

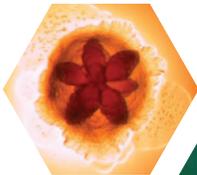
Product Catalog 2021



MTD

MedTechDental

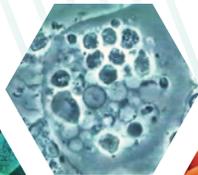
Worldwide specialists in treatments
of oral bacterial infections



A. Actinomyces-temcomitans



T. Forsythia



P. Gingivalis



T. Denticola



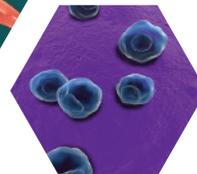
P. Intermedia



P. Nigrecens



F. Nucleatum



C. Pneumoniare



MTD
MedTechDental



What is needed.
Where it's needed

MTD Worldwide specialists in treatments of oral bacterial infections

About us

MedTechDental (MTD) was founded in 2013 in Switzerland by a group of former executives of highly recognized dental companies. They realized that a new era in dentistry was coming, as incumbent research found out that intraoral bacteria did not only affect the oral cavity, but they are believed to be involved in several systemic diseases if untreated.

Furthermore, the appearance of new diseases like peri-implantitis that affects millions of implants and patients worldwide offered new, unsolved challenges that couldn't be properly treated with the existing approach. And, on top, more and more health authorities have been raising the issue of bacterial resistance as a critical health issue for the 21st century, while dentists, in lack of better solutions, were the only medical specialty that has been steadily increasing their prescription patterns for the past 20 years, accounting for more than 10% of the global antibiotic usage.

At MTD we believed the answer is not doing something better, but something completely different. We see a misconception in treating the whole body with pharmaceutical products when the problem is topical and easily accessible. This systemic approach has been the norm for decades, so in order to change it we have to modify the existing mindset, so a unique methodology was required based on research and science.

New technologies were registered and patented. Conceived by just focusing on the problems and being simple and efficient. Creating the ability to apply **what is needed, where it's needed.**

For the past few years, we have been trying and testing, with Limited Market releases and thousands of cases that reported extremely high success rates. Partnering with universities across Europe as well as independent researchers, we investigated, tested and applied global findings on bacterial infections in multiple medical fields. Some of the universities. We have been working with:



As a result of almost 6 years' work, MTD developed medical devices that can address several of these issues in a very efficient way, treating the causes rather than waiting for the consequences to emerge. Encouraging first studies from these universities have been published or will be published in the next few months:

Now localized solutions can be used by dentists in Europe and neighboring countries. We have an amazing collection of clinical cases from around the world with extraordinary results and hundredths of happy doctors that have tried our products and keep on using them.

And we continue with our passion to constantly improve. New applications and developments are being investigated and tested to focus on preventive and initial-stage treatments, rather than relying on major surgeries. We can control and detain the progression of chronic diseases and offer renewed hope for patients.

Our commercial network is expanding incredibly fast. Today over 20 countries are carrying our portfolio and several more will join us in the next 12 to 24 months.

As global experts in treatments of oral bacterial infections, our only goal is to make the lives of our doctors and patients better, through the usage of our portfolio and the achievement of strong medical results. One drop and one patient at the time.



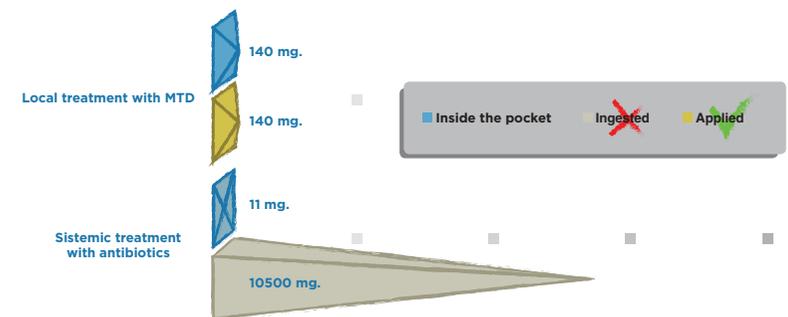


Systemic vs. Local treatments: Why are we so effective

Modern medicine has defined that it is always preferable to be more topically active and less invasive, avoiding undesirable consequences and side effects both short and long term. The oral cavity has been the exception as existing technologies where not able to address the problem of treatment duration, intensity and effectiveness. Our research broke down effectively those barriers offering the following advantages:

