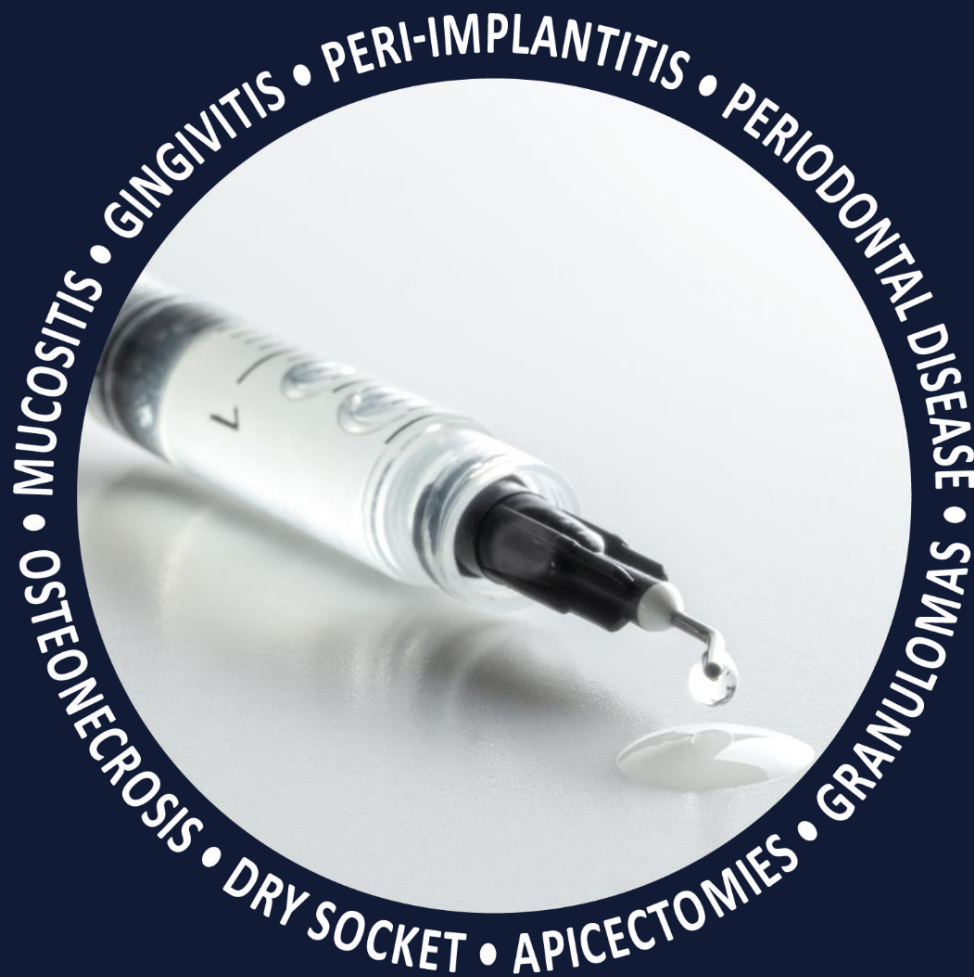




# Ozosan<sup>®</sup> gel





# Ozosan<sup>®</sup> gel



## *Profile of the inventor*

**Dr. Roberto Ghiringhelli - Viggiù (VA) Italy**

Graduated in medicine and surgery at the University of Milan in October 1978

Freelance dentist since 1979

He works in the fields of conservative dentistry, endodontics, surgery, fixed and removable prostheses

Member of the World Council Association  
Stomatologique Internationale – ASI

National President of EuroConsulta

President of the Scientific and Research Committee of Sanipan S.r.l.



## GENERAL CONCEPTS and USE

Ozone therapy consists in the use of stabilized ozone.

**It's a therapy that dates back to the early 1900s and has undergone multiple evolutions over time, based on scientific research that testifies to its effectiveness and reliability in the medical field.**



# Ozosan<sup>®</sup> gel

## GENERAL CONCEPTS and USE

Ozone therapy consists in the use of stabilized ozone.

