

# DENTAL TRIBUNE

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## World News

Xerostomia: Unlocking the secrets of saliva

▶ Page 8



## Extra

The latest news from the FDI head office

▶ Pages 13/14



## Crown preparation

Dr Barrington on how to utilise a microscope

▶ Pages 15/16

## Australia: Oral health at stake in federal election Health experts demand better access to public dental services

HONG KONG/LEIPZIG, Germany: Health experts in Australia have urged all political parties to make oral health a greater priority in the upcoming federal election. In a statement released by the National Oral Health Alliance, a non-governmental body comprised of several dental and health organisations, they also called for the development of a sustainable dental workforce to allow people better access to oral health-care services.

Currently, Australians who are in need of public dental health-care services have to wait for long periods before they receive treatment. In some parts of the country, patients have to wait between one to two years. As a consequence, figures suggest that one in three Australians decide to delay or avoid dental treatment altogether.

The incumbent Labor Party led by Prime Minister Julia Gillard claimed to have delivered more than 850,000 dental check-ups to teenagers under the 2008 Medicare Teen Dental Plan, but failed to implement a new universal dental scheme



PM Julia Gillard (middle) at a rally in Tamworth, New South Wales. (DTI/Photo courtesy of DPMC, Australia)

as promised in the 2007 federal election. Their US\$3.57 billion scheme called DentiCare, developed by the National Health and Hospitals Reform Commission, has been opposed by the Coalition members in the Senate in favour of Medicare, an existing dental care scheme for patients with chronic conditions intro-

duced by opposition leader Tony Abbott in 2007, when he was Minister for Health and Ageing. Labour recently established a taskforce to investigate dentists' compliance with the Medicare scheme, which they say found that a substantial number of them failed to comply with the requirements.

Abbott has announced that he will seek to retain Medicare in case of an electoral win.

Australia will be able to vote for a new government on 21 August. Latest polls have predicted a tie between Labor and the Coalition of the Liberal Party and National Party. [D]

## France and the US go digital fast

Dental markets in France and the US are worldwide leaders in the adoption of digital sensors, according to a US market report. While France has a high penetration rate of almost 75 per cent, US practices are undergoing a rapid transition from analogue film to digital technology, which will have a dramatic impact on the US dental imaging market, the report states.

Intraoral X-ray procedures are the most common type of dental X-ray nowadays as they are typically performed in annual checkups. Dental practitioners can choose between analogue film, photostimulable phosphor and digital systems.

Digital sensors are able to take and upload X-ray images of teeth to a computer immediately, which eliminates the labour necessary for the development of physical film. By reducing film loss, digital imaging also reduces the total number of X-rays taken and in turn decreases patient exposure to radiation. [D]



Terminal 2 at Frankfurt Airport. According to plans of the European Union, patients in Europe will soon be able to receive the same health-care services in all member states. (DTI/Photo courtesy of Fraport AG, Germany) ▶ WORLD NEWS, page 5

## FDI congress adds to Singapore title

Singapore has recently been claiming the position of best city and country to hold business meetings in Asia for the third consecutive year. In 2009, the city hosted over 600 meetings that met international criteria, including the Annual World Dental Congress of the FDI World Dental Federation. [D]

## Best teeth whitener is fruit, study say

A recent study by Harvard University in the United States has revealed that eating fruit daily is the best way to whiten teeth. Through a three-month clinical study, it was found that strawberries, orange peels, and lemon juice have a natural enzyme that removes tooth stains. [D]

## Malpractice bill dismissed by Thai doctors

Medical and dental professionals in Thailand are opposing a new law that aims to give victims of malpractice more rights without having to go to court. In a public letter to Prime Minister Abhisit Vejjajiva, doctors and dentists stated that the committee that developed the law did not fairly represent all stakeholders in the issue and that the law would give victims the right to sue even after they have received compensation.

According to national patients' rights organisations, there are between 10,000 and 50,000 cases of malpractice every year in Thailand, of which only a small percentage ends up in court. Over 97 per cent of these registered complaints were filed against state hospitals last year, according to figures from the National Health Security Office in Bangkok. [D]



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# Current ethical guidelines in India are deficient

An interview with Assistant Prof. Saurab Bither, Christian Dental College, Ludhiana, India

The first handbook on ethical and legal issues for dentists in India was recently released by the Christian Dental College in Ludhiana in India. *Dental Tribune Asia Pacific* spoke with author Assistant Prof. Saurab Bither about the book and its discussion of ethical issues in dental practice.

**DTAsiaPacific: Ethical guidelines for dentistry already exist. Why did you decide to publish a handbook on the issue?**

**Assistant Prof. Saurab Bither:** Ethical guidelines for dentistry have indeed been formulated by regulatory bodies like the Dental Council of India (DCI) and Indian Dental Association (IDA). What this handbook offers is legal guidelines because ethical issues that arise in the delivery of any health-care serv-



Assistant Prof. Saurab Bither

ices are usually accompanied by legal issues. In this handbook, we also sought to highlight the concept of *dental negligence* and the relevant provisions of legislation pertaining to this matter in our country. Forensic odontology and the need for expert witnesses in the field are discussed in the book as well.

