

DENTAL TRIBUNE

The World's Dental Newspaper • Middle East & Africa Edition

PUBLISHED IN DUBAI

www.dental-tribune.me

September-October 2019 | No. 5, Vol. 9

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Expo 2020 Dubai to present next-gen healthcare innovations

By The National

Expo 2020 Dubai will host 10 dedicated conferences that will present cutting-edge practice in healthcare, including the use of virtual reality and 3D printing.

The announcement came just weeks after it unveiled its state-of-the-art on-site emergency centre that includes an isolation room, emergency care room and a helicopter pad.

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Expo 2020 Dubai will take over the emirate for six months from next October

AD

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1st Arab Perio Meeting



By Arab Society of Periodontology

On the 24th of July with the representatives of Perio societies and clubs from five Arab countries (Egypt, Lebanon, KSA, UAE and Jordan the hosting country). The first meeting was held in Amman, the

participants stated the importance of having a Pan Arab society for Arab periodontists in the Arabic countries.

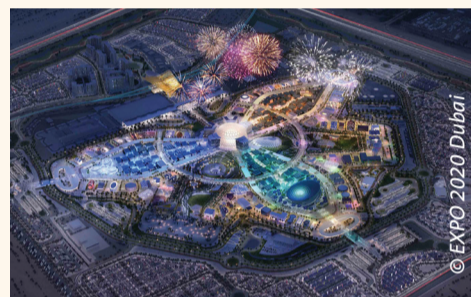
Where ASP (Arab Society of Periodontists) will be the Scientific and social tribune of all Periodontists & dentists who have the Perio passion.

ASP will partner with all international Perio societies, at the same time the attendees stressed on the importance of expanding this society to all local societies in the Arabic countries.

The attendees drafted the internal

bylaws of the society and agreed to hold the first regional Arab Perio in Amman on April 6th, 2020 and the 2nd one will be held in Beirut in 2022. The attendees elected: Dr. Ala' Ersheidat (President), Prof Nada Naaman (Vice-president), Dr. Abdallah Al Amri (Treasury). ^{DT}

◀Page 1



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Ten healthcare
conferences will put spot-
light on virtual reality,
3D printing and wearable
technology

The conferences, which will focus on technological advances in health care, will include a Virtual Reality and Robotics Expo with artificial intelligence, 3D printing and wearable technology being the subject of several panel discussions.

The conferences will be held at the Expo's co-located Dubai Exhibition Centre, in collaboration with Medetarian Conferences Organising, a medical conference and consumer events specialist.

"The 10 cutting-edge medical conferences and specialist events that will be hosted at DEC during Expo 2020... will serve as an invaluable addition to the UAE's medical landscape," Najeeb Al Ali, executive director of Expo 2020 Dubai Bureau said.

The UAE already hosts a number of high-level healthcare and medical-related conferences. These include the annual Arab Health conference, which has grown over the past 45 years to become, arguably, the world's flagship healthcare event. ^{DT}

Editorial note: The article was originally published in The National:
<https://www.thenational.ae/uae/health/expo-2020-dubai-to-present-next-gen-healthcare-innovations-1.905277>

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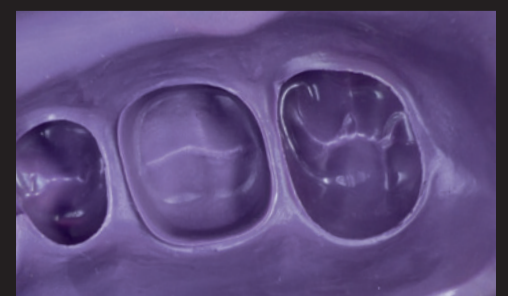