**In Dentistry important benefits are obtained in surgery, implantology, treatment of osteonecrosis, bacterial stomatitis, prevention of alveolitis, mouth ulcers, adjuvant in the treatment of periodontitis and peri-implantitis.**



# Ozosan<sup>®</sup> gel

## GENERAL CONCEPTS and USE

Ozone therapy consists in the use of stabilized ozone.

**Ozone is a very powerful natural decontaminant that facilitates wound healing and, therefore, the patient's use of antibiotics can be reduced.**



# Ozosan<sup>®</sup> gel



## ORAL HYGIENE

- Gingivitis
- Mucositis
- Mouth sores



## PERIODONTICS

- General periodontal disease
- Periodontal surgery
- Gingival recession



## IMPLANTOLOGY

- Peri-implantitis
- Decontaminant prior to:
  - ▶ implant placement
  - ▶ placement of healing caps
  - ▶ placement of prosthetic abutments



## ORAL SURGERY

- Apicectomy
- Dry socket
- Maxillary sinus lifting
- Extractions
- Surgical wounds
- Osteonecrosis

## How it works:

- It breaks down the double bonds between carbon atoms of the cell walls by means of oxidation and causes the death of the micro-organism in few seconds



# Ozosan<sup>®</sup> gel



## ORAL HYGIENE

- Gingivitis
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## ORAL SURGERY

- Apicectomy
- Dry socket
- Maxillary sinus lifting
- Extractions
- Surgical wounds
- Osteonecrosis

The literature confirms that it:

- destroys 100% of micro-organisms in dental caries or periodontal lesions.
- the ozone concentration in **Ozosan Gel** is enough to destroy bacterial cells including spores.



# Ozosan<sup>®</sup> gel



## ORAL HYGIENE

- Gingivitis
- Mucositis
- Mouth sores



## PERIODONTICS

- General periodontal disease
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## ORAL SURGERY

- Apicectomy
- Dry socket
- Maxillary sinus lifting
- Extractions
- Surgical wounds
- Osteonecrosis

## Functions:

- antimicrobial
- virucidal
- anti-inflammatory
- bactericidal
- fungicidal
- biostimulant (neoangiogenesis)





# Ozosan<sup>®</sup> gel



The sunflower oil-based gel is the essential part of the product.

This holds the right amount of ozone stable and ready for use directly at the site to be treated.



# Ozosan<sup>®</sup> gel



Another feature that characterises **Ozosan Gel** is the “**cold chain**” – this distinctive aspect guarantees the stability of the ozone in the gel.

At all stages of the supply chain (manufacture/storage/packing/transportation) the product is kept at a controlled temperature.

When the product reaches the clinic, it must be kept in the fridge (max 8°) and has a shelf life of 36 months.





# Ozosan<sup>®</sup> gel

T0 – Afta Major 1,3 cm



11 days later – 3 applications





# Ozosan<sup>®</sup> gel

## Post-extraction alveolus with tissue healing by secondary intention

T0 : biomaterials & suture



10 min. after Ozosan Gel application



1 week later: stitches removal



Courtesy of Dr. Guerino Caso - Nocera Inferiore (SA), Italy



# Ozosan<sup>®</sup> gel

## Mucositis on implant placed in 2002

Tartar ablation - Air polish - Ozosan Gel application

T0



10 min. later



Courtesy of Dr. Marianna De Nale - Padova, Italy



# Ozosan<sup>®</sup> gel

## Avulsion and simultaneous implant placement in guided surgery

T0 - Ozosan Gel inside the mask during the surgery



4 days later: healing by second intention



Courtesy of Dr. Massimiliano Baiano - Napoli, Italy





# Ozosan<sup>®</sup> gel

Periodontitis with II° mobility and PPD of 09 mm



T0: debridement and Ozosan Gel application



T1: one week later

Ozosan Gel was applied every two days, and at the third week, tooth mobility went from II to 0

