brief summary of the work of the European Consensus Conference should give you, dear colleagues, an overview of this scientific part of the BDIZ EDI's work. If you are interested in the EuCC papers and their literature, please visit our website https://bdizedi.org/en/european-consensus-conference/.

Stay tuned.

Christian Berger President BDIZ EDI







BDIZ EDI at IDS 2025



Important German dentists in Prague

#### **EDI News**

#### 08 EuCC recommendations on complications in implant treatment

20<sup>th</sup> European Consensus Conference (EuCC) updates its guideline

#### 18 Impressions from Cologne

20th Expert Symposium

#### 20 Three successful graduates

Certification exam for EDA Expert in Implantology

#### 21 A role model and pioneer

Obituary: Dr Jürgen Weitkamp

#### 22 Impressions of IDS 2025

International Dental Show in Cologne

#### 24 Impulses, innovations, IDS

Leading dental trade show in Cologne

#### 25 Qualification for experienced implantologists

Certification as an EDA Expert in Implantology

#### 26 Europe Ticker

#### 28 Implant maintenance is a team effort

Implant care instructions brochure for patients

#### 30 Did you ever know...

#### 32 18th European Symposium in Stockholm

Save the date: 21 June 2025

#### 34 Review and outlook for Fuerteventura

 $33^{\text{rd}}$  and  $34^{\text{th}}$  International Expert Symposiums

#### 36 Important German dentists in Prague

History of German-Czech relations in the 19th and 20th centuries

#### 40 Waste management and sustainability in dentistry

Statement of the Council of European Dentists

#### 41 We want YOU!

BDIZ EDI and its multifaceted work

#### 42 Unexpected decision by the ECJ

Does the prohibition of third-party ownership for medical and dental practices derive from European law?

#### Case Studies

#### 46 Rehabilitation of severe maxillary ridge atrophy with short mandibular implants

15-year follow-up clinical case

#### 52 Immediate implant placement using the Socket Shield Technique

A contemporary approach in preserving buccal structures

#### 58 Fully guided immediate implant restoration in the aesthetic zone

Six-year case report

#### Business & Events

#### 64 Shaping the future of ceramic implantology

4th Annual Congress of EACim, Spain

#### 65 OSSTEM IMPLANT now focuses on the European market

Powering progress in implantology

#### 66 World's leading congress in periodontology and implant dentistry

EuroPerio11, Austria

#### 68 Focus on science and practice

 $3^{\text{rd}}$  European Congress for Ceramic Implantology, Switzerland

#### 70 botiss presents hyaluron and magnesium at IDS

Driving dental innovation

#### News and Views

**03** Editorial

#### **06** Partner Organizations of BDIZ EDI

07 Scientific Board/Imprint

#### 71 Product Reports/Product Studies/Product News

74 Calendar of Events/Publisher's Corner





Striate+™ Collagen Membrane Exceptional Clinical Results





#### Association of Dental Implantology UK (ADI UK)

ADI UK, founded in 1987, is a registered charity committed to improving the standards of implant dentistry by providing continuing education and ensuring scientific research. It is a membership-focused organisation dedicated to providing the dental profession with continuing education, and the public with a greater understanding of the benefits of dental implant treatment. Membership of the ADI is open to the whole dental team and industry, and offers a wealth of benefits, education and support for anyone wishing to start out or develop further in the field of dental implantology.



OSIS EDI, founded in 1992, is a university-based organisation of Polish scientific implantological associations that joined forces to form OSIS. The mission of OSIS EDI is to increase implant patients' comfort and quality of life by promoting the state-of-the-art and high standards of treatment among dental professionals. OSIS EDI offers a postgraduate education in dental implantology leading to receiving a Certificate of Skills (Certy kat Umiejetnosci OSIS), which over 130 dental implantologists have already been awarded.



### Sociedad Espanola de Implantes (SEI)

SEI is the oldest society for oral implantology in Europe. The pioneer work started in 1959 with great expectations. The concept of the founding fathers had been a bold one at the time, although a preliminary form of implantology had existed both in Spain and Italy for some time. Today, what was started by those visionaries has become a centrepiece of dentistry in Spain. SEI is the society of reference for all those who practice implantology in Spain and has been throughout the 50 years, during which the practice has been promoted and defended whereas many other societies had jumped on the bandwagon. In 2009 SEI celebrated its 50th anniversary and the board is still emphasizing the importance of cooperating with other recognised and renowned professional societies and associations throughout Europe.



## Sociedade Portuguesa de Cirurgia Oral (SPCO)

The SPCO's first international activity was the foundation—together with their counterparts in France, Italy, Spain and Germany—of the European Federation of Oral Surgery (EFOOS) in 1999. The Sociedade Portuguesa de Cirurgia Oral's primary objective is the promotion of medical knowledge in the field of oral surgery and the training of its members.



## Udruženje Stomatologa Implantologa Srbije-EDI (USSI EDI)

USSI EDI was founded in 2010 with the desire to enhance dentists' knowledge of dental

implants, as well as to provide the highest quality of continuing education in dentistry. The most important aims of the organisation are to make postgraduate studies meeting the standards of the European Union available to dentists from Serbia and the region; to raise the level of education in the field of oral implantology; to develop forensic practice in implantology; and to cooperate with countries in the region striving to achieve similar goals.



#### **EDI of Macedonia**

The Association is Albanian Implantology Association of Macedonia—AIAM was founded in 2013 as a branch of Albanian Dental So-

ciety of Macedonia. The association was created to advance education in the field of dental implantology for the benefit of the population. The objectives of the association are:

- To promote the progress of education, research and development of dental implantology in Macedonia
- To encourage postgraduate education, study and research in dental implantology through:
  - Appointment of meetings, lectures, seminars and courses either individually or with others
- Encouraging the publication of dental implantology articles!
- To cooperate and make agreements with relevant, national, local, foreign and different institutions.

In 2017, AIAM & MAOS (Macedonian Association of Oral Surgeons) became EDI of Macedonia and signed a Cooperation Agreement with BDIZ EDI to cooperate in dental implantology!



#### Scientific Board



#### **Imprint**

**Association:** The European Journal for Dental Implantologists (EDI) is published in cooperation with BDIZ EDI.

Publisher Board Members: Christian Berger, Professor Joachim E. Zöller, Professor Jörg Neugebauer, Professor Thomas Ratajczak

Editor-in-Chief (responsible according to the press law): Anita Wuttke, Phone: +49 89 72069-888, wuttke@bdizedi.org

Advertising Management: OEMUS MEDIA AG, Stefan Thieme, Phone: +49 341 48474-224, s.thieme@oemus-media.de

Publisher: OEMUS MEDIA AG, Holbeinstraße 29, 04229 Leipzig, Germany Phone: +49 341 48474-224, Fax: +49 341 48474-290 s.thieme@oemus-media.de, www.oemus.com

Managing Director: Ingolf Döbbecke, Lutz V. Hiller, Torsten R. Oemus

Subscription: OEMUS MEDIA AG Phone: +49 341 48474-200, abo@oemus-media.de

Translation: Per N. Döhler, Triacom Dental

Editorial Management: OEMUS MEDIA AG, Dr Alina Ion, Phone: +49 341 48474-141, a.ion@oemus-media.de

Layout: Dipl.-Des. (FH) Alexander Jahn, Lisa Greulich

Printing: Silber Druck GmbH & Co. KG, Otto-Hahn-Straße 25, 34253 Lohfelden, Germany

Publication Dates: March, July, September, December

Subscription Rates: Annual subscription: Germany €40 including shipping and VAT. All other countries €58 including shipping. Subscription payments must be made in advance. Ordering: in written form only to the publisher. Cancellation deadlines: in written form only, eight weeks prior to end of subscription year. Subscription is governed by German law. Past issues are available. Complaints regarding non receipt of issues will be accepted up to three months after date of publication. Current advertising rate list of 1/1/2022. ISSN 1862-2879

Chair is Professor Jörg Neugebauer.

Copyright and Publishing Rights: All rights reserved. The magazine and all articles and illustrations therein are protected by copyright. Any utilisation without the prior consent of editor and publisher is inadmissible and liable to prosecution. No part of this publication may be produced or transmitted in any form or by any means, electronic or mechanical including by photocopy, recording, or information storage and retrieval system without permission in writing from the publisher. With accepand retrieval system without permission in writing from the polisher. With acceptance of manuscripts the publisher has the right to publish, translate, permit reproduction, electronically store in databases, produce reprints, photocopies and microcopies. No responsibility shall be taken for unsolicited books and manuscripts. Articles bearing symbols other than of the editorial department or which are distinguished by the name of the authors represent the opinion of the afore-mentioned, and do not have to comply with the views of BDIZ EDI or OEMUS MEDIA AG. Responsibility for such articles shall be borne by the author. All information, results etc. contained in this publication are produced by the authors with best intentions and are carefully checked by the authors and the publisher. All cases of liability arising from inaccurate or faulty information are excluded. Responsibility for advertisements and other specially labeled items shall not be borne by the editorial department.

Copyright: OEMUS MEDIA AG · Place of jurisdiction: Leipzig

#### 20th European Consensus Conference (EuCC) updates its guideline

# EuCC recommendations on complications in implant treatment

The aim of the 2025 guideline of the 20<sup>th</sup> European Consensus Conference (EuCC) under the auspices of BDIZ EDI is to prevent complications and, if they do occur, to treat them correctly in order to improve the patient outcome. The new eight-page paper is intended to serve as a recommendation for implantologists on how deal with complications.

case

The international panel of 16 experts at the European Consensus Conference discussed the various treatment concepts in implant therapy, including both surgical and prosthetic approaches.

They concluded: "Dental implants are reliable treatment options for restoring patient function and aesthetics. Careful

selection is necessary by considering not only the oral findings alone. Due

to the great variation of implant designs and surgical and prosthetic procedures proposed, the individual suggested parameter should be followed to avoid complications. All procedures should be performed by treatment providers with the requisite up-to-date expertise and training.

The working paper was prepared by Prof. Jörg Neugebauer of the Department of Oral, Maxillofacial and Plastic Facial Surgery, Polyclinic for Oral Surgery and Implantology, Plastic, Reconstructive and Aesthetic Surgery, University of Cologne, Germany. The members of the EuCC reviewed and discussed the first draft according to the following timetable: review of the first draft, registration of alternative proposals, voting on recommendations and levels of recommendation, discussion of points of disagreement, and final voting.

#### Changes from the 2019 version

As the host of the European Consensus Conference, Neugebauer pointed out the changes to the previous 2019 version: "It was important for this year's EuCC to highlight the need to develop specific, patient-centred treatment strategies. The restrictive approach to osteoporosis is also outdated. A 2023 meta-analysis by Lemos CAA et al. has prompted the EuCC to issue the cautiously optimistic statement that there is 'no increased general risk of osteoporosis'."

#### Ordering the guideline

The 8-page guideline 2025 brochure with its comprehensive bibliography in German or English can be ordered from the BDIZ EDI online shop at a price of €4.50 per copy (including VAT, plus shipping).

A sample is also available in the online shop.

Members will receive the guideline free of charge with the next newsletter.



AWU



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications in implant treatment

#### 20th European Consensus Conference (EuCC) 2025

#### 1 March 2025

Prepared by: Jörg Neugebauer, PhD, DMD

Chairman: Professor J. Neugebauer (Germany)
Protocol: Professor J. Neugebauer (Germany)

Participants: Ch. Berger (Germany)
Dr E. Cerekja (Albania)
Dr V. Gowd (India)

Dr V. Gowd (India) Dr A. Hartmann (Germany) Dr F. Kasapi (Macedonia) Professor P. Kobler (Croatia) Professor V. Konstantinovic (Serbia)

Dr S. Liepe (Germany) Dr W. Neumann (Germany) Professor H. Özyuvaci (Turkey)

Dr G. Schiroli (Italy)
Dr B. Singh (Nepal)

DDr M. Tröltzsch (Germany) Dr J.W. Vaartjes (The Netherlands) Professor J.E. Zöller (Germany)

#### Content

1 Methods	2
2 Problem	2
3 Patient sections	3
4 Surgical techniques	4
5 Prosthetic procedures	5
6 Conclusion	6
7 References	7



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications in implant treatment

#### 1 Methods

#### **Objective**

The purpose of this guide is to provide recommendations for clinicians active in implant dentistry, enabling the prevention, early detection and treatment of complications in order to optimize the patient outcome.

#### Introduction

All consensus recommendations in this paper should be interpreted as guidelines only. The patient's specific situation is always an important aspect and may justify deviations from the recommendations of this consensus paper.

#### Background

Implant placement is a proven way to replace missing teeth and to restore function and aesthetics. Nevertheless, complications may occur at various stages of treatment flow. Earlier guidelines covered surgical complications that might be harmful to anatomical structures; a risk analysis; and avoiding implant malpositioning considering further therapeutic needs. This guideline focuses on less frequently encountered risk factors that may arise at various treatment stages.

#### Literature search

The Cochrane Library, EMBASE, DIMDI and Medline literature databases were used to conduct a systematic search of recent published data. Selective search criteria were used, including terms such as

#### complication, dental implant, meta-analysis.

The publications identified with the search were screened by reading their abstracts and those irrelevant to the subject were identified and excluded. Those articles found to be potentially relevant were obtained in full-text form. Multiple review papers with meta-analyses were available on the subject.

#### Procedure for developing the guideline/consensus conference

A preliminary version of this document on which the EuCC based its deliberations was prepared and authored by Professor J. Neugebauer, University of Cologne, Faculty of Medicine and University Hospital Cologne, Department for Oral and Craniomaxillofacial and Plastic Surgery. The preliminary report was reviewed and discussed by the committee members in five steps, as follows:

- · Reviewing the preliminary draft
- Collecting alternative proposals
- Voting on recommendations and levels of recommendation
- Discussing non-consensual issues
- Final voting

#### 2 Problem

The outcome of implant therapy depends on the health status of the patient, including medication and nutritional status and the planned procedures and prosthetic restorations. From a surgical point of view, the use of surgical guides and grafting procedures may lead to complications. The recommendations for immediate loading require a high insertion torque, which is also a possible risk factor. From a restorative point of view, the retention type of the superstructure may be associated with technical or biological complications



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications in implant treatment

or aesthetic failures **[40]**. The question of joining natural and implant abutments has also been subject to controversial discussion.

#### 3 Patient sections

#### Patient expectations

The high number of implant treatments performed today may have deceived patients into believing that there are no longer any contraindications to implant treatment. Implants require a physiological bone metabolism, something that is not a given in the presence of several systemic diseases such as osteopetrosis (Morbus Albers-Schönberg), osteodystrophia deformans (Paget's disease of bone) or fibrous dysplasia. The bone metabolism can also be affected by medications, smoking habits or nutritional status.

#### Current observations

Case reports have stated that implant treatment is possible for patients with Paget's disease or fibrous dysplasia. For patients receiving antiresorptive therapy, a high incidence of complications in the form of bone necrosis has been reported after tooth extraction, surgical interventions or even as a result of sore spots. However, implant placement, possibly in conjunction with autologous grafting procedures, could produce positive outcomes in osteoporosis patients [32]. There is a need to develop specific treatment strategies for each individual patient [28].

Low level of cholecalciferol (vitamin D3) may compromise osseointegration and graft regeneration or lead to progressing peri-implantitis **[6]**. Patients receiving proton pump inhibitors (PPI) or serotonin reuptake inhibitors (SRI) exhibit higher rates of implant failure **[16]**. Conflicting results have been reported regarding the effect of glucocorticoids and NSAIDs on implant treatment outcomes **[12]**.

#### Preventions of complications

- Implant placement is contraindicated in patients suffering from osteopetrosis.
- High-dosage antiresorptive therapy could result in higher rate of BRONJ [35].
- Patients who have been on antiresorptive therapy for osteoporosis need a detailed case selection with surgical techniques not requiring intensive bone remodelling [15, 35]. Extensive bone splitting, osteotome techniques or lateral sinus grafts should be avoided.
- No increased general risk for patients suffering from osteoporosis has been reported [20].
- In patients with soft bone evident in preoperative radiographs or with increased bone resorption, blood cholecalciferol levels should be checked [6].
- In patients with PPI or SRI, the duration and amount of drugs could be investigated before considering
  a patient for implant treatment [16].
- Patients must be informed that untreated periodontitis, uncontrolled diabetes or smoking may substantially increase the risk for biologic complications (e.g. peri-implantitis) [3, 7, 23, 33].
- In patients under long-term glucocorticoid medication at high doses, bone-metabolism parameters may have to be evaluated.
- Mild bone malformation in patients with fibrous dysplasia or Paget's disease need a strict indication for dental implants due to a lack of pertinent data.
- Depending on the surgical indication, patient may profit by an antibiotic prophylaxis for reduced (early) implant failure [13, 36, 38].



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications in implant treatment

#### 4 Surgical techniques

#### Patient expectations

Patients increasingly request immediate fixed rehabilitation in conjunction with immediate implant placement and loading. However, postoperative morbidity should be kept as low as possible.

#### Current observations

#### High insertion torque

Immediate implant placement with immediate restoration is a scientifically proven treatment concept for rehabilitating a failing dentition [10]. Various recommendation on the determination of primary stability have been given, depending on implant designs and the surgical procedures performed, for achieving osseointegration in the context of immediate restoration [37]. A recent RCT on insertion torque showed increased failure and bone resorption rates in the mandible for high insertion torques [25]. Previous meta-analyses have shown that high insertion torques are not correlated with increased bone resorption or implant failure [4, 22].

#### Flapless surgery

Implant placement using 3D surgical guides is now established, and flapless surgery should reduce the postoperative discomfort. The use of surgical guides based on CBCT technology permits highly accurate implant placement [5, 8]. Compared to free-hand flapless surgery and to the raising of a flap, the outcome of guided flapless surgery was not different in terms of implant failure rates and bone resorption in the hands of experienced treatment providers [21, 41]. Nevertheless, complication such as bone perforation or displacement of the surgical guide may occur [5, 8, 30].

#### Soft-tissue grafting

To achieve better outcomes in the aesthetic zone, soft-tissue grafting should be considered, particularly for immediate implant placement [31]. Grafting may also be necessary in case of soft-tissue dehiscence [2].

#### Amount of grafting

Grafting procedures carry a certain risk of complications. The use of shorter implants could reduce the amount of grafting required, thereby potentially lowering these risks [1].

#### Prevention of complications

- Due to the many different implant designs and recommend preparation techniques, especially in dense bone or in the presence of a thin cortical plate, the manufacturers' recommend insertion torques should be considered.
- Patients benefit from flapless procedures if a proper indication exists in terms of the available bone supply and preoperative 3D diagnostic findings.
- Flapless procedures are subject to a specific learning curve.
- · Soft-tissue grafting reduces the risk of aesthetic complications.



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications in implant treatment

#### 5 Prosthetic procedures

#### Patient expectations

Patients expect a stable prosthetic restoration that meets their aesthetic and functional needs, with minimal complications.

#### Current observations

A reduction in the number of implants in a given case due to economic or anatomical reasons may be considered by using both teeth and implants as abutments for fixed partial dentures (FPDs). Superstructures can be cemented or screw-retained, both of which can be associated with complications. In recent years a large spread of materials, prosthetic designs and components are used.

#### Tooth-to-implant fixed partial dentures

A meta-analysis of tooth-to-implant (hybrid) fixed partial dentures (T-I FPDs) reported survival rates of 94.1% after 5 years and 77.8% after 10 years of clinical service **[18]**. The impact of T-I FPDs and implant-to-implant FPDs in the partially edentulous arch on implant survival rates showed no significant differences for periods up to 72 months **[27, 42]**. A recent systematic review assessed the effect of rigid and non-rigid splinting between implants and teeth, with overall prosthetic survival rates of 85% and higher risks for tooth intrusion associated with non-rigid connections for observation periods of between 18 and 120 months **[39]**.