- **Increased patients' treatment compliance:** one application at the clinic eliminates the dependence on patient's commitment.
- **Minimized side effects:** short term (diarrhea, stomach pain, etc.) and long term (bacterial resistance) are addressed with our patented delivery method.
- **Minimized risks of secondary problems.**
- **Increased treatment control and effectiveness:** a critical reduction of the "in body" active ingredients (and none "ingested") but a much higher "in problem" presence of the active component.

Sample quantity of active components in the body and the wound *



Our adjunct active components: maximizing the results while minimizing the risks

For our products we have selected adjunct active components that have a proven and strong antibacterial activity, but given their natural characteristics, are either inert or not absorbed by the body.

Our patented essential oils combination offers a unique action that allows patients to benefit from strong antibacterial activity for a long period of time without any known or tested side effects.

The usage of Piperacillin-Tazobactam in some of our products is due to the wide spectrum activity, proven effectiveness with most bacteria (see comparative chart at the side) and reduced potential for bacterial resistance when measured up against other components like tetracyclines. It is also an antibiotic that can't be digested by the body, meaning that its application is safer than other similar products.

	Gram Positive Cocci			Gram Negative Bacilli			Anaerobes
	MRSA	MSSA	Streptococci	E.coli, Klebsiella, Proteus	Pseudomonas	ESCAPPM*	
Penicillin							
Amoxicillin							
Clindamycin							
Metronidazole							
Gentamicin							
Amoxicillin-clavulanate							
PIPERACILLIN-TAZOBACTAM							

Wellington ICU Drug Manual, Antibiotic sensitivity overview, Appendix



GELCIDE

Bringing simplicity for periodontitis and exposed wounds

Complete treatment for exposed infections or wounds, such as periodontitis, caused by bacteria. One application in the wound can help improve the outcome of the treatment.

How does it work?

Liquid solution that once in contact with the crevicular fluid or the saliva forms a sealing film that protects the wound and increases the regeneration and recovery of the area. The film's action is protected by a strong antibiotic (Piperacillin) and a Beta-Lactamase inhibitor that attacks the biofilm.

The solution forms a film almost instantly that adheres to the applied area, protecting the area during a period of 8 to 12 days, eliminating the pathogenic activity, stimulating the regeneration and leaving a residual effect that slows down a future potential bacterial recolonization.



Blister presentation:

- Vial with distilled water, resins and alcohol.
- 1 Piperacillin-Tazobactam vial.
- 2 syringes.
- 2 blunt needles.

Physical and antibacterial action

The film protects and covers the wound or pocket from continuous bacterial penetration and colonization. It is permeable but not soluble in oral fluids, allowing to consistently release the active components during a lengthy period in small quantities. There is no need for removal. Application is simple. Applied in the pocket as liquid the physical activity makes the product turn rapidly into a solid, protective film that blocks all bacterial activity for a relevant period of time.



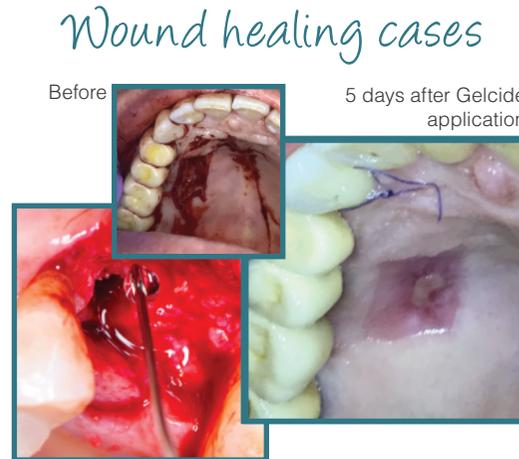
Dr. Leonardo Arias, Rianxo clinic director, Masters in Dental Pathologies and Therapies, assistant professor USC.

