

today

15
16
17

© Noppasin/Shutterstock.com



Case report

Sinus lifts are regarded as one of the most difficult and invasive surgeries performed in dental clinics. This case report demonstrates a novel approach to the hydraulic sinus lift technique, utilising the iRaise Sinus Lift System by Israeli company Maxillent.

»Page 11



Implant planning

With an increasing number of patients opting for implants rather than conventional restorations, a thorough and individual planning process is more important than ever. Prof. Rainer Buchmann covers key aspects of ensuring safety in implant treatment.

»Page 12



What's on in Berlin

There is no such thing as boredom in a city like Berlin. Whether you want to explore the Festival of Lights or enjoy a cool Paulaner beer at Berlin's largest Oktoberfest, here are some tips on how to spend your time off in Germany's vibrant capital.

»Page 15

The world of oral implantology visits Berlin

German capital hosts 2015 ICOI World Congress from 15 to 17 October

Today, the International Congress of Implantologists (ICOI) is not only the world's largest dental implant organization, but it is also the world's largest provider of continuing dental implant education. For more than three decades, the ICOI has drawn dental professionals to various places around the globe each year. In 2015, the congress takes place in Berlin and will address contemporary concepts and philosophies related to implantology.

On 15 October, scientific presentations as part of the Young Implan-

tologists programme and several free sponsored pre-congress workshops will be held, followed by the welcome reception. On 16 and 17 October, 16 international main podium speakers will offer clinicians an understanding of current implant treatments and their applications. Topics include treatment planning and the use of 3-D imaging, implant site development, hard- and soft-tissue regeneration, simple to complex surgical and prosthetic procedures, and management of complications. The gala dinner will be held on the evening of 16 October.

More than 1,000 dental professionals, including general dentists, specialists, laboratory technicians, students and industry representatives, from all over the world are expected to attend.

For the meeting in Berlin, the ICOI joined forces with two German partner societies for the first time, namely the Deutsche German Association of Oral Implantology and the European Association of Dental Implantologists.

Berlin is a unique city with many historical sites and creative

hot spots. It's the largest city in Germany and the country's capital. Since the fall of the Berlin Wall in 1989, Berlin has long since become one of the world's most popular cities—a metropolis where culture, the economy, science, and politics meet. With about 3.4 million residents from about 180 nations, it is also one of the largest cultural melting pots in Europe.

The congress venue is the Maritim Hotel, situated in the city's embassy district close to the Brandenburg Gate, the historic symbol of Berlin's reunification.

The ICOI, which was founded in 1972, is an association of various dental professions, including general dentists, oral and maxillo-facial surgeons, periodontists, prosthodontists, endodontists, orthodontists, and laboratory technicians. The ICOI currently has over 13,000 members. It is the world's largest dental implant organisation and largest provider of continuing dental implant education.

More information about the congress and registration can be found at www.icoiberlin2015.org.

AD

SUNSTAR GUIDOR®

Join us today at 4.15pm to discuss:

“Stability as a key for success”

And experience:

The technological advantages of in-situ hardening alloplastic bone graft substitutes and new matrix barriers in a hands on situation

GUEST SPEAKER: Dr. Henrik-Christian Hollay



Thursday 15th October
4:15pm till 6:15pm



Room: PC15,
Maritim Hotelgesellschaft mbH,
Herforder Straße 2, 32105 Bad Salzufen

SUNSTAR
GUIDOR®

Malmö University receives funding for research on tooth and implant infections

by DTI

■ MALMÖ, Sweden: A research project on chronic oral infections, led by Prof. Gunnel Svensäter from Malmö University, has been awarded a grant of SEK 12 million (€1.3 million) by the Swedish Knowledge Foundation. The researchers aim to develop new clinical tools to diagnose and treat such infections.

In a statement, the foundation acknowledged that research on chronic oral infections offers immense potential and could be of considerable benefit for patients, the dental care system, industry and society in general. To date, there are no reliable methods in dental care for identifying individuals with an increased risk of serious tooth and implant infections. Therefore, the Malmö researchers are targeting the development of



new clinical tools in order to enhance diagnosis and treatment of such conditions.

“We are searching for proteins that exist in biofilms around teeth and implants. The proteins can originate either from bacteria or from human cells. If these proteins could be found it would be possible to identify the site as a potential source of infection and treatment could be initiated at an early stage,” Svensäter, Professor of Oral Biology at the university’s Faculty of Odontology, said.