#### Retention of superstructures

Depending on the number of implants and the design of available abutments, superstructures can be cemented or screw-retained. Technical or biological complications may occur with either type of retention. A meta-analysis showed no differences regarding loosening of superstructures, changes in marginal bone levels or peri-implantitis [19, 24]. Using 6 implants for full-arch restoration in the maxilla result in fewer complications compared to using 4 implants [34].

#### Design of superstructures

To minimize the number of implants, cantilevers are often used in prosthetic reconstructions. However, these superstructures are associated with a higher incidence of technical complications, particularly in full-arch reconstructions [17] and single crowns [9, 17]. Patients suffering from bruxism have also been found to experience more frequent technical complications [14].

To reduce the risk of complications such as chipping, monolithic zirconia superstructures perform better than veneered zirconia in full-arch reconstructions **[26, 29]**. Additionally, metal-ceramic superstructures exhibit fewer complications compared to metal-acrylic resin implant-supported fixed complete dental prostheses **[11]**.

#### Prevention of complications

- Rigid superstructures should be preferred for T-I FPDs.
- Complications associated with T-I FPDs are encountered mainly at the natural abutment, especially
  when the teeth are periodontally compromised or root canal filled.
- The form of retention of the superstructure should be chosen by taking function, aesthetics and
  professional maintenance into account rather than focusing on available techniques.
- To facilitate maintenance, a retrievable superstructure is preferred, but a definitive cementing on natural tooth.
- To avoid technical complication the biomechanical considerations for each patients must be evaluated.



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

Update: Preventing, detecting and treating specific complications in implant treatment

#### 6 Conclusion

Dental implants are reliable treatment options for restoring patient function and aesthetics. Careful case selection is necessary by considering not only the oral findings alone. Due to the great variability of implant designs and surgical and prosthetic procedures proposed, the individual suggested parameter should be followed to avoid complication. All procedures should be performed by treatment providers with the requisite up-to-date expertise and training.

Cologne, 1 March 2025

Professor Joachim E. Zöller

Professor Jörg Neugebaue



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications to optimize patient

#### 7 References

- Abayov P, Sarikov R, Nazarenko LM et al. Outcome Difference between Short and Longer Dental Implants Placed Simultaneously with Alveolar Bone Augmentation: a Systematic Review and Meta-Analysis. J Oral Maxillofac Res 2024; 15: e2.
- Amid R, Moscowchi A, Azizi S et al. Coverage stability of peri-implant soft tissue dehiscence: A systematic review and meta-analysis. J Esthet Restor Dent 2024; 36: 284-294.
- 3. Bencze B, Cavalcante BGN, Romandini M et al. Prediabetes and poorly controlled type-2 diabetes as risk indicators for peri-implant diseases: A systematic review and meta-analysis. J Dent 2024; 146: 105094.
- Berardini M, Trisi P, Sinjari B et al. The Effects of High Insertion Torque Versus Low Insertion Torque on Marginal Bone Resorption and Implant Failure Rates: A Systematic Review With Meta-Analyses. Implant Dent 2016; 25: 532-540.
- Bover-Ramos F, Vina-Almunia J, Cervera-Ballester J et al. Accuracy of Implant Placement with Computer-Guided Surgery: A Systematic Review and Meta-Analysis Comparing Cadaver, Clinical, and In Vitro Studies. Int J Oral Maxillofac Implants 2018; 33: 101-115.
- 6. Choukroun J, Khoury G, Khoury F et al. Two neglected biologic risk factors in bone grafting and implantology: high low-density lipoprotein cholesterol and low serum vitamin D. J Oral Implantol 2014; 40: 110-114.
- Chrcanovic BR, Albrektsson T, Wennerberg A. Smoking and dental implants: A systematic review and metaanalysis. J Dent 2015; 43: 487-498.
- 8. Colombo M, Mangano C, Mijiritsky E et al. Clinical applications and effectiveness of guided implant surgery: a critical review based on randomized controlled trials. BMC Oral Health 2017; 17: 150.
- De Angelis P, Manicone PF, Liguori MG et al. Clinical and radiographic evaluation of implant-supported singleunit crowns with cantilever extensions: A systematic review and meta-analysis. J Prosthodont 2024; 33: 841-851.
- Del Fabbro M, Ceresoli V, Taschieri S et al. Immediate loading of postextraction implants in the esthetic area: systematic review of the literature. Clin Implant Dent Relat Res 2015; 17: 52-70.
- Éstrin N, Nam K, Romanos GE et al. Clinical Outcomes of Metal-Ceramic versus Metal-Acrylic Resin Implant-Supported Fixed Complete Dental Prostheses: A Systematic Review and Meta-analysis. Int J Prosthodont 2023; 36: 354-365.
- Fu JH, Bashutski JD, Al-Hezaimi K et al. Statins, glucocorticoids, and nonsteroidal anti-inflammatory drugs: their influence on implant healing. Implant Dent 2012; 21: 362-367.
- Ikram J, Shado R, Pereira IN et al. Efficacy and safety of using antibiotics to prevent post-operative complications in oral implant treatment: evidence-based review. BDJ Open 2023; 9: 47.
- Ionfrida JA, Stiller HL, Kammerer PW et al. Dental Implant Failure Risk in Patients with Bruxism-A Systematic Review and Meta-Analysis of the Literature. Dent J (Basel) 2024; 13.
- Jung J, Shim GJ, Park JS et al. Effect of anti-resorptive therapy on implant failure: a systematic review and meta-analysis. J Periodontal Implant Sci 2024.
- Jung RE, Ál-Nawas B, Araujo M et al. Group 1 ITI Consensus Report: The influence of implant length and design and medications on clinical and patient-reported outcomes. Clin Oral Implants Res 2018; 29 Suppl 16: 60.77
- 17. Kondo Y, Sakai K, Minakuchi H et al. Implant-supported fixed prostheses with cantilever: a systematic review and meta-analysis. Int J Implant Dent 2024; 10: 57.
- Lang NP, Pjetursson BE, Tan K et al. A systematic review of the survival and complication rates of fixed partial dentures (FPDs) after an observation period of at least 5 years. II. Combined tooth--implant-supported FPDs. Clinical oral implants research 2004; 15: 643-653.
- 19. Lemos CA, de Souza Batista VE, Almeida DA et al. Evaluation of cement-retained versus screw-retained implant-supported restorations for marginal bone loss: A systematic review and meta-analysis. J Prosthet Dent 2016; 115: 419-427.
- 20. Lemos CAA, de Oliveira AS, Fae DS et al. Do dental implants placed in patients with osteoporosis have higher risks of failure and marginal bone loss compared to those in healthy patients? A systematic review with meta-
- analysis. Clin Oral Investig 2023; 27: 2483-2493.

  21. Lemos CAA, Verri FR, Cruz RS et al. Comparison between flapless and open-flap implant placement: a systematic review and meta-analysis. Int J Oral Maxillofac Surg 2018.
- 22. Li H, Liang Y, Zheng Q. Meta-Analysis of Correlations Between Marginal Bone Resorption and High Insertion Torque of Dental Implants. Int J Oral Maxillofac Implants 2015; 30: 767-772.
- Li Y, Lu Z, Sun H. Impact of diabetes mellitus on the poor prognosis in patients with osseointegrated dental implants: a meta-analysis of observational studies. Biotechnol Genet Eng Rev 2024; 40: 473-491.
- Ma S, Fenton A. Screw- versus cement-retained implant prostheses: a systematic review of prosthodontic maintenance and complications. Int J Prosthodont 2015; 28: 127-145.
- 25. Marconcini S, Giammarinaro E, Toti P et al. Longitudinal analysis on the effect of insertion torque on delayed single implants: A 3-year randomized clinical study. Clin Implant Dent Relat Res 2018; 20: 322-332.



Bundesverband der implantologisch tätigen Zahnärzte in Europa e.V.

#### **Guidelines 2025**

#### Update: Preventing, detecting and treating specific complications to optimize patient

- Martakoush-Saleh S, Salgado-Peralvo AO, Pena-Cardelles JF et al. Evaluating the clinical behavior of veneered zirconia in comparison with monolithic zirconia complete arch implant-supported prostheses: A systematic review and meta-analysis. J Prosthet Dent 2024; 132: 899-912.
- 27. Muddugangadhar BC, Amarnath GS, Sonika R et al. Meta-analysis of Failure and Survival Rate of Implant-supported Single Crowns, Fixed Partial Denture, and Implant Tooth-supported Prostheses. J Int Oral Health 2015; 7: 11-17.
- Penoni DC, Canellas JVS, Silami M et al. Osteonecrosis of the jaws in patients under osteoporosis treatment: a nine-year experience report. Arch Endocrinol Metab 2023; 67: e000612.
- Pjetursson BE, Sailer I, Merino-Higuera E et al. Systematic review evaluating the influence of the prosthetic material and prosthetic design on the clinical outcomes of implant-supported multi-unit fixed dental prosthesis in the posterior area. Clin Oral Implants Res 2023; 34 Suppl 26: 86-103.
- Romandini M, Ruales-Carrera E, Sadilina S et al. Minimal invasiveness at dental implant placement: A systematic review with meta-analyses on flapless fully guided surgery. Periodontol 2000 2023; 91: 89-112.
- Rondone EM, Leitao-Almeida B, Pereira MS et al. The Use of Tissue Grafts Associated with Immediate Implant Placement to Achieve Better Peri-Implant Stability and Efficacy: A Systematic Review and Meta-Analysis. J Clin Med 2024; 13.
- Schmitt CM, Buchbender M, Lutz R et al. Oral implant survival in patients with bisphosphonate (BP)/antiresorptive and radiation therapy and their impact on osteonecrosis of the jaws. A systematic review. Eur J Oral Implantol 2018; 11 Suppl 1: S93-S111.
- Serroni M, Borgnakke WS, Romano L et al. History of periodontitis as a risk factor for implant failure and incidence of peri-implantitis: A systematic review, meta-analysis, and trial sequential analysis of prospective cohort studies. Clin Implant Dent Relat Res 2024; 26: 482-508.
- Sharaf MA, Wang S, Mashrah MA et al. Outcomes that may affect implant and prosthesis survival and complications in maxillary fixed prosthesis supported by four or six implants: A systematic review and metaanalysis. Heliyon 2024; 10: e24365.
- 35. Stavropoulos A, Bertl K, Pietschmann P et al. The effect of antiresorptive drugs on implant therapy: Systematic review and meta-analysis. Clin Oral Implants Res 2018; 29 Suppl 18: 54-92.
- Tan LW, Ng YE, Giok KC et al. Comparative Efficacy of Different Amoxicillin Dosing Regimens in Preventing Early Implant Failure-A Systematic Review with Network Meta-Analysis. Antibiotics (Basel) 2023; 12.
- Tettamanti L, Andrisani C, Bassi MA et al. Immediate loading implants: review of the critical aspects. Oral Implantol (Rome) 2017; 10: 129-139.
- Torof E, Morrissey H, Ball PA. Antibiotic Use in Dental Implant Procedures: A Systematic Review and Meta-Analysis. Medicina (Kaunas) 2023; 59.
- 39. Tsaousoglou P, Michalakis K, Kang K et al. The effect of rigid and non-rigid connections between implants and teeth on biological and technical complications: a systematic review and a meta-analysis. Clin Oral Implants Res 2017; 28: 849-863.
- Verma A, Singh SV, Arya D et al. Mechanical failures of dental implants and supported prostheses: A systematic review. J Oral Biol Craniofac Res 2023; 13: 306-314.
- Voulgarakis A, Strub JR, Att W. Outcomes of implants placed with three different flapless surgical procedures: a systematic review. Int J Oral Maxillofac Surg 2014; 43: 476-486.
- 42. Weber HP, Sukotjo C. Does the type of implant prosthesis affect outcomes in the partially edentulous patient? Int J Oral Maxillofac Implants 2007; 22 Suppl: 140-172.

# THE KING

**AMONG THE BEGO IMPLANTS** 

**BEGO Semados® RSXPro** 



#### **MAKE THE MOVE OF YOUR LIFE!**

The BEGO Semados® RSX<sup>Pro</sup> implant is more than just an implant. It is a guarantee of quality, reliability, and first-class results. With its versatility and adaptability, it is the perfect solution for a wide range of dental applications. Discover the future of dental implantology!







20th Expert Symposium

# **Impressions** from Cologne

The anniversary edition of the Expert Symposium took place on 2 March 2025, once again at the Pullman Hotel in the carnival stronghold, Cologne. The event brought together experts in oral implantology for the 20th time. BDIZ EDI President Christian Berger and Prof. Joachim E. Zöller jointly welcomed the participants, whose overarching theme was "Complications in implantology—why did it happen?"

On the previous day, the programme had included practical workshops with industry partners as the European Committee of the BDIZ EDI was meeting at the same time. Also on Saturday, three dentists took the European Expert in Implantology (EDA) certification examination. Three EDA examiners tested the candidates' knowledge, expertise and experience and were able to certify a "passed" for each of them. All three are now enti-

tled to use the title European Expert in Implantology (EDA).

At the end of the symposium, the participants joined Prof. Zöller—who, in addition to being BDIZ EDI Vice President, is also President of the Cologne Carnival Committee "Grosse von 1823"—for the Sunday carnival session in Gürzenich Hall.

MLF



The BDIZ EDI Europe Committee.



Hands-on learning.



Prof. Dr Thomas Ratajczak captivates the audience with his lecture.



The workshops took place in rotating small groups.



Dr Amely Hartmann relies on a mixture of modern technology and traditional methods.





Opening of the 20<sup>th</sup> Expert Symposium by Prof. Dr Dr Joachim Zöller and Christian Berger.

Hands-on experience: The workshops offered the opportunity to try out the latest innovations in implantology.



Expertise and fun—the expert symposium combines both.



Professional exchange: Dr Sebahat Kaya and Dr Dr Markus Tröltzsch in conversation with Dr Amely Hartmann.



Dr Dr Frank Bagambisa enjoys the last rays of sunshine at the 20th Expert Symposium.



Three happy participants after successfully passing the EDA exam.

#### **Certification exam for EDA Expert in Implantology**

# Three successful graduates

Every year, BDIZ EDI organises its annual Expert Symposium in Cologne. To mark the 20<sup>th</sup> anniversary of the Expert Symposium, three dentists successfully passed the examination to become European Experts in Implantology (EDA).



Highest distinction for Dr Nathalie Khasin, Dr Andrea Grandoch and Dr Basim Hakimi. They successfully passed the examination to become EDA Experts in Implantology. Pictured here with examiners Christian Berger, Dr Stefan Liepe and Dr Wolfgang Neumann.

The stringent requirements of the examination were met and so two dentists from Berlin and Cologne and one from Switzerland presented their cases to the European Dental Association (EDA) examination board, consisting of Christian Berger, Dr Stefan Liepe and Dr Wolfgang Neumann. After assessing the implants and restorations and answering the testers' questions, the ranks of EDA Experts in Implantology have now grown by three.

The successful graduates are Dr Nathalie Khasin from Berlin, Dr Andrea Grandoch from the University of Cologne and Dr Basim Hakimi from Bern. BDIZ EDI congratulates!

# Certification as EDA Expert in Implantology

Those interested in taking the certification examination as European Expert in Implantology (EDA) can find all the information at www.bdizedi.org/en/european-expert-in-implantology. The European Dental Association (EDA) was founded in 1999 as an umbrella organisation of European educational organisations and institutions. It offers the possibility of European integration for all groups involved in continuing education and is aimed at dentists who wish to specialise in one or more disciplines.

Admission requirements for the certification exam in the discipline of oral implantology include:

- 250 hours of EDA-approved continuing education in various sub-disciplines of oral implantology
- Submission of ten documented, independently performed implant treatment cases
- At least five years of professional activity primarily in the field of implant dentistry

Specific experience and primary activity in oral implantology must be documented by at least 400 implants placed and 150 implants restored over the previous five years. If you would like to register for the certification exam, you can obtain the necessary information and registration forms from BDIZ EDI or the EDA:







AWU

#### **Obituary: Dr Jürgen Weitkamp**

# A role model and pioneer

It is with great sadness that we remember Jürgen Weitkamp, Dr med, Dr med dent. President of the German Dental Association from 2000 to 2008 and recipient of the Federal Cross of Merit, First Class. He passed away on 30 January 2025 at the age of 86 after a short but serious illness.

Jürgen was much more than an honourable functionary. For many years, he shaped professional policy with far-sightedness and tact. In particular, the importance of the German Dental Association (Bundeszahnärztekammer, BZÄK) grew during his term as President to become an important institution for German dentists. However, Jürgen was also a helpful colleague who, despite his voluntary duties, took great care to ensure that scientific dentistry was practised in the dental office.

Jürgen Weitkamp was born in Bielefeld, Westphalia, on 15 July 1938. After graduating from high school and studying medicine and dentistry, partly in the USA, he set up shop in his father's practice in Lübbecke in 1967. He became involved with his local colleagues very early on.

His offices, memberships, initiatives and implementation of new institutions, projects and promotion of careers and young talent over the decades are innumerable. The development of the dental profession on many levels was always important to him.

In 1990, he was elected President of the Westphalia-Lippe Dental Association, a position he held until 2001. He relinquished this position after being elected President of the German Dental Association in 2000, a position he held until 2008. Not only did he fulfil his duties and functions, but he also raised them to a new level through his work. The list of his achievements is extensive: he was Hon-

orary President of the Westphalia-Lippe Dental Association and Honorary President of the German Dental Association. He was decorated with the Federal Cross of Merit, First Class. And he was awarded the Badge of Honor of the German Society of Periodontology and the Golden Badge of Honor of the German Society of Dental, Oral and Maxillofacial Sciences. In 2009 he was awarded the Apollonia zu Münster-Foundation of Dentists in Westfalen-Lippe prize and was made an honorary citizen of the city of Quedlinburg in recognition of his work in restoring and revitalising a number of historic buildings there. He was also made an honorary citizen of his home town of Lübbecke.

He was an early adopter of developments in dentistry and helped shape the change from the reparative and reconstructive dentistry of the 1970s and 1980s to multi-stage prevention and conservative restoration through the project to scientifically redefine preventive dentistry, which was carried out in conjunction with the German Association of Statutory Health Insurance Dentists (Kassenzahnärztliche Bundesvereinigung, KZBV) and the scientific community. We are still benefiting from these successes today: oral health studies show that prevention is a top priority in Germany and that the country's dental health is among the best in the world.

As the then President of the Bavarian Chamber of Dentists and chief organiser



of the Bavarian Dentists' Congress, I have fond memories of his visits to Munich as a highly esteemed guest of honour, which he combined with visits to his daughter.

On more than one occasion he was a speaker at our professional policy symposia for the BDIZ EDI. I fondly recall his keynote speech "Guidelines for preventionoriented dental medicine" at our 2007 Annual Symposium in Berlin, in which he took us on a journey into the future of dentistry with impressive foresight.

There are not many people left like Jürgen, wholeheartedly committed to the German dental profession. He was a role model and pioneer. We will miss his dedication to the profession and him personally as an always courteous and gentle person and friend. He will be remembered with affection and respect. Our thoughts are with his family.

Christian Berger on behalf of the BDIZ EDI Board





#### **International Dental Show in Cologne**

# Impressions of IDS 2025

BDIZ EDI was present as usual with new publications that interested visitors could take away free of charge—including the new Guideline on complications in oral implantology. Many VIPs were present at our booth in Hall 11.2: Dr Gregory Chadwick, FDI President; Prof. Roman Šmucler, President of the Czech Dental Association; Dr Hrvoje Pezo, President of the Croatian Dental Association and his delegation; Prof. Christoph Benz, President of the German Dental Association; and many guests from Europe and around the world.