**What are the central issues in dental ethics in India and have they become of greater concern?**

Dentistry is flourishing in India thanks to technology, education and stringent measures adopted by regulatory bodies like the DCI and IDA. Unfortunately, there are members of the dental fraternity who resort to unethical practices and flout all norms, guidelines and ethics of practice in order to make a quick buck or just out of financial need. The image of the entire dental profession may suffer as a result of the unethical actions of those few.

With increasing dental tourism in India, it is also very important that ethical guidelines are followed and implemented in dental practice. Should this not be done, we might fail to benefit from an increasing

number of foreign patients in the future.

**What are the main conclusions of your book and what are their implications in practice?**

The current ethical principles in Indian dentistry are helpful guidelines regarding dentistry's professional obligations, but are deficient in that they do not address the reciprocity of the relationship between dentists and their patients or the principle of self-determination. Professional ethical codes, however, are important in developing higher standards of conduct, as they are based upon what are considered to be the correct attitude and procedure.



Dental professionals must recognise and deal with ethical issues in their interaction with their patients and society in a rational and principled manner as defined by a code of ethics. For example, they must be aware of the legislation concerning malpractice, primarily the *Consumer Protection Act*, in order to prevent litigation. Dentists also have a duty to maintain and regularly update their level of knowledge and skills, as well as to participate in the professional community, maintain cordial relations with fellow professionals and share the burden of professional self-regulation.

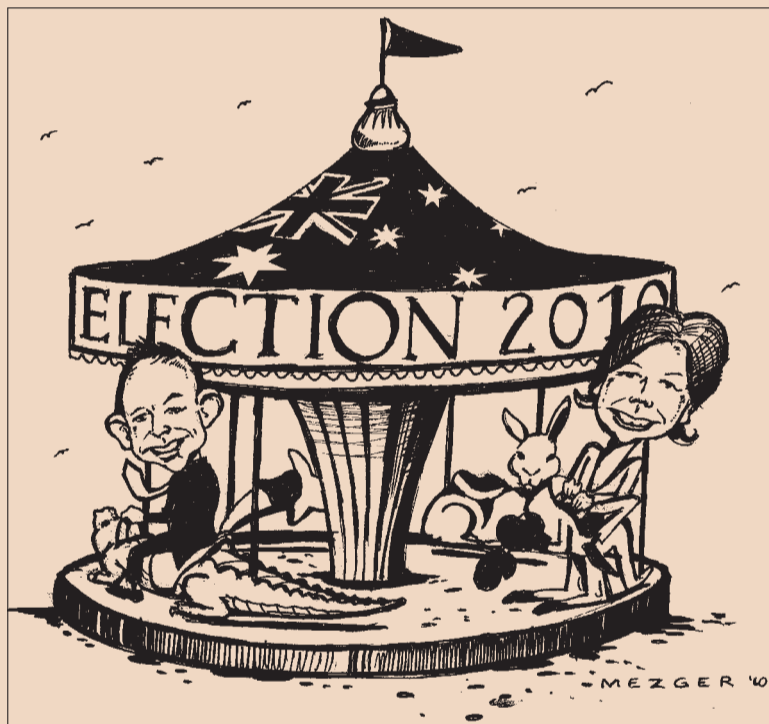
*Thank you very much for this interview.* □

# Politics, but no policy discussion on oral health



Prof. Jenny Lewis  
Australia

The Australian federal election is currently characterised by a focus on the current Prime Minister's (Julia Gillard) hair and the Opposition Leader's (Tony Abbott) swimwear. Were attention to be shifted to their teeth instead, perhaps we could move onto policy substance. Both of the contenders for Australia's top job have socially acceptable mouths with no missing or crumbling teeth, poor gums or bad breath. However, this is not the case for many low-income earning Australians who cannot afford private dental care, and so wait years for treatment in public clinics, often in pain, and suffer embarrassment



when they open their mouths in front of others.

For the last two years, there has been a battle underway, with the Labour Government attempting to abolish the previous Coalition Government's scheme that allows complex and chronic conditions to be treated, and reintroduce a national dental programme along the lines of Labour's previous programme, in order to provide treatment for low-income earners. This has twice been blocked by Senate. The DentiCare plan proposed by the National Health and Hospitals Reform Commission, intended to provide universal access to oral health care through a new tax, has not transpired either.

At issue is a difference in views about policy. Should public dental care be universal or residual? In Australia, where medical and hos-

pital cover is universal, it remains acceptable to distinguish between groups in the case of oral health because it is not seen as integral to health but as an optional extra. An important policy debate about this should be taking place during this election, and some have attempted to engage in such a debate. But there are considerable political difficulties in introducing a new tax to fund a universal scheme, finding a sufficient number of professionals to provide timely services, and (an inevitable consequence of workforce shortages) allowing auxiliary staff to provide more services directly. These conspire to make policy discussions difficult, but that is no reason not to have them. Avoiding them merely perpetuates the situation for those who have no choice but to continue using pharmaceuticals and their hands to cover their painful and embarrassing mouths. □

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# Heraeus acquires majority in Korean dental dealer

Daniel Zimmermann  
DTI

**HONG KONG/LEIPZIG, Germany:** The dental division of the German Heraeus Group is reinforcing its market position in Asia. As part of a capital increase, the company recently acquired a majority share-

holding in Huden, a South Korean dental dealer based in Seoul. The acquisition, which will focus on the sale of materials and equipment for restorative and implant procedures, gives Heraeus direct access to customers in one of the fastest growing dental markets in Asia.