I use MTD products mostly for all my perio therapies as well as any infections I might find in my patient's mouth. Not only because of the excellent results we have but also because we can improve chair efficiencies as well as patients' experience and satisfaction.

Periodontal pocket treatment

Extraordinary results when complementing the traditional scaling and root planning, with increased biological and aesthetic results by:

- Sealing the pocket, not allowing new bacteria to enter the damaged area.
- Its unique liquid application avoids any problem due to the morphology of the pocket.
- Its unique formulation is active long term against all pathogens of the periodontal pocket.
- One application in the clinic ensures patient's compliance.



Suture protection

Alveolitis cases



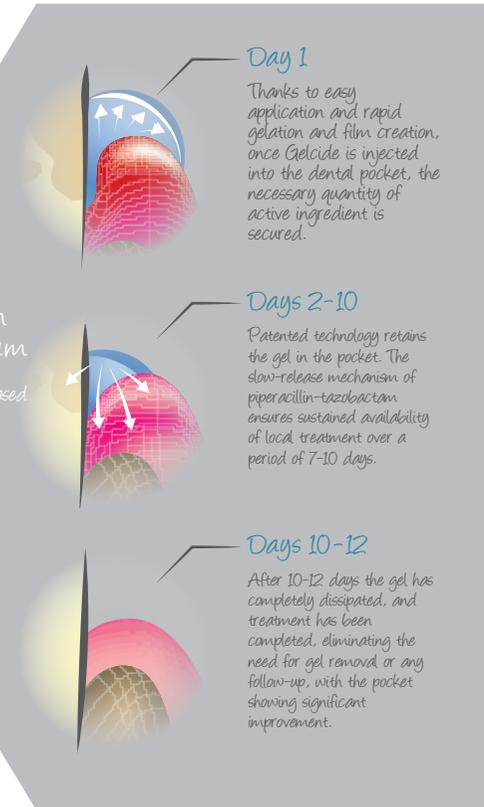
Treatment



Piperacillin Tazobactam
(Patented copolymer-based delivery system)

Application

- Not absorbed by the gastro-intestinal tract.
- No residuals: water permeable.
- Non-irritant and causes no discomfort.
- All application on site.



Prof. Juan Manuel Vadillo, Director Implantology Masters, UAX, Madrid, Spain.

"I am convinced that, in the next few years every dental clinic will carry a MTD product, as our profession will be more about effectively preventing the causes of tooth and implant loss, than dealing with the consequences"



GELCIDE ESSENTIALS

A natural and effective approach against oral bacteria

Partner with nature to fight oral bacterial infections

Comprehensive treatment for protection and maintenance of periodontal and peri-implant structures against bacterial threads utilizing the power of essential oils.

Why use essential oils in periodontal and peri-implant treatments instead of antibiotics?

At MTD we seek to lead the fight against oral infections. We believe in localized antibiotic therapy that does not affect the entire system, but we found out that essential oils have enormous antibacterial capacity and, in combination with our patented delivery systems, offer extraordinary results in long-term treatments. Although there are more than 400 studies that confirm the effectiveness of essential oils as an oral antimicrobial, MTD has developed the first products that are applied only where they are needed, for the required period of time.

How does it work?

Ready-to-use liquid preparation that forms a protective film once in contact with humidity like saliva or crevicular fluid. Following thorough mechanical cleansing, the film and the embedded essential oils effectively support the body's regeneration after an oral bacterial infection. The healing site is physically protected against bacterial recolonization for a period of 12 to 25 days. And pathogens that might have escaped the mechanical procedure are taken care of by the natural power of essential oils.