The wheel of fortune was spun twice a day for visitors to the booth. The BDIZ EDI Board with Christian Berger, Dr Stefan Liepe and Dr Wolfgang Neumann explained its Curriculum Implantology in its two incarnations, presented to the next European symposium in Stockholm and drew attention to the European Specialist in Implantology (EDA) examination. All in all, a successful IDS week for the association, its members and visitors.





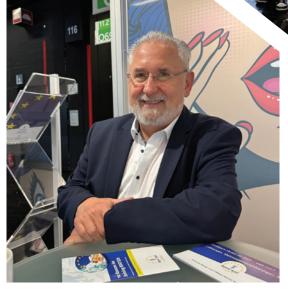
























# Impulses, innovations, IDS

135,000 visitors from 156 countries, an increase in visitor numbers of more than 15 per cent, a high level of internationality, quality and motivation on the part of both exhibitors and visitors – these are the key figures for IDS 2025.

For many stakeholders, the International Dental Show 2025 was more than just a meeting point for the industry—it represented a joint step forward into a future dental world that will be increasingly digital and networked.

More than 2,000 companies from over 60 countries presented their comprehensive range of products for dentistry and dental technology. More than 135,000 visitors from 156 countries rewarded this commitment with their openness and their willingness to invest. Despite geopolitical uncertainties and economic challenges, the number of trade visitors rose by more than 15 per cent compared to the previous event—with particularly strong growth in the number of visitors from Germany.

As a result, the 41st IDS ended on 29 March 2025 on a strong and convincing note, with a result that not only surpassed the figures for 2023 but also reinforces the IDS' claim to be the international benchmark in terms of quality, reach and professional relevance. Germany continues to be an important innovation hub for the dental world—this was once again evident.

"IDS has clearly exceeded our expectations yet again. Overall, we can see that the German dental industry is very well positioned as an innovation leader in terms of international competition. This is also reflected in the high level of interest in

innovative products and system solutions. IDS is the beacon for the global dental industry," said Mark Stephen Pace, Chairman of the Executive Board of the Association of the German Dental Industry (VDDI).

"IDS 2025 was a resounding success in every respect. It showed that Cologne is not only the home of the dental industry, but also a place where the future is taking shape. As the world's leading trade fair, it is both the showcase and a driving force—for sustainable progress, the quality of the supply and for global partnerships," added Oliver Frese, CEO of Koelnmesse.

#### **Encounters and visions**

"In times of rapid technological progress and digital solutions, it is more important than ever for us to work together as a dental community. IDS offers us the opportunity to exchange examples of best practice so that our patients will continue to have access to local and low-threshold dentistry in the future," said Prof. Christoph Benz, President of the German Dentists Association (BZÄK).

For Dominik Kruchen, President of the Guild Association of German Dental Technicians (VDZI), IDS 2025 was a complete success: "This year's IDS was once again the leading trade fair for many dental technician laboratories. It is the place where

laboratories examine new technologies, materials and workflows and look for new ideas in prosthetics. In doing so they benefit from their entrepreneurial vision and professional experience. Investment decisions, if they are to be well-founded, are made with a view to practical implementation in the laboratory. The large number of trainees in the exhibition halls is an expression of the fact that our upand-coming generation is preparing for its role in the future prosthetic supply chain."

#### IDS 2025 in figures

2,010 companies from 61 countries took part in IDS 2025 on filling 180,000 square metres of exhibition space, including 463 exhibitors from Germany and 1,547 exhibitors from abroad. Foreign exhibitors thus accounted for 77 per cent of the total. When including estimates for the last day of the event, more than 135,000 trade visitors from 156 countries attended IDS, of which 55 per cent came from abroad. This represents a 15 per cent increase in the number of visitors compared to the previous IDS

The next, the 42<sup>nd</sup> International Dental Show will be held from 16 to 20 March 2027.

Source: IDS PR

#### **Certification as an EDA Expert in Implantology**

# Qualification for experienced implantologists

For many years, BDIZ EDI has been catering to experienced and well-versed oral implantologists by offering the certification exam for EDA Expert in Implantology. Jointly with the European Dental Association (EDA), BDIZ EDI regularly invites interested dentists to take the certification exam, which we would like to present in this article.

That quality is of paramount importance to BDIZ EDI is no secret. BDIZ EDI has demonstrated this in many different areas—legal and accounting, material testing, postgraduate education, the annual guidelines of the European Consensus Conference (EuCC) on current implantological issues and finally the qualification of court experts. BDIZ EDI also supports dental education with its Curriculum Implantology that introduces aspiring dentists and young implantologists to this dental specialty in eight well-organised modules.

## Admission requirements for the certification exam

Certification as Expert in Implantology requires very good to excellent skills and knowledge. Candidates must meet the following admission requirements:

- 250 EDA-recognised continuing education/training hours in various sub-disciplines of implantology
- Submission of ten documented, independently performed implantological treatment cases
- At least five years of professional activity, primarily in the field of implantology.

Specific experience and primary activity in the field of implantology must be documented by at least 400 implants inserted and

#### More information...

To register for the next certification exam, please go to www.bdizedi.org and select English > Professionals > Expert or write to the BDIZ EDI office in Munich at office@bdizedi.org.





150 implants restored within the past five years. Candidates who already obtained qualifications in oral implantology (e.g. from other professional societies) may submit the appropriate credentials with their application for certification as EDA Expert in Implantology.

#### The exam

Candidates meeting all the requirements will be admitted to the examination. The examination board of BDIZ EDI and EDA consists of recognised specialists. The exam has a theoretical and a practical part, both of which must be completed successfully. The procedure is as follows: the theoretical part of the exam will start with a discussion of the documented cases. In addition, candidates are expected to answer questions related to oral implantology and closely associated fields. The theoretical examination usually takes no longer than 60 minutes; it may be administered to candidates in groups. The practical part of the examination covers one or more recognised, state-of-the-art treatment method or methods and/or treatment plans covering some aspect of oral implantology. Candidates will be informed of the respective topic two weeks before the exam date. Candidates are responsible for providing the required materials and instruments on the day of the exam. The examination as a whole is subject to a fee to cover the cost incurred by the examination board.

New EDA Experts in Implantology are nominated by the president or vice president of the EDA certification committee.

AWU



On 1 January Poland took over the rotating presidency of the Council of the European Union. The motto of the Polish EU Council Presidency is: "Security, Europe!" The focus is on strengthening seven dimensions of European security, explicitly including health, which will concentrate on three areas: the digital transformation of healthcare, which includes the implementation of the European Health Data Space (EHDS); the mental health of children and young people; and health promotion and disease prevention.

Source: BZÄK-klartext 1/2025

#### **EU Chemicals Agency examines ethanol**

### Germany warns of restrictions

In the light of an ongoing review by the EU Chemicals Agency into the hazard classification of ethanol, the leading German medical, dental and pharmacy associations and the German Hospital Association are urgently warning the German federal government of the consequences of a negative classification of the well-established disinfectant as a CMR substance (carcinogenic/mutagenic/reproductive toxicant). The availability and use of ethanol could be severely restricted—or even banned—as a result of health and safety regulations. According to the German Dental Association, ethanol is of vital importance as a disinfectant in medical and dental practices due to its superior effectiveness and is indispensable for the effective protection of both patients and health-care staff against infection.

Source: BZÄK-klartext 1/2025

Antibiotic administration after tooth extraction

# No demonstrable benefit

A retrospective cohort study by researchers from Ireland (Dublin Dental University Hospital) and France examined the association between antibiotic administration and postoperative complications after tooth extraction. The cohort included around 269,000 patients who underwent tooth extraction between 2015 and 2019. The researchers compared two groups of patients: one group that was prescribed an antibiotic before the operation and a second group that was not. The study paid particular attention to the occurrence of complications within seven days of the operation, such as oral infections, dry alveoli or fever.

The results showed that 31.8 per cent of patients received antibiotic prophylaxis, with amoxicillin being the most commonly used antibiotic. In most cases, an antibiotic was prescribed if the patient was to undergo a surgical extraction.

In total, 3,387 patients experienced a complication. Of these patients, 1,272 (37.5%) had received antibiotics, compared with 2,115 (62.5%) who had not.

Overall, the cohort study found no evidence of a demonstrable benefit in preventing postoperative complications by administering antibiotics before surgery.

Sources: ZWP Online Germany, 28 Feb 2025; nature.com

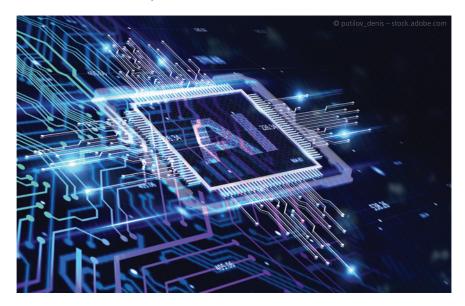
#### **EU AI law**

#### Social behaviour must not be evaluated

Under the EU's Artificial Intelligence (AI) Act, the use of artificial intelligence programs that evaluate social behaviour is prohibited. The ban is the first provision in the implementation of the AI Act, which came into force in August 2024, the commission announced. To ensure compliance with the law, the commission will publish guidelines on prohibited AI practices. These guidelines would explain the legal concepts and provide practical use cases based on stakeholder input. These will be non-binding and will be updated as necessary.

Companies developing or using AI should assess their systems according to the level of risk and take appropriate measures to comply with the legal requirements. According to the commission, the aim of the new regulation is not only to protect consumer rights. It also intends to ensure that AI is used responsibly.

Source: zm-Online, Germany



#### GDC start-of-the-year report

#### More dentists in the UK

According to the General Dental Council (GDC), there were 45,580 dentists registered in the UK at the start of 2025. This is 1,371 dentists or 3.1 per cent more than in 2024. The number of registrations has increased steadily over the last five years: 2021, 41,863; 2022, 42,215; 2023, 43,130; 2024, 44,209; 2025, 45,580. The 793 (1.7%) dentists who did not renew their registration in 2025 was the lowest figure for the last five years. This percentage had fluctuated between 2.3% and 2.9% since 2021. Reasons for removal include voluntary removal, non-payment, retirement, and notifications of death.

However, the GDC noted that the data "does not provide insight into the number of professionals working in different patterns". For example, it remains unclear how many of the registered dentists work full-time or part-time, or whether they work in the National Health Service (NHS) or in the private sector.

Source: zm Online, 27 Jan 2025; GDC

#### Study by the University of Buffalo

# Cannabis promotes dental caries

The smoking of cannabis correlates with an increased prevalence of dental caries and tooth loss. This finding was established by a working group at the University of Buffalo in a study published in the *Journal of the American Dental Association (JADA)*. The legalisation of cannabis in several US states has coincided with a rise in consumption of the drug. According to a study conducted by the National Institute on Drug Abuse in 2023, the percentage of young adults (aged 19 to 30) who used marijuana in the past year (sometimes daily) reached its highest level ever.

Building upon earlier clinical observations, a team of researchers led by Ellyce Clonan, DDS, at the University at Buffalo's School of Dental Medicine initiated a survey study to examine the effects of cannabis. This cross-sectional study analysed data from 5,656 participants aged 18 to 59 years who took part in the National Health and Nutrition Examination Survey from 2015 to 2018.

The analysis revealed that, in comparison to non-cannabis users, participants who reported cannabis use exhibited a 17% higher probability of developing crown caries (95%-CI, 1.02 to 1.35), a 55% higher probability of developing root caries (95%-CI, 1.21 to 1.99) and a 41% higher probability of tooth loss (95%-CI, 1.00 to 1.99), with adjustments made for age, gender, race or ethnicity, place of birth, education, family income relative to poverty, and alcohol consumption.

Source: School of Dental Medicine, University of Buffalo, NY, USA

Clonan E, Shah P, Cloidt M, Laniado N. Frequent recreational cannabis use and its association with caries and severe tooth loss: Findings from the National Health and Nutrition Examination Survey, 2015–2018. J Am Dent Assoc. 2025 Jan; 156(1):9–16.e1. doi: 10.1016/j.adaj.2024.10.005.

#### Implant care instructions brochure for patients

# Implant maintenance is a team effort

The European Association of Dental Implantologists (BDIZ EDI) has published an English edition of its implant maintenance brochure. In easy-to-understand language, the brochure entitled "Implants—longer-lasting and longer beautiful" offers well-illustrated instructions and general information about oral health.



supported restorations. "Good to know" provides background information on choosing the right tooth-brush and using the proper brushing technique, describes the process of professional tooth cleaning and educates readers about risk factors. A checklist intends to alert implant patients to possible changes in the mouth and around the implant. This is the first English edition of the brochure, which has been completely redesigned with large images and short texts in easy language that patients can understand. The preface states: "It is up to you to ensure careful oral hygiene, and this is a prerequisite for a long implant life. Teamwork is of the essence!"

#### AWU

#### Bibliography

Implant care brochure of BDIZ EDI for patients Long-lasting implants for long-lasting beauty

A5 format, 24 pages, 32 images Prize: €1.50 + VAT + shipping (minimum order: 10)

Contact BDIZ EDI in Munich/Germany office@bdizedi.org > English

Via Phone: +49 89 72069-888 Fax: +49 89 72069-889



#### Why is normal oral hygiene not good enough?

#### The threat of bone loss

Dental plaque is home to numerous bacteria. As long as the plaque deposits are removed at regular intervals before they cause damage to the teeth or gums, the biological balance in the oral cavity will be maintained. But as soon as the plaque bacteria multiply, there will be an increasing risk of tooth decay and periodontial disease. Severe inflammatory conditions such as periodontitis (Inflammation of the gums around a tooth) or peri-implantitis (inflammation of the gums around an implant) pose a significant risk for bone loss and may cause the loss of the tooth or implant.

#### What tools can and cannot do

- Toothbrushes (even the most futuristic electric ones) cannot clean the teeth everywhere because they do not get into the interdental spaces.
- ▶ Dental floss, interdental brushes or toothpicks are essential (there is even "thick" dental floss especially for use around implants). They are the only way to remove the bacterial plaque between the teeth.
- rial plaque between the teeth.

  Oral irrigators are of limited use around implants and certainly not a substitute for proper tooth cleaning.



There is a natural protective barrier between each natural tooth and the surrounding gums. The transition zone between an implant and its surrounding gums can be passed more easily, so the risk is greater that bacteria can penetrate it and cause inflammation of the mucous membrane around the implant (peri-implant mucositis).

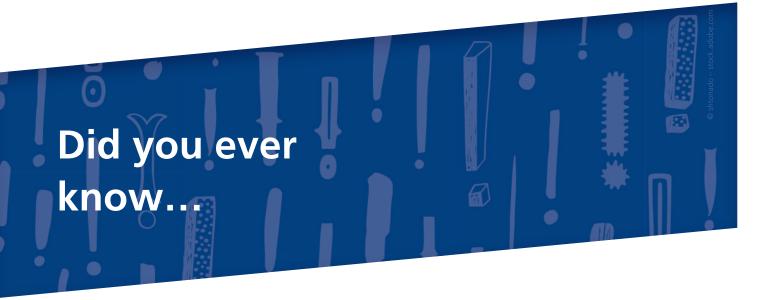
Since implant surfaces are usually rough and may be designed in screw form (depending on the system), invading bacteria can settle down easily and will be difficult to remove even by an experienced professional. Unless it can be stopped, the inflammation will keep on pro-

gressing, attacking the supporting jawbone and breaking it up or destroying it. The implant may work itself loose or even to fall out.

INTRODUCTION

The many different types of bacteria in the mouth (in the oral cavity) will colonize implant roots in the same way as natural tooth roots.

But if you follow a few simple rules, things will not have to come this far Proper maintenance is the be-all and end-all of implant care. You should invest a bit more time and effort than with "normal" tooth care. In this guide we show you how to maintain your implants carefully and gently.



## ...that *EDI Journal*, the English equivalent of *BDIZ EDI konkret*, is celebrating its 20<sup>th</sup> anniversary this year?

This anniversary will be duly celebrated in the 2/2025 issue of *EDI Journal*. The editorial team is inviting high-ranking representatives of German and European associations and the industry partners of BDIZ EDI to formulate a greeting. The partner associations in Europe and beyond will also have their say. *EDI Journal* is published four times a year and is sent out to members of the partner associations as well as to subscribers and various organisations in Brussels and Strasbourg.



#### ...that BDIZ EDI has held its 20th Expert Symposium on 2 March 2025?

The concept developed by Vice President Professor Joachim Zöller to offer a symposium with expert opinions on a current topic in oral implantology—always in Cologne on Carnival Sunday—has proved its worth over the past two decades. Immediately prior to the symposium, the European Consensus Conference (EuCC) under the auspices of BDIZ EDI, seeks and achieves consensus on the respective topic of the symposium. The resulting guidelines serve as recommendations for implant practice. Over the years, BDIZ EDI has produced 20 practice guidelines in German and English and has updated many of the topics several times.



Full house at the BDIZ EDI Expert Symposium.

## ...that the Curriculum Implantology currently underway at the University of Cologne is already the 26<sup>th</sup> edition?

To date, almost 1,000 young implantologists have successfully completed this introductory course in eight modules over a period of one year. The Curriculum is now also being successfully "replicated" by partner associations in other European countries. The 27th Curriculum Implantology will start in October, also at the University of Cologne. Its sister event in the south will start for the second time in September: in Munich and Ansbach.



Graduates of the 25<sup>th</sup> Curriculum Implantology at the University of Cologne.



# GCRATE MPLANTOLOGY AND GENERAL DENTISTRY

27./28. JUNI 2025 VILLA QUARANTA VALPOLICELLA (IT) OEMUS EVENT SELECTION





Save the date: 21 June 2025

# 18<sup>th</sup> European Symposium in Stockholm

BDIZ EDI is organizing its 18<sup>th</sup> European Symposium, focusing on professional exchange within Europe. Demosthenes (384 to 322 BCE) already knew that "the starting point for the greatest undertakings often lies in barely perceptible opportunities".

Following the interdisciplinary CODM Congress, which will take place in Stockholm from 18 to 20 June 2025, BDIZ EDI will present its 18<sup>th</sup> European Symposium.

The annual World Congress of Dental, Oral and Maxillofacial Medicine (CODM) has been successfully organised eight times in recent years, attracting more than 500 participants from over 30 countries and regions. This international event focuses on basic research, advanced technologies and clinical applications and provides a platform for experts to discuss the latest research findings and achievements. To find out more about CODM, please visit www.bitcongress.com/codm2025.

The event hotel for CODM and the European Symposium is the Clarion in Stockholm. More information about the BDIZ EDI event will be available soon on the BDIZ EDI website.

Speakers will come from all over Europe—including, of course, members of the BDIZ EDI Board. The event will be held in English. Topics will include implant surgery and implant prosthetics.

#### Stockholm—then and now

Stockholm is probably named after the protective wooden poles (stock) that lined the sound of Lake Mälaren leading up to the islet (holme) which is today the central island called Stadsholmen or, more commonly, Gamla Stan. Its history of settlement dates back to the 11<sup>th</sup> century. Stockholm has been the royal residence since 1643.

Water covers about 30 per cent of the city's area. The city still draws its drinking water from Lake Mälaren; the high quality of the water makes it possible to fish for salmon right in the city centre. The city is spread over 14 islands connected by 53 bridges. Much of the city is wooded.

The site of present-day Stockholm was first mentioned by the Icelandic poet and saga writer Snorri Sturluson (1179–1241) in his Ynglinga saga, where he describes a barrier of poles across today's Norrström waterway, which he called Stokksunda. Excavations in the late 1970s uncovered the remains of water poles from the 11<sup>th</sup> century, which support this statement. Snorri also mentions a fortification tower from the 12<sup>th</sup> century, which is said to have been located where the royal castle has stood since 1580.