Founded in 1851, family-owned Heraeus has been active in business sectors such as industrial

precious metals, sensors, quartz glass and biomaterials. Its dental division, which includes casting materials, composites, alloys and ceramics, reported a turnover of €288 million in 2009.

Company officials told *Dental Tribune* that the capital increase was decided upon by shareholders earlier this year, and will be used to extend Huden's sales and dis-

tribution team in the short and mid-term. In addition, Heraeus aims to extend cooperation with local thought leaders and universities to advance product approvals and enhance brand recognition in the country. The company aims to double its current market share in the next few years.

The financial terms of the transaction were not disclosed. [D](#)

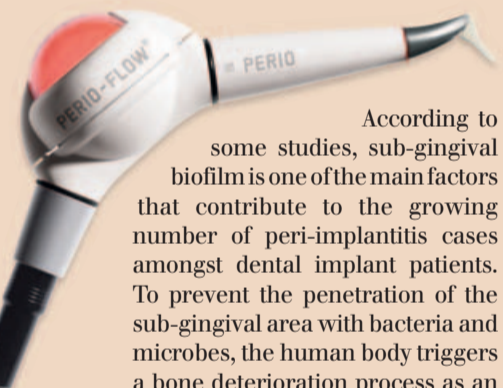


Heraeus dental laboratory (DTI/Photo Heraeus Holding, Germany)

## EMS device targets sub-gingival biofilm

Daniel Zimmermann  
DTI

**LEIPZIG, Germany:** The Swiss-based company EMS is now offering its latest portable Perio handpiece Air-Flow handy Perio to dentists in the Asia Pacific region. The device, which is based on the company's award-winning Air-Flow Master and Air-Flow handy 2+ series, was developed for rapid removal of biofilm from the sub-gingival area. It comes with a single-use Perio nozzle for easy access to pockets of up to 10 mm and the air-polishing powder Air-Flow powder Perio.



According to some studies, sub-gingival biofilm is one of the main factors that contribute to the growing number of peri-implantitis cases amongst dental implant patients. To prevent the penetration of the sub-gingival area with bacteria and microbes, the human body triggers a bone deterioration process as an "emergency response", which can cause dental implants to fail. As sub-gingival biofilm efficiently protects bacteria against pharmaceuticals, conventional treatment with antibiotics is very difficult. EMS says that their new handpiece provides clinicians with an ergonomic solution that offers complete removal of the biofilm even on implant surfaces and without damaging the cement or the tooth.

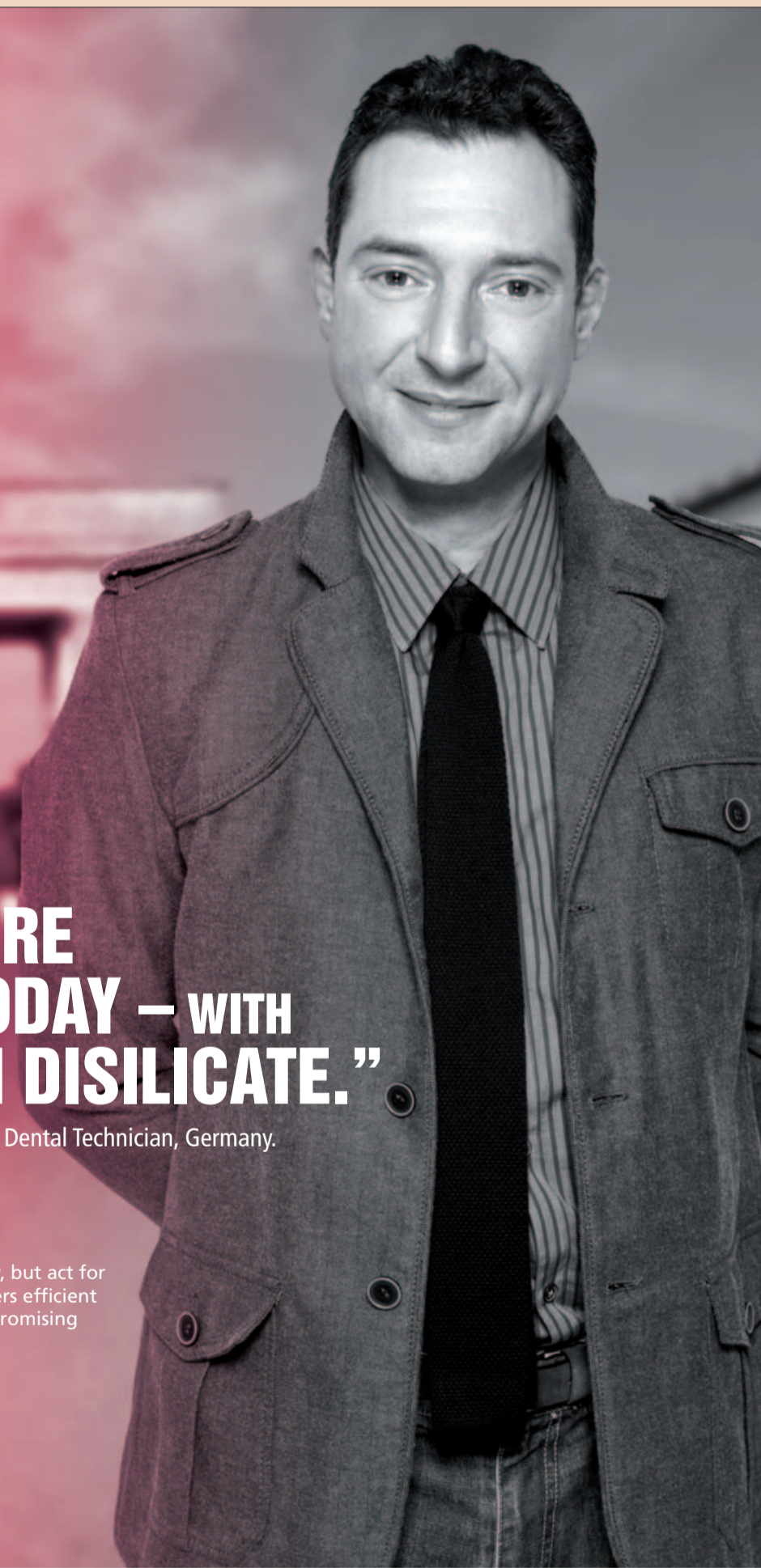
The Air-Flow handy Perio device is available in white. It will be available through EMS and through the company's local dealers in Asia. [D](#)