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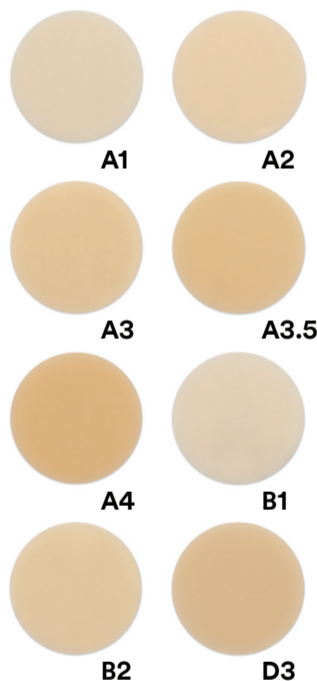
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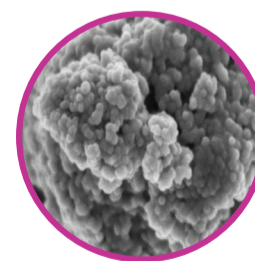
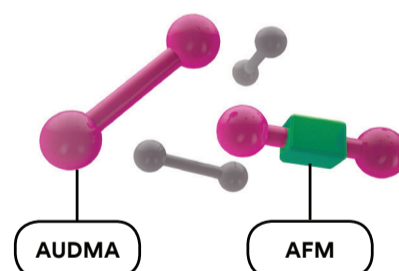
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100K magnification of nanocluster. SEM photo courtesy of Dr. J. Perdigão, University of Minnesota.

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Hybrid Technologies grows business with full-arch palatal Jigs 3D printed on NextDent 5100

Small dental laboratory now offers full-arch shell temps with palatal jig enabled by 3D Systems' NextDent 5100 3D printer

By 3D Systems

Hybrid Technologies is a small dental laboratory in Orlando, Florida, that specializes in highly esthetic multiple unit implant restorations. Since incorporating 3D Systems' NextDent™ 5100 dental 3D printer, owner Matt Mills reports "absolutely nonstop" use that has generated new business opportunities for his lab.

Cost-effective 3D printing with wide material choice

Mills has extensive professional experience with dental 3D printers, so when it came time to choose the right solution to bring in-house, he knew what to look for. As a small lab owner, pricing and capability were his top concerns. Of the options he researched, some were too expensive to consider, and others had recurring costs beyond the materials used.

"Cost was the first thing that drew me towards the NextDent 5100, followed by the breadth of materials," Mills says. "The fact that I can own this printer rather than lease it makes it a better value, and the fact that resins are the only consumable is a big plus to keep my recurring costs low." In terms of addressable indications, Mills says 3D Systems' NextDent resins cover every category his lab will ever need to print.

Application versatility, from 3D printed temporaries and palatal jigs to white digital wax ups

3D Systems' NextDent material portfolio includes 30 unique biocompatible and CE-certified materials to address a broad range of clinical needs. Hybrid Technologies takes advantage of several of these materials, including NextDent C&B MFH, NextDent Model 2.0 and NextDent Tray.

3D printed temporaries improve accuracy, shorten appointment times

In addition to providing high quality lab work for final dental restorations, Hybrid Technologies offers esthetic 3D printed temporaries (shell temps) for in-mouth wear while the final restoration is being made. Hybrid Technologies works with dentists on esthetically demanding cases, in which the temporaries are extremely important because they function as a communication tool between the patient, the doctor, and the lab. "Using NextDent MFH material for shell temps looks ten times better than anything you can mill, and it's so much more cost-effective," says Mills.

Whereas the conventional process for temporization involves a considerable amount of chair-side manipulation by the dentist, a digi-

tal workflow with the NextDent 5100 improves the process for both the dentist and patient. Mills says the dentists he works with like the shell temp service because it allows them to be highly accurate with shorter appointment times. Hybrid Technologies also polishes and textures the NextDent prints for highly attractive results, which means the patients are happy with their smile throughout treatment.

3D printed palatal jigs indispensable to full-arch restorations

Without teeth for the dentist to index the placement of a temporary or final restoration, full arch edentulous cases require a palatal jig. The NextDent 5100 has made it possible for Hybrid Technologies to offer 3D printed palatal jigs for full-arch restorations as a cost-efficient alternative to conventional palatal jigs.