Courtesy of Dr. Massimiliano Baiano - Napoli, Italy



# Ozosan<sup>®</sup> gel

## Herpes labialis



T0



Ozosan Gel application



24h later

Courtesy of Dr. Sante Vece - Broni (PV), Italy





# Ozosan<sup>®</sup> gel

## Herpes labialis



T0

Courtesy of Dr. Sante Vece - Broni (PV), Italy



T1: 15h later



# Ozosan<sup>®</sup> gel

## Connective Tissue Harvested form the Palate



T0



T1: 10 days later



T2: 14 days later

Courtesy of Dr. Marco Redemagni - Lomazzo (CO), Italy



# Ozosan<sup>®</sup> gel

## Biphosphonate-induced osteonecrosis





# Ozosan<sup>®</sup> gel

**Extraction with apical granuloma and maxillary sinus involvement**  
Schneider's membrane is untouched



post extraction



10 days later



30 days later

Courtesy of Dr. Emilio Luis Porcar - El Puerto de S.ta Maria - Cadiz, Spain



# Ozosan<sup>®</sup> gel

**Osteonecrosis** - one application every week



T0



3 months later



# Ozosan<sup>®</sup> gel



I have been using **Ozosan Gel** for about 6 years in the field of oral, periodontal and implant surgery with excellent results thanks to antibacterial and fibroblastogenic properties of ozone

Dr. Giuliano Garlini – Milano, Italy





# Ozosan<sup>®</sup> gel

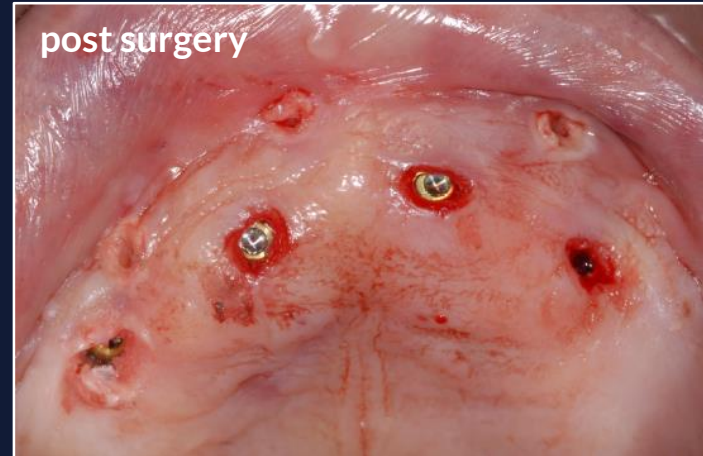
Cleaning the healing screw before the fixation of the crown





# Ozosan<sup>®</sup> gel

Promote healing and decontamination after computer guided surgery

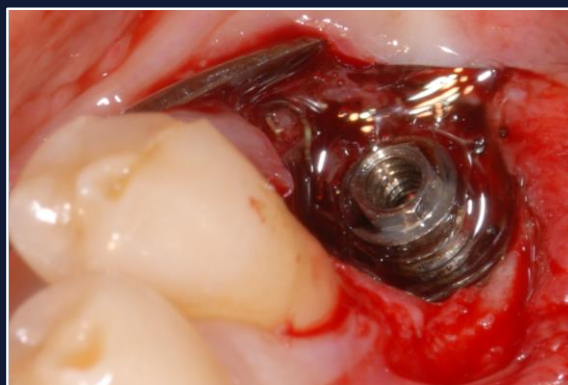
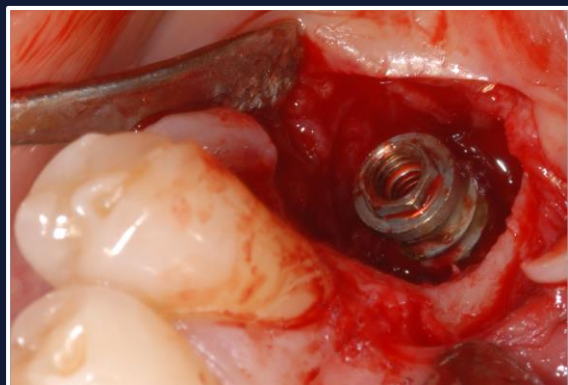