### Correction

In *Dental Tribune Asia Pacific* No.5 Vol. 8, the interview titled "Dental caries is ... not easily prevented or treated in the most susceptible children" on pages 15/16 misstated the surname of an interviewee. The correct surname is Lim, not Kim.

In *Dental Tribune Asia Pacific* No.6 Vol. 8, the article "Aesthetic and functional restorations with Panasil impression materials" on pages 15/16 misstated that the authors were DTI editors. Dr Ugo Torquati Gritti and Giancarlo Riva are freelance authors and not affiliated with Dental Tribune International.

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Datuk Rosnah Rashid Shirlin (second from right) at a visit to Hospital Kuala Lumpur. (DTI/Photo HKL, Malaysia)

## Malaysian govt admits to public health crisis

Daniel Zimmermann  
DTI

**HONG KONG/LEIPZIG, Germany:** The government of Malaysia has released new figures that underline a significant shortage in the country's public health care sector. Speaking to senators at a parliamentary question time in August, Deputy Health Minister Datuk Rosnah Rashid Shirlin said

new figures show that an average of 360 medical officers have resigned from public service annually since 2005.

Malaysia currently faces a shortage of 5,000 physicians and dentists, a situation that has left thousands of patients in rural areas especially without access to affordable health or dental health care.

The Deputy Health Minister promised to seek keeping officers in public service through various initiatives, including the increase of medical, dentistry and pharmacy graduates in the public service. She added that the government is also planning to provide more career development opportunities for public officers and to improve their incentives and allowances.

Earlier this year, the Ministry of Health considered extending the compulsory public service for doctors to five or ten years from the current three. Since 1971, doctors in Malaysia have been required to serve with the government. [DTI](#)

## Asian bug causes trouble worldwide

Daniel Zimmermann  
DTI

**HONG KONG/LEIPZIG, Germany:** The emergence of a bacteria-resistant genetic mutation in Asia and other countries poses a significant threat to global health, a multinational team of researchers has reported. According to their study, published in the current issue of *The Lancet Infectious Diseases*, evidence of increased prevalence of *New Delhi metallo-beta-lactamase* (NDM-1), an enzyme that makes bacteria resistant to antibiotics, was detected in *Enterobacteriaceae* isolated in India, Pakistan and the UK. The researchers called for co-ordinated international surveillance of the enzyme to prevent its spread through medical and dental tourism.

NDM-1, which was first identified by UK Prof. Tim Walsh in a hospital in India last year, has been found to be resistant to a wide range of antibiotics, including penicillin and amoxicillin, which are commonly used after dental procedures. In addition, it also affects the efficiency of carbapenems, a group of antibiotics reserved for use in emergencies when other antibiotics have failed.

Prof. Walsh told the magazine *New Scientist* that due to travelling and medical tourism throughout the region, bacterial mutations like NDM-1 increasingly find their way into other countries. He said the gene, which was rarely observed just a few years ago, is now to be found in between 1 and 3 per cent of all *Enterobacteriaceae*-involved infections. Mutated genes have recently been isolated in the US, Sweden, Turkey, Israel, Greece and the UK, he said.