Key product benefits

Ideal for the treatment of gingivitis and peri-implant mucositis, preventing the potential progression to more serious forms of disease.

- Protection of surgical sutures, and exposed wounds.
- Natural alternative for commonly used preparations.
- Support of periodontal maintenance.



Blister presentation:

- 1 Bottle containing a 1.5 ml essential oils patented solution with copolymers and alcohol
- 1 Syringe
- 1 Blunt needle



PhD. Michael Homm, COO MedTechDental, Basel, Switzerland.

At MTD we have developed technological advancements that protect damaged or endangered oral tissues, whether they are exposed or submerged. Our patented technologies allow us to offer clinicians improved results when compared to traditional treatments. Products like Gelicide Essentials, forming a long lasting barrier that allows and even enhances regeneration, can be seen within a few days not only by doctors and hygienist, but also by patients, improving results and increasing the satisfaction of all stakeholders.

GELCIDE

ESSENTIALS

Natural periodontal medicine arrives to the dental clinic

The natural periodontal pocket treatment



Periodontal pockets of more than 6mm, BOP and high sensitivity. When inspected, we found excessive quantities of *T. denticola*, *P. gingivalis* and *T. forsythia*.



Gelcide Essentials was applied. The blunt needle should reach the bottom of the periodontal pockets, and the pockets are filled with the patented formulation.

A full mechanical debridement was done.



Once applied, air should be blown over the product for approximately 5 seconds, after that, we can see how the solidification of the product takes place.



Case 1



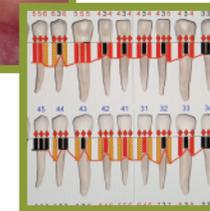
Aspect of the gums 1 week after the treatment. No BOP and no sensitivity, due to product sealing.



After 16 weeks, gums are much healthier. Pockets have been reduced by 50%. Still no BOP and no sensitivity.



Case 2



Patient with chronic periodontal problems, gets a scaling root planning treatment complemented with Gelcide Essentials. After 3 days it becomes very visible the healthy look of the gums. After 6 months results are still clear: reduced pockets, clear aesthetic results, no BOP.



Dr. med. Gregor Thomas (DMD, DDS, PhD, MSc) former technical director of several companies, Medical Head of Z99 dental clinics, Austria.

During several months of Gelcide Essentials use we observed a lot of benefits in patients' development for different indications. There was clearly no disadvantage when compared to standard treatments that included chlorhexidine, systemic antibiotics or other ointments. On the contrary, a clear advantage is that Gelcide Essentials forms a solid film after it has contact with liquids. This protects the wound and facilitates the healing process with improved treatment results. We as a clinic have integrated Gelcide Essentials as part of our standard clinical treatments.



IMPLAPROTECT

Your ally to combat submerged infections

Complete treatment for submerged infections or wounds, such as cysts or apicectomies, caused by bacteria. One application in the wound can help improve the outcome of the treatment.

How does it work?

Liquid solution with a base of high-density hyaluronic acid (HA), that acts as a natural barrier and stimulates regeneration. The HA's action is protected by a strong antibiotic (Piperacillin) and a Beta-Lactamase inhibitor that attacks the biofilm.

The solution, being applied subgingivally or mixed with biomaterials creates the necessary barrier function and regenerative stimuli to avoid infections and speeds the recovery and regeneration of the infected area. The product works for several days, stimulating the regeneration and leaving a residual effect that slows down a future potential bacterial reinfection.

Key product benefits

- Ideal for mucositis treatment, preventing the evolution into peri-implantitis.
- Easy to use treatment that can be applied once in the clinic and have a long term, visible effect.
- Protects the damaged or rebuilding tissues.
- Improves the implant osseointegration.
- Enhances bone regeneration in post extraction sites and increases soft tissue health.