The lead researcher furthermore foresees potential financial benefits from developing diagnosis tools that could be used worldwide, for both the health care system and companies. “The problem we are endeavouring to solve is significant and exists on a global scale. Some 10 per cent of the Swedish population could experience serious problems involving chronic infections that could result in them losing their teeth. The scenario is much the same throughout the rest of the world,” she said.

The four-year project, which brings together microbiologists, cellular biologists, chemists and clinical experts, among others, will focus on first finding protein markers in laboratory experiments and later proceed to clinical studies with patients.

According to Svensäter, the research project has been in the planning for a number of years. “We now have the right research group and the right companies in place and we are extremely pleased.”

Adding to donations of about SEK12 million by companies, as well as the university’s contribution of SEK 6 million (€0.6 million), the grant by the foundation brings the project’s total budget to SEK 30 million (€3.2 million).

The Knowledge Foundation is a funding body for universities and serves to strengthen Sweden’s competitiveness. Since its formation in 1994, the foundation has invested about SEK 8.7 billion (€942 million) in more than 2,500 projects. ◀

AD

Moscow

Budapest

New York

Istanbul

Exhibition Live Product Presentations Hands-on Workshops
Printed Reference Guide Coffee With the Experts

28 Sep 2015 01 Oct 2015 ● Moscow	01 Oct 2015 03 Oct 2015 ● Budapest	30 Oct 2015 01 Nov 2015 ● Istanbul	27 Nov 2016 28 Nov 2016 ● New York
--	--	--	--

www.DDSWorldShow.com

2016 ICOI Winter Implant Symposium to be held in Miami

by DTI



■ The International Congress of Oral Implantologists (ICOI) will kick off the new scientific year with the 2016 ICOI Winter Implant Symposium in sunny Miami in the US. From 12 to 14 February, the event will once more gather a group of distinguished international speakers to share their knowledge and experience on dental implants and associated subjects with clinicians from around the globe.

Attendees can expect a diverse scientific programme covering such topics as new protocols for immediate loading, bone grafting applications, zygomatic implants and advances in the ever-evolving world of digital dentistry.

Additionally, an array of didactic and hands-on pre-conference

courses will provide the opportunity to meet and interact with the speakers in a more personal educational environment.

A special highlight of the event will be the celebration of the ICOI’s newest class of diplomates, masters and fellows at the Advanced Credentials’ Awards reception. The venue for the Winter Implant Symposium is the prestigious Trump National Doral Miami. Located in the downtown area of Miami, the 800-acre resort offers recreational on-site amenities, such as spa and wellness facilities, premier dining and four championship golf courses.

For more information and to register for the 2016 ICOI Winter Implant Symposium, please visit www.icoimiami2016.org. ◀



See the latest developments
in implant design and prosthetics

Visit us at
Booth #18

BruxZir[®]
Solid Zirconia



INCLUSIVE[®]
PROSTHETIC COMPONENTS



NEW!

HAHN[™]
TAPERED IMPLANT



INCLUSIVE[®]
TAPERED IMPLANT SYSTEM



Industry Standard
Conical Connection

Industry Standard Internal
Hex Connection

949-431-7400
www.glidewelldirect.com

GLIDEWELL DIRECT  **EUROPE**
CLINICAL AND LABORATORY PRODUCTS

New study suggests many dental implants may be prone to fracture

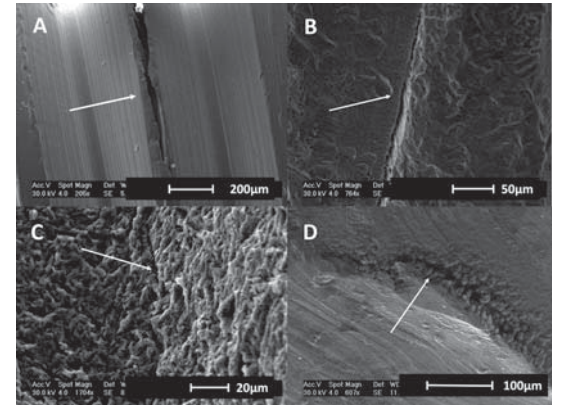
by DTI

■ HAIFA, Israel: An examination of 100 biologically failed dental implants has found that more than 60 per cent of these implants showed

signs of mechanical flaws, such as crack-like defects and full cracks. In publicising these results, the researchers aim to encourage dental

implant manufacturers and dentists to find ways to reduce the structural damage that occurs when a metal is subject to repeated applied loads.