Conventional palatal jigs are milled using a special milling puck that is taller than average to accommodate the height of the device. The material costs and wear and tear to the milling machine of traditional palatal jigs made these tools too expensive for Hybrid Technologies to offer conventionally. However, Mills says his lab is now able to 3D print palatal jigs using the NextDent 5100. "3D printing versus milling is definitely a positive in more than one area," says Mills. "The cost savings on materials is huge, but by 3D printing you are also able to save the integrity of your milling machine for materials like zirconia."

Using a two-stage build process, Hybrid Technologies prints a kind of bite splint that shows where the shell temps will fit. The anterior teeth are prepped in the first stage, and the posterior teeth are prepped in the second. This allows a constant frame of reference for positioning. "When you break up the shell temps into sections like that, placing them in the mouth becomes very accurate and esthetic," says Mills. "Providing accurate temporaries that are precisely placed in the mouth increases the predictability of the final outcome, along with the patient's satisfaction in the final restorations."

Mills says his business has been able to grow tremendously with this new offering. "Offering shell temps with a palatal jig is probably one of the biggest and most profitable parts of my lab," Mills says. "That workflow has really opened a lot of doors for me."

White digital wax ups help doctors sell treatment

Mills reports enthusiastic feedback on the esthetic quality of NextDent prints across indications, including the digital wax ups he is able to 3D print in a true white color using NextDent



Mills reports enthusiastic feedback on the esthetic quality of NextDent prints across indications.

Model 2.0 material. "A lot of companies offer ivory, peach, or gray materials for digital wax ups, but NextDent Model 2.0 is an actual white material, and that's huge," Mills says.

Access to white dental materials has been a game-changer for the doctors Mills works with who need to give their patients a preview of their anticipated treatment. "Patients need to be able to trust their doctor with what they are going to do with their smile, and when they're looking at peach-colored teeth, the patient starts second-guessing," Mills says. Since offering digital wax ups with NextDent Model 2.0, Mills has been able to help his doctors sell more cases with white and shiny teeth that represent the smile makeover patients want to see.

Speed of printing enables same-day services

Hybrid Technologies works with several doctors who also have the NextDent 5100 in-house, and supports their workflow with dental design services. Together, the dental lab and dental offices coordinate to deliver enhanced and accelerated patient care.

The dentist books Hybrid Technologies' time to match the patient's appointment, and while the patient is in the chair for treatment, the dentist sends the patient's intraoral scan to the lab for concurrent design work. Hybrid Technologies completes the work and sends back a file for 3D printing within the appointment window. The dentist 3D prints the file in-house and sends the patient home with an esthetic result. "The NextDent 5100 can print a full arch in 30 minutes, which means massive improvements to same-day dentistry," says Mills.

According to Mills, the print speed of the NextDent 5100 is a tremendous advantage for his lab work as well. "On any other printer, I'd maybe get two prints done in a day, run another overnight, and hope to catch up in the morn-

CHALLENGE:

Expand small dental lab capabilities and business with cost-effective, high quality solution

SOLUTION:

3D Systems' NextDent™ 5100 dental 3D printer and NextDent materials

RESULTS:

- New service offering with 3D printed shell temps and palatal jigs
- 30 minutes to print full arch
- Four-fold increase in productivity compared to other 3D printers tested
- White digital wax ups help dentists sell treatment
- High print speeds eliminate backlog
- Improving same-day dentistry