Blister presentation:

- 1 High density Hyaluronic acid (liquid)
- 1 Piperacillin-Tazobactam vial
- 2 syringes
- 2 blunt needles



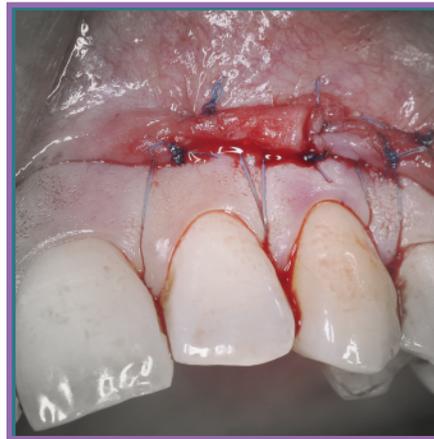
Peri-implant mucositis



Dr. Tomas Beca Campoy, Clinical head Dres. Beca, Assistant professor FdV University, Madrid, Spain

It is key to apply what is needed, where it's needed to patients. In every case we try to maintain and improve patient's natural tissues, accelerate the regeneration process and the osseointegration while reducing the infection risks. That is why using a few drops of MTD products I can get that and more.

Full regeneration after a severe apicectomy in 10 days



Implaprotect was applied to the wound after cleaning manually the area, as well as in the gingiva that was affected. 10 days later the soft tissue has a healthy look and patient felt no pain.

27 months later, the area is still healthy and there is good bone regeneration.

...and more uses and applications



Dr. Antonio Fernandez Coppel, PhD OMS, Centro Dental Coppel and Coppel Dental Academy Madrid, Spain.

"I use always, on my bone regeneration treatments, Implaprotect, combining it with the biomaterials. With it I maximize the treatment safety and the aesthetic results, minimizing the dependency on patient's treatment compliance"



IMPLACURE

A way to effectively treat peri-implantitis

A reliable solution management for the treatment of peri-implantitis that features 3 steps to maximize the chances of success: mechanical debridement, surface treatment, and active protection & regeneration of the affected tissues.

How does it work?

Implaprotect's exclusive protocol that involves all 3 steps of implant cleaning and tissue regeneration, is supported by:

- A set of implant surface polishing burs to eliminate biofilm and places where bacteria can hide.
- A unique patented combination of chlorhexidine and orthophosphoric acid to ensure thorough removal of existing bacteria in the implant surface and the affected neighboring area.
- A combination of high-density hyaluronic acid that will act as a barrier and stimulate tissue growth, protected with a potent active ingredient (piperacillin & tazobactam) that will support the regenerative process while protecting the site in the medium and long term.

Key product benefits

- Increases soft tissue regeneration and bone osseointegration.
- Minimizes patient discomfort and risks after surgery.
- Protects the damaged or rebuilding tissues
- Stops the progression of the disease and, in most cases and depending other factors such as bone grafting materials or the type of defect, achieves significant defect reduction and great aesthetics results.
- Localized activity that reduces or nullifies the need of systemic antibiotics.



Box presentation:

- 1 High density Hyaluronic acid (liquid)
- 1 Piperacillin-Tazobactam vial
- 3 syringes
- 3 mixing tips
- 1 Chlorhexidine and orthophosphoric acid syringe



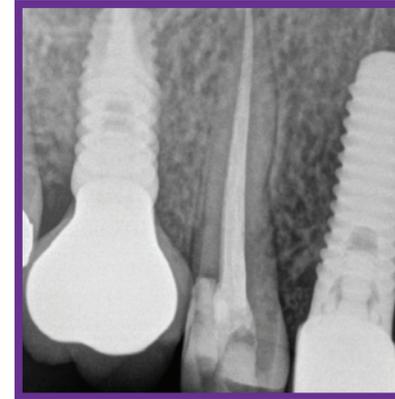
Severe peri-implantitis on a zygomatic implant, fully recovered after 2 years of the Implacure protocol application.