# Ozosan<sup>®</sup> gel

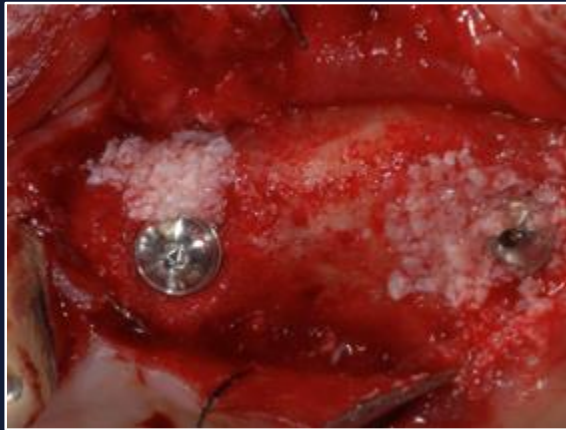
## Perimplant soft and hard tissues healing





# Ozosan<sup>®</sup> gel

## Smoking patient on biphosphonates therapy



T0 - Implant placement and regeneration



Suture and Ozosan Gel on the wound



3 weeks later : tissue healing



# Ozosan<sup>®</sup> gel

T0: avulsion, suture and Ozosan Gel placement



1 week later: tissue healing





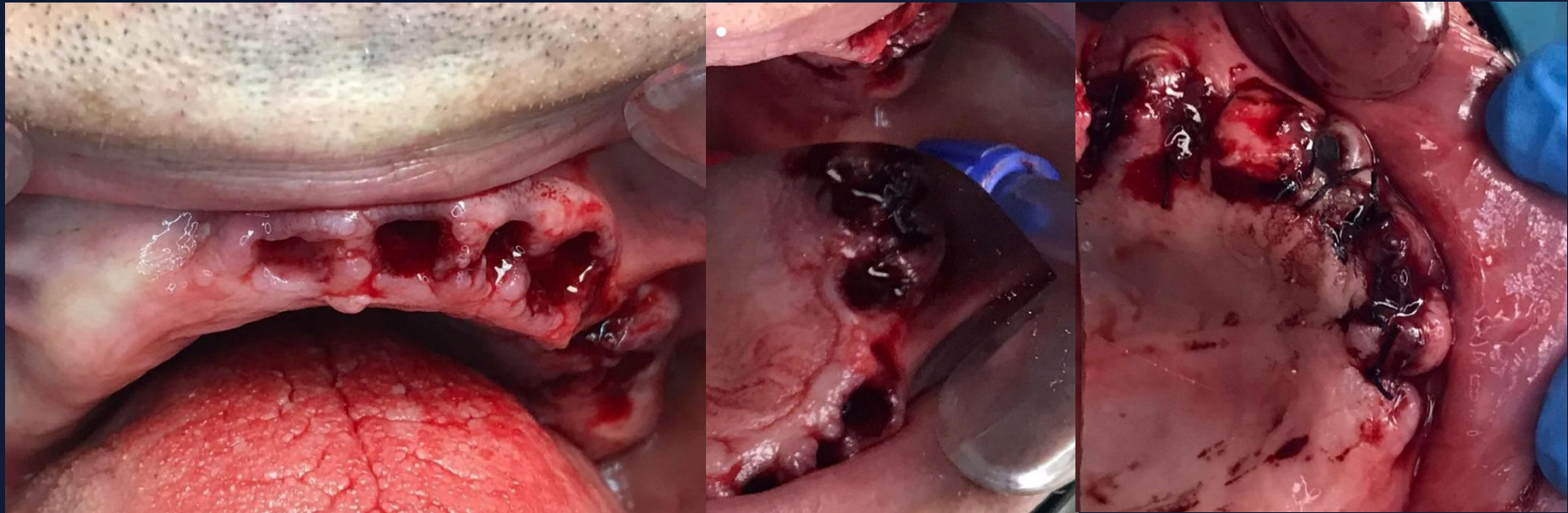


# Ozosan<sup>®</sup> gel

T0

Ozosan Gel application

blood clot 2 minutes later



Courtesy of Dr. Luisa Vigliaroli – Napoli, Italy



# Ozosan<sup>®</sup> gel

**Luigi Vanvitelli University of Campania (Italy)**

U.O.S Surgery and Rehabilitation of the Oro-Maxillofacial District

*Prof. Salvatore D'Amato - Dr. Ivo Ferrieri - Dr. Nicola Cornacchini - Dr. Gianmaria Imola*

## Case report

64-year-old patient with zygomatic implant installed around 2009.

In 2019, an orocutaneous fistula formed in the right zygomatic region associated with ipsilateral sinus disease.

Surgically treated by removal of the zygomatic implant, emptying and revision of the maxillary sinus.

Both the skin and oral lesions were treated with the application of **Ozosan Gel** in the immediate post-operative period.



# Ozosan<sup>®</sup> gel

**Luigi Vanvitelli University of Campania (Italy)**

U.O.S Surgery and Rehabilitation of the Oro-Maxillofacial District

*Prof. Salvatore D'Amato - Dr. Ivo Ferrieri - Dr. Nicola Cornacchini - Dr. Gianmaria Imola*

Oro-cutaneous fistula in the right zygomatic region





# Ozosan<sup>®</sup> gel

**Luigi Vanvitelli University of Campania (Italy)**

U.O.S Surgery and Rehabilitation of the Oro-Maxillofacial District

*Prof. Salvatore D'Amato - Dr. Ivo Ferrieri - Dr. Nicola Cornacchini - Dr. Gianmaria Imola*