Infectious disease experts in the US and the UK have warned clinicians to be aware of the possibility of NDM-1-producing bacteria in patients who have received medical care in India and Pakistan. They should also specifically enquire about this risk factor when carbapenem-resistant *Enterobacteriaceae* are identified. [DTI](#)

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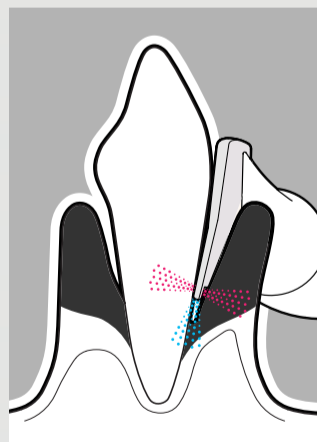
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## Tea not necessarily beneficial for teeth

Daniel Zimmermann  
DTI

**BARCELONA, Spain/LEIPZIG, Germany:** Britons may need to rethink their national habit of afternoon tea, as new research presented at the IADR meeting in Barcelona in Spain suggests that the world's most-consumed beverage contains more fluoride than previously thought. According to a study led by Dr Gary Whitford

from the Medical College of Georgia, USA, the concentration of fluoride in black tea can be as high as 9 mg/l compared to 1–5 mg/l found in earlier studies. The findings could explain the occurrence of advanced skeletal and dental fluorosis, a health condition that affects the stability of teeth and bones.

Whitford found that tea leaves accumulate not only fluoride, but also large amounts of aluminium.

When the leaves are brewed, both substances form insoluble aluminium fluoride, which cannot be detected by common fluoride detection methods. By breaking the aluminium fluoride bond through diffusion, he found that the amount of fluoride in all cases was 1.4 to 3.5 times higher. Dr Whitford said that this additional fluoride does not contribute to fluorosis when consumed moderately but heavy

drinkers should be aware of the danger.

Fluorosis affects more than ten million people worldwide. It is found to be most severe in countries like China and India, where more than 60 million people are at risk. Besides the consumption of tea, common causes of excessive intake of fluoride are the inhalation of fluoride fumes in the chemical industries and drinking water. [DTI](#)



Woman picking tea leaves in Sri Lanka.

## Europe to improve patient rights

Daniel Zimmermann  
DTI

**LEIPZIG, Germany:** The European Union is advancing the rights of medical and dental patients in all its member states. In a new cross-border health-care directive developed by presidency holder Spain and adopted by the ministers of the European Council in June, patients resident in an EU member state will be entitled to reimbursement for medical services obtained in another member state. The draft directive is expected to become legal once the European Commission, Council and Parliament begin negotiations on a final version later this year.

The decision of the Council comes as a surprise, as Spain opposed an earlier draft, fearing that it would have to bear the costs of many Northern Europeans currently living in retirement on Spanish coasts. The new directive, which offers a compromise to an original proposal by the European Commission, shifts the obligation for reimbursement from the country of residence to the country of origin. It also aims to strengthen the recognition of medical prescriptions and cooperation between member states, for example, in the digital exchange of patient data.

Members of the European Commission, which is responsible for implementing the decisions of the Council, have criticised the directive's requirement that patients are to seek prior authorisation from health-care authorities if their treatment involves hi-tech equipment or a hospital stay of more than one night. They claim that the Council version of the directive falls short of their original proposal and creates more confusion for patients.

Cross-border health care between members states of the EU already exists, but this is usually regulated by domestic law and transnational agreements. Rulings by the European Court of Justice over the last ten years had established that patients have the right to obtain health care in other EU countries, but the European Commission desired greater legal certainty so that patients did not have to go to court every time they wished to go abroad for an operation or other medical procedure. [DTI](#)



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# New information material from Straumann Asia Pacific

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Fig. 1: Brochure

For Straumann, “Simply Doing More” also matters in the field of Patient Communication. The newly available patient information material supports dental professionals in their daily endeavors to inform their patients that it is possible to



Fig. 2a: Leaflet

mation on dental implants. Sometimes they simply fear the pain caused by the surgical procedures. In order to bring patients one step closer to choosing implant-based tooth replacement solutions, they need to be provided with all the necessary facts. With well-balanced and fact-based information material, patients will find answers to their most frequently asked questions like, “Where and when can im-



Fig. 2b: Leaflet

the advantages of dental implantology (Fig. 1).

### Leaflet & Leaflet Holder

Suited for patients who request basic information. Provides information on the advantages of dental implantology, an overview about materials, the function of dental implants as well as different indications and treatments. For distribution at your reception or waiting room (Figs. 2 a & b, 3).

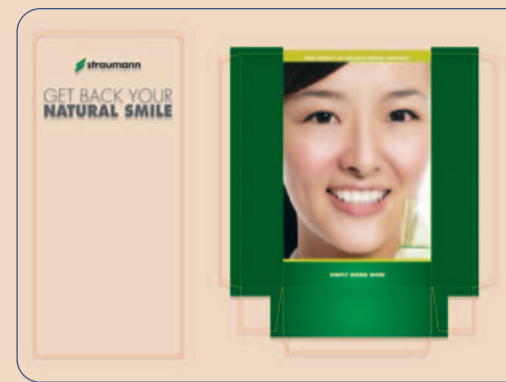


Fig. 3: Leaflet Holder



Fig. 5a: Flipchart



Fig. 5b: Flipchart

### Poster

Provides information about the advantages of dental implantology at your reception, as well as your waiting and examination room (Fig. 4).



Fig. 4: Poster

### Flipchart

More detailed information and clinical explanations for the dentists to explain to the pa-

available which can be used to visualize the benefits of single-tooth implant treatment compared to conventional 3-unit bridge treatment. It comes in a high-quality bag and includes a 1 : 1 sample implant (Straumann Standard Plus) and a 1 : 1 artificial tooth (Figs. 7 a-c).