PhD. Fernando Duarte, Head of CLITROFA Clinic, University of Porto, Trofa, Portugal

I receive patients from around the globe, usually desperate cases. Some of the most anguishing ones are those patients with peri-implantitis in their zygomatic implants. For them is do or die. After thorough investigation we decided to use the Implacure protocol from MTD. These patients must have the progression of the disease stopped immediately, and with Implacure we do that and a lot more.

First ever case: a 5 year follow up

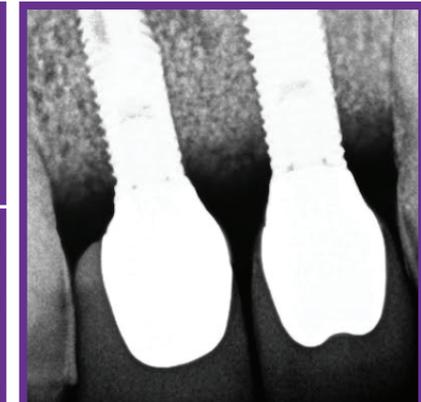
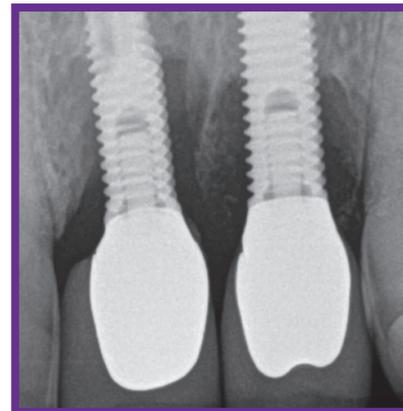


The first case ever treated with the Im placure protocol. A 3 mm bone loss with the soft tissue results after 30 days and full bone regeneration 5 years later.



Severe periimplantitis in aesthetic zone, a 4 years success story.

A severe peri-implantitis case with over 8 mm bone loss, and 4 years later, with 6mm bone gain. Treated with Im placure.



Dr. Dessimirov, Dessimirov Clinics group & Plovdiv University, Bulgaria

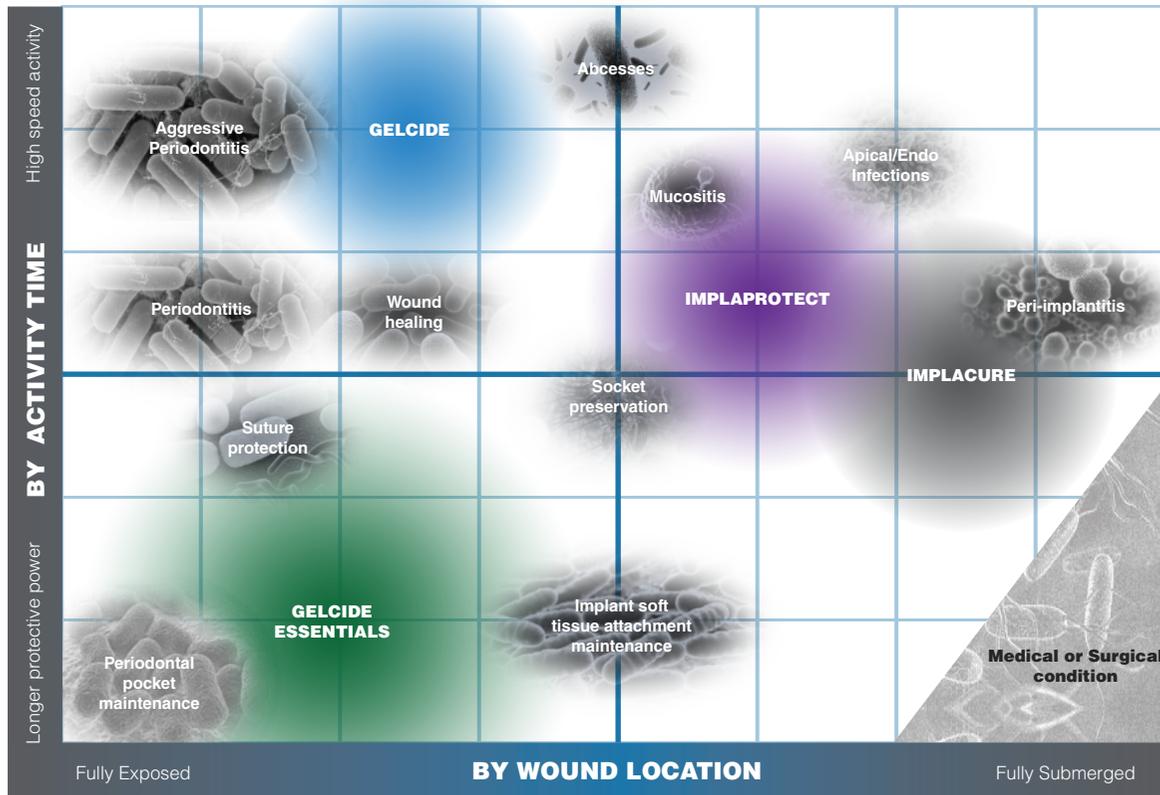
“For me, peri-implantitis is one of the major challenges we have to face in dentistry. Bone destruction eliminates options. Today Im placure is the only protocol that offers us the certainty to stop the progression of the disease and great chances to create an environment where bone can be regenerated.”