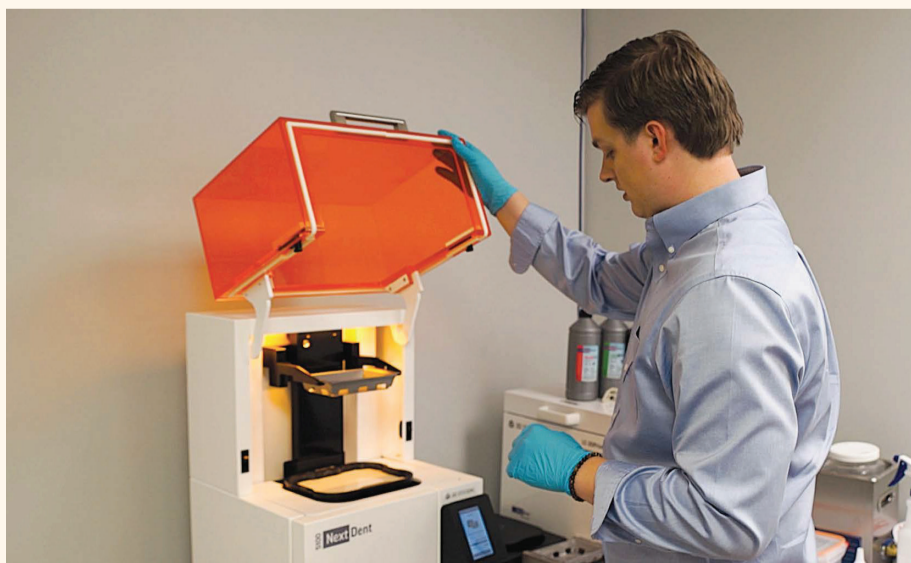
ing. With the NextDent 5100, I can easily get 10 to 12 prints done in a day, in between my other work."

Mills reports a user-friendly experience operating the NextDent 5100. In addition to excellent functionality of the included 3D Sprint® software, he says part and support removal are quick and easy. "3D Sprint is awesome," Mills says. "It's much better than other nesting software I've used, and the process to get parts off the build plate is much improved over other printers as well. I haven't broken a single model, and the Smart Supports pluck right off." [DT](#)

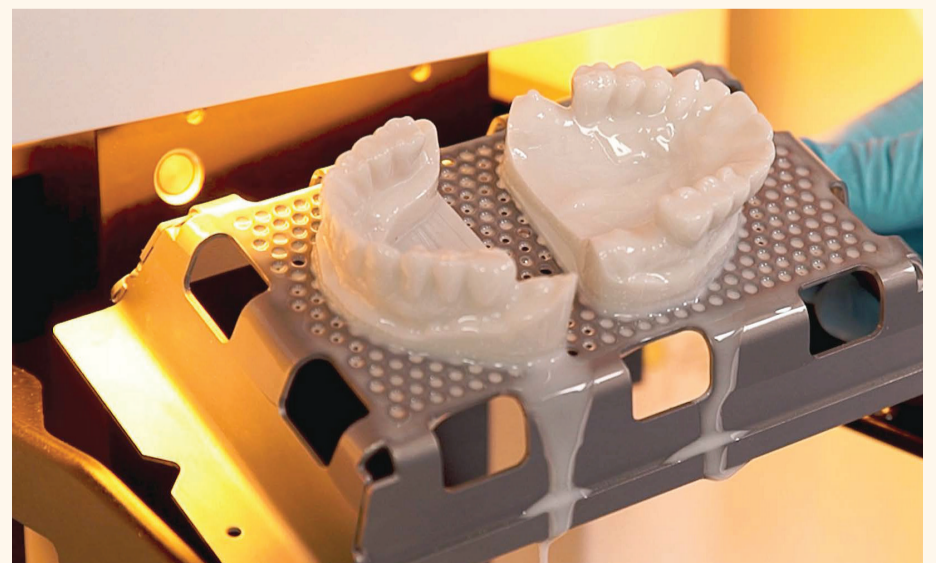
To learn more about the NextDent 5100 3D printer, visit www.3d-me.com/nextdent-5100

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Mills says 3D Systems' NextDent resins cover every category his lab will ever need to print.



The NextDent 5100 can print a full arch in 30 minutes according to Matt Mills, owner of Hybrid Technologies.