Fig. 6a: Passport



Fig. 6b: Passport

replace tooth roots almost entirely with dental implants. Moreover, it presents implant treatment therapy as a modern dental method that has been scientifically tested and used for over three decades. It shows patients that qualified dentists and oral surgeons can offer them an attractive long-term solution to enjoy a new quality of life despite missing teeth.

### There is a need for patient information

As a German market survey indicates, 97% of those who have received implant therapy confirm that they feel happy with their newly regained quality of life. However, out of all suitable cases, only 46% decide to be treated with implants. This ratio suggests that many potential candidates for this treatment are still not very well-informed and that, accordingly, there is a need for patient information and appropriate material.

### Helping patients decide

Patients may have only superficial knowledge or wrong infor-

plants be used in tooth restorations?”, “What are the benefits?”, “What is the difference from conventional procedures?” and “What are the costs/the long-term savings?”. The print material can be displayed in the waiting room or handed out to patients after the initial discussion on treatment options. The content is presented in an emotionally appealing way and includes patient testimonials, scientific data and graphics visualizing the situation before and after implant treatment.

### Dental Implants “Get back your natural smile”

The “Dental Implants” information package (brochure, patient flyer and post-op flyer, posters, implant passport) contains basic information on dental implants, the surgical procedures and the costs, and the difference from and advantages over conventional methods are explained.

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In addition to the print material, a premium 3 : 1 model

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  - Leaflet (A6)
  - Leaflet holder
  - Poster (A5)
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  - Implant passport (Credit-card size)
  - 3 : 1 Premium Illustration model
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tients in the consultation room. Easy to use tabs to find the relevant info, easy handling size and sturdy calendar table-top base (Figs. 5 a & b).

### Implant Passport

Records information about your patient’s treatment flows. Hand it over after the implant procedure (Figs. 6 a & b).