MTD's product understanding and usage matrix

The biggest challenge when developing our portfolio has been to classify the needs of the patient and providing doctors the right framework of choices. We have found out that bacterial infections can appear internally or into places with really hard access, or exposed. These approaches will require different technologies. Also, the length of time in which we need the product to be effective. For some cases we need longer times as a preventive treatment while for others we need to act fast. Once again, different approaches had to be developed.

As part of our internal analysis, we have classified bacterial infection treatments in different quadrants.

Guidance to determine which treatment to use given the patient pathology



1. Exposed bacterial infections with protective, long term action.
2. Exposed bacterial infections with a need for fast action.
3. Submerged infections with longer term action.
4. Submerged infections with longer term prognosis.

Each quadrant offers a unique treatment challenge that can be supported by one of our products, increasing the predictability and patient's satisfaction.

Contact Us
If you have any questions do not hesitate to contact us or our local partners



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GELCIDE ESSENTIALS

A natural and effective approach against oral bacteria

Patented treatment for the treatment of peri-implantitis that includes all 3 steps to maximize the chances of success: mechanical debridement, chemical cleaning and active protection and regeneration of the affected tissues.

How does it work?

Liquid solution that once in contact with the crevicular fluid or the saliva forms a sealing film that protects the wound and increases the regeneration and recovery of the area. The film's action is protected by a strong antibiotic (Piperacillin) and a B-Lactamas inhibitor that attacks the biofilm. The solution forms a film almost instantly that adheres to the applied area, protecting the area during a period of 8 to 12 days, eliminating the pathogenic activity, stimulating the regeneration and leaving a residual effect that slows down a future potential bacterial recolonization.

Key product benefits

The film protects and covers the wound or pocket from continuous bacterial penetration and colonization. It is permeable but not soluble in oral fluids, allowing to consistently release the active components during a lengthy period in small quantities. There is no need for removal. Application is simple as its application is as liquid turning rapidly into solid.



PhD. Fernando Duarte, Head of CLITROFA Clinic, University of Porto, Trofa, Portugal

I receive patients from around the globe, usually desperate cases. Some of the most anguishing ones are those patients with peri-implantitis in their zygomatic implants. For them is do or die. After thorough investigation we decided to use the Implacure protocol from MTD. These patients must have the progression of the disease stopped immediately, and with Implacure we do that and a lot more.