

Oral Photodynamic Therapy

LIGHT PDT630



WHY PHOTODYNAMIC?

INCREASE DENTAL CLINIC INCOME

Your can increase your normal Treatment with 10% or 20%

SAVE YOUR TREATMENT TIME AND IMPROVE SUCCESFUL RATE

Photodynamic Have the following advantage:

1,Minimal Invasive,Save chair side time.

2,As a good of endodontic treatment succesful rate 82.5%,Photodynamic provides high Targeting Precision and increase the success of treatment to 96.6%.

3,Faster Post-Treatment Recovery.

Clinical and Scientific Proves

PDT device is scientific based devices with hundereds and thousand of Article.

Humanity's antibiotic dilemma

Development speed

The current pace of antibiotic development cannot keep up with the pace of bacterial resistance

Limitation of Use

Systemic use of antibiotics is limited. Misuse of antibiotics can also accelerate the development of bacterial resistance

The dangers of anti-biotic resistance

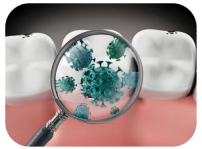
This poses a serious threat to human health, which further highlights the importance of finding alternative treatments.

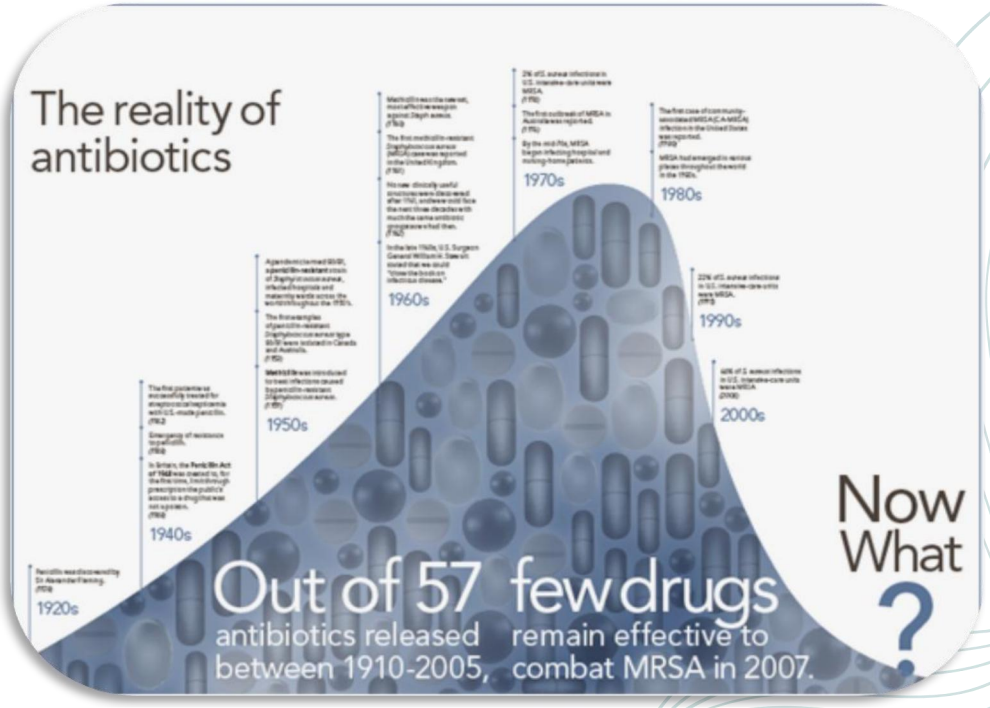
Product Opportunity

Light PDT——This product uses photodynamic therapy, has no side effects on the human body, **can replace antibiotics for treatment**, and is expected to solve the problems caused by antibiotic resistance.









Product Inspiration by Prof. Wilson



Background

Since 1989, Professor Mike Wilson and his colleagues from the Eastman Dental Institute of University College London have focused on the research of photodynamic therapy for oral infections. They have a profound academic background and rich research experience in this field, which provides a theoretical basis for subsequent product development.



Research significance

Their research have attracted widespread attention and promoted the development of photodynamic therapy for oral infections. They have provided direction for subsequent product innovation and made the development of Light PDT630 possible.

Academic Impact

It has established an authoritative position in the field of international stomatology, attracting more researchers to engage in research in this field. It has promoted academic exchanges and cooperation, and laid a good academic atmosphere for the promotion of products.

Your Smile, Our Dream

What is PDT photodynamic therapy?

Photodynamic therapy (PDT) is a new technology that uses the photodynamic effect to treat diseases. Its action is based on the photodynamic effect. This is a photosensitization reaction with the participation of **oxygen molecules and accompanied by biological effects.** The process is that laser irradiation of a specific wavelength excites the photosensitizer absorbed by the tissue, and the excited photosensitizer transfers energy to the surrounding oxygen to generate highly active singlet oxygen. The singlet oxygen undergoes an oxidation reaction with adjacent biomacromolecules, producing cytotoxic effects, which in turn causes damage to the diseased cells and even death of the diseased bacteria.

It is currently widely used as a new method for treating tumors, precancerous lesions, proliferative skin diseases, oral diseases, etc.

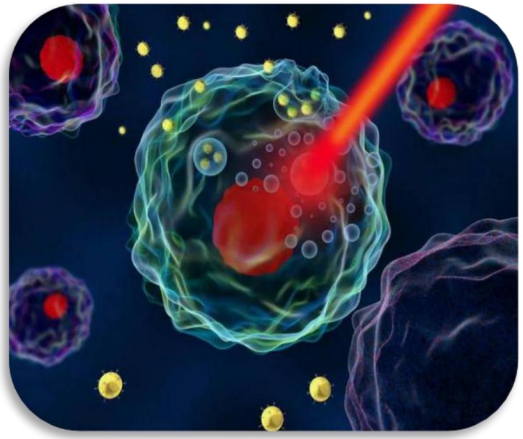




Technical Advantages of PDT630



Minimally invasive and comfortable treatment, Higher patient acceptance.