A letter of protection for Fogdö Monastery, issued in July 1252, is the oldest surviving document in which Stockholm is mentioned. The Erik Chronicle (Erikskrönikan), written between 1320 and 1335, states that the founder of Stockholm, the regent Birger Jarl, wanted to build a fortress around 1250 to protect Lake Mälaren from pirate raids.

In the 15<sup>th</sup> century, its strategic and economic importance made Stockholm an important factor in the conflicts between the Danish kings of the Kalmar Union and the Swedish national independence movement. With the arrival of Gustav Vasa in 1523 and the establishment of a strong royal power, Stockholm became an important royal residence. The royal court also be-





gan to shape the cityscape, which had previously been dominated by merchants—often German—and craftsmen.

Sweden rose to become a great power in the 17<sup>th</sup> century. This was reflected in the development of Stockholm—between 1610 and 1680 the population increased sixfold. In 1713 and 1714, Stockholm was ravaged by the plague. After the end of the Great Northern War and the resulting loss of Swedish territory in 1721, the city began to stagnate and continued to do so throughout the early 19<sup>th</sup> century. Norrköping became the largest manufacturing city and Gothenburg, with its favourable location on the Kattegat, a straight opening to the Skagerrak and the North Sea, became Sweden's most important export port. It was not until the second half of the century that Stockholm once again took on a leading role in the country's economic development. A number of important industrial companies were established here, with the result that Stockholm developed into an important centre for trade and services, as well as a transport hub.

#### Places of interest

Stockholm's cityscape and architecture are shaped by its unique location on the shores of Lake Mälaren, a freshwater lake that runs from west to east; a ridge of glacial moraine that runs from north to south; and the central island in the middle of the river. The city has many small parks, including Tegnérlunden, which is mentioned in Astrid Lindgren's work. The old town (Gamla Stan) on the city island (Stadsholmen) still has the medieval street network with the streets that cross the island from north to south (Österlånggatan and Västerlånggatan) and narrow alleyways sloping down to the water—which have become longer and longer over the centuries as the land has slowly risen following the disappearance of the heavy Ice Age glaciers, a process that continues to this day.

#### Why the European Symposium?

Every day we face new and continuing practical challenges. Undoubtedly, innovations in implant dentistry come from scientific advances and are translated into products developed by the dental industry. The demand from practicing dentists for new products and procedures and improved treatment options has culminated in the remarkable variety of new applications we see on the market today—new approaches to bone grafting, new capabilities in laser technology, chairside CAD/CAM and new materials of all kinds.

Given that we have already achieved very high standards and high success rates in implant therapy, it is not easy to strive for even better results and shorter treatment times. Nature sets limits. This makes it all the more important for implantologists to continue their education to stay abreast of the latest scientific and technical innovations and materials for the benefit of their patients and their practices. Education and training must keep pace with developments.

BDIZ EDI has therefore always considered the exchange of ideas as part of its professional focus. For the 18<sup>th</sup> time, BDIZ EDI will be organising its European Symposium in 2025—and for the first time in Scandinavia. Demosthenes (384–322 BCE) already knew that "small opportunities are often the beginning of great enterprises." This quote is characteristic of the BEDIZ EDI's European Symposia. Humble beginnings and spurious opportunities have been consolidated into a comprehensive approach that allows communities of dentists to transcend national borders and to intensify the exchange of ideas within Europe. The 18<sup>th</sup> European Symposium in Stockholm is a good example of this. It will once again demonstrate how implant dentists from all over Europe can benefit from each other's experience.

Christian Berger President, BDIZ EDI



The theme of the 33<sup>rd</sup> International Expert Symposium on Regenerative Procedures in Dentistry in 2024 was "Surgical and Prosthetic Complications". Registration is now open for the 34<sup>th</sup> Expert Symposium on Fuerteventura. Date: 24 to 31 October 2025.

For the 33rd time, Professor Joachim E. Zöller has organised his Expert Symposium on Regenerative Procedures in Dentistry on Fuerteventura, Canary Islands, Spain. "Surgical and Prosthetic Complications" had been the main theme at the Robinson Club Esquinzo Playa from 25 October to 1 November 2024. More than 50 internationally renowned speakers addressed the topic from all angles. More than a dozen workshops offered suggested solutions and troubleshooting tips. After a week of "cramming" with breaks for sports activities, the White BBQ Evening under palm trees brought the training week to a close.

Highly respected speakers will demonstrate how to achieve healthy and stable gingival and peri-implant soft tissue, taking into account the individual risk profiles and patient needs. Special emphasis will be placed on microsurgical work, incisions, flap elevation and suturing, management of gingival recession, peri-implant mucosal recession—and whether and when they actually need treatment. Overall, surgical techniques for achieving healthy and stable gingival conditions and new methods for immediate implant placement will be presented.

In addition to this main theme, topical presentations on all aspects of implant dentistry will provide exciting food for thought.

## For further information and registration please contact:

info@reisebuero-gup.de Reisebüro Garthe & Pflug GmbH Triftstrasse 20 60528 Frankfurt-Niederrad Germany +49 69 677367-0

# Topic for 2025: "Interaction between implantology and periodontology"

This year the focus will be on patient-centred approaches in oral implantology and periodontal surgery. Based on current research data, it is no longer justified for dentists to be for or against the preservation of severely damaged teeth or for or against implants. Rather, the time has come to move away from dogma and combine both worlds—tooth preservation and implant therapy—into a meaningful whole for the benefit of the patient.

#### Pool of speakers (requested and confirmed)

Dr L. Börner,
Prof. Dr B. Böttiger,
Dr W. Bücking,
Dr U. Fürst,
Priv.-Doz. Dr P. Gehrke,
Prof. Dr A. Happe,
Dr J. Hauschild,
Dr F. Hermann,
Prof. Dr J. Hescheler,
Prof. Dr A. Karenberg,
Prof. Dr F. Khoury,
Dr V. Knorr,

Prof. Dr F. Bergmann,

Dr Ch. Köneke,
Dr T. Mandel,
T. Mann,
Dr F.-J. Mellinghof,
Dr Th. Müller,
Prof. Dr H.-J. Nickenig,
Dr F. Petschelt,
Dr P. Randelzhofer,
Dr B. Rauschenbach,
Prof. Dr Dr V.
Regitz-Zagrosek,
H. Reker,
B. Rieken,

Dr R. Rosen,
Prof. Dr R. Rößler,
Prof. Dr A. Sculean,
Dr R. Sperber,
Dr F. Vizethum,
Dr F. Weber,
Dr V. Wennekes-Neagu,
Dr G. Werling,
Dr K. Yazdani,
Priv.-Doz. Dr Dr M. Zirk,
Prof. Dr Dr J. Zöller

and more



# INTERNATIONAL BLCCCDCONCENTRATE DAY

**BIOLOGISATION IN REGENERATIVE DENTISTRY** 

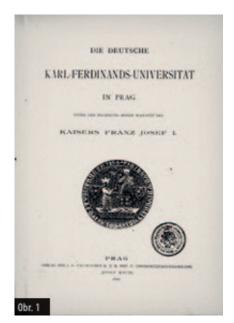
25-26 SEPTEMBER 2025
RADISSON BLU HOTEL FRANKFURT AM MAIN



#### History of German-Czech relations in the 19th and 20th centuries

# Important German dentists in Prague

This article is dedicated to important personalities in dentistry who worked at the German Faculty of Medicine in Prague. This faculty was created by the division of the University of Prague by a law from February 1882, which stipulated that the former Karl Ferdinand University in Prague was to be divided into a Czech and a German university from the



Title page of a publication on the history of the German University in Prague.



The German University in Prague. The last hundred years of its Medical Faculty, Walther Koerting, published in 1968.

1882/1883 academic year onwards. This brought to an end the negotiations on the Czech demand that university lectures in Prague be held in Czech. Emperor Franz Joseph I finally chose this solution from several possibilities by imperial decree.

In 1782, the Austrian Emperor Joseph II replaced Latin, which had been the language of university instruction since the Middle Ages, with German at all universities in the Habsburg Monarchy. However, the citizens of the multinational monarchy had been demanding the right to instruction in their own languages since the mid-19<sup>th</sup> century. For example, Poles promoted instruction in Polish in Kraków, just as Hungarians promoted instruction in Hungarian in Pest. The Czechs in Prague also demanded lectures in Czech.

Ludmila Hlaváčková and Petr Svobodný from the Institute for the History of Medicine published *Biographisches Lexikon der Deutschen Medizinischen Fakultät in Prag 1883–1945* (*Biographical Dictionary of the German Medical Faculty in Prague 1883–1945*) in 1998. This volume contains basic biographical data on all assistants, lecturers and professors at the faculty.

As I was leafing through its pages, I came across a number of Czech names written in German spelling: F. Czapek, V. Hruschka, J. Dworzak, H. Jedlitschka, N. Koblitschek, R. Maresch, A. Tschermak.

For comparison, I also consulted the *Biographical Dictionary of the Czech Medical Faculty* by the same institute, in which I again read the German names of Czech teachers at the Czech Medical Faculty: B. Eiselt, V. Weiss, V. Treitz, J. V. Krombholz., A. Goll, J. Böhm, J. Dienstbier,

J. Kurz. The first elected dean of the Czech Medical Faculty in Prague was Wilhelm Weiss, professor of surgery. This proves that Czech-German marriages took place in Bohemia and that the children born at that time opted for Czech or German nationality.

At this point it is worth recalling the development of Czech-German relations over the past centuries. In the 18th century and the first half of the 19th century, the relationship to one's homeland in Bohemia was shaped by so-called territorial patriotism: nationality was determined by where one lived. The philosopher and theologian Augustin Smetana, a member of the Order of the Knights of the Cross with the Red Star, referred to the inhabitants of the Bohemian kingdom as "Bohemians of the German tongue and Bohemians of the Slavic tongue". Bernard Bolzano, a native of Prague with Italian-German family roots, was a professor of philosophy, mathematics, and theology and an ordained Catholic priest. In his Sunday sermons, he encouraged both Czech and German students to work together in friendship and brotherhood for the good of their common fatherland.

After the Napoleonic Wars, national consciousness grew in all European countries. Interest in glorious periods of history increased, national languages, folk tales, and songs were cultivated, and linguistic patriotism gradually replaced territorial

patriotism: a Czech was now defined as someone who spoke Czech. The development of the Czech national revival was strengthened by the ideas of the German philosopher Johann Gottfried Herder. He wrote sympathetically about the Slavs, praising their peaceful way of life and believing in their great future. The linguist Josef Jungmann, a Czech with a German surname, became the unofficial but widely recognised leader of the Czech revival movement.

The revolution of 1848 gradually spread across Europe. Czechs and Germans met in Prague on 14 March to formulate their political demands. The Viennese had already risen on 13 March, calling on Emperor Ferdinand I to proclaim a constitution, abolish censorship, and permit elections for the provincial assemblies and the Imperial Diet in Vienna. The Czechs demanded a transformation of centralist Austrian into a constitutional monarchy with a federal structure, ensuring equal rights for all nations within a multinational Austrian Empire. Meanwhile, the Germans in Bohemia looked to Frankfurt, where a pan-German parliament had convened with the aim of uniting all Germans living in the various kingdoms, duchies, principalities and free cities into a single state. This could have included the Germanspeaking areas of Austria, including the Bohemian lands. But from that moment on, the political goals and paths of the Czechs and Germans began to diverge.

The Frankfurt Assembly ultimately failed to achieve its goals—Austria did not become a federation of individual states.

In the following century, World War I changed the map of Europe. After the collapse of Austria-Hungary in 1918, new states emerged, including Czechoslovakia, which was home to 3.5 million Germans. A new situation called for new solutions. Only the Czechs greeted a separate state with joy. The Czechoslovak constitution guaranteed equal rights to citizens of all nationalities. But the Germans were unwilling to accept minority status.

Efforts to achieve mutual cooperation and understanding began to emerge on

both sides, with a "Swiss solution" as a possible goal. President Tomáš Garrigue Masaryk undertook to mediate in the negotiations between the Germans and the Czechs and considered the formation of a joint government of Czech and German ministers to be a success. As a result, the Minister of Agriculture nominated by the Czech political party was a Germanspeaking Czech with the German name of Ladislav Feierabend, while the Minister of Education nominated by the German party was a Czech-speaking German with the Czech name Ludwig Czech.

An example of the cooperation between Czech and German doctors was their joint meeting in May 1929, which was in response to new laws being drafted by the Ministry of Health, which the doctors considered an unacceptable violation of their rights. Representatives of the Czech and German medical associations, professional societies and representatives of Czech and German medical faculties met at the National House in Prague. Věstník československých lékařů (Journal of Czechoslovak Doctors) published a detailed report of this meeting on 24 May 1929. Here are some quotations from some of the speeches. The doctors present were welcomed by Professor R. Fischl, representing the German university, and MUDr Springer, representing the German section of the Medical Association. Politicians also attended, including Deputy



Augustin Smetana (1814–1851) wrote *Bohemians of the German tongue and Bohemians of the Slavic tongue*.



Biographical Dictionary of the German Medical Faculty in Prague 1883–1945, Ludmila Hlaváčková and Petr Svobodný, published in Prague in 1998.

Hackenberg for the German Social Democrats and Senator Hilgenreiner for the German Christian Socialists. The editors of the German newspapers *Prager Tagblatt, Bohemia* and *Sudetendeutsche Tageszeitung* were also present.

Professor R. Fischl began: "On behalf of the Medical Faculty of the German University in Prague, I would like to extend a warm welcome to you. Please accept my assurance that we recognise the legitimacy of your demands and will do our utmost to meet them. Once again, I assure you of our heartfelt sympathy. The fact that we have come together without



Bernard Bolzano (1781–1848), professor at the University of Prague, called for friendly and fraternal collaboration.

the barriers of national affiliation and political persuasion is a significant event. On behalf of the German Medical Faculty, I hereby solemnly guarantee that we will support your demands, fair or moderate, with all our strength and vigour."

The vice chairman of the German Medical Association, MUDr Reiman, addressed those present as "dear Czech colleagues". Professor Jan Jesenský, Chairman of the Czech Clinic of Dentistry, proposed the construction of a new building for postgraduate dental education in both Czech and German. The proposal was submitted to both the Ministry of Education and the Ministry of Health but was unfortunately never implemented due to financial constraints.

In order to bring about a rapprochement between President Masaryk and the Czechoslovak Germans, the German writer Emil Ludwig published a book entitled Denker und Staatsmann. Gespräche mit Masaryk (Thinker and statesman. Conversations with Masaryk. Masaryk said: "Our Germans have lived with us for centuries. They are culturally and economically linked to us. They never succumbed to northern, Prussian influences; their connection with the Slavs has enriched them. They taught us about the spiritual richness of the West and gave us good impulses."

One example of Czech-German cultural cooperation was an event organised by members of the Czech and German theatres. In 1936 they staged a play by Jan

Nepomuk Štěpánek from 1816 called "Czechs and Germans". In this bilingual comedy, the actors spoke either only Czech, only German or both in their roles. The roles were assigned in such a way that the Czech roles were played by Czechspeaking Germans and the German roles by German-speaking Czechs. The play was performed on the stages of the Czech State Theatre and the New German Theatre.

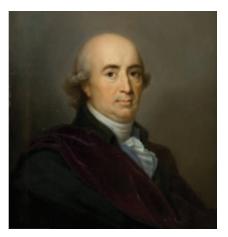
After the fall of the totalitarian regime in 1989, historians turned their attention to Czech-German relations. In a 1991 statement, they wrote: "The complex, evolving and changing relationship between Czechs and Germans has not always been tense to the point of hostility throughout the entire historical process; on the contrary, there have sometimes been periods of cooperation, understanding and tolerance. It was only in modern history, in the era of nationalism and political and national conflicts, that the paths of the Czechs and Germans who had lived in our country for centuries fundamentally diverged."

The remainder of this article is dedicated to the life dates and activities of six personalities in the field of dentistry at the German Medical Faculty in Prague, in chronological order of their activities.

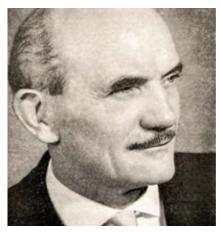
Heinrich Schmidt was born in Prague in 1840 and lived there all his life. He attended grammar school in Malá Strana/ Lesser Town in Prague and graduated from the German University in Prague in

1875. He first joined the Institute of Pathology and Anatomy, where he worked as a student demonstrator, and then moved to the Surgical Clinic as an assistant. In 1879, for health reasons, he changed his field of study to dentistry and completed his specialist training after a year's stay in Vienna. In 1880 he became a lecturer in dentistry in Prague, where he also had a private practice. He was known for his charity, treating poor patients free of charge. He concluded his career in 1889 in the dental department set up especially for him in 1889. He had the reputation of being an excellent teacher. He died in Prague in 1895.

Heinrich Boennecken (1862-1937) was born in Krefeld, Germany. He studied medicine in Bonn, Berlin and Freiburg. After graduating in 1886, he worked as a doctor at the municipal hospital in Elberfeld (now Wuppertal, North Rhine-Westphalia) and after a year took up a two-year post as a ship's doctor for the Norddeutscher Lloyd shipping company. In 1889 he became an assistant at the surgical clinic of the medical faculty in Rostock. He worked mainly on diseases of the dental pulp and dental sepsis. In order to gain experience, he travelled to the United States and obtained a specialisation in dentistry and a DDS degree from the University of Pennsylvania, Philadelphia. After his return, he received his venia legendi in Bonn in 1891 and was appointed professor of dentistry at the German Medical Faculty in Prague in



Johann Gottfried Herder (1744–1803), German author, promoted the Czech renaissance.



Joseph Eschler (1908–1969), professor of dentistry in Prague.



Karl Häupl (1893–1960), professor of dentistry in Prague.

1897. In 1929 he was appointed director of the institute, from which he retired after three years, in 1932. He died in Karlovy Vary/Carlsbad in 1937.

Wilhelm Bauer (1886-1956) was born in Prague and studied at the German Medical Faculty of the University of Prague, where he graduated in 1912. After his clinical work in Prague, he went to Innsbruck, where he received his venia legendi in dentistry in 1925 and was appointed professor and head of the dental clinic in 1933. In the midst of a deteriorating personal and international situation, Bauer was retired against his will in 1939 and emigrated to the USA before conditions for him and his family worsened. He took a new position at the Department of Pathology at St. Louis University of Medicine, whose administrator he later became. In 1956, Wilhelm Bauer died in the United States.

Karl Häupl (1893-1960) was born in Austria, in Seewalchen on the shores of the picturesque Lake Attersee. He studied medicine in Innsbruck. He graduated in 1919 and worked at the medical faculty there until 1923, when he decided to specialise in dentistry in Oslo. He received his venia legendi in 1927 and remained there until 1934, when he moved to the German Medical Faculty in Prague as an associate professor and head of the clinic for dental and maxillofacial diseases. In 1942 he received a call to Berlin, where he devoted himself to orthodontics and prosthetics. After the war, he returned to Innsbruck in 1945 and then to the Medical Academy in Düsseldorf in 1951. In 1960, he was invited to Basel to speak at the 500th anniversary celebrations of the local university. Immediately after his speech, he suffered a heart attack and died.

Fritz Brosch (1903–1981) came from Svitavy in Moravia, where he was born in 1903. After studying at the German Medical Faculty, where he graduated in 1929, he worked in the surgical departments of hospitals, first in Šumperk, then in Uničov and finally in Šternberk (all in Moravia). In 1934 he came to Prague to the dental clinic of Professor Karl Häupl, where he specialised in dentistry and maxillofacial

surgery. He continued his education at the University of Vienna and became a lecturer in these fields on his return to Prague. When Professor Häupl was called to Berlin in 1943, he took over the management of the clinic as a full professor. In 1950, he became a professor at the Clinic for Dental, Oral and Maxillofacial Diseases at the University of Hamburg. He retired from the university in 1961 and became head of the dental department at a major Hamburg hospital. He died in 1981.