In the study, the researchers examined 100 discarded dental implants,



• Scanning electron micrographs show various locations along the implant's thread used to fix it into the jawbone (A & B). C and D are magnifications of these locations. (Images: Technion—Israel Institute of Technology)

which had been extracted owing to peri-implantitis, made of a titanium alloy and commercially pure titanium using energy dispersive X-ray analysis and scanning electron microscopy. They found mechanical defects in 62 per cent of the specimens. In addition, the inspection showed that the pure titanium implants had more cracks than did the titanium alloy implants.



• Dr Keren Shemtov-Yona (© Technion—Israel Institute of Technology)

“Embedded particles appear to be linked to the generation of surface defects that evolve into full cracks,” explained Dr Keren Shemtov-Yona, a dental researcher at the Technion—Israel Institute of Technology, who conducted the study as part of her Master of Science degree. Furthermore, the wear and tear of daily use may also contribute towards the potential of manufacturing flaws to develop into cracks and subsequently lead to failure of the material, the researchers stated. It was also found that the width and length of the different implants in this study were not correlated with the observed defects.

Shemtov-Yona is now aiming to conduct further studies to investigate the reasons for the development of cracks to determine whether the causes lie in manufacturing, use or both.

The study, titled “On the mechanical integrity of retrieved dental implants”, was published in the September issue *Journal of the Mechanical Behavior of Biomedical Materials*. ◀

AD

NOT JUST ALL MOUTH.

BOOK YOUR STAND

The only event where you can reach all sectors of the UK dental market.

For more information call
+44(0)20 7348 5270 or
email dentistry@closerstillmedia.com