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Size is everything NiTi system HyFlex EDM extended with new glide path file



© Coltène/Whaledent AG

By Coltene

Modular nickel-titanium systems enable the endo-expert to work flexibly in a variety of indications. Meanwhile, most patient cases can be prepared efficiently and reliably with a reduced file sequence. For slightly more curved canals, the dentist can now use a special glide path file in addition to the classic file sequence.

Additional glide path file for strongly curved canals

The internationally leading dental specialist COLTENE once again complements its versatile HyFlex NiTi range with a further useful component: a new HyFlex EDM glide path file is now available in the range for the preparation of strongly curved and very narrow canals. The HyFlex

EDM GPF 15/.03 is a flexible glide path file that ensures optimum shaping of the access cavity. Even S-shaped canals can be prepared safely and competently with the additional instrument. As accustomed, the dentist subsequently enlarges with the glide path file size 10/.05 and the HyFlex EDM preparation file 20/.05. The recommended sequence for very narrow canals thus remains clearly structured and well manageable for the entire practice team. Depending on the initial situation and personal preferences, the 25/.12 orifice opener can be used beforehand as an option.

The good cutting performance and break resistance of the flexible nickel-titanium files is due to a special manufacturing process referred to as "Electrical Discharge Machin-

ing" (EDM for short). The robust high-performance instruments are predestined for endo beginners and dentists who wish to produce reliable results quickly with a reduced number of files.

Expanded file sequence for maximum flexibility

The novel HyFlex EDM GPF 15/.03 fits harmoniously into the existing portfolio of HyFlex files from COLTENE. One of the special features of the NiTi file series is the specially developed "CM" treatment: due to the "Controlled Memory" process, the files can be pre-bent similar to classic stainless steel files and demonstrate almost no recovery effect. This allows them to move optimally in the centre of the canal, to prepare all canal walls evenly and thus significantly improve preparation efficiency. In

addition, the risk of a false canal is also minimised.

With the HyFlex EDM Shaping Set Max Curve, the complete sequence of special files for strongly curved canals will also be available as a practical box from dental retailers from the 2nd quarter of 2019. Due to its high flexibility, the file configuration is suitable for preparatory work in limited spaces as well as for instrument use in normal to extremely curved canals.

Incidentally, the COLTENE Group's merger with the French endo expert MicroMega in autumn 2018 will also expand its portfolio of clever endo solutions ranging from preparation to obturation in the long term. **DT**

ADA, FDI and industry leaders join centennial global launch

By Nathalie Schüller, DTI

SAN FRANCISCO, U.S.: The International College of Dentists (ICD), conceived in 1920 by two visionary leaders, is today the 12,000-strong foremost global honor society for dentists and supports hundreds of humanitarian and educational projects worldwide. Global leaders met for the launch of the ICD's centennial celebrations during the FDI World Dental Congress held last week in San Francisco.

Witnessed by an enthusiastic crowd of over 800 attendees, the global launch of the ICD's centennial celebrations kicked off during the dinner held by the US section. Leaders from the ICD, ADA and FDI were joined by ICD centennial partner Henry Schein and ICD global media partner Dental Tribune International to support the commemoration. Adding to the excitement of the evening was the screening of the new promotional video, capturing the impact of 100 years of the ICD and the upcoming events in Japan.

The video has already registered over 2,000 views on different social media channels!

As part of the global launch, registration was officially opened on the centennial website, icd100.org, for the once-in-a-century meeting to be held Nov. 11–13, 2020, in Nagoya.

For more information about Nagoya registration, hotel accommodation and tours, visit the centennial website or contact the college office. **DTI**



Global leaders (from left): Torsten Oemus, CEO and President of Dental Tribune International (ICD global media partner); Steve Kess, Vice President of Global Professional Relations at Henry Schein (ICD centennial partner); Dr. Kathryn Kell, President of FDI; Dr. Bettie McKaig, President of the ICD International Council; Dr. Jeff Cole, President of the ADA; David Kochman, Vice President of Corporate Affairs and Deputy Chief of Staff at Henry Schein; and Dr. Dov Sydney, International Editor/Director of Communications and General Chair of the College Centennial Committee at the ICD.