Josef Eschler (1908–1969) was born in Liska near Děčín on the Elbe. After studying medicine at the German University in Prague, he graduated in 1933 and moved to the Clinic of Dental and Maxillofacial Surgery in Prague, where he gualified as a professor in 1939. A year later, he was invited to be a visiting professor at the University of Tokyo, where he remained until 1945. In the meantime, he was appointed professor in Prague in 1943. After the war, he worked at the Katharinenhospital in Stuttgart. A year later he went to Cairo and then to Bombay as a visiting professor. On his return, he became professor and director of the Clinic for Dentistry and Oral Medicine at the University of Freiburg, where he died in 1969.

Two hundred years ago, Bernard Bolzano encouraged German and Czech students to work hand in hand for the good of their common homeland. Today we can realise his vision all the more clearly—for our cooperation, for our common friendship, for our common fatherland, the European Union.

Otakar Brazda





**Statement of the Council of European Dentists** 

# Waste management and sustainability in dentistry

At the General Meeting in May 2024 the CED adopted a statement on waste management and sustainability in dentistry.

Dentists spend many hours in the dental practices aiming to provide safe dental services to as many patients as possible. Dentists receive further training and continuous professional development and follow meticulously hygiene regulations and treatment protocols in order to make sure to give patients the best treatment and oral healthcare.

# Sustainability

The Council of European Dentists (CED) is convinced sustainable dentistry is possible. Content of the statement: "If we work together we can improve oral and consequently overall health to reduce the amount of curative treatments and lower the pollution caused by medicine residues and travel movements. By increasing the public knowledge about good oral healthcare we can prevent a lot of treatments and lower the use of dental materials. All materials that we do not have to use are helping us to reduce waste. We advocate for more education on our environmental impact to increase awareness amongst dental professionals and the dental industry. So we can make a more conscious

decision in order to improve sustainability in the dental profession."

Manufacturers play a vital role in promoting sustainable waste management in dentistry. The CED believes that manufacturers should focus on developing ecofriendly and recyclable dental products, reducing the environmental impact of their materials. They can also focus their efforts on minimising excessive packaging and opt for sustainable materials to reduce plastic waste whenever possible and focus on eco-friendly production line practices and materials targeting to minimise the CO<sub>2</sub> production. Finally, CED urges them to establish takeback and recycling programmes for used dental products and materials, encouraging proper disposal and recycling. Dental practices who wish to do so can seek and obtain environmental certifications that demonstrate their commitment to responsible waste management and sustainability.

EU funding and national subsidies supporting dental practices that are looking to implement waste-reduction practices should be encouraged. CED wishes to underline that any national and EU healthcare waste management strategies should be developed through the participation of relevant stakeholders, dentists included. It is important that any obligations for healthcare professionals in relation to such strategies and policies are proportionate and realistic. Such strategies should not introduce any significant financial and administrative burdens on dental practices that qualify as micro and small enterprises and that will not be able to cope with such requirements. Excessive bureaucracy is the wrong approach and must be avoided.

# Conclusion

Sustainable waste management as it is already in place in many EU member states is a necessity for the dental sector in the European Union. By implementing the recommended measures, dental practices, as end users, and manufacturers can significantly reduce their environmental footprint and contribute to a healthier and more sustainable future for all. "By working together, we can safeguard our environment while delivering high quality dental care to patients across the EU."

Adopted at the CED General Meeting in May 2024

# **BDIZ EDI and its multifaceted work**

# We want YOU!

At IDS 2025 BDIZ EDI is relaunching its "We want you" information campaign. The aim is to interest young dentists from Germany and Europe in oral implantology and in the work of BDIZ EDI.





With the "We want you" campaign, the association wants to draw attention to the many different support services it offers for all dental practices, even beyond implantology, including continuing education for newcomers to the profession and seasoned practitioners alike.

BDIZ EDI is an active Europe-wide association that in 2002 went beyond the borders of Germany to forge collaborations, support partner associations and make its voice heard in EU politics. Of course, health policy interventions are also initiated at the federal level. BDIZ EDI is the only association to have presented its own draft law on combating corruption in the health sector. It is currently working intensively on the Medical Device Regulation (MDR) and its many problems.

With its information offensive, BDIZ EDI is highlighting its work in the field of continuing education:

- "Meet the Experts" allows newcomers to get in touch with experienced implantologists and top lecturers.
- An absolute must for anyone interested in implantology is the Curriculum Implantology, which is run in cooperation with the University of Cologne and recently started in the south of Germany. This eight-module course teaches the key building blocks of implant dentistry to small groups of participants. The curriculum takes place at the University of Cologne. It runs for one year and is designed to be affordable for newcomers to the profession. Some partner associations have adopted, and adapted,

- the modules for their countries: Greece, Serbia, Poland and India.
- Each year, the BDIZ EDI Expert Symposium provides an update on a current issue in implant dentistry, and the associated European Consensus Conference (EuCC) provides guidance for practitioners.
- The Europe Symposium of BDIZ EDI provides an opportunity to look beyond the local dental fence and to appreciate the work of European colleagues and exchange ideas. This year's Europe Symposium will be taking place in Stockholm, Sweden.

# A wide field

The full scope of BDIZ EDI's work is illustrated by the "BDIZ EDI informs" webinar series, which the association has been organising since the start of the COVID-19 pandemic in 2020. The continuing-education webinars feature top-notch presenters and cover dental topics (not just implantology!) as well as legal issues. The webinars are particularly suitable for strategic practice orientation for current and future practice owners. BDIZ EDI webinars are aimed at dentists and all members of the dental team. Participation is free of charge for members. On average, BDIZ EDI webinars are attended by between 150 and 400 participants. Members can view the recorded webinars in the seminar archive after the live broadcast.

**AWU** 



# Unexpected decision by the ECJ

On 19 December 2024, the European Court of Justice (ECJ) delivered a landmark judgment in a case concerning the prohibition of third-party ownership of law firms in Germany, which was unexpected following the Advocate General's previous vote (case C-295/23). The ban on third-party ownership is valid under European law.

Following a similar ruling by the ECJ in 2009 on the prohibition of third-party ownership in the German Pharmacy Act, the question arose as to whether these standards could also be applied to other liberal professions in the healthcare sector, in particular investor-managed medical care centres (IMVZ), and what consequences could be drawn from the latest ECJ ruling.

## The case

The ECJ heard a case concerning the withdrawal of the licence to practise law from a law firm's limited liability company (LLC) after the original sole lawyershareholder sold 51 per cent of his shares to an LLC under Austrian law, which is not licensed to provide legal advice in either Germany or Austria but focuses only on business consulting and investment. At the

same time, the LLC's articles of association were amended to ensure the independence of the company's management, which was to be reserved for lawyers. The relevant bar association withdrew the LLC's licence. The case was referred to the ECJ by the Anwaltsgerichtshof München (Munich Bar Court).

# The ECJ judgment

The ECJ considers that the core of the legal dispute is the question of compatibility with EU law of a regulation aimed at preventing purely financial investors who have no intention of practising law professionally, from influencing the operational activities of a law firm. It interprets the questions of the Munich Bar Court as seeking clarification as to whether European law precludes a national rule "according to which, if the law firm con-

cerned is not to have its registration with the bar association revoked, prohibits shares in that company being transferred to a purely financial investor which does not intend to exercise, in that company, a professional activity covered by that legislation."

# Investor-owned MCCs face the same issue

The ECJ considers that both the freedom of establishment and the free movement of capital are affected under European law, but that these restrictions are justified under EU law. The protection of recipients of services—in this case legal services—and, in this context, also the sound administration of justice and the proper exercise of the profession of lawyer all constitute overriding reasons relating to the public interest.



According to the court, a lawyer's duty of representation consists above all in "protecting and defending the principal's interests to the greatest possible extent, acting in full independence and in line with the law and professional rules and codes of conduct". The German rules on the prohibition of third-party ownership are appropriate to ensure the objective of safeguarding the proper administration of justice and ensuring the integrity of the legal profession, as the law expressly excludes the possibility for purely financial investors to influence the decisions and activities of a law firm. The desire of purely financial investors in a law firm to obtain a return on their investment, the ECJ fears, poses a clear risk that this desire may have a direct impact on the organisation and activity of a law firm, since if such investors consider that the return on their investment is insufficient, they may be tempted to demand "that the firm reduce costs or seek a certain type of client".

On the one hand, the Court states that the absence of conflicts of interest is essential to the exercise of the profession of lawyer and requires, in particular, that lawyers should be in a situation of independence, including financial independence, vis-à-vis the public authorities and other operators. On the other hand, the Court emphasises that, in the absence of harmonisation of the rules governing the professions and ethics at EU level, each member state is, in principle, free to regulate the exercise of the profession or ethics in question.

With regard to the profession of lawver, a member state would therefore be entitled to conclude "that a lawyer would not be able to exercise his or her profession independently and in compliance with his or her professional and ethical obligations if that lawyer were part of a firm whose members are persons who, first, are neither practising lawyers nor members of any other profession subject to the moderating effect of rules of professional conduct and, second, act exclusively as purely financial investors with no intention of exercising, within that company, an activity falling within the scope of such a profession."

# Prohibition of third-party ownership in the medical sector

Now that the ECJ has made it clear that a prohibition of third-party ownership is not in principle contrary to EU law for the liberal profession of lawyer, the question arises as to what consequences can or must be drawn from this for other liberal professions—particularly in the medical sector.

# 1. Pharmacies

Pharmacies are responsible for ensuring the proper supply of medicines to the population in the public interest. In order to be able to fulfil this public interest in an independent manner, owners and operators of pharmacies must be pharmacists. More than one person may operate a pharmacy only if all partners can obtain a licence to operate a pharmacy.

The prohibition of third-party ownership of pharmacies laid down in federal law has already been examined by the ECJ, which upheld it (judgments of 19 May 2009, cases C-171/07 and C-172/07). In view of the very specific nature of medicinal prod-

ucts and the associated protection of public health as an overriding reason in the public interest, the ECJ considered the prohibition of third-party ownership to be compatible with EU law, as the member states, within their wide margin of discretion regarding the level of health protection, can "require that medicinal products be supplied by pharmacists enjoying genuine professional independence. They may also take measures which are capable of eliminating or reducing a risk that that independence will be prejudiced because such prejudice would be liable to affect the degree to which the provision of medicinal products to the public is reliable and of good quality."

Therefore, member states may consider that pharmacies run by non-pharmacists may pose a risk to public health, as the profit-oriented nature of these businesses would not be accompanied by the mitigating factors that characterise the pharmacist's activity. Similarly, a member state may take into account the risk that nonpharmacist operators may jeopardise the independence of employed pharmacists by encouraging them to discontinue the sale of medicinal products which it is no longer profitable to keep in stock or that those operators may reduce their operating costs, which may affect the manner in which medicinal products are supplied at retail level.

# 2. Medical groups/joint practices

The situation is less clear when it comes to medical groups/joint practices. Germany has no explicit legal provision prohibiting third-party ownership. A model regulation of the German Medical Association has been implemented in a legally binding or at least comparable way in some federal states. Although there are standards, e.g., in the model professional code of conduct for physicians, these are of a much lower legal level; it is at least doubtful whether they can be easily derived from the medical laws of the federal states. To date, there is no binding legal prohibition of third-party ownership for medical groups/partnership practices that

would support a general prohibition of non-professional ownership.

### 3. MCCs

The area of medical care centres (MCC) is even less clearly regulated. § 95 of the German Social Code, vol. V (SGB V) only provides for the establishment of these centres as "physician-led facilities in which physicians who are entered in the register of physicians in accordance with § 2 (3) SGB V work as employees or contract physicians" and permits the establishment of these centres by licensed physicians, licensed hospitals, providers of non-medical dialysis services in accordance with § 126 (3) SGB V, recognised practice networks pursuant to § 87b (2) (3) SGB V, non-profit organisations involved in medical care that are recognised by statutory health insurers on the basis of a licence or authorisation, or by local authorities. German MCC law does not yet recognise the principles of differentiating between "good" and "bad" third-party ownership.

# Consequences of the ECJ ruling

First of all, it should be noted that the ECJ has found an existing explicit legal prohibition to be compatible with EU law. There are currently no such legal prohibitions affecting the medical profession. It makes a difference whether an existing prohibition of foreign ownership is compatible with European law or whether such a prohibition does not exist at all. It does not follow from the conformity of an existing legal prohibition of third-party ownership with European law that any such (currently non-existent) prohibitions of third-party ownership are required by European law. It only follows from this that the non-existence of prohibitions is not a problem under European law.

It will be interesting when national legislators decide whether and, if so, under what conditions they wish to enact prohibitions of third-party ownership in the healthcare sector. According to the ECJ ruling of 13 December 2024, they are generally allowed to do so without being in

breach with European law. But the question of whether they do so is a matter for each EU member state to decide, at least until there is uniform European legislation on the issue.

This is the second time that the ECJ has declared the prohibition of third-party ownership in the liberal professions to be compatible with European law. The ECJ's decision was based in particular on the wide scope for assessment and decision-making granted to the member states. The court also concluded that member states have the power to decide on the risk prognosis and the classification of financial interests of companies and persons outside the profession as at least an abstract risk to the independence of the exercise of the liberal professions.

This makes it clear that possible regulatory efforts by the German legislator—as called for by the German Medical Association—to introduce a more specific ban on third-party ownership of medical corporations and medical practices have few limits from a European legal perspective. However, the legislator must take positive action if it wants to introduce the ban on third-party ownership of MCCs. The ECJ ruling of 19 December 2024 means that it can do so. Whether it does do so is not a legal decision, but a political one.

It is only necessary to protect public health and enable the independent and conflict-free exercise of the liberal professions—objectives explicitly recognised in European law—and to base these laws on a comprehensible risk assessment.

Obviously, however, this does not in itself imply a decision on the constitutionality of a regulation prohibiting third-party ownership in Germany—in particular with regard to Art. 3 (1) of the Basic Law. Here, too, the general interests recognised under European law also appear to be the starting point for a possible justification of an encroachment on fundamental rights.

### Summary

In its judgment of 19 December 2024, the ECJ has once again clarified that—in line with its case law on the prohibition of

third-party ownership of pharmacies—a regulation prohibiting third-party ownership of law firms does not conflict with EU law. Due to the similarity of interests with other liberal professions in the medical field, this decision—also in view of the efforts of the 125th Congress of the German Medical Association—will breathe new life into the debate on a ban on thirdparty ownership of medical practices and other medical professions, as well as medical care centres. In particular, the question of the compatibility of such regulations with the fundamental rights enshrined in the Basic Law will have to be clarified. The ECJ has already given a clear answer to the question of compatibility with European law. It is now up to national legislators to show their colours.

**RAT** 

## **Contact address**

### **Prof. Thomas Ratajczak**

Solicitor
Specialist for Medical Law
Specialist for Social Law
Legal advisor to the European
Association of Dental Implantologists
(BDIZ EDI)

with the collaboration of **Sebastian Schurz, cand iur** as a research assistant

# Kanzlei RATAJCZAK & PARTNER mbB Rechtsanwälte

Berlin · Böblingen · Duisburg · Essen · Freiburg i. Br. · Cologne · Meißen · Munich Charles-Lindbergh-Straße 7, 71034 Böblingen, Germany (from 1 April 2025)

Phone: +49 7031 9505-27 (Sybill Ratajczak) syr@rpmed.de Fax: +49 7031 9505-99 ratajczak@bdizedi.org huschke@rpmed.de



We publish dental for over the past three decades.

YOU CAN RELY ON US. WWW.OEMUS.COM



# 15-year follow-up clinical case

# Rehabilitation of severe maxillary ridge atrophy with short mandibular implants

Dr Eduardo Anitua, Spain

Oral implantology has experienced significant development in recent decades, offering increasingly effective and less invasive solutions for the rehabilitation of patients with bone atrophies.<sup>1-3</sup> In our practice, we frequently observe cases of vertical, horizontal, and mixed bone atrophies that require advanced techniques for their rehabilitation using dental implants.<sup>4,5</sup> Surgical and rehabilitative techniques for the maxilla and mandible have evolved considerably, adopting a minimally invasive approach in line with other medical disciplines.6,7 Procedures that were considered innovative just a decade ago have now become standard in daily clinical practice. The optimisation of these techniques has improved treatment predictability, reduced patient morbidity, and shortened recovery times, transforming the landscape of modern implantology.8

One of the most significant advances in this field has been the two-phase ridge expansion or split technique with transitional implants, described by our research group in 2011.<sup>10</sup> This procedure was designed to treat severe horizontal bone atrophies, achieving an increase in total bone volume and a better final implant position compared to the conventional split method.<sup>10,11</sup> The validation of this technique was supported by the publication of a pilot study, and today, 14 years later, it has become a routine practice in implant rehabilitation.<sup>10–13</sup>



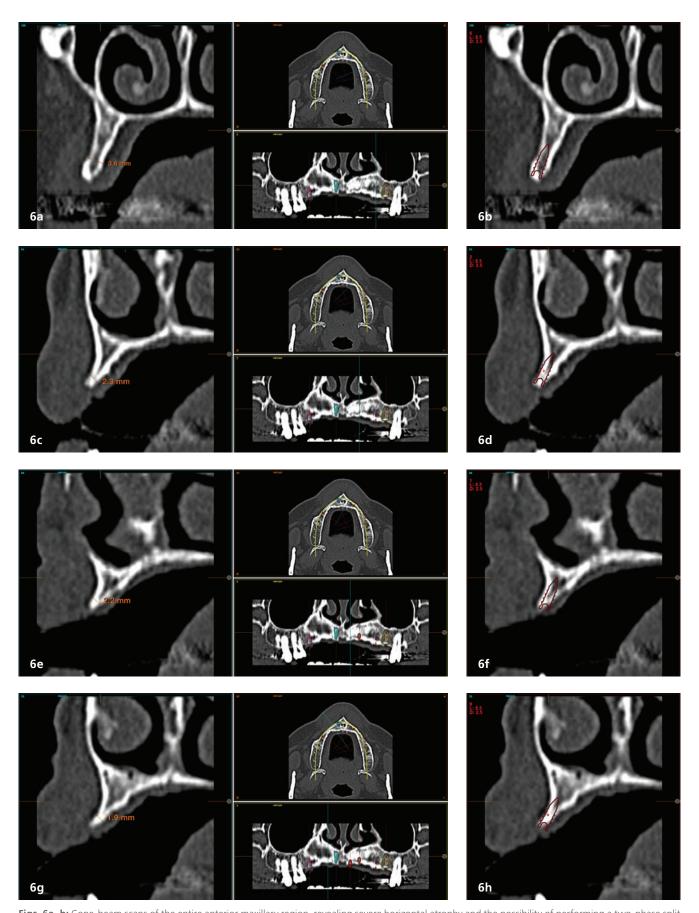




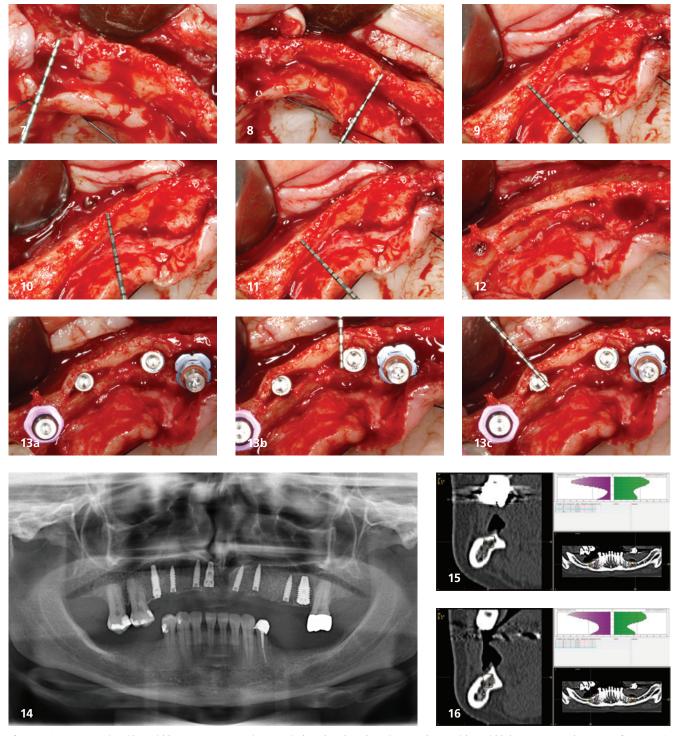




**Figs. 1+2:** Intra-oral images of the patient without the prosthesis, showing a thin mucosa covering the upper alveolar ridge, which appears narrow. – **Fig. 3:** Initial radiograph of the patient. It shows vertical atrophy in both posterior mandibular sectors and an edentulous section in the upper maxilla, which the patient wishes to rehabilitate with dental implants. – **Figs. 4+5:** Images of the initial diagnostic wax-up with the teeth to be replaced.