**dentistry
show**

22nd & 23rd April 2016 / NEC Birmingham

for all that dentistry demands

Co-located with



PRACTICE OWNERS
& MANAGERS

DENTISTS

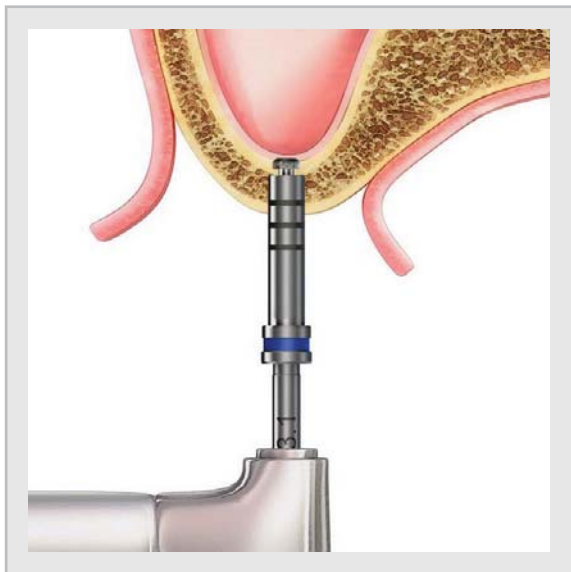
DENTAL HYGIENISTS
& THERAPISTS

DENTAL NURSES

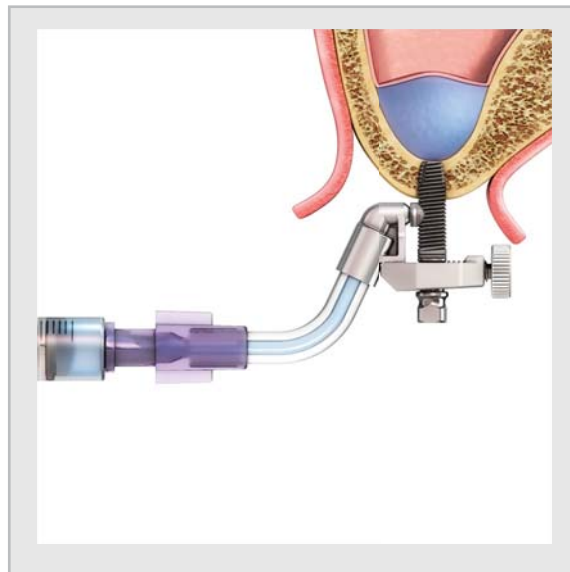
TECHNICIANS
& CDTs

iRaiseTM SINUS LIFT SYSTEM

Perform sinus lifts in 25 minutes at your clinic



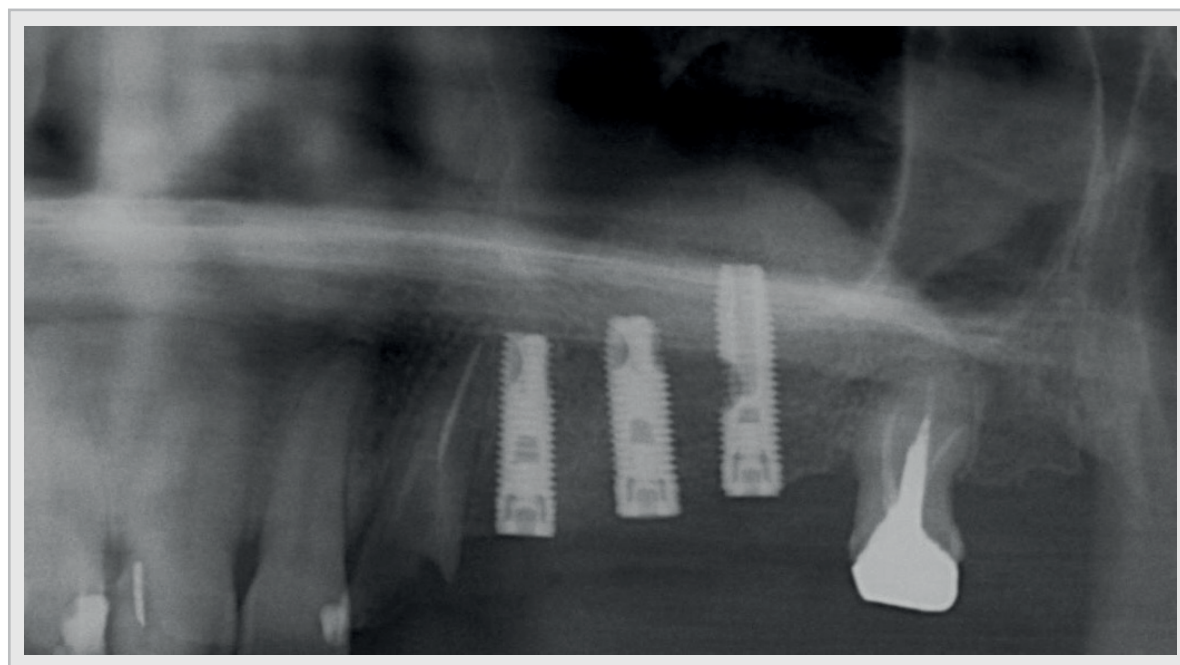
1 Reach sinus safely:
special cortex drill



2 Elevate membrane
with saline pressure



3 Inject
bone graft



Post-op panoramic X-ray

perform sinus lift procedures with **confidence** and **ease**
dramatically improve your patients' **experience** and **quality of life**

**Seeking exclusive distributors:
come and share the iRaise success**



maxillent www.maxillent.com e-mail: info@maxillent.com

“Our next mission will be to return to nature”

An interview with Dr Henrik-Christian Hollay, Germany

At this year's ICOI World Congress, Dr Henrik-Christian Hollay will address the importance of stability in guided bone regeneration therapy. In anticipation of his Sunstar pre-conference workshop on 15 October, *Dental Tribune Interna-*

Dr Henrik-Christian Hollay: Stability is and always has been key to successful bone augmentation and regeneration. In recent years, several methods and materials were developed to achieve this aim that are very complex and

harden shortly after being placed and membranes that remain in position have made substantial progress in achieving these goals.

What techniques stand out in clinical practice?

All of them are minimally invasive, and tunnel augmentation and socket or ridge preservation are even flapless.

What are the main advantages of new technologies in the bone graft field compared to GBR with traditional particulate bone graft materials and membranes?

One of the most interesting technological developments is availability of materials with in situ hardening and putty like mouldability. These two feature allied to syringe delivery allow clinicians to consider minimally invasive (tis-

advantages of alloplastic/synthetic matrices, such as the GUIDOR Bioresorbable Matrix Barrier?

The most interesting and important point about resorbable materials is that a second operation to remove the membrane is not necessary. Removal of a non-resorbable barrier requires the raising of a flap involving elevation of the periosteum, which always results in bone resorption. The GUIDOR matrix barrier is a resorbable material, but the resorption process longer than that of collagen membranes, for example. It offers the long-term stability of a non-re-

“Stability is and always has been key to successful bone augmentation and regeneration.”

tional had the opportunity to ask him about promising new technologies in regenerative practice and key factors for achieving the best possible clinical outcomes.