### 3 : 1 Premium Illustration Model

In addition to the print material, a premium 3 : 1 model is



Fig. 7a: 3:1 Premium Illustration Model



Fig. 7b: 3:1 Premium Illustration Model



Fig. 7c: 3:1 Premium Illustration Model



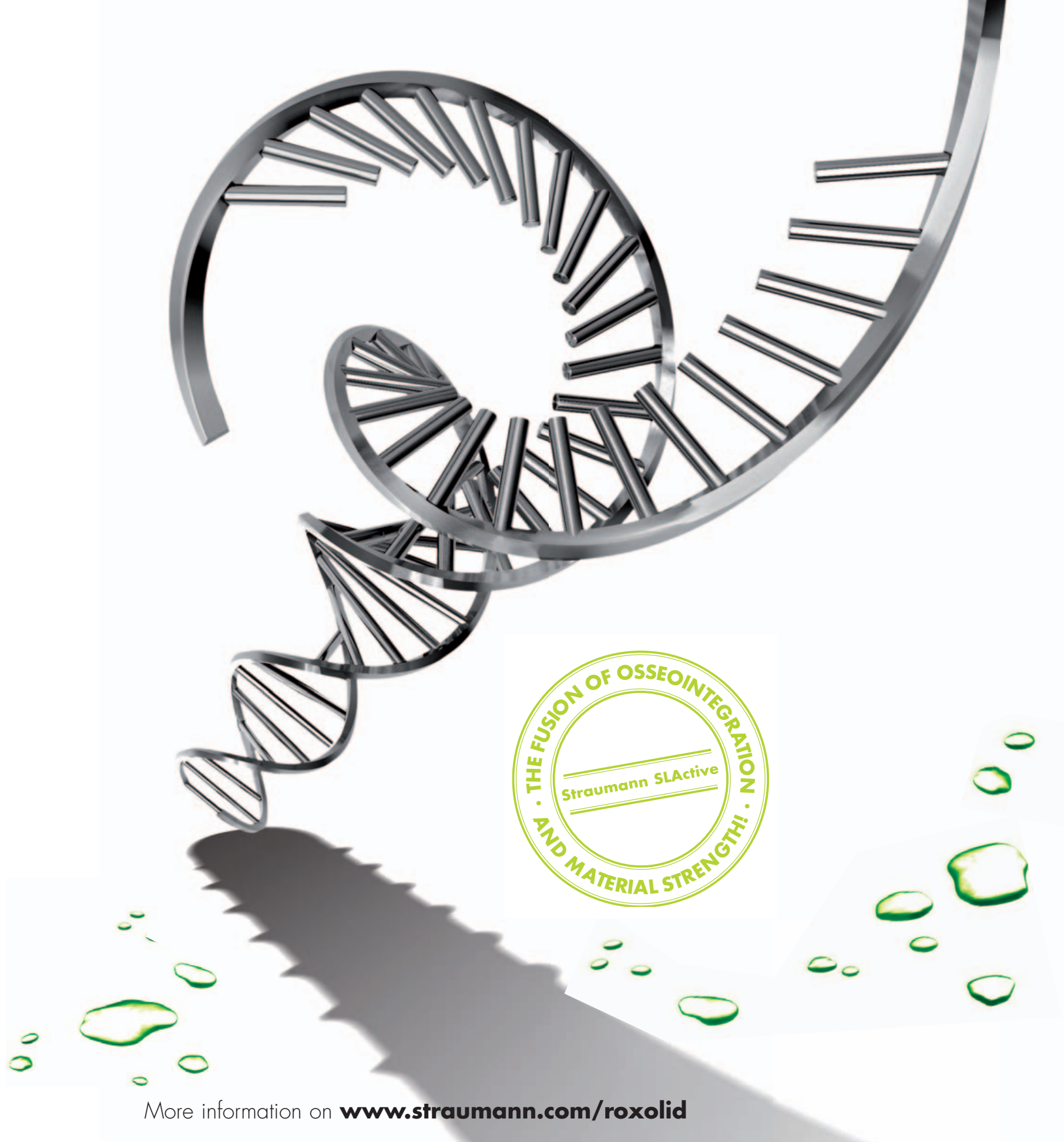


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Prof. Mike Lewis (DTI/Photo courtesy of Dentoptix, USA)

## Xerostomia discussed at UK hygiene forum

Lisa Townshend  
DT UK

GLASGOW/LONDON, UK: The rising occurrences of Xerostomia (dry mouth) in patients was one of the most talked-about issues at the International Symposium on Dental Hygiene, recently held at the Scottish Exhibition and Conference Centre in Glasgow. So it was unsurprising that it was a packed room for Prof. Michael

Lewis' presentation The role of the dental hygienist in the diagnosis and management of dry mouth in association with GSK.

Lewis is Professor of Oral Medicine in the School of Dentistry, Associate Dean for Postgraduate Studies and Dean of the Dental Faculty at Cardiff University. He is also Vice-President of the Royal College of Physicians and Surgeons of Glasgow.

The lecture began with Prof. Lewis setting the scene for the lecture with his alternative title *Unlocking the secrets of saliva*. His aim was to inform delegates of the production of saliva, its components, the effects of reduced salivary production, and what can be done to help patients with this condition.

Prof. Lewis explained that there are three major paired

glands that produce 95 per cent of saliva: the parotid (60 per cent), the submandibular (30 per cent) and the sublingual (5 per cent). The rest is produced by more than 600 minor or accessory glands mainly found in the lips, cheek and palate.

Prof. Lewis detailed the manner in which salivary flow rate is neurally controlled—it is excited by taste and mechanical stimuli but inhibited by feelings such as anxiety. Owing to its importance in speech, as a buffer against acid attack, cleansing antimicrobial actions etc., a reduced flow rate soon manifests as a problem. Symptoms often mentioned by patients include a lack of taste, difficulty in swallowing, and increased effort when speaking. Immediate signs in the mouth observed by clinicians include no saliva pooling in the mouth, frothy or cloudy saliva, sticky/erythematous mucosa, atrophic tongue dorsum, candidosis, and angular cheilitis. One big marker for xerostomia, explained Prof. Lewis, is the occurrence of cervical caries and failed restorations.

Xerostomia is a complaint that is often the result of an underlying cause, including drugs, Sjögren's Syndrome, radiotherapy, undiagnosed or poorly controlled diabetes, dehydration and absence of salivary glands.

Moving from theory to practice, Prof. Lewis then discussed what clinicians can do for patients presenting with dry mouth. He stressed the importance of investigation into the causes of dry mouth for each patient, to ensure any underlying condition has been identified and medication use explored.

Means of investigation can include clinical exam (discussion with patient; appearance of patient, i.e. face, hands, gait; appearance of saliva; 'mirror sticks test'—a dental mirror will often stick to the buccal mucosa if there is reduced saliva), salivary flow rate tests, haematological tests, sialography and labial gland biopsy.

Once the cause of the condition has been identified, both the clinician and patient can focus on the way in which to manage it, commented Prof. Lewis. For example, it may be possible to suggest a change in medication to one that does not list dry mouth as a side effect; or a diagnosis of diabetes should see improved glycaemic control on behalf of the patient and subsequent resolution of dry mouth symptoms.

There are many salivary substitutes that can be recommended. Prof. Lewis described a few of these, as well as the benefits and disadvantages of using them. The most graphic disadvantage was of Salinum, described as "like licking a cricket bat"! Owing to their formulation and ease of use, oral care systems such as the Biotène range have proved very popular with patients. **DT**

AD



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## Established expertise in dentin hypersensitivity

- Continuous development of dentin hypersensitivity solutions since its launch as the first desensitizing toothpaste providing both sensitivity relief and caries protection<sup>1</sup>
- Strong scientific evidence in the field of dentin hypersensitivity<sup>2-36</sup>
- Extensive research and development in collaboration with leading experts

## Treats your patients' sensitivity at the source of the pain

- Sensodyne's potassium formulations work by blocking pain signals at the nerve

## Proven to provide your patients with significant relief from the pain of sensitive teeth

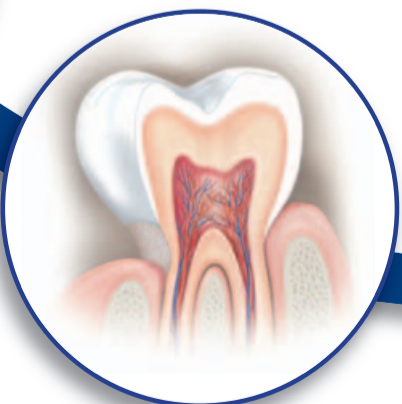
- Proven in publications<sup>2-11</sup> and confirmed by patients<sup>2</sup>