**Figs. 6a–h:** Cone-beam scans of the entire anterior maxillary region, revealing severe horizontal atrophy and the possibility of performing a two-phase split to achieve the necessary width for placing conventional-diameter implants in the correct axis.



Figs. 7–10: Intraoperative ridge width measurements using a periodontal probe. These images show a ridge width between 2 and 3 mm. – Figs. 11+12: Residual bone crest before and after the initial perforations for the transitional implants, following the use of the first expander and separation of the cortical plates. – Figs. 13a–c: Placement of the transitional implants and final bone width after the procedure, which, as seen, has doubled compared to the initial measurement. – Fig. 14: Panoramic radiograph taken after the initial surgery, showing the two-phase split procedure and the placement of transitional implants. – Figs. 15+16: Cone-beam planning scans of the mandible for the placement of short implants in both posterior mandibular sectors.

Likewise, short and extra-short implants have represented a crucial advancement in the treatment of height atrophies in the maxilla and mandible. With extensive clinical experience and long-term followup, these implants have proven to be an effective alternative to avoid more invasive procedures such as bone grafts or sinus lifts, significantly reducing the surgical impact on the patient.<sup>14–16</sup>

When both procedures are used together, they provide a highly effective

solution for the most challenging cases, where vertical and horizontal bone atrophies coexist. This combination allows for easier management of complex situations, ensuring predictable rehabilitation with a lower rate of postoperative complications.

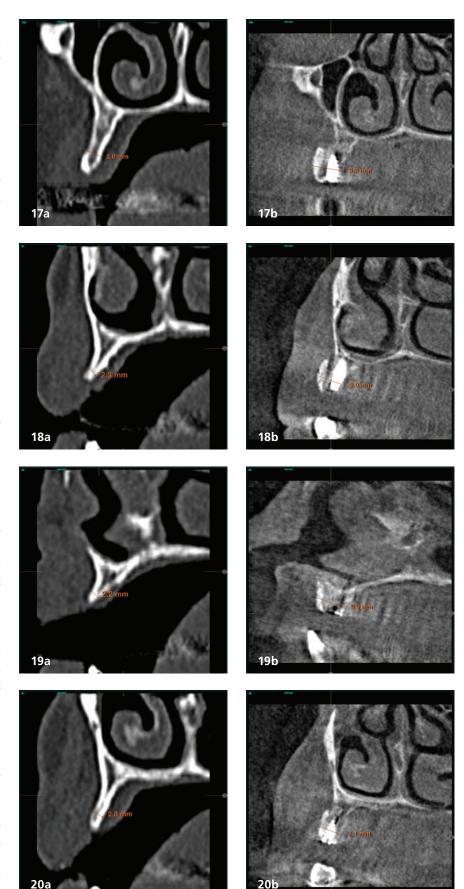
We present a clinical case demonstrating a successful 15-year rehabilitation using a two-phase expansion with transitional implants in areas of severe horizontal atrophy and extra-short implants for height loss (Figs. 1–34). The outcome has been successful after a 15-year follow-up period, ensuring stable long-term rehabilitation without incidents or complications, further reinforcing the effectiveness of these techniques in addressing complex cases.

# Discussion

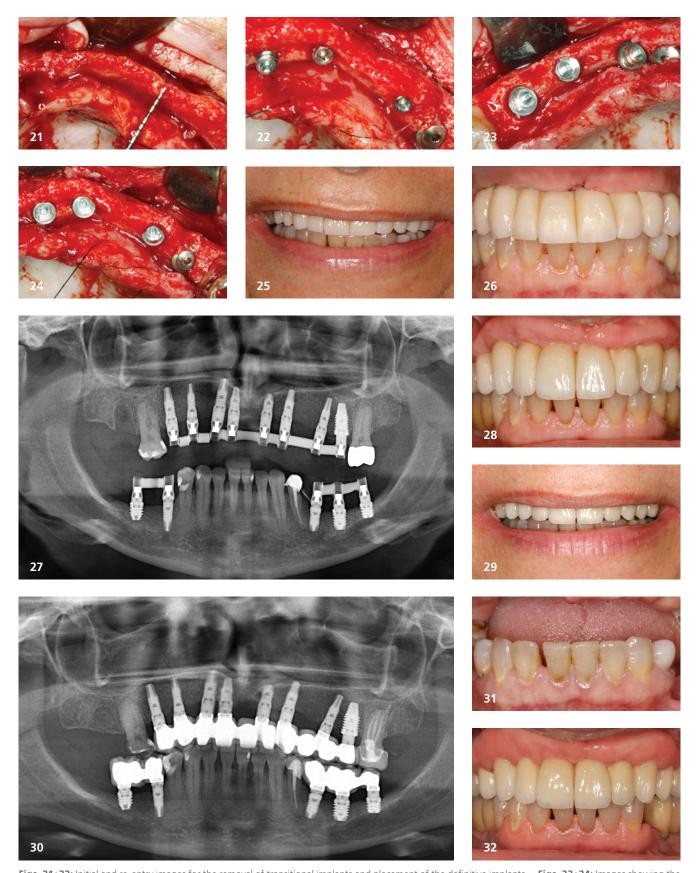
Implantology, both in its surgical and prosthetic aspects, is in constant evolution, with modifications in procedures aimed at optimising long-term outcomes.<sup>17, 18</sup> Severe bone atrophies, such as those presented in this clinical case, represent a considerable challenge in implant rehabilitation, yet their incidence in daily practice has been increasing. This trend may be attributed both to the failure of previous implant treatments and to the growing demand from long-term edentulous patients seeking to benefit from implant placement.<sup>19</sup>

Traditionally, these cases relied on advanced bone regeneration procedures, such as autologous grafts, guided bone regeneration techniques, or maxillary sinus lifts. <sup>20</sup> However, these approaches present certain limitations, including the waiting period for bone integration, donor site morbidity in the case of autologous grafts, and an increased risk of complications. <sup>19–22</sup> Therefore, having resources such as short and extra-short implants, as well as two-phase split techniques, is essential for offering less invasive therapeutic approaches with long-term successful outcomes, as demonstrated in the follow-up of this case.

Current studies have shown that reducedlength implants can achieve success rates comparable to or even superior to those of conventional implants when applied



**Figs. 17a–20b:** Initial images and follow-up cone-beam scans showing the achieved width after the two-phase expansion.



**Figs. 21+22:** Initial and re-entry images for the removal of transitional implants and placement of the definitive implants. – **Figs. 23+24:** Images showing the placement of the definitive implants after the removal of the transitional implants. – **Figs. 25+26:** Clinical images of the patient with the progressively loaded prosthesis, fabricated and placed hours after implant insertion. – **Fig. 27:** Radiograph of the newly placed prosthesis. – **Figs. 28+29:** Definitive prostheses placed in the patient. – **Fig. 30:** Radiograph taken at the time of definitive prosthesis placement. – **Figs. 31+32:** Initial and final images of the case at 15 years of follow-up.

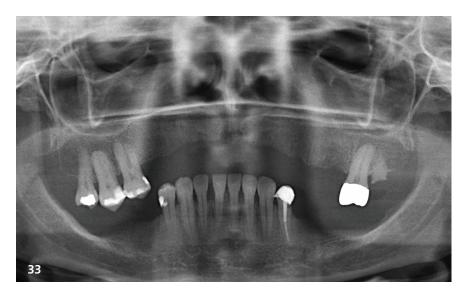
under appropriate biomechanical criteria.<sup>23,24</sup> The optimised design of these implants, featuring treated surfaces that enhance osseointegration and specific geometries that optimise load distribution, has been key to their establishment as a valid alternative in modern implantology.

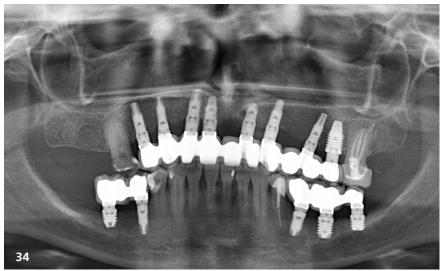
Meanwhile, the split crest technique allows for an increase in bone bed volume without the need for additional grafts in many cases. This technique is particularly useful in patients with moderate to severe horizontal atrophy, where the available bone width is insufficient for the placement of conventional implants.<sup>25</sup> One of the primary benefits of the split crest technique is that it allows for the immediate insertion of implants within the same surgical session, reducing treatment times compared to guided bone regeneration techniques or autologous grafts, which require prolonged waiting periods for bone consolidation. Additionally, by preserving the vascularisation of the expanded segment and minimising surgical trauma, better healing and long-term implant stability are promoted.

With the description of this technique variant using a transitional implant, the vestibular inclination of the implant—one of the main issues of the original technique—can be reduced.<sup>10,11</sup> The combined use of both procedures can be an effective and predictable alternative, as demonstrated in this clinical case with extensive follow-up and excellent results in terms of treatment stability and implant survival.

# **Conclusions**

The most severe cases of combined atrophies require solutions that integrate multiple surgical techniques, always prioritising those with lower morbidity for the patient to ensure a comfortable and predictable long-term procedure. As demonstrated in the presented clinical case, the bone gains achieved through the two-phase split technique and transitional implants have been maintained throughout the follow-up period, allowing them to be considered predictable and stable over time.





**Figs. 33+34:** Initial and final radiographs at 15 years of follow-up.





References





Contact address

Eduardo Anitua DDS, MD, PhD
Eduardo Anitua Foundation
Vitoria, Spain
eduardo@fundacioneduardoanitua.org
www.fundacioneduardoanitua.org

# A contemporary approach in preserving buccal structures

# Immediate implant placement using the Socket Shield Technique

Dr Jörg-Martin Ruppin, Germany

Following an initial surge in popularity during the late 1990s, the concepts of immediate implant placement and immediate provisionalisation have regained significant attention in clinical practice. From a patient-centered perspective, these protocols offer numerous advantages—including shortened treatment times, fewer surgical interventions, reduced postoperative morbidity, and improved comfort through fixed interim restorations.

Nonetheless, in the early stages of immediate implantations, especially in the aesthetic zone, failures and complications could not be ruled out. The assumption that an immediate implantation could influence or halt the resorption processes of the alveolar bone after tooth extraction turned out to be incorrect.

Robust scientific evidence now confirms that post-extraction ridge resorption is a physiological process that cannot be prevented. The extent of this resorption is largely dictated by individual phenotypic factors, such as buccal bone thickness, soft-tissue volume, and periodontal biotype.<sup>1</sup>

Should immediate implant placement still be considered in the aesthetic zone, meticulous case selection and a thorough understanding of the resorptive processes and their underlying causes are absolute prerequisites (conditio sine qua non).<sup>2</sup>

Incorrect case indication or suboptimal surgical technique may lead to significant long-term aesthetic complications due to hard- and soft-tissue resorption. These may manifest as buccal translucency or exposure of the implant surface—outcomes that, from the patient's perspective, are often perceived as complete aesthetic failures.

Since corrective surgical interventions, such as secondary connective tissue graft-

ing, offer limited predictability and success in such scenarios, the only viable solution in most cases involves explantation, reaugmentation of the site, and complete implant re-treatment.

In recent years, in addition to improved understanding of appropriate case selection, several key factors have emerged as critical for the successful management of risks associated with immediate implant placement. Foremost among these is the correct positioning of the implant within the aesthetic zone. Implants should be planned with a palatal offset and placed at a sufficient distance from the buccal alveolar wall.<sup>3</sup> In this context, the use of

guided surgery systems with digital planning of the implant position (Computer-Aided Surgery, CAS) can be of significant benefit (Fig. 1).

Surgical guides serve as valuable tools for precise implant placement, particularly in immediate implantation cases where there is often only partial contact between the implant and the surrounding bone (Figs. 2+3).

In addition to correct implant positioning, the management of resorptive processes is the most critical factor for achieving long-term success in the aesthetic zone. The current literature describes two primary approaches to address this challenge.

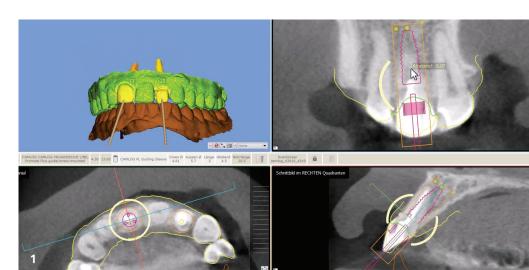
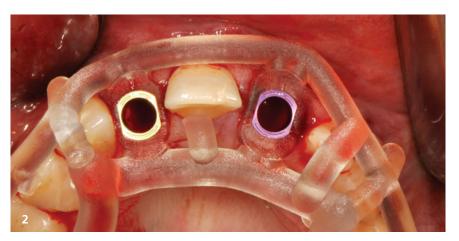
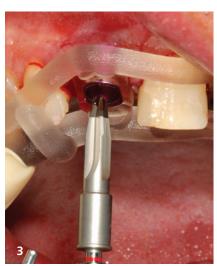


Fig. 1: Implant position planning using CAS software.



**Fig. 2:** Surgical guide fabricated based on digital planning. – **Fig. 3:** Guided osteotomy using the surgical template.



The first approach involves filling the gap between the implant and the buccal bone wall with a non-resorbable bone substitute material. While this method does not prevent resorption of the buccal bone plate, it may help maintain the original alveolar volume to a significant extent.<sup>4</sup> This technique can be further enhanced by soft-tissue augmentation using a subepithelial connective tissue graft.

The second approach aims to actually reduce or even prevent buccal bone resorption. This method focuses on preserving the so-called "bundle bone," the inner layer of alveolar bone, which receives its vascular supply almost exclusively from the periodontal capillary plexus surrounding the natural tooth. Upon tooth extraction, the periodontium—and thus the associated vascular network—is entirely disrupted, resulting in the loss of perfusion to the bundle bone. This vascular loss leads directly to bone resorption.

The extent of this resorptive process is strongly influenced by the anatomical thickness of the buccal bone plate—being most pronounced when the buccal wall is naturally thin.<sup>5</sup>

In 2010, the research group led by Hürzeler introduced a novel technique for "partial tooth extraction".<sup>6</sup> The core concept behind this approach is the preservation of a portion of the buccal root segment to maintain the vitality of the periodontal vascular plexus. For this reason, the technique is referred to in the inter-

national literature not only as the "Socket Shield Technique" but also as a "Partial Extraction Technique".

Since its original publication, the method has undergone several modifications, yet its fundamental principle remains unchanged.<sup>7,8</sup>

The following case report presents a detailed step-by-step explanation and clinical application of this technique.

# **Case report**

A 61-year-old female patient presented to our practice in May 2021 requesting implant placement in region # 14. Her medical history revealed a penicillin allergy; she was a non-smoker and periodontally healthy. The tooth had undergone prior endodontic treatment and exhibited a palatal cusp fracture extending into the pulpal floor.

The tooth was therefore deemed non-restorable. Both the surrounding alveolar bone and soft tissue were intact; however, the patient exhibited a thin gingival phenotype, which is associated with a higher risk of post-extraction resorption (Figs. 4+5).

Following a comprehensive consultation and evaluation of all treatment options, a decision was made in agreement with the patient to proceed with immediate implant placement using the Socket Shield Technique.

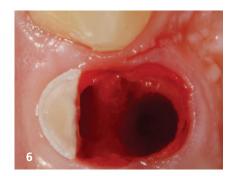
The procedure began with decoronation of the tooth, followed by separation of the roots at the pulpal floor using a fine Lindemann bur. After careful removal of the palatal root, the buccal root fragment was thinned using a Lindemann bur and diamond burs (Figs. 6+7).

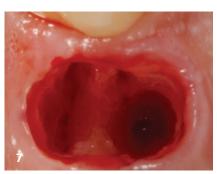
The goal of the Socket Shield Technique is to completely remove the apical portion

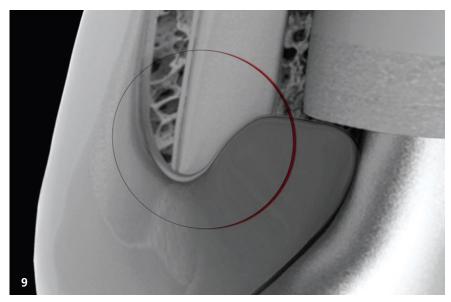


Fig. 4: Buccal view of tooth #14. – Fig. 5: Occlusal view of tooth #14.











**Fig. 6:** Alveolus following removal of the palatal root segment. – **Fig. 7:** Alveolus after thinning of the buccal root fragment. – **Fig. 8:** Immediate implant placement; gap augmented with autologous bone chips. – **Fig. 9:** Schematic representation of the Socket Shield Technique (Source: Schwimmer CW et al., *The Journal of Prosthetic Dentistry*, 2019).

of the root while preserving the crestal part of the buccal root, along with the surrounding periodontal ligament. This preparation must be carried out with precision and minimal trauma to avoid damaging the periodontal structures.

The immediate implant placement was then performed using a CAMLOG PRO-

The Osstell ISQ scale ISQ has a non-linear correlation to micro mobility.

Micro mobility decreases >50 % from 60 to 70 ISQ (ref. 7, 8) 65 LOW STABILITY MEDIUM STABILITY HIGH STABILITY ISQ 60-65 ISQ 65-70 ISQ >70 Indication Partial case Surgical protoco 1- or 2-stage Early loading Restorative protoco Traditional loading ref. 1, 5, 6 ref. 1, 3, 4 ref. 1, 2, 3,9 The above is a summary of scientific data and not an official recommendation by Osstell. To monitor osseointegration measure at placement and before final restoration. ()OSSTELL 10

GRESSIVE-LINE implant (CAMLOG), with a slightly palatal positioning. A small gap between the implant and the root segment was intentionally left, which was subsequently augmented with autologous bone chips (Fig. 8). The principle of implant and Socket Shield positioning is detailed in Figure 9.9

During the implant placement, both the insertion torque and ISQ values (resonance frequency analysis, RFA) were recorded to accurately assess primary stability. The insertion torque was 55 Ncm, and the ISQ values were 78/78 (Osstell Beacon®, W&H). According to the Osstell ISQ scale (Fig. 10), the primary stability was within a range that allows for immediate loading with a non-occlusally supported single crown.