Application of Ozosan Gel directly on the intraoral and extraoral lesion immediately after surgery







# Ozosan<sup>®</sup> gel

**Luigi Vanvitelli University of Campania (Italy)**

U.O.S Surgery and Rehabilitation of the Oro-Maxillofacial District

*Prof. Salvatore D'Amato - Dr. Ivo Ferrieri - Dr. Nicola Cornacchini - Dr. Gianmaria Imola*

Complete healing about 1 month after the surgery and two applications of Ozosan Gel







# Ozosan<sup>®</sup> gel

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Complete healing about 1 month after the surgery and two applications of **Ozosan Gel**





# Ozosan<sup>®</sup> gel

**Luigi Vanvitelli University of Campania (Italy)**

U.O.S Surgery and Rehabilitation of the Oro-Maxillofacial District

*Prof. Salvatore D'Amato - Dr. Ivo Ferrieri - Dr. Nicola Cornacchini - Dr. Gianmaria Imola*



Osteonecrosis



1 application Ozosan Gel for 5 weeks



# Ozosan<sup>®</sup> gel



Ozosan gel can undoubtedly be defined as the only real ozonated seed oil gel that can be used for professional dental ozone therapy applications.

Convenient, useful, effective, usable by procedures daily prophylaxis to surgical complications.

**I call it an «All in One Chemical Technology»**

Dr. Giulio Papa - Caserta, Italy

Graduated in Dentistry and Dental Prosthetics University A. Moro of Bari

Graduated in Dental Hygiene University of Campania Luigi Vanvitelli



# Ozosan<sup>®</sup> gel

## Gingivitis



T0



two applications – 7 days later





# Ozosan<sup>®</sup> gel

debridement and Ozosan Gel applications every 15 days



T0



4 months later



# Ozosan<sup>®</sup> gel

T0



7 days later – 3 applications





# Ozosan<sup>®</sup> gel

T0 - Fistula