Dental Tribune International: Dr Hollay, could you please explain the importance of stability in guided bone regeneration therapy today?

technique sensitive, such as titanium meshes, different types of membranes, which mostly have to be fixed with pins, and bone blocks that have to be screwed to the bone. Aside from the surgical challenge, the costs of these have driven the pursuit of materials that are cheaper and easy to handle and that facilitate the complete workflow. Bone graft materials that

Guided bone regeneration is the keyword of the moment. There are many interesting techniques that are relevant in daily practice. A technique that has been much discussed is socket or ridge preservation. There are also a few very special new techniques that have been developed in the last few years, such as the tunnel augmentation technique and different shell tech-

AD

The Dental Tribune International C.E. Magazines

www.dental-tribune.com





I would like to subscribe to

<ul style="list-style-type: none"> <input type="checkbox"/> CAD/CAM <input type="checkbox"/> cone beam <input type="checkbox"/> cosmetic dentistry* <input type="checkbox"/> DT Study Club (France)*** <input type="checkbox"/> gums* 	<ul style="list-style-type: none"> <input type="checkbox"/> implants <input type="checkbox"/> laser <input type="checkbox"/> ortho <input type="checkbox"/> prevention* <input type="checkbox"/> roots
--	---

€44/magazine (4 issues/year; incl. shipping and VAT for customers in Germany) and €46/magazine (4 issues/year; incl. shipping for customers outside Germany).** Your subscription will be renewed automatically every year until a written cancellation is sent to Dental Tribune International GmbH, Holbeinstr. 29, 04229 Leipzig, Germany, six weeks prior to the renewal date.

** Prices for 2 issues/year are €22 and €23 respectively per year.

4 issues per year | * 2 issues per year
*** €56/magazine (4 issues/year; incl. shipping and VAT)

Shipping address _____

City _____ Country _____

Phone _____ Fax _____

Signature _____ Date _____

PayPal | subscriptions@dental-tribune.com Credit Card

Credit Card Number _____ Expiration Date _____ Security Code _____

↑ SUBSCRIBE NOW!

fax: +49 341 48474 173 | e-mail: subscriptions@dental-tribune.com



sue sparing) techniques (such as the tunnel and soft shell techniques described above). For example, GUIDOR easy-graft from Sunstar is stable after 4 or 5 minutes forming an analogue of the defect site into which it is placed. Traditional particulates (even those delivered from a syringe) will remain mobile and often do not conform to the site morphology. The inherent mobility of a traditional particulate often requires placement of a membrane to stabilise and contain the particles. Typically in such instances, the membrane will need to overlap the defect on all sides by 2 or 3 mm necessitating a significantly larger access flap. Because of rapid enzymatic degradation, collagen membranes used in such instances must be covered by tension free soft tissue closure. Techniques to achieve this may well require elevation of the periosteum and mobilisation of a free flap. This surgical cascade and the tissue trauma associated with it is technique sensitive, painful and can delay healing as well as consume more time. Moreover, the micro-movements from an unstable site may well be associated with soft tissue invasion rather than the required hard tissue regeneration.

Compared with non-resorbable materials, what are the main

sorbable membrane with the benefit of avoiding re-entry to remove it.

What are the most important factors regarding favourable outcomes in regenerative practice?





Next to stability, in my opinion, the most important factor is blood. Without strong bleeding from the cancellous bone in the recipient bone area, bone regeneration and augmentation will not occur. The pluripotent mesenchymal cells that are carried to the augmentation site via the blood do the real work for us, and it is important to bear that in mind. Several different techniques and materials can lead to a good outcome in guided bone regeneration performed correctly, but why is that so? It is because the human body has enormous healing potential and only needs a little bit of guidance from surgeons. After a long period of research on materials and techniques, our next mission will be to return to nature. ◀

Dr Henrik-Christian Hollay is presenting the Sunstar GUIDOR pre-conference workshop titled “Stability as a key for success: An overview of various augmentation techniques with in situ hardening bone graft substitutes” on 15 October, from 16.15 to 18.15.

Bone Graft Substitute

GUIDOR® *easy-graft*

Visit our pre-congress workshop
15 th October 2015, 4:15 – 6:15 pm.