**Fig. 10:** ISQ values and interpretation for primary stability assessment.















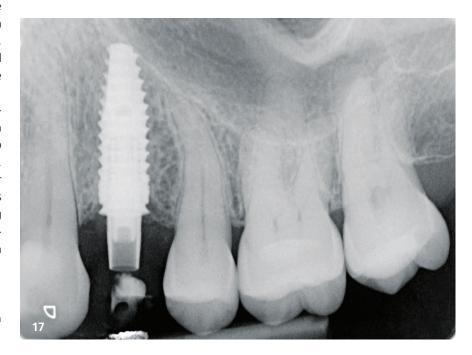
Fig. 11: Intraoperative impression using a semi-customised impression post. – Figs. 12+13: Semicustomised gingival former in situ. - Fig. 14: Master model with gingival mask, following semicustomised impression post. - Fig. 15: Clinical situation six days post-op. - Fig. 16: Long-time provisional restoration placed six days post-op.

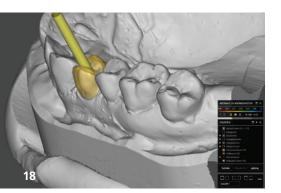
An intraoperative impression was taken using a custom PEEK impression coping (DEDICAM®, CAMLOG) to transfer the planned emergence profile into the model (Fig. 11). Following the impression, the implant was temporarily restored with a custom PEEK gingiva former (DEDICAM®, CAMLOG), and the patient was dismissed with instructions for postoperative care (Figs. 12+13).

The postoperative course was uneventful. The patient did not require any pain medication at any point and reported no visible extra-oral swelling or hematoma. Six days post-surgery, the gingiva former was removed. The clinical situation was largely uneventful, with only mild swelling noted in the papillary area. The laboratoryfabricated, long-term provisional crown

Fig. 17: Postoperative radiographic evaluation 48 hours after implant placement.

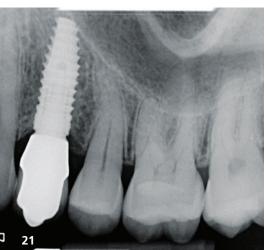
(acrylate, occlusally screwed, designed as a one-piece hybrid abutment crown with a titanium bonding base) was placed with an insertion torque of 25 Ncm. The crown featured centric occlusal contacts, but no guidance was intentionally provided for laterotrusive movements to avoid applying extra-axial chewing forces to the im-











**Fig. 18:** CAD/CAM design of the final restoration (fully veneered zirconia hybrid abutment crown). – **Figs. 19+20:** Definitively placed hybrid abutment crown on implant #14 – **Fig. 21:** Radiograph of implant #14 with final crown in place.

plantduring the healing phase (Figs. 15+16). The control X-ray (Fig. 17) shows the implant with the long-term provisional crown in place. The material used is not radiopaque.

After a complication-free healing period of twelve weeks, the long-term provisional crown was removed, and a new ISQ measurement was performed to assess the quality of osseointegration. The values of 81/83 indicated complete osseointegration of the implant, allowing for the final restoration to proceed. The master model from the day of surgery was used for the final prosthetic fabrication.

Since the Socket Shield Technique generally results in minimal volumetric changes to both hard and soft tissues during the healing process, no new impression or intra-oral scan was necessary. Both hard and soft tissues appeared unchanged in comparison to the model situation (Fig. 18). The final restoration was designed as a one-piece hybrid abutment crown (zirconia, fully veneered) on a titanium bonding base (CAMLOG) and was placed without the need for any adjustments (Figs. 19–21).

Although this technique is surgically demanding and time-consuming, the aesthetic outcomes and excellent patient acceptance (shorter healing times, extremely low postoperative morbidity, and the possibility of immediate restoration without a removable provisional) justify the effort. It offers a viable alternative to established treatment protocols.

With a current observation period of approximately 14 years, a final evaluation of the technique through scientific studies is still pending. However, existing studies suggest comparable long-term stability and complication rates to those of established techniques.<sup>10</sup>

# Conclusion

The Socket Shield or Partial Extraction Technique represents a relatively new variant of immediate implantation. The goal is to maintain the vitality of the periodontal ligament in the buccal region by deliberately and carefully preserving a portion of the buccal root, thereby minimising resorption of both the buccal hard and soft tissues.



Author details



References



Contact address

Dr Jörg-Martin Ruppin Penzberg, Germany +49 8856 91078-78 dr.ruppin@iz-ruppin.de www.iz-ruppin.de



# ZVP ONLINE

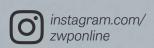


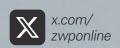
show some



leave a like.









# Six-year case report

# Fully guided immediate implant restoration in the aesthetic zone

Dr Guilherme Moreira, Brazil

Dental implants have become a reliable option for replacing missing teeth due to their high clinical success rate. Over the years, advancements in implant technology and surgical techniques have significantly improved patient outcomes.<sup>1</sup> One of the notable advancements is immediate implant placement, developed to address the traditionally lengthy treatment times associated with conventional implant protocols.<sup>2</sup> Immediate implant placement offers the advantage of reducing overall treatment duration and minimising the number of surgical interventions required.

Rehabilitating missing anterior teeth with dental implants in the maxillary aesthetic zone presents particular restorative challenges due to the high aesthetic demands of this region. The aesthetic zone is highly visible when a person smiles or speaks, and any imperfections can significantly affect a patient's appearance and selfconfidence. Achieving a harmonious integration of the implant-supported restoration with the surrounding natural dentition is crucial for patient satisfaction. However, the variability in aesthetic outcomes can be influenced by several factors, including the patient's biotype, the quality and quantity of the surrounding soft and hard tissues, and the skill and experience of the clinician.3

Immediate implant placement in the aesthetic zone requires precise planning and execution to achieve optimal aesthetic and functional results.4 This approach often involves a multidisciplinary team, including restorative dentists, oral surgeons, and dental technicians, to ensure a comprehensive treatment plan tailored to the individual patient's needs. The use of advanced digital technology, such as computer-aided design & computeraided manufacturing (CAD/CAM), and guided surgery has disrupted the planning and placement of dental implants. These technologies enhance the accuracy of implant placement, allowing for a more predictable outcome and reducing the risk of complications.5

In the following case report, we present a fully guided immediate implant restoration in the aesthetic zone, with a six-year follow-up. This case highlights the importance of meticulous planning, the use of advanced technology for guided surgery, and the long-term stability of the aesthetic and functional outcomes. The patient presented with a hopeless maxillary central incisor and strongly desired a rapid and aesthetically appealing solution. Through detailed preoperative assessment and guided implant surgery, we achieved immediate implant placement and restoration, providing the patient with a seamless transition from a failing tooth to a functional and aesthetically pleasing implantsupported restoration.





Fig. 1: Initial intra-oral examination showing external root resorption on the palatal surface of tooth #11. – Fig. 2: Tooth #11 appears darker and slightly intruded compared to its contralateral tooth.

The six-year follow-up period offers valuable data on the stability of the treatment, underscoring the importance of a correct diagnosis and treatment planning.

# **Initial situation**

A 45-year-old woman, in good health (ASA I), a non-smoker, and with no medications or allergies, visited our clinic due to concerns about one of her central incisors. She reported, "I have a front tooth that has changed colour and was told it needed to be extracted. I would like it to be restored quickly because it's the first thing you see when talking and smiling." She desired a minimally invasive aesthetic solution for her upper right central incisor.

The extra-oral examination showed a high smile line. The intra-oral examination of tooth #11 revealed signs of external root resorption on the palatal surface (Fig. 1). The tooth appeared darker and slightly intruded compared to its contralateral tooth (Fig. 2), raising suspicion of ankylosis. The tooth was non-sensitive to percussion, and the CO<sub>2</sub> test was negative. No signs of local infection, occlusal trauma, or periodontal inflammation were observed.





**Fig. 3:** CBCT scan confirming the extent of root resorption. – **Fig. 4:** SAC classification categorising the patient's surgical case as complex and prosthodontic case as advanced.

The CBCT scan confirmed the extent of the root resorption with no loss of alveolar height detected (Fig. 3).

Based on the SAC classification, the patient's surgical case was categorised as complex, and her prosthodontic case was evaluated as advanced (Fig. 4).

# **Treatment planning**

Following an extensive discussion of the treatment options, immediate implant placement was selected, considering the favourable clinical conditions and the patient's desire. Tooth #11 was atraumatically extracted with the intention of preserving the residual alveolar bone. A temporary screw-retained crown was placed on the same day.

The treatment workflow included:

- 1. Digital planning to establish a prosthetically-driven implant position.
- 2. Atraumatic extraction of tooth #11.
- Guided surgery for a Straumann®
   Bone Level Tapered 3.3 mm SLActive®
   12 mm implant placement in a prosthetically driven position.
- 4. Connective tissue graft on the buccal side.
- 5. Temporary screw-retained crown delivery after surgery.
- 6. After healing, final screw-retained crown delivery.







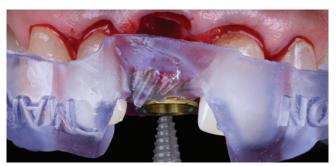


Fig. 5: Evaluation of tooth #11 showing absence of increased probing depth. – Fig. 6: Implant bed preparation following the extraction of tooth #11. – Fig. 7: Confirming complete preparation depth and correct orientation of the implant axis. – Fig. 8: Insertion of Straumann® Bone Level Tapered SLActive® implant using the surgical guide.

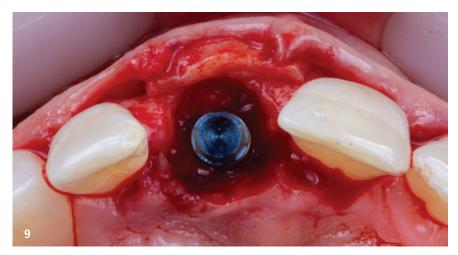


Fig. 9: Soft-tissue augmentation in the buccal zone with a connective tissue graft.

# **Surgical procedure**

We initiated the evaluation of the tooth, noting the absence of dental plaque, bleeding on probing, or increased probing depth (Fig. 5). Local anaesthesia with 4% articaine and 1:100,000 epinephrine was administered, and tooth #11 was extracted atraumatically.

The sterile surgical guide was verified and positioned for implant-site preparation following the extraction. The implant bed was prepared according to the manufacturer's guidelines (Fig. 6). The Straumann® depth gauge was utilised to confirm the complete preparation depth and the correct orientation of the implant axis (Fig. 7).

The Straumann® Bone Level Tapered 3.3 mm SLActive® 12 mm implant was inserted using the surgical guide with the

aid of the handpiece in a clockwise direction at a speed of 15 rpm torqued to 35 Ncm (Fig. 8). Soft-tissue augmentation was performed in the buccal zone with a connective tissue graft (Fig. 9).

A tension-free closure of the soft tissue was achieved, and a provisional abutment was placed (Fig. 10). A radiograph was taken to confirm the precise positioning of implant #11 in relation to teeth #21 and #12, as well as the placement of the abutment. Subsequently, the abutment was torqued to 35 Ncm using a torque wrench, followed by the placement of an immediate temporary crown (Fig. 11). Proximal contacts and occlusion were verified, and all occlusal contacts were adjusted to eliminate interference during lateral and excursive movements. The patient received instructions on care and hygiene.

The site demonstrated good healing at the time of suture removal ten days later and at subsequent follow-up appointments.

# **Prosthetic procedure**

Four months after the implant had healed and osseointegration was confirmed, the temporary crown was removed. The gingiva was examined for healing, showing sufficient interdental papilla and buccal contours similar to those of the adjacent teeth (Figs. 12+13).

A digital impression was taken using a Virtuo Vivo<sup>TM</sup> IOS, and the final crown was placed, ensuring proper occlusion and aesthetics. A radiographic intra-oral examination confirmed the absence of any pathological findings (Fig. 14). Access holes were sealed with Teflon and composite restoration. The patient was highly satisfied with the treatment's aesthetic and functional results. Oral hygiene instructions were given, and follow-up appointments were scheduled.

Clinical and radiographic evaluations were performed yearly. During these follow-up assessments, at two (Fig. 15) and six years (Figs. 16+17), the clinical examinations showed well-maintained gingival tissues and gingival margin around the implant. The prosthesis was deemed satisfactory in terms of aesthetics, and patient satisfaction. At six years, the radiographic evaluation confirmed the preservation of peri-implant bone tissue (Fig. 18).

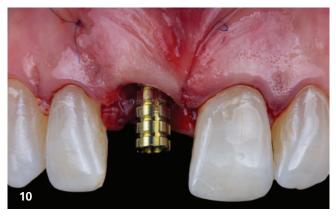
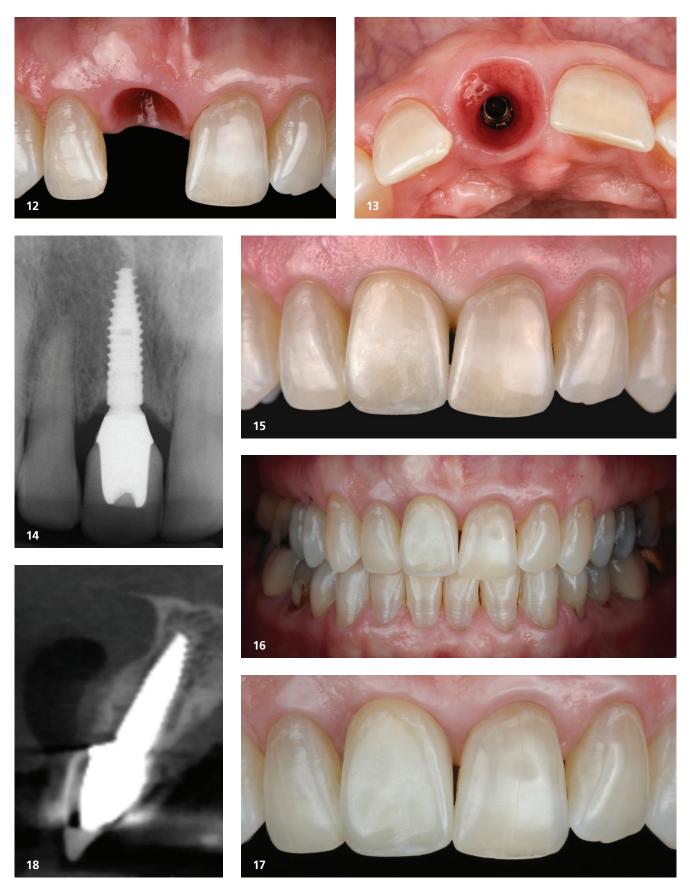




Fig. 10: Placement of the provisional abutment. - Fig. 11: Immediate temporary crown.



**Figs. 12+13:** Four months after the surgery, presence of sufficient interdental papilla and buccal contours similar to those of the adjacent teeth. – **Fig. 14:** Radiographic examination of the final crown. – **Fig. 15:** Two-year follow-up showing well-maintained gingival tissues. – **Figs. 16+17:** Six-year follow-up showing stable gingival margin around the implant. – **Fig. 18:** Six-year follow-up radiographic evaluation.

# WE LOVE WHAT WE DO NOT THE PROPERTY OF THE PRO

We publish dental for over the past three decades.

YOU CAN RELY ON US. WWW.OEMUS.COM



Holbeinstraße  $29 \cdot 04229$  Leipzig · Germany Phone: +49 341 48474-0 · info@oemus-media.de

# **Treatment outcomes**

The final outcome demonstrated exceptional health in both the hard and soft tissues. The gingival tissue surrounding the implants has remained stable with no recession for six years following final crown placement. The patient expressed gratitude, stating, "I am very pleased with the treatment results, especially having had a provisional prosthesis from the outset. The new crown looks natural and blends perfectly with my other teeth—I love it."

# Conclusion

The key to successful implant therapy in the anterior aesthetic zone is the optimal management of the relationship between hard and soft tissues. Implants that are adequately stabilised can be successfully loaded without occlusal contact at the time of implant placement. They can later be definitively loaded with occlusal contact, without compromising function or aesthetics.



Author details



References



Contact address

Dr. Guilherme Moreira Bauru, Brazil +55 14 981381318 ectoperio@gmail.com www.ectoperio.com.br







The European Academy for Ceramic Implantology (EACim) proudly announces its 4<sup>th</sup> Annual Congress, set to take place in the dynamic and culturally rich city of Madrid on 13 and 14 June 2025. This highly anticipated event will once again bring together pioneers, innovators, and leading voices in advanced ceramic implantology for two transformative days of cutting-edge science, groundbreaking research, and meaningful collaboration.

At the forefront of this year's congress is the rapidly evolving field of metal-free implantology. Renowned international experts will take the stage to share their insights, unveiling the latest scientific

DUBAI BALIROOM



breakthroughs, innovative techniques, and forward-thinking approaches that are shaping the future of implant dentistry. Attendees will gain comprehensive, upto-date knowledge on this growing field, ensuring they stay ahead in an industry that is constantly advancing.

# Beyond knowledge: An immersive experience in innovation and collaboration

However, EACim 2025 is more than just a platform for knowledge transfer—it is an immersive, hands-on experience designed to foster innovation, spark discussions, and transform patient care. Participants will have the opportunity to engage in practical workshops, live demonstrations, and interactive sessions, allowing them to refine their skills, explore new treatment solutions, and exchange ideas with leading professionals and like-minded peers. The congress will serve as a collaborative think tank, where experts and attendees work together to redefine best practices and drive the next generation of implantology.

Madrid, a city that seamlessly blends tradition and modernity, provides the ideal backdrop for this exceptional event. Between sessions, delegates can explore world-renowned museums, historic landmarks, and a thriving culinary scene, ensuring an experience that is as enriching outside the congress as it is within.

# Join us and be part of the future

Whether you are a seasoned professional, a forward-thinking researcher, or an ambitious clinician eager to expand your expertise, the EACim Congress 2025 is your gateway to the future of ceramic implantology. This is where innovation meets practice, where ideas are exchanged, and where the evolution of implant dentistry takes form.



# Contact address

EACim—European Academy of Ceramic Implantology

www.eacim-ceramic-implantology.com

# Powering progress in implantology

# **OSSTEM IMPLANT now focuses** on the European market

OSSTEM has established itself as one of the leading providers in the field of dental implantology worldwide. With a clear vision for the future, the company is now strengthening its presence in Europe.

This was impressively demonstrated at the IDS 2025 in Cologne, where the company showcased its expertise with an 630 m<sup>2</sup> booth. The event highlighted not only OSSTEM's position as a global market leader but also its comprehensive product portfolio, ranging from implants to digital dentistry solutions.

Just before IDS, the company hosted the OSSTEM Europe Dealer Seminar, bringing together its European distribution partners. The goal was to enhance collaboration within the network and improve service for end-users. OSSTEM is dedicated to bringing smiles to both dental professionals and patients through innovative solutions that simplify daily practice and optimise treatment outcomes.

A major addition to the product lineup in Europe is the IM-Cure Kit, a specialised solution for removing peri-implantitis, providing clinicians with an effective tool to improve implant longevity and patient outcomes. In response to growing clinical demands, OSSTEM is also expanding its range of short implants, allowing for a broader range of indications and treatment possibilities.

In line with its commitment to continuous product innovation, OSSTEM has introduced several enhancements to its two-piece abutments. The lower part of the HEX has been extended to increase resistance to deformation, resulting in over a 50% improvement in fatigue strength, as confirmed by internal testing. Beyond these improvements, OSSTEM is also expanding its range of abutments to provide even greater flexibility for clinicians.

But the efforts go beyond implants and abutments. The company is currently working on reg-







ulatory approvals for the T2 Plus CBCT system and the K5 dental chair unit, further broadening its offering to dental professionals and ensuring comprehensive support in clinical practice.

Education and scientific advancement are at the core of OSSTEM's mission. As a Diamond Sponsor of EuroPerio and since 2023 also of the EAO, OSSTEM underscores its commitment to education and research. The continuous expansion of the OSSTEM Implant Scientific Community (OIC) provides a valuable platform for knowledge exchange and professional development in implantology.

Those interested in OSSTEM's products, courses, or other offerings can reach out directly to OSSTEM or connect with its growing network of dealers.