Precision targeted therapy and few side effects, solve infections that are difficult to clear with conventional treatments.



Wide use-Covering a wide range of areas such as **root canal disinfection, peri-implantitis, periodontal treatment, caries management, oral mucosal diseases.

Why Choose Oral Photodynamic Technology

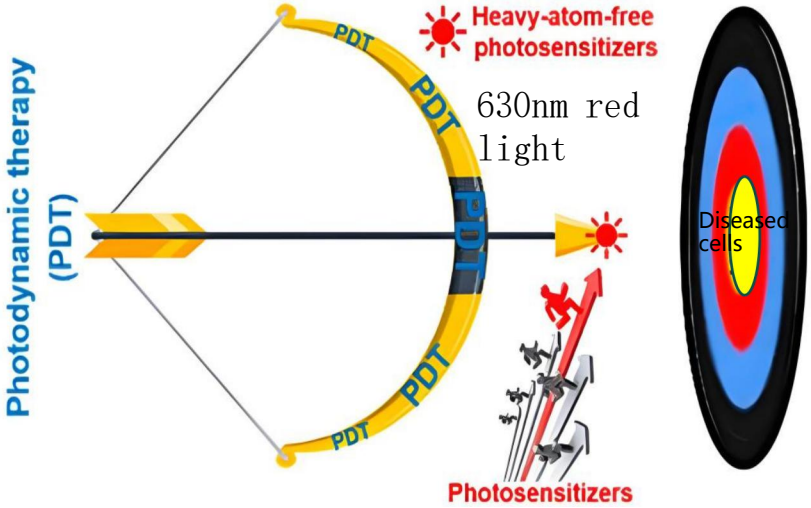


Non-invasive laser, no heat production, no cutting



Minimally invasive and comfortable treatment. Safe and efficient.

Why Choose Oral Photodynamic Technology



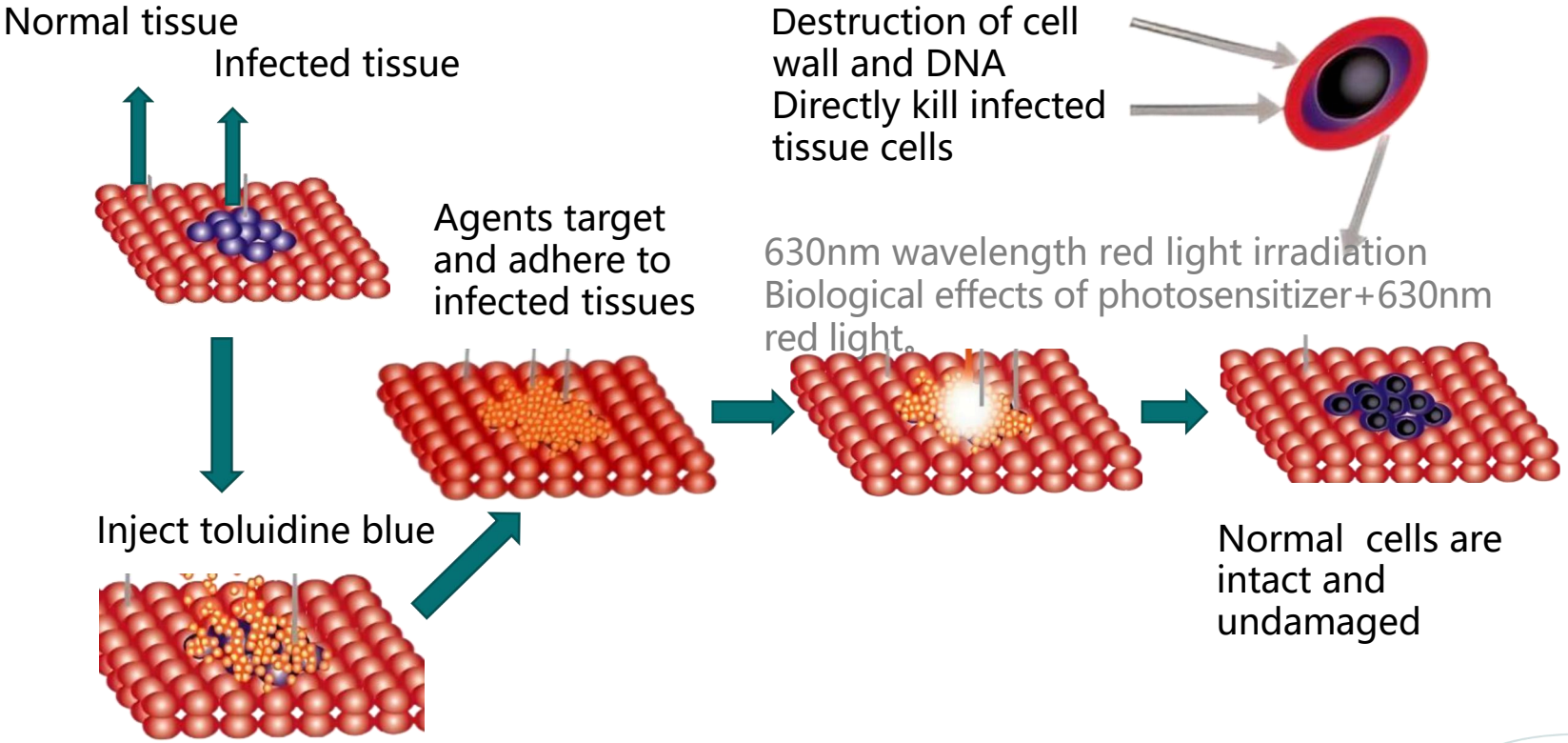
Targeting is more precise, safer and more reliable

Microbial species	Sterilization rate
E. coli strains	99.99%
Staphylococcus aureus	
pseudomonas aeruginosa	
Enterococcus faecalis	
Candida albicans	
Porphyromonas gingivalis	