-  100 % alloplastic bone graft substitute
-  Soft from the syringe
-  Mouldable in the defect
-  In situ hardening

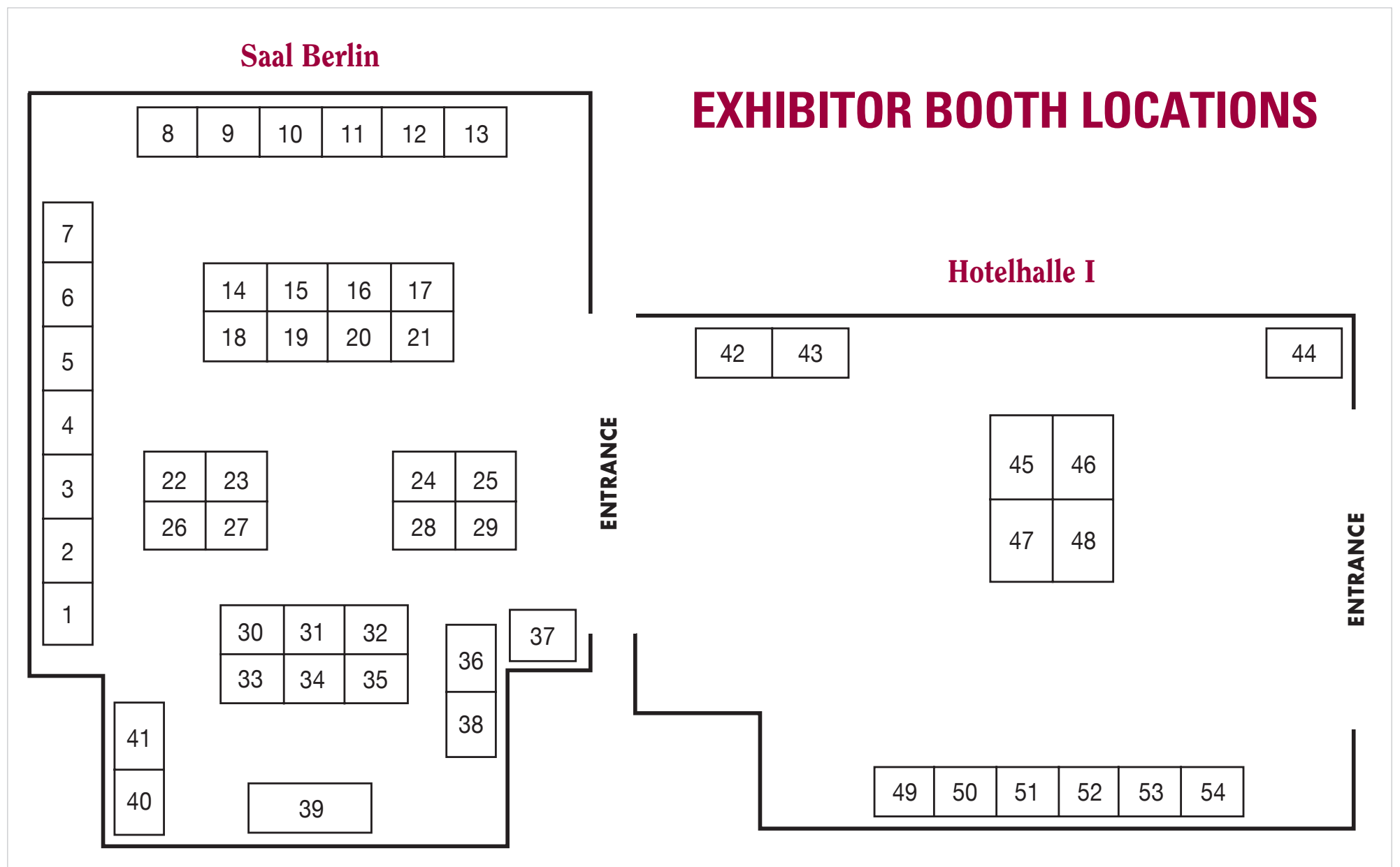
Distribution:

Sunstar Deutschland GmbH · Aiterfeld 1 · 79677 Schönau
Fon: +49 7673 885 10855 · Fax: +49 7673 885 10844
service@de.sunstar.com · www.easy-graft.com

List of exhibitors

Company	Hall	Booth	Company	Hall	Booth
Acteon Germany GmbH	Hotelhalle I	45, 46	Health AG	Hotelhalle I	47, 48
American Dental Systems GmbH	Saal Berlin	36	Helmut Zepf Medizintechnik GmbH	Saal Berlin	3
Argon Dental			Hess Medizintechnik GmbH	Saal Berlin	23
Vertriebs Gesellschaft mbH & Co. KG	Saal Berlin	29	Instradent GmbH	Saal Berlin	8
BDIZ EDI	Saal Berlin	5	Leading Health Centers	Saal Berlin	22
BEGO Implant Systems GmbH & Co. KG	Saal Berlin	6	Maxillent Ltd.	Saal Berlin	35
Bicon Europe Ltd.	Saal Berlin	12, 13	MCC Medical CareCapital GmbH	Saal Berlin	30
BioHorizons GmbH	Saal Berlin	7	Mectron Deutschland Vertriebs GmbH	Hotelhalle I	42
Bioimplon GmbH	Hotelhalle I	43	Medentis Medical GmbH	Saal Berlin	39
BmedS/StarMed Loups & Lights	Saal Berlin	4	Quintessenz Verlags-GmbH	Saal Berlin	9
Botiss Medical AG	Saal Berlin	34	SIC invent Deutschland GmbH	Saal Berlin	11, 12
Bredent Medical GmbH & Co. KG	Hotelhalle I	49, 50, 51	SICAT GmbH & Co. KG	Saal Berlin	26, 27
BTI Deutschland GmbH	Saal Berlin	33	Stoma Dentalsysteme GmbH & Co. KG	Saal Berlin	20
CAMLOG Vertriebs GmbH	Saal Berlin	15, 16	Straumann GmbH	Saal Berlin	37
ClaroNav	Saal Berlin	41	Sunstar Deutschland GmbH	Saal Berlin	24, 25
Curasan AG	Saal Berlin	2	Synchrodent eK	Saal Berlin	14
DENTSPLY Implants Manufacturing GmbH	Hotelhalle I	52, 53, 54	TRI Dental Implants	Saal Berlin	16, 17
Deutsche Bank Privat- und Geschäftskunden AG	Saal Berlin	19	Universität Frankfurt	Hotelhalle I	44
Geistlich Biomaterials Vertriebsgesellschaft mbH	Saal Berlin	31	Ustomed Instrumente		
Glidewell Laboratories	Saal Berlin	18	Ulrich Storz GmbH & Co. KG	Saal Berlin	28
Hager & Meisinger GmbH	Saal Berlin	32	X-Nav Technologies, LLC	Saal Berlin	21
Harf Medical Services GmbH -			Z-Systems GmbH	Saal Berlin	10
Cortex Vertrieb Deutschland	Saal Berlin	1			

Floor plan and the exhibitors list are subject to change. Last update was 30 September, 2015.



Scientific programme of the 2015 ICOI World Congress XXXII



Thursday, 15 October

14:00 – 16:00

Pre-Congress Courses

GOLD Sponsors: Bredent Medical, DENTSPLY Implants, Health AG
SILVER Sponsors: Bicon Europe, BioHorizons, Camlog, SIC Invent

14:00 to 15:00

Diplomate Written Exam

15:00 to 17:00

Diplomate Oral Exam

18:00 to 19:30

Poster Presentations/ Welcome Reception

niques for a Predictable Single Implant Placement in the Esthetic Zone

14:30 to 15:30

Dr. Paolo Trisi:

Implant Stability: Where Are We?

15:30 to 16:15

Break with Exhibitors

16:15 to 17:15

Dr. Fouad Khoury:

Oral Rehabilitation in Patient with Severe Bone Loss: Surgical Approach with Autogenous Bone Grafts and Long Term Results

17:15 to 18:15

Dr. Ady Palti:

New Techniques and Materials for Sinus Elevation Including Trouble Shooting in the Implant Office

19:00 to 20:00

Awards Ceremony

20:00 to 23:30

Gala Dinner

Saturday, 17 October

08:00 to 09:00

Dr. Eric Rompen:

Extraction Socket Management with Immediate or Delayed Implant Placement: Facts and Figures

09:00 to 10:00

Dr. Ata Anil:

Soft Tissue Applications Around Implants; Why and How?

10:00 to 10:30

Break with Exhibitors

10:30 to 11:30

Dr. Gerard Scortecchi:

Breaking the Limits with New Technologies

11:30 to 12:30

Dr. Joseph Choukroun:

Platelet Rich Fibrin and Advanced PRF: Healing Improvement in Soft and Hard Tissue. Biological and Pharmacological Factors for Success in Implantology

12:30 to 13:30

Lunch with Exhibitors

13:30 to 14:30

Dr. Jaafar Mouhyi:

Periimplantitis: Is There Any Treatment for this Implant Specific Pathology?

14:30 to 15:30

Dr. Yvan Poitras:

Predictable Destruction of Osteointegrated Implants with Prostheses

15:30 to 16:15

Break with Exhibitors

16:15 to 17:15

Dr. Mariusz Duda:

Implantological Cases with Complications Compared with Successful Cases

17:15 to 18:15

Dr. Richard Leesungbok:

Implant Treatment with Smart Loading Protocols, CAD/C Technology, and Magnetic Attachments

18:15

Closing Comments

Young Implantologists

Thursday, 15 October

Chair: K. Judy, G. Scortecchi, N. Fornia, M. Steigmann

Moderator: K. D. Valavanis

10:00 to 10:10

Introducing the ICOI Young Implantologists Podium

10:10 to 10:30

Roberta Gasparro (Italy):

Ultra-short Implants: A Novel Mini Invasive Treatment Opportunity

10:30 to 10:50

Teruaki Homma (Japan):

One Abutment One Change, Digital Prosthetic Protocol

10:50 to 11:10

Elisa Choukroun (France):

Socket Management for Secondary Implantation—A Biological Approach

11:10 to 11:30

Filipa Braga (Portugal):

Digital Dentistry in Complex Cases

11:30 to 11:50

Paolo Nuzzolo (Italy):

Platform Switching: “Cono Morse” and Implant Morphology to Optimize Function and Aesthetics

11:50 to 12:10

Coffee Break

12:10 to 12:30

Daniel Grubeanu (Germany):

Predictable Implant Aesthetics in the Sensitive Zone by Intelli-

gent Abutment Selection. The Concept “Atlantis”

12:30 to 12:50

Giuseppe Pantaleo (Italy):

Different Indications of Regenerative Biomaterials: Our Clinical Experience

12:50 to 13:10

Nicolaos Mallios (Greece):

Optimum Graft for Reconstructing Absorbed Ridges. Autogenous Bone, Allografts, Xenografts or Alloplastic Materials?

13:10 to 13:30

Tom Giblin (Australia):

Incorporating Digital Dentistry into the Modern Implant Practice

13:30 to 13:50

Gil Asafrana (Israel):

Digitally Assisted Controlled Prosthodontic Approach

13:50 to 14:10

Thilo Damaskos (Germany):

Backward Planning in Implant Dentistry

Presentation dates and topics are subject to change. Last update was 23 September, 2015.

Friday, 16 October

08:00 to 09:00

Dr. Ralf Smeets:

Alternatives to Autogenous Bone Grafts in Dental Implantology—What’s New?

09:00 to 10:00

Dr. Galip Gurel:

Ultimate Digital Communication Skills for Minimally Invasive Dentistry

10:00 to 10:30

Break with Exhibitors

10:30 to 11:30

Dr. Ilija Roussou:

Bruxism and Implant Restorations: Occlusal Considerations

11:30 to 12:30

Dr. Konstantinos Valavanis:

Implant Therapy Strategies for the Aesthetic Zone

12:30 to 13:30

Lunch with Exhibitors

13:30 to 14:30

Dr. Pascal Marquardt:

Advanced and Approved Tech-

today About the Publisher

dti Dental Tribune International

Editorial/Administrative Office
Dental Tribune International GmbH
Holbeinstraße 29, 04229 Leipzig, Germany
Phone
+49 341 48474-302
Fax
+49 341 48474-173
Internet
www.dti-publishing.com
www.dental-tribune.com

Publisher
Director of Finance and Controlling
Managing Editor
Product Manager
Torsten Oemus
Dan Wunderlich
Daniel Zimmermann
Antje Kahnt

Production Executive
Production
Gernot Meyer
Matthias Abicht

This special edition of *today international* will appear during the 2015 ICOI World Congress XXXII, Berlin, 15–17 October, 2015.

The magazine and all articles and illustrations therein are protected by copyright. Any utilization without prior consent from the editor or publisher is inadmissible and liable to prosecution. No responsibility shall be assumed for information published about associations, companies and commercial markets. General terms and conditions apply, legal venue is Leipzig, Germany.