**Contact address** OSSTEM Europe s.r.o info@osstem.eu www.osstem.eu



EuroPerio11, Austria

# World's leading congress in periodontology and implant dentistry

EuroPerio11 isn't just the premier event in periodontology and implant dentistry, it's an unmatched opportunity to explore the latest scientific developments, innovative treatments, and important connections between oral health and overall health. Whether you cover health, science, or technology, EuroPerio11 will provide fresh, newsworthy content for your audience.







This most important global gathering for periodontology and implant dentistry event will take place from 14 to 17 May 2025 at Messe Wien in Vienna, Austria. Hosted by the European Federation of Periodontology (EFP), EuroPerio is renowned for its cutting-edge scientific presentations, lively debates, networking opportunities and comprehensive exhibition of the latest dental innovations.

# Why gum health matters

Periodontal disease and oral health issues continue to make headlines due to their widespread impact and links to systemic conditions such as diabetes and heart disease. EuroPerio11 provides an unrivalled opportunity to learn about the latest advances in prevention and management, making it a key event for journalists looking to cover breakthroughs in health, technology, and patient care.

# What's new and exciting at EuroPerio11

- Latest innovations in periodontal care: discover pioneering research, with more than 155 speakers from 34 countries, sharing the most up-to-date clinical data and discussing emerging trends in periodontology and implant dentistry.
- Artificial intelligence (AI) and dentistry: EuroPerio11 will showcase how AI is transforming dental diagnostics and treatment planning, opening exciting new avenues for both clinicians and researchers. Don't miss the AI in Dentistry session, offering plenty of story ideas for tech and healthcare reporters alike.
- Live surgeries and interactive sessions: atendees will have a
  front-row seat to three live surgeries, conducted by worldleading clinicians, demonstrating cutting-edge techniques
  and technologies in real-time. These sessions provide a rare
  opportunity to see leading experts in action, helping to bring
  clinical stories to life for your readers.

- Gut microbiome research and periodontitis: in the intriguing session "Bottoms up! What can we learn from gut microbiome research to benefit periodontitis patients?" experts will dive into the latest findings on the gut–oral health connection. This cutting-edge research reveals how gut microbiota may influence periodontal disease, with potential new strategies for managing periodontitis.
- Patient-centred sessions: a major focus this year is on patient-centric care, a growing trend in healthcare. Special sessions will explore how dentists are adapting their practices to be more attuned to the needs and preferences of patients and ensure adherence to recommendations.
- Spotlight on women's oral health: For the first time, EuroPerio
  will host a dedicated session on women's oral health, addressing the specific challenges and advances in the field, including
  hormonal influences and unique dental care needs. This session
  provides new perspectives for coverage on gender and health
  and calls for more research in this area.
- Systemic connections: EuroPerio11 will spotlight research that links periodontal health to systemic diseases such as cardiovascular disease and diabetes. This comprehensive, whole-body approach opens fresh story angles on how oral health impacts overall well-being. A session on gum disease and diabetes will draw on the latest evidence connecting these chronic conditions and point to new ways of improving patient outcomes.

Register here



# Contact address

European Federation of Periodontology (EFP) info@efp.org www.efp.org



3<sup>rd</sup> European Congress for Ceramic Implantology, Switzerland

# Focus on science and practice

Only the facts matter: Under the theme "Facts of Ceramic Implants Part III," the European Society for Ceramic Implantology (ESCI) invites clinicians, implantologists, and researchers to the highly anticipated third edition of this prestigious event. The 3<sup>rd</sup> European Congress for Ceramic Implantology will take place from 25 to 27 September 2025, in Horgen/Zurich, Switzerland, offering a premier platform for the exchange of cutting-edge scientific advancements and clinical breakthroughs in ceramic implantology.

# A world-class programme featuring renowned experts

Over three dynamic days, attendees will gain invaluable insights from 27 globally recognised speakers, who will present pioneering research, innovative treatment approaches, and real-world clinical experiences. The programme is structured around three core themes: material science, biological integration, and clinical application. Topics will range from the

fundamentals of ceramic implantology to advanced techniques and interdisciplinary methodologies, equipping both researchers and clinicians with essential knowledge.

# Pre-congress workshops: Hands-on learning at its best

Participants will have the opportunity to refine their expertise through specialised, practice-oriented workshops led by world-renowned experts. These sessions will focus on surgical techniques, emerging treatment modalities, and best practices for seamlessly integrating ceramic implants into daily clinical practice. A highlight of the event is the exclusive ESCI Pre-Congress Workshop, developed in collaboration with the Centre for Dental Medicine at the University of Zurich. This unique session provides hands-on training with three different implant systems, featuring live surgeries and practi-











cal exercises—an unparalleled educational experience found nowhere else in the world.

# The prestigious ESCI Award

The ESCI is proud to offer its members the opportunity to showcase their clinical expertise through case presentations. The ESCI Scientific Advisory Board will honor the best submission with the ESCI Award, valued at CHF1,000. The recipient will also be invited to present their case during the congress, providing well-deserved recognition for their outstanding work.

# Networking in an inspiring atmosphere

Beyond its scientific excellence, the congress fosters meaningful connections in a warm and engaging setting. The Welcome Reception, held in the historic wine cellar of Landgut Bocken, provides a perfect environment for networking and exchanging ideas. The Swiss Gala Dinner,

themed "60 Years of Implantology," will be a social highlight, hosted at the picturesque Bocken Estate on the shores of Lake Zurich. This special evening commemorates the 60<sup>th</sup> anniversary of the first dental implant placed by Per-Ingvar Brånemark, featuring a keynote address by his close collaborator, Prof. Tomas Albrektsson. Attendees will also enjoy a delightful showcase of Swiss culture, complemented by exquisite cuisine and a captivating entertainment programme.

# A perfect blend of innovation and tradition

Zurich serves as an ideal backdrop for this congress, seamlessly merging scientific rigor with Swiss hospitality. Attendees will not only benefit from groundbreaking presentations but also have the chance to explore the city's rich cultural and culinary heritage.

With its unique combination of pioneering science, hands-on learning, and cultural immersion, the 3<sup>rd</sup> European Congress

of Ceramic Implantology is set to redefine standards in the field. Recognised as the world's largest and most influential event for zirconia implantology, this congress is an unmissable occasion.

We look forward to welcoming you!

Join us and register now



### Contact address

European Society for Ceramic Implantology—ESCI info@esci-online.com www.esci-online.com/congress



**Driving dental innovation** 

# botiss presents hyaluron and magnesium at IDS

botiss biomaterials once again demonstrated its commitment to dental innovation during the IDS 2025 in Cologne. By orchestrating hyaluronic acid and magnesium, botiss is driving the next generation of regenerative tools that harmonise with the body's own healing potential.

maxgraft®+Hya is a combination of allogenic maxgraft® granules and hyaluronic acid. Particularly practical: maxgraft®+Hya is also available as a fine bone powder <0.25 mm) that can be applied with a Luersyringe.

The NOVAMag® SHIELD is a new, revolutionary solution for bone defects after tooth extractions. The magnesium SHIELD is stable, biodegradable, supports natural healing and ensures new bone formation even outside the existing contour.

These innovations are not just new materials, but also a shift towards more patient-centred, sustainable and biologically integrated dentistry.

Both product launches attracted a great deal of attention at IDS 2025. Surgeons and implan-

tologists from all over the world welcomed the biologically orientated approach and appreciated the user-friendly design and versatility of both materials.

### Contact address

botiss biomaterials GmbH

Germany info@botiss.com www.botiss.com

**NucleOSS Europe** 

# SLH—The connection between you and your patients

The DC-BONE-LEVEL implant features modern and aesthetic design details and offers a safe and comfortable surgical experience for the dentist and patient. A wide range of prosthetic abutment options helps to give patients a radiant smile. In addition, the implant gives patients self-confidence through its intelligent and strong design. With extensive abutment options, a convenient application kit and a registered clean surface, the DC-BONE-LEVEL implant is more than outstanding. The ground-breaking aspect of the DC-BONE-LEVEL implant is that it balances quality and price. The implant has been carefully developed to increase comfort for clinicians and patients with its aesthetic design and high strength. SLH is a new dental implant

system with the aim of giving patients back their bright smile and stands for "Smart Design, Leading System, Healthy Solution". By developing the highest level of biointegrity and excellent surface cleanliness, it is possible to create the highest possible standard for the user. Many years of research and development have resulted in a new implant system that enables the practitioner to achieve the best possible results.





**Straumann** 

# Revolutionise your full-arch solutions with LOCATOR FIXED® for Straumann® implants

If you're seeking an affordable, reliable fixed full-arch solution, it's time to consider LOCATOR FIXED®.

The LOCATOR FIXED® system leverages the same abutment and workflow as the renowned LOCATOR® Removable Attachment System, making the transition seamless. This



ing both function and aesthetics for your patients. With its high-retention housing, the system provides a strong bond and reduces chair time, offering efficiency and flexibility in your practice.

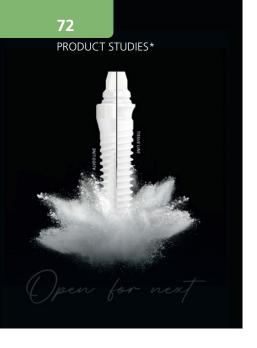
Dental professionals praise LOCATOR FIXED® for its simplicity and effectiveness, which translates to lower costs and improved patient satisfaction. Additionally, comprehensive online training is available for free to ensure you and your team can fully capitalise on the system's benefits.

Upgrade your practice with LOCATOR FIXED® and experience the next level of dental restoration.



# Contact address

**Straumann Holding AG**, Switzerland info@straumann.com www.straumann.com



bredent medical

# High primary stability and aesthetic appearance

The whiteSKY implant system from bredent is among the best-docu-

mented zirconia implant systems worldwide. It has not only demonstrated excellent osseointegration and longevity in numerous studies but has also proven its efficacy in practice. In fact, the longevity of whiteSKY implants is comparable to that of titanium implants. The whiteSKY implant system offers two different implant types: the whiteSKY Tissue Line and the whiteSKY Alveo Line. The narrow whiteSKY Tissue Line implant provides sufficient space for both the hard and soft tissue and ensures an aesthetically pleasing appearance with its slightly tapered shape in the sulcus area, transitioning from the gingiva to the implant crown. The whiteSKY Alveo Line, on the other hand, is ideal for immediate loading as it fills the extraction socket. At the same time, it provides the treating doctor with the possibility to individualise the implant according to the specific requirements of the clinical case.

# Optimal conditions for soft-tissue attachment and high mechanical stability

Both the Alveo and Tissue Line implants of the whiteSKY system offer optimal conditions for soft-tissue attachment due to their specially designed sulcus surface. The whiteSKY implants are made of hardened zirconia and are one-piece, which gives them particularly high mechanical stability. Thanks to the improved thread design and bone-quality-oriented surgical protocol, the whiteSKY

implants achieve high primary stability, making them ideal for immediate loading. Studies have shown that immediate implant placement can improve the boneimplant contact by more than 50 per cent.

Contact address
bredent medical
GmbH & Co. KG
Germany
info@bredent.com

www.bredent-implants.com

**Fotona** 

# Redefining dental laser technology

Fotona's LightWalker is a revolutionary dental laser system with 20 W of power, two wavelengths, five pulse durations and four special pulse modes, offering an unparalleled range of clinical applications.

Practitioners are thrilled by the LightWalker's SWEEPS mode for its efficacy in endodontics, witnessing the power of bubbles in cleaning narrow root canal spaces, removing the smear layer, debris and biofilm. SWEEPS also enables non-surgical removal of biofilm and calculus in periodontal and peri-implant therapy.

The LightWalker's patented QSP mode makes it invaluable for hard-tissue treatments, debond-

ing of veneers and orthodontic brackets, dental aesthetics and surgery. With the laser's SMOOTH mode, dental practices can even perform a wide range of cutting-edge aesthetic and antisnoring laser therapies, thus attracting new patients and revenue.

Embrace the power of LightWalker's unmatched versatility.

# Contact address

Fotona, d.o.o. Slovenia www.fotona.com



botiss

# Breakthrough in bone defect treatment and ridge preservation

With the NOVAMag® SHIELD, botiss is launching a new, revolutionary solution for bone defects after tooth extractions.

Until now, socket preservation has only stabilised the damaged alveolar area. NOVAMag® SHIELD goes much further: it is stable, biodegradable, supports natural healing and ensures new bone formation also outside of the existing contour. The magnesium shield is easy to adapt and can be used in a minimally invasive way—without fixation to the bone. Depending on the treatment plan, it can be combined with various bone replacement materials.

The product is also particularly suitable for patients in whom no implant is placed in the defect. It offers a simple and economical way of preserving the alveolar ridge. In combination with stable bone replacement materials such as cerabone® plus, it can even slow down bone loss in denture wearers.



**NSK Europe** 

# Digitally networked implant treatment

NSK has developed and improved the Surgic Pro surgical micromotor system, which is now available as Surgic Pro2. Surgic Pro2 provides a Bluetooth connection to the Osseo 100+ osseo-integration gauge and a Link Set connection to the VarioSurg3 ultrasonic surgical system. By installing an application and connecting an iPad to the control unit, detailed intervention data can be displayed in real time. Both Surgic Pro2 treatment parameters and Osseo 100+ data can be displayed and stored on the iPad. The traceability of patient-specific treatment data means that implant treatment can be customised for each patient. The Surgic Pro2 and VarioSurg3 can be operated wirelessly and hygienically using a common foot control. But even without connection to other units, Surgic Pro2 offers advantages for the practitioner. The micromotor is short, lightweight and ergonomic. A high-resolution LED in the micromotor serves as light source to match working conditions under full daylight. The pump module is quiet, and the irrigation tube is easy to attach. The Surgic Pro2 is simple and intuitive to use, making it easy to upgrade

from the previous model to Surgic Pro2.



**Contact address NSK Europe GmbH** 

> Japan +49 6196 77606-0 www.nsk-europe.de



Take advantage of

the current savings

	Event	Location	Date	Details/Registration
5/2025	IDEX	Istanbul Turkey	7–10 May 2025	eng.idex.org.tr
	EuroPerio11	Vienna Austria	14–17 May 2025	efp.org
	BDIA	Birmingham United Kingdom	16–17 May 2025	birmingham.dentistryshow.co.uk/ welcome
	SSO Kongress	Lugano Switzerland	22–24 May 2025	sso.ch/de/kongress
6/2025	Europe Symposium	Stockholm Schweden	21 June 2025	www.bdizedi.org
	Giornate Veronesi	Verona Italy	27–28 June 2025	oemus.com/events
9/2025	FDI World Dental Congress	Shanghai China	9–12 September 2025	https://2025.world-dental- congress.org/

# EDI Journal – Information for authors

EDI Journal – the interdisciplinary journal for prosthetic dental implantology is aimed at dentists and technicians interested in prosthetics implantology. All contributions submitted should be focused on this aspect in content and form. Suggested contributions may include:

- Original scientific research
- Case studies
- Product studies
- Overviews

### Manuscript submission

Submissions should be made in digital form. Original articles will be considered for publication only on the condition that they have not been published elsewhere in part or in whole and are not simultaneously under consideration elsewhere

Pages should be numbered consecutively, starting with the cover page. The cover page should include the title of the manuscript and the name and degree for all authors. Also included should be the full postal address, telephone number, and e-mail address of the contact author.

Manuscripts can be organised in a manner that best fits the specific goals of the article, but should always include an introductory section, the body of the article and a conclusion

Each article should contain a minimum of 20 and a maximum of 50 pictures, except in unusual circumstances. Our publishing house attaches great importance to high quality illustrations. All illustrations should be numbered, have a caption and be mentioned in the text.

The photos should have a size of 10x15 cm, the image or graphic files must have a resolution of 300dpi. TIFF, EPS and JPG file formats are suitable. Radiographs, charts, graphs, and drawn figures are also accepted.

Captions should be brief one or two-line descriptions of each illustration, typed on a separate page following the references. Captions must be numbered in the same numerical order as the illustrations. Tables should be typed on a separate page and numbered consecutively, according to citation in the text. The title of the table and its caption must be on the same page as the table itself.

Each article should contain a minimum of 10 and a maximum of 30 references, except in unusual circumstances. Citations in the body of the text should be made in numerical order. The reference list should be typed on a separate sheet and should provide complete bibliographical information in the format

exemplified below:
[1] Albrektsson, T.: A multicenter report on osseointegrated oral implants. J Prosthet Dent 1988; 60, 75–82.
[2] Hildebrand, H. F., Veron, Chr., Martin, P.: Nickel, chromium, cobalt dental alloys

and allergic reactions: an overview. Biomaterials 10, 545-548 (1989).

Manuscripts will be reviewed by three members of the editorial board. Authors are not informed of the identity of the reviewers and reviewers are not provided with the identity of the author. The review cycle will be completed within 60 days. Publication is expected within nine months

With acceptance of a manuscript, the publisher has the right to publish and translate the text, permit its reproduction, electronically store it in databases, produce reprints, photocopies and microcopies, and publish the text online. Any further utilisation or publication of the article is subject to prior approval by OEMUS MEDIA AG.

# Page charges and reprints

There are no page charges. The publisher will cover all costs of production.
The journal will provide the primary author with a PDF file of the article and a free copy of the journal issue in which the article appears.

OFMUS MEDIA AG Holbeinstraße 29 · 04229 Leipzig · Germany Phone: +49 341 48474-224 · Fax: +49 341 48474-290 s.thieme@oemus-media.de www.oemus.com



# MEMBERSHIP REGISTRATION FORM

I hereby apply for a membership in the BDIZ EDI

(European Association of Dental Implantologists)	FULL MEMBERSHIP			
	TOLL WILWIDERSTIII			
Name:	□ Full member – clinical		EUR345.00	
First Name:	☐ Assistant dentist / you (up to 5 years after gra		EUR172.50	
Country:				
Zip Code/City:	□ Second membership /	•	EUR172.50	
Street:	EXTRAORDINARY MEI	MREKZHIP		
Phone:	☐ Co-operative Member (Professionals without practice and dental technicians)		EUR165.00	
Fax:	- C I			
E-Mail:	☐ Students		non-contributory	
	☐ Supporting Membersh	nip	EUR530.00	
Homepage:	(Companies etc.)			
Date of Birth:	Payment Membership cannot be confirm payment is by bank transfer. Pl	ned until payment is proces:	sed. Method of	
Practising implantology since:	Commerzbank Bonn	ease use the following bank	ang account	
Member of other Societies:	Account Number: Bank Code:	310 144 100 380 400 07		
□ICOI □BDO □DGI □DGZI □DGMKG □EAO	IBAN: BIC:	DE96 3804 0007 03 COBADEFFXXX	310 1441 00	
Continuing education Courses:	Membership cards will be sent upon receipt of the annual subscription fee.			
	City / Date:			
	Seal/Signature:			
Fellowship status / diplomate status in implantology				
· · · · · · · · · · · · · · · · · · ·	Please return the completed registration form to:			
☐ Yes ☐ No ☐ Organisation	European Association of		ts e.V.	
	Lipowskystr. 12 · 81373	•		
Entry in BDIZ EDI Directory: ☐ Yes ☐ No	Phone: + 49 89 7206-9888, Fax: + 49 89 7206-9889			
(For information on BDIZ EDI Directory of Implant Dentists see overleaf)	E-Mail: office@bdizedi.org, Homepage: www.bdizedi.org			

The annual membership fee for:

BDIZ EDI • Lipowskystr. 12 • 81373 Munich, Germany • Phone: +49 89 7206-9888 • Fax: +49 89 7206-9889 office@bdizedi.org • www.bdizedi.org





STRAUMANN® IEXCEL

# EMPOWERING YOU TO EXCEL



- ONE SET OF INSTRUMENTS
- FOUR IMPLANT DESIGNS
- ONE SIZE PROSTHETIC CONNECTION