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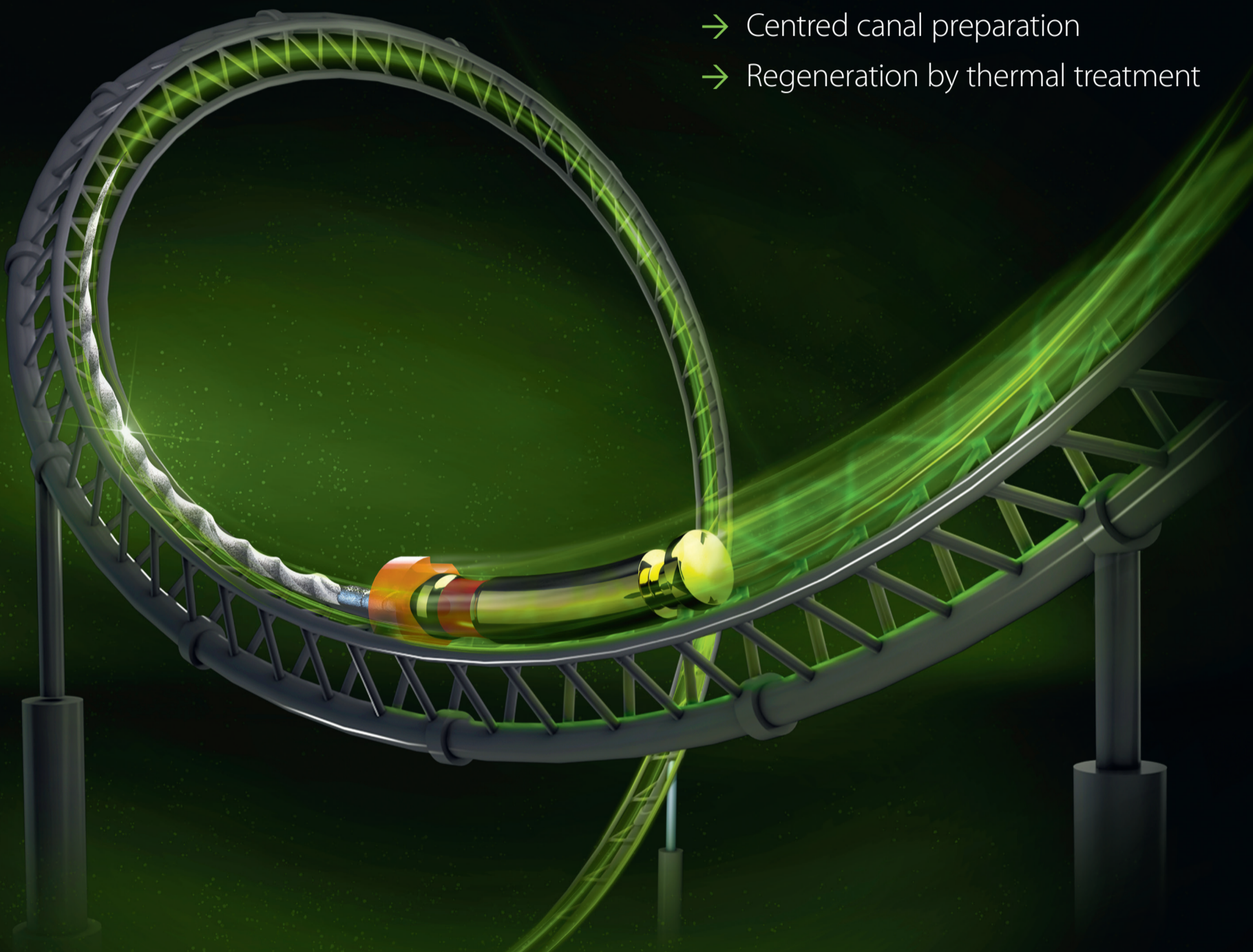
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