## Specifically developed to provide the right care for your patients

- Proven to relieve the pain of dentin hypersensitivity<sup>2-11</sup>
- Provides ongoing and effective pain relief with continued use<sup>2-11</sup>
- Low abrasion<sup>12</sup> to minimize damage to exposed dentin<sup>13-14</sup>
- Protects against caries<sup>38,39</sup> and strengthens tooth enamel<sup>39-41</sup>
- Offers a range of variants to encourage patient compliance



Number 1 patient preferred desensitizing toothpaste brand<sup>42</sup>



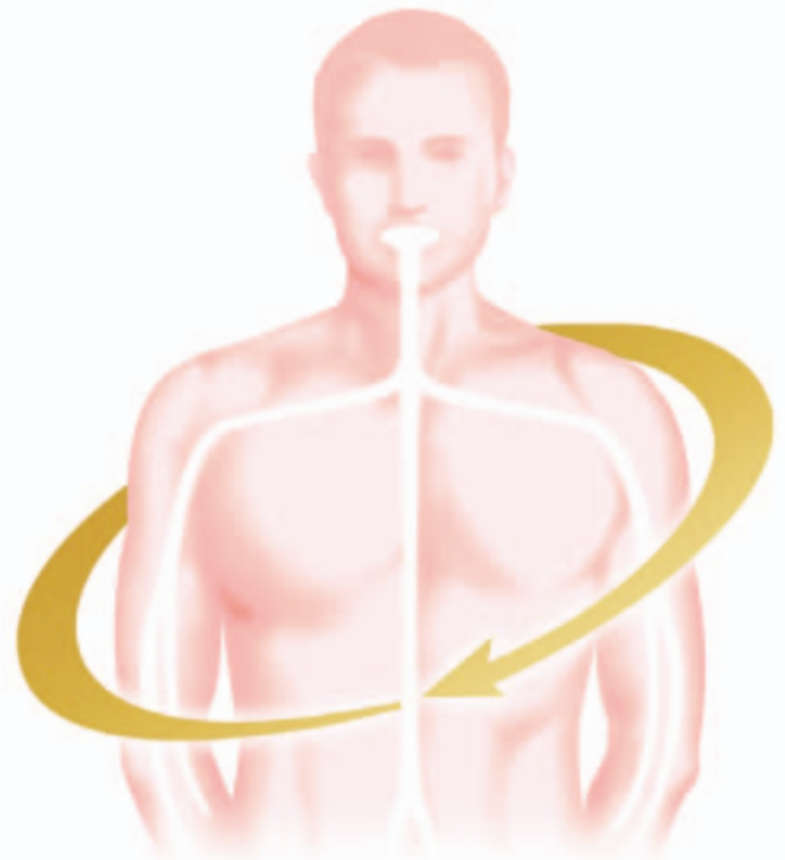
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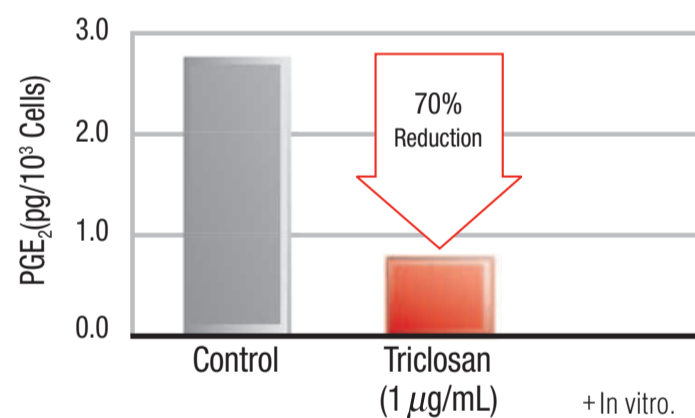
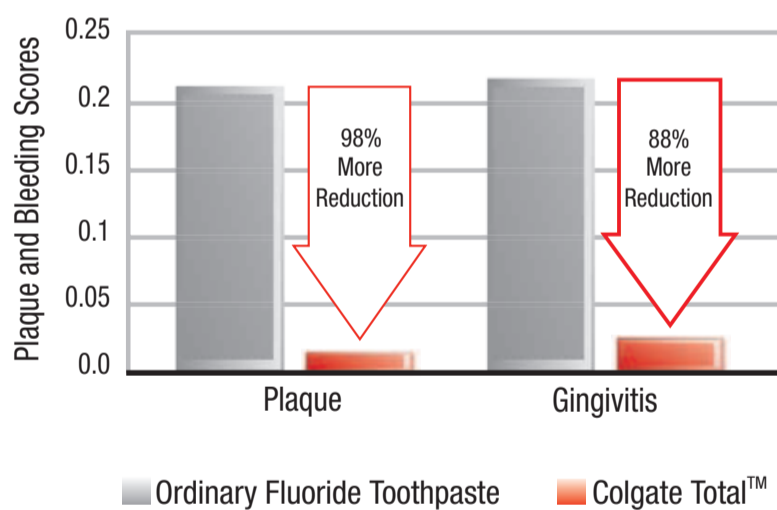


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