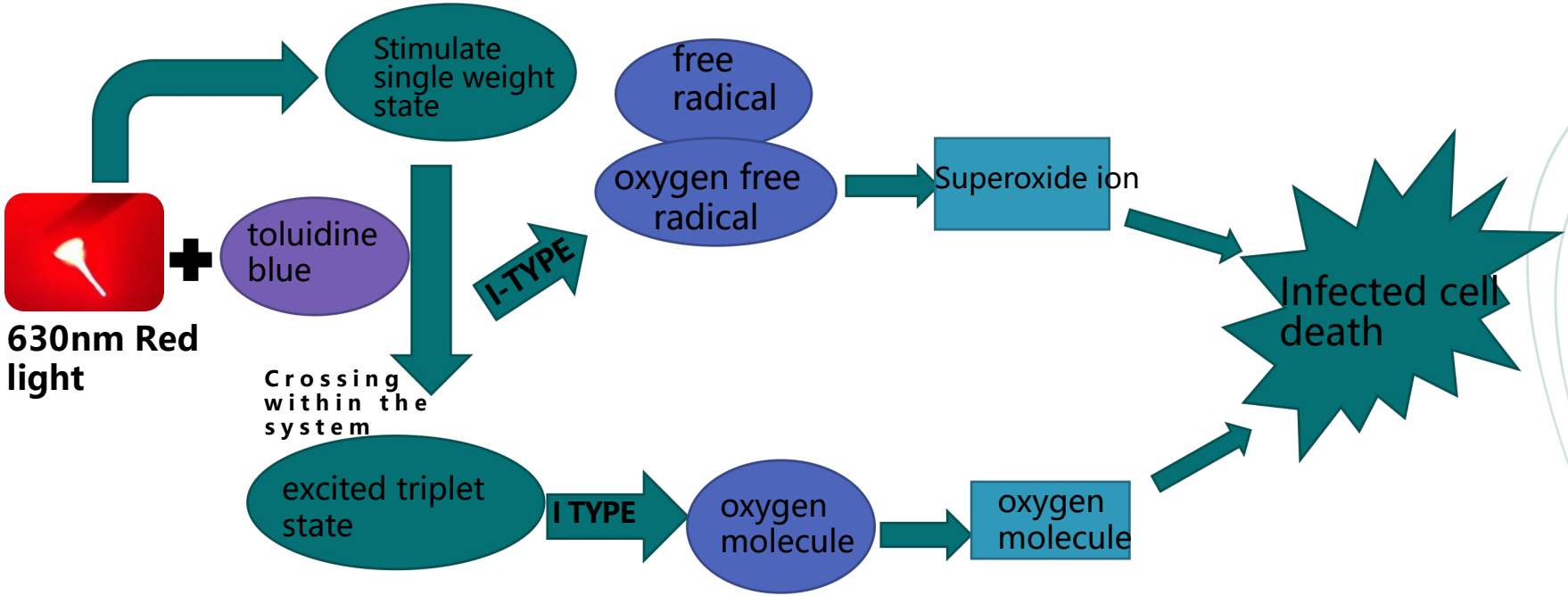
Oral Photodynamic Technology

Safe without cutting as well as heat production. Strong targeting, few side effects, harmless to the human body. No drug resistance, wide range of application. Children, pregnant women, the elderly, frail and other special groups can be treated.

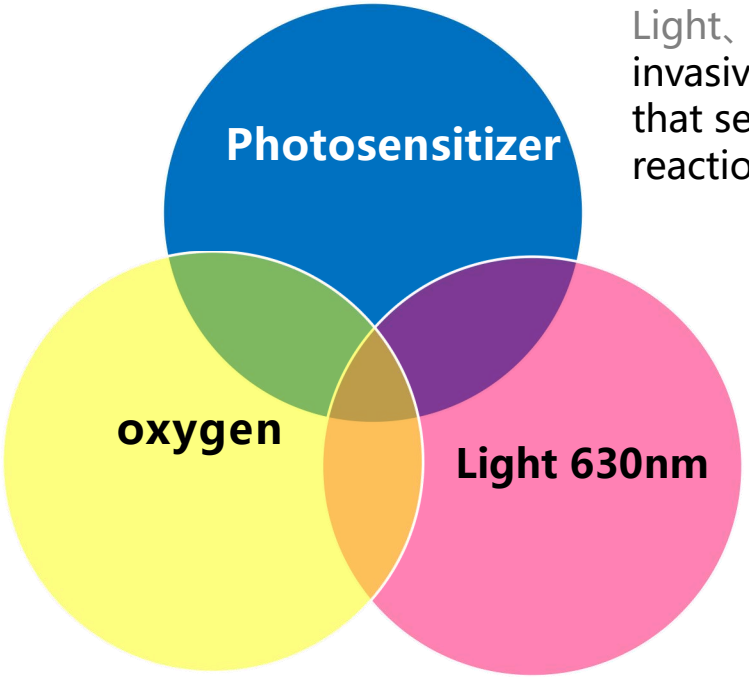
Principles of Photodynamic Therapy



Mechanism of photodynamic action



Three elements of PDT photodynamic therapy



Photodynamic Therapy, PDT is based on Light、Photosensitizer,and Oxygen interact, A non-invasive or minimally invasive new treatment technique that selectively destroys diseased tissue through dynamic reactions to achieve therapeutic goals.

Stain agent requirements:
It must adhere to the infected cell area and be able to be specific
Wavelength light source excitation

Light source requirements:
Specific wavelength 630nm red light, with stable wavelength and power, the light source can reach the infected area.

Product Features of Light PDT 630

Wireless handle & double - switch design

Designed in line with ergonomics for more convenient use.



3400mAH rechargeable lithium - battery, no worry about battery life



Double - switch design facilitates maxillary and mandibular treatment

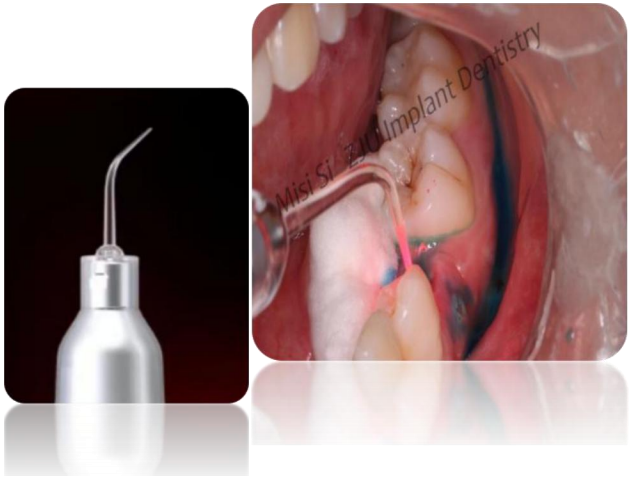


Light - guide head lens spotlight design & disinfectable

Product Features of Light PDT 630



VS



① The average service life of LED light - emitting diodes is longer. The luminous efficiency, output power and stability of the array light source are better.

② The light - guide head’ s lens spotlight design is more precise, concentrating energy better and making the light source more stable after focusing.

③ Spontaneous irradiation of multiple points better matches the excitation of the photosensitizer’ s absorption spectrum in the luminous band and full - width at half - maximum (FWHM).

① LD laser diode exciter, consuming more power.

② The light source is stable in direct irradiation with high power, but the bent light - guide head design affects irradiation stability.

Five types of light guide tips are available to meet different clinical needs



For irradiation treatment of gum surface

For irradiation treatment of Periodontal pocket

For irradiation treatment of root canal

① Five types of light guide tips are used with linear light sources and lens focusing point design, which makes the focusing performance more concentrated, accurate and efficient.

② They can be used for various treatments such as endodontic pulpitis, periodontitis, peri-implantitis, gingivitis, oral mucosa, etc.

Three types of photosensitizers are available to meet different clinical needs

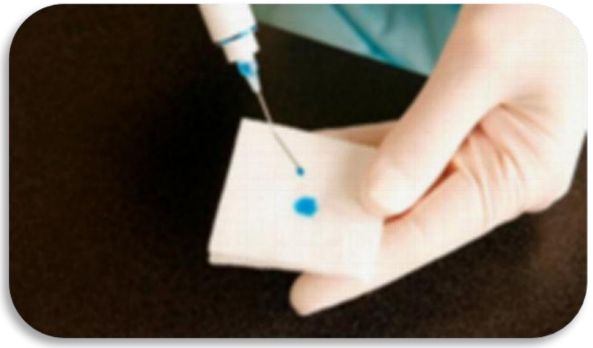


low viscosity (liquid)

Medium viscosity (gel)

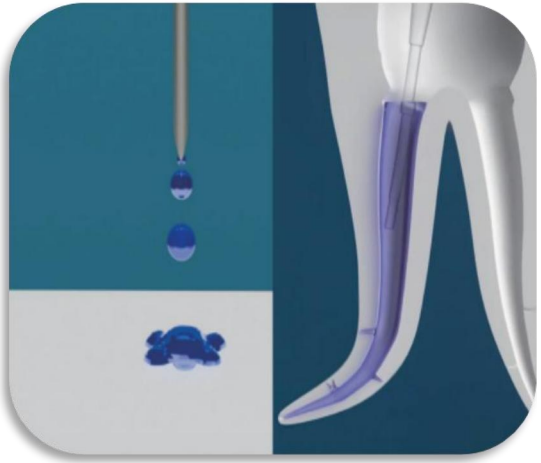
High viscosity (gel)

VS

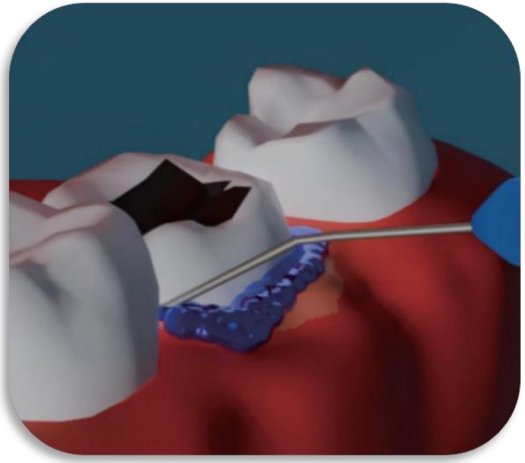


(Liquid)

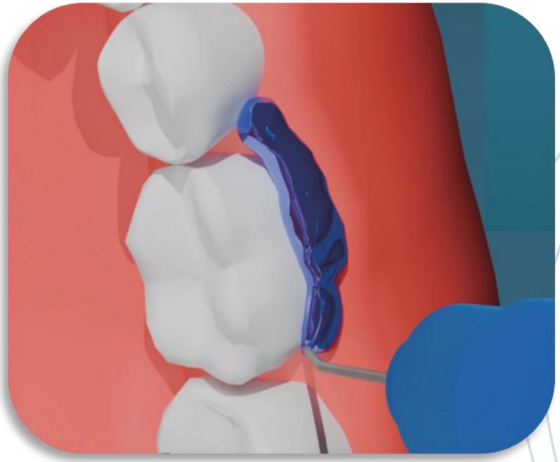
Three types of photosensitizers are available to meet different clinical needs



Low viscosity photosensitizer is in liquid form and has good fluidity. It is suitable for root canal treatment sterilization and prevention of peri-implantitis, it has good effects.



Medium viscosity photosensitizer is in gel form. It has good adhesiveness and is not easily lost due to dilution by saliva and other factors in the treatment of periodontitis and tooth extraction.



High viscosity photosensitizer is in gel form. It has good viscosity and better adhesion in the treatment of maxillary gums, oral mucosa, etc., and the treatment effect will not be affected by liquid dropping and saliva dilution concentration.

Periodontitis treatment methods

Treatment	Advantages	Disadvantages
Scrape SRP	Low cost	It requires systematic training and high technical requirements, and periodontal pockets larger than 6mm are prone to relapse in treatment effect.
Ultrasound	Low cost, replacing SRP and reducing difficulty	The root surface is uneven due to self-cutting, which makes it easy for plaque residue to recur.
High power laser	It has cutting and gasification function, and the high temperature can seal small blood vessels, shorten the healing time, and has powerful functions.	Expensive, high cost of use, requires professional training, and high operator requirements. Difficulty in power adjustment
Chemical drugs	The first use is effective quickly.	The maintenance time is short and it is easy to develop drug resistance. Long-term use is prone to drug residues
PDT Photodynamic therapy	High sterilization rate, targeted sterilization will not produce drug resistance. Simple operation. Cold laser is safer. More comfortable. Suitable for a wide range of people.	The initial investment cost is slightly higher.

How to choose a treatment plan for periodontitis?

Our suggestion is that SRP basic treatment (first, must) followed by photodynamic therapy will have better results!

The combined use of SRP+PDT or ultrasound+PDT has better effects and is more acceptable to patients!

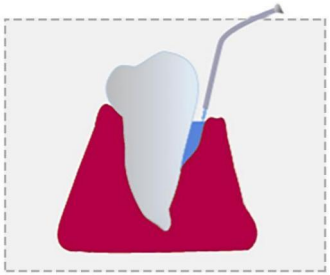




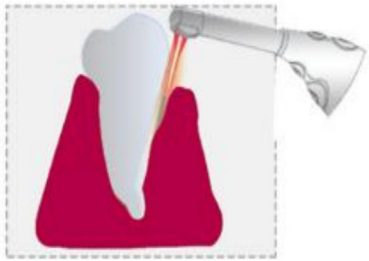
Recommended process of periodontal treatment by PDT



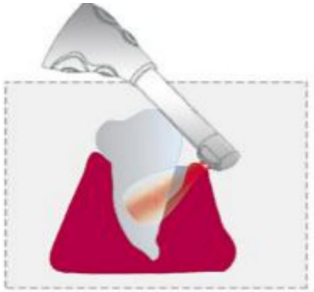
SRP treatment



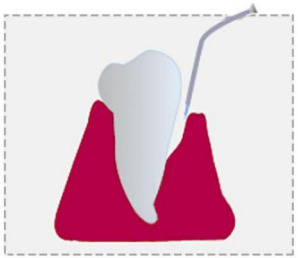
Inject MEDIUM photosensitizer



Irradiate 10-30S PD>4mm



6 points for molar 4points for premolar



Rinse

Note: The recommended process is for reference only. The actual clinical situation and instructions shall prevail. Not as a treatment guidance process!

Light PDT 630 application

Prevalence of peri-implant mucositis	43%-47%
Prevalence of peri-implantitis	22%





Comparison of treatment methods for peri-implantitis

Treatment methods	Advantages	Disadvantages
Mechanical debridement	Low cost, minimally invasive	difficult to clean thoroughly due to thread structure of the implant
Mechanical debridement combined with antibiotic	Minimally invasive, quick effect	short effect,easy to relapse and cause drug resistance
LD laser	Minimally invasive, reduces healing time	Expensive,requires professional training,difficult to adjust the power.
Slow-release drugs in PD	Quick effect after first use	short effect,long-term use is prone to residues. Side effects are significant
PDT	High sterilization rate, no drug resistance,simple operation, safe,wide application	Slightly higher initial investment cost

How to choose treatment for peri-implantitis?

Our suggestion is that mechanical debridement or surgical treatment (first, must) and then photodynamic therapy will have better results! ! ! !

Mechanical debridement + **PDT**
or **surgical treatment** + **PDT**



Combined use has better effects and higher patient acceptance!



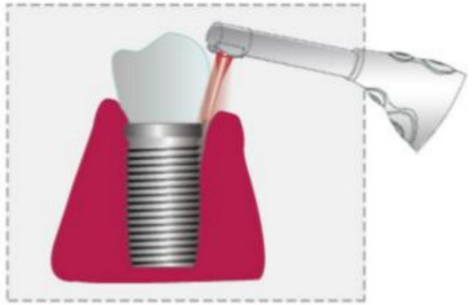
Recommended Procedures for Peri-implantitis



Surgery/basic treatment



Injection of photosensitizer
Medium/high viscosity



Irradiation 10-30S



Rinse

Note: The recommended process is for reference only. The actual situation is subject to clinical conditions and instructions. It is not a treatment guidance process.

Differentiated applications of PDT in implantation?

Advantages of using before implant surgery	Advantages of using in implant surgery	Advantages of post-implantation use
Photodynamic disinfection and antibacterial treatment of preoperative tooth extraction or implant cavities	PDT treatment after implant placement and healing abutment and photodynamic antimicrobial therapy after suturing	After surgery, it is recommended to have PDT treatment every six months for maintenance. Doctors' outpatient visits increase revenue.
Provide early guarantee for the success rate of implantation. Reduce bone resorption	An additional barrier to prevent peri-implant tissue lesions	Prevention and treatment of peri-implant tissue diseases
Shorten the waiting period for implant placement and reduce the risk of failure and postoperative complications	Reduce the risk of postoperative complications	Extending the life of implants
	Accelerate wound closure and increase bone integration (red light effect), promote soft and hard tissue repair	It improves the patient's trust, improves comfort, saves money, and thus improves the clinic's reputation, making it easier for customers to refer.

Prevention>Treatment! ! ! !

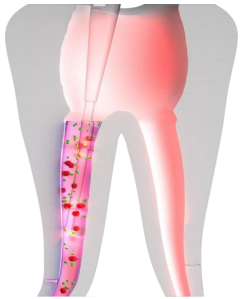
Differentiation, improve word of mouth, increase conversion rate

Application of PDT in Root Canal Treatment

Root canal treatment is relatively complicated, and it is difficult to completely sterilize,which may contribute to treatment failure.

We recommend using PDT photodynamic therapy combined with traditional chemical irrigation to kill bacteria in the root canal more thoroughly, improve clinic success rate of standardized root canal treatment, while demonstrating time-saving and cost-effective advantages.

For recurrent infections or root canal therapies by periapical pathologies, photodynamic therapy represents an optimal multi-technique adjunctive option within comprehensive treatment strategies.

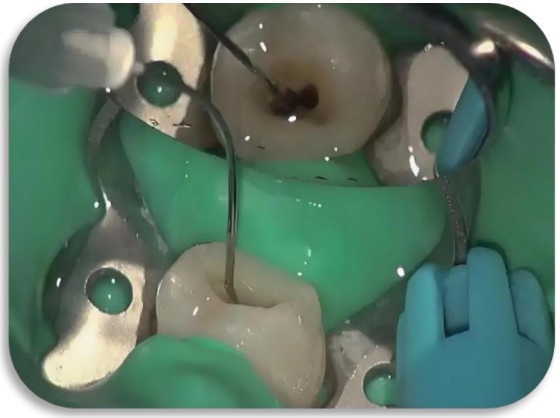


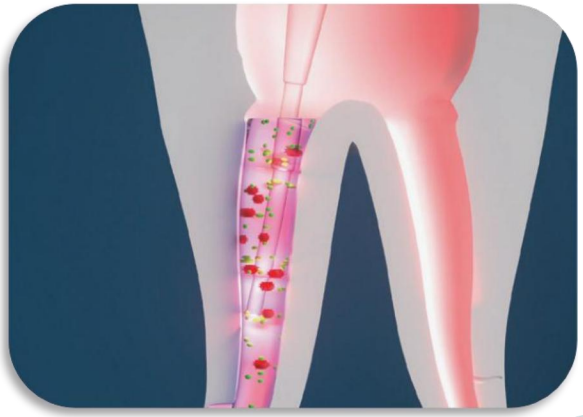


How to choose a treatment plan for root canal treatment?

PDT(Photodynamic therapy) cannot replace traditional chemical irrigation in root canal treatment, but it can be used as an effective technical supplement. We recommend root canal chemical irrigation (before, must) and then using PDT root canal disinfection to assist in combined treatment.

Root canal chemical irrigation + PDT (photodynamic therapy) **combine** can improve and prolong the success rate of treatment.





Recommended Procedures for Root Canal Treatment

Note: The recommended process is for reference only. The actual situation is subject to clinical conditions and instructions. It is not a treatment guide process!



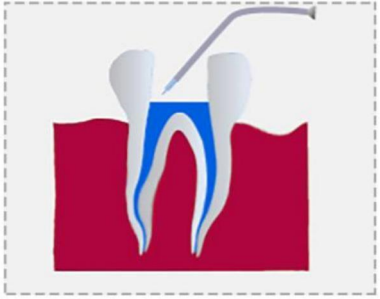
Root canal preparation



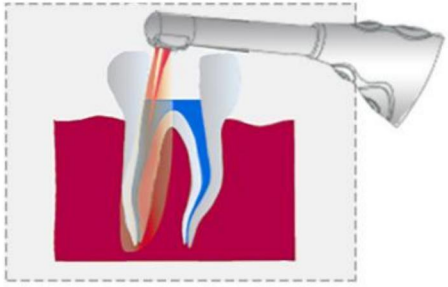
Chemical flushing/Irrigation



Dry the canal



Inject dye agent



Irradiate 10-30S

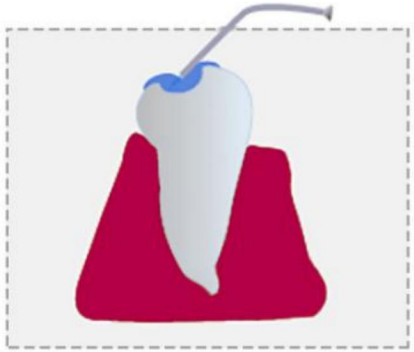


Clean

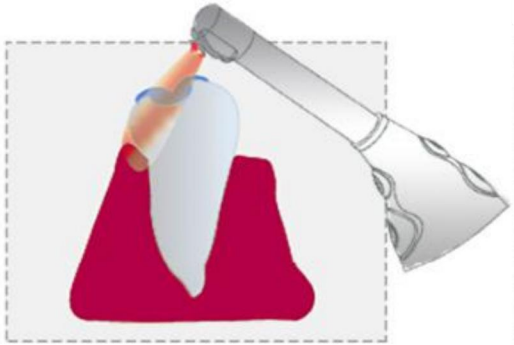
Dental Caries Treatment Recommended Procedure



Caries Removal



Injection of high-viscosity staining agent



Irradiation for 10-30S



Irrigation and Drying

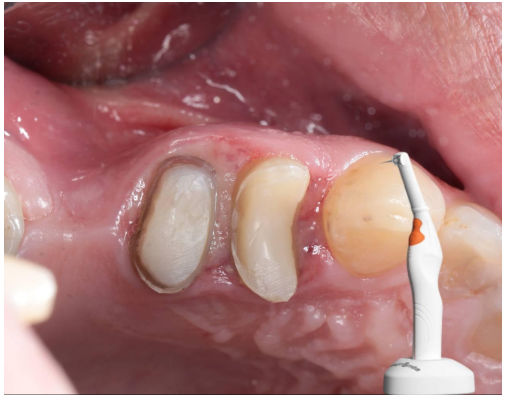
Note: The recommended procedure is for reference only. Actual treatment should be based on clinical conditions and the manufacturer's instructions. This is not intended as a therapeutic guideline!

Cases Sharing-gingivitis-Two days

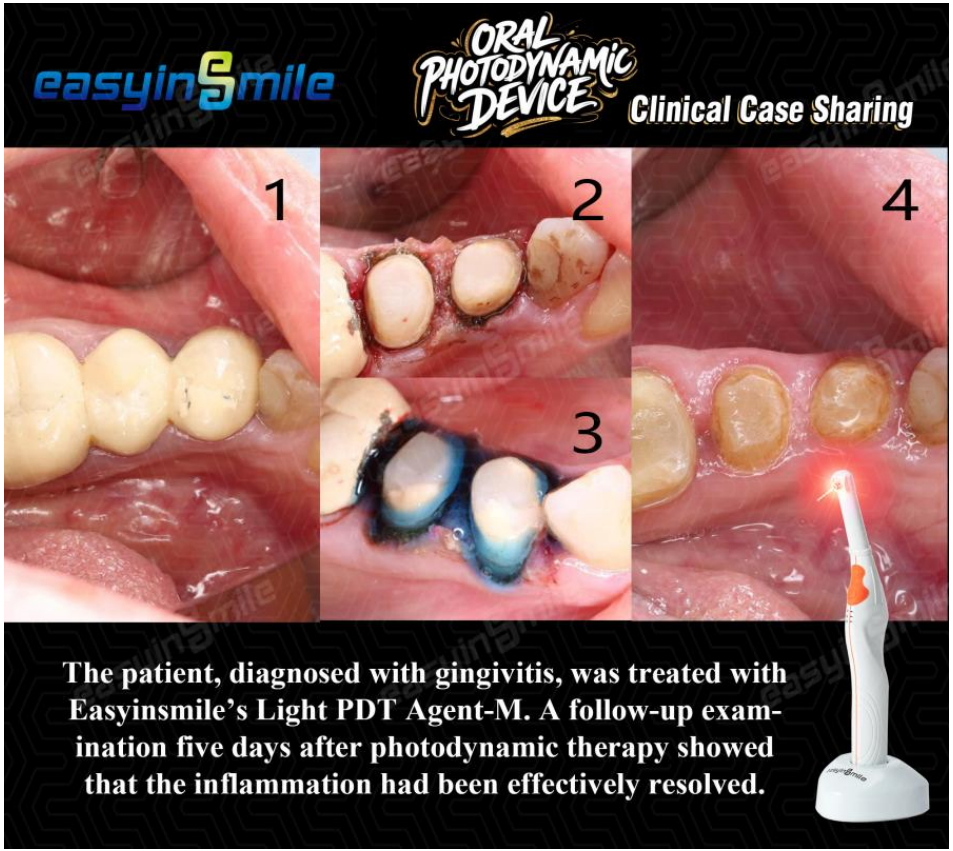


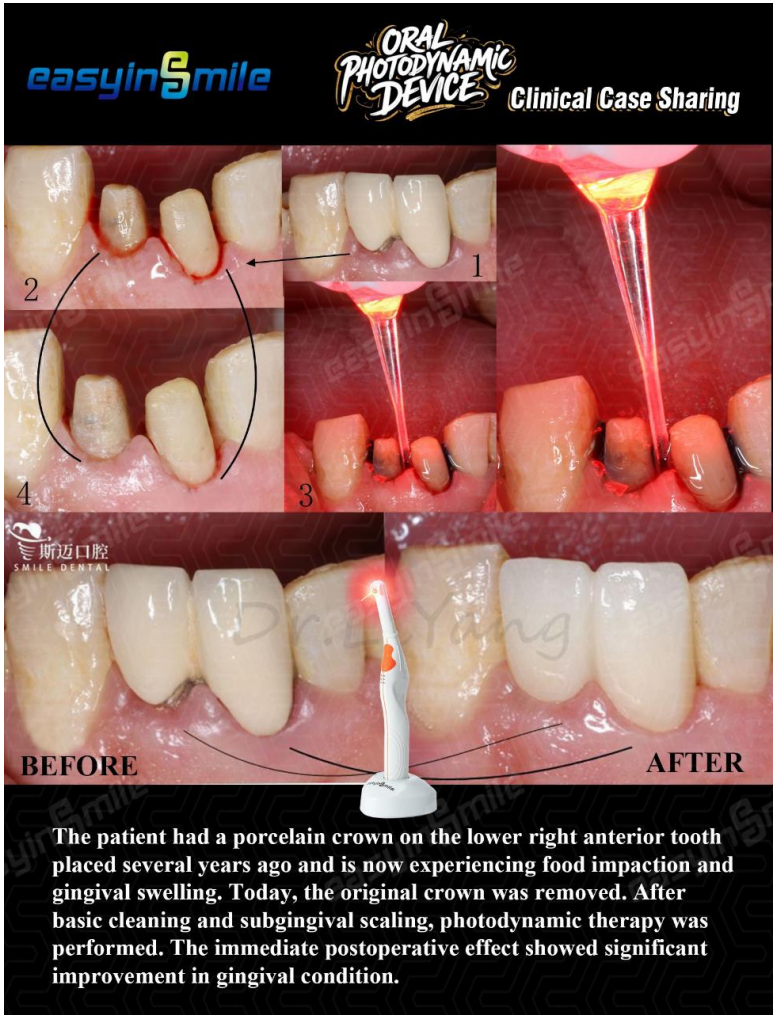






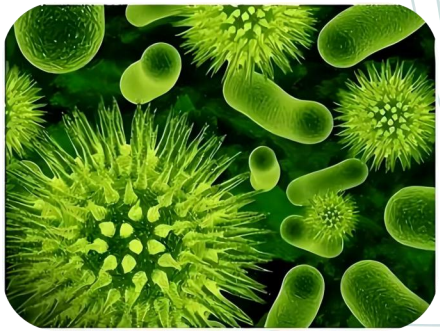
Case sharing





Benefits of Antimicrobial Photodynamic Therapy

(1) Broad antimicrobial spectrum - effective against bacteria, fungi, viruses, and protozoa;
(2) Effective against drug-resistant strains;
(3) Capable of eliminating pathogenic microorganisms without damaging host tissues when using appropriate PDT protocols;
(4) No development of PDT resistance even after multiple treatments;
(5) Non-teratogenic;
(6) Photosensitizers have low toxicity with minimal impact on liver and kidney functions;
(7) Minimal effect on normal tissues - safe for pregnant women and debilitated elderly patients;
(8) No requirement for long-term medication and unaffected by patient compliance;
(9) Effective in avascular infected areas, making it suitable for necrotic tissue infections untreatable by antibiotics;
(10) Capable of inactivating toxic factors secreted by microorganisms.



Market Potential for Photodynamic Therapy

Current Market Trends 01

Indonesia's healthcare sector is expanding, with an increasing focus on innovative treatments like photodynamic therapy (PDT).

Regulatory Environment 02

The Indonesian government has been easing regulations to encourage the adoption of advanced medical technologies, including PDT.

Local Demand Analysis 03

There is a growing demand for non-invasive treatments, with photodynamic therapy being particularly sought after for dermatological conditions.

Competitive Landscape 04

The market is currently underserved, with limited competition, presenting a significant opportunity for new entrants with innovative PDT solutions.

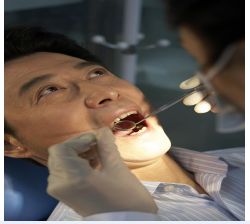
Potential Entry Strategies 05

Provide differentiated treatment plans Suitable for the elderly, children, and pregnant women

Future Growth Prospects 06

The future for photodynamic therapy in Indonesia looks promising, with potential for strong growth in both public and private healthcare sectors.

Challenges of Photodynamic Therapy



Insufficient training for doctors

Dentist dont know the device, and dont trust new technology for photodynamic therapy (PDT) products.

Economic Constraints and Affordability

Higher costs of PDT equipment and treatments make them less accessible to the majority of Indonesians.

Competition from Alternative Treatments

Widespread use and acceptance of traditional treatments over PDT in Indonesia.

Limited Awareness and Education

Insufficient information on PDT benefits, leading to low patient and healthcare provider awareness.

Infrastructure Limitations

Limited availability of medical facilities equipped with the technology needed for PDT.

Cultural and Language Barriers

Language differences and cultural beliefs that may affect the adoption of PDT in Indonesia.

Distributor Support Programs



Pricing Support 01

We offer competitive pricing models to ensure our distributors can remain competitive in the market.

Comprehensive Training Solutions 02

Our training programs are designed to equip distributors with the necessary skills and knowledge to maximize sales and customer satisfaction.

International Expert Collaboration 03

Invite international famous speaker to give lecture in local.

Local Instructor Engagement 04

Work with Local instructors to provide tailored support, understanding regional market nuances and customer behaviors.

Targeted Marketing strategy 05

By providing 1 to 1 targed marketing and strategies, we help distributors stay ahead of the competition.

Sustaining Growth and Success 06

We offer continuous support to help distributors maintain growth and achieve long-term success.

Short-Term and Long-Term Goals for Photodynamic Therapy

Assessing Current Market Position

Photodynamic therapy (PDT) is gaining traction in Indonesia, as a Non-invasive treatment method for Oral applications.It suitable for most of Oral area. such as Endodontic, Periodontic,orthdontic, impant, Caries,

Establishing Long-Term Vision

Long-term objectives aim at making PDT a standard treatment option across dental fields in Indonesia.

Regulatory Compliance and Market Entry

Ensuring strict adherence to Indonesian medical device regulations is essential for PDT market entry.

Defining Short-Term Objectives

1- Work with speaker team to increasing awareness and training healthcare professionals on PDT techniques.

2-Establish Demonstration Clinic In different city as a basis for organizing communication activities event

3-Expand 50 clinics to start learn use PDT in dally practice

Long-Term Expansion Plans

1-Promote the safety and effectiveness of photodynamic therapy through social media platforms such as Instagram and YouTube, as well as local media

2- To make more Education and promotion, to let patients are better informed about photodynamic therapy and more willing to accept it

Forecasting Growth Potential

The market potential for PDT in Indonesia is estimated to grow significantly due to increasing healthcare demands Expected to grow to 500 clinics using PDT within 2 years.

INTERNATIONAL SPEAKER TEAM



Prof. Georgi Tomov

Chair of the Periodontology Department and Director of the Laser Center at the Faculty of Dental Medicine, Plovdiv Bulgaria. He is also a President-elect of the Bulgarian Dental Laser Society and member of the Executive Board of ISLD (International Society for Laser Dentistry).



Dr Waleed Kurdi

Certified Silver Member in Style Italiano Endodontics.
More than ten years of experience as a Clinician, Researcher and Lecturer in developing strategies and guidance in root canal treatment and dental hygiene.
Lecturer and Course Director of Endo-Dam Team for more than three years with 18 credit hours including workshop and Lecture.



Dr Emre and Dr Ayfer

R&D Designer Creator of Rising DDS PHD Endodontics ,Senior Lecturer Micro Endodontics
He is also actively involved in training future generations of endodontists through advanced microscope-assisted workshops and courses

LOCAL SEAPKER TEAM



Drg Dennis
MDSc.,Sp.KG,Subsp.KE(K).,Ph.D
Department of Conservative Dentistry, Faculty of Dentistry, Universitas Sumatera Utara



Drg Aulia Yudha Prawira
drg. Aulia Yudha Prawira, Sp.Perio is a Periodontic Specialist Doctor graduated from the Faculty of Medicine of the University of Indonesia. He is a member of the Indonesian Dental Association (PDGI).



Drg martariwansyah
Conservative Dentistry Specialist (Sp.KG)
ASN Bangka Barat
Alumni Of Padjadjaran University

After-Sales service

- **Warranty**
1-year free warranty for equipment (During the warranty period, we provide free repairs and replacements for device issues, including temporary replacement units if needed).

- **Customer Follow-Up**
Conduct annual check-ins (at least once per year)

- **Post-Warranty Support**
Lifetime maintenance and repair services (charged after the warranty expires).



Thank you!



Your Smile, Our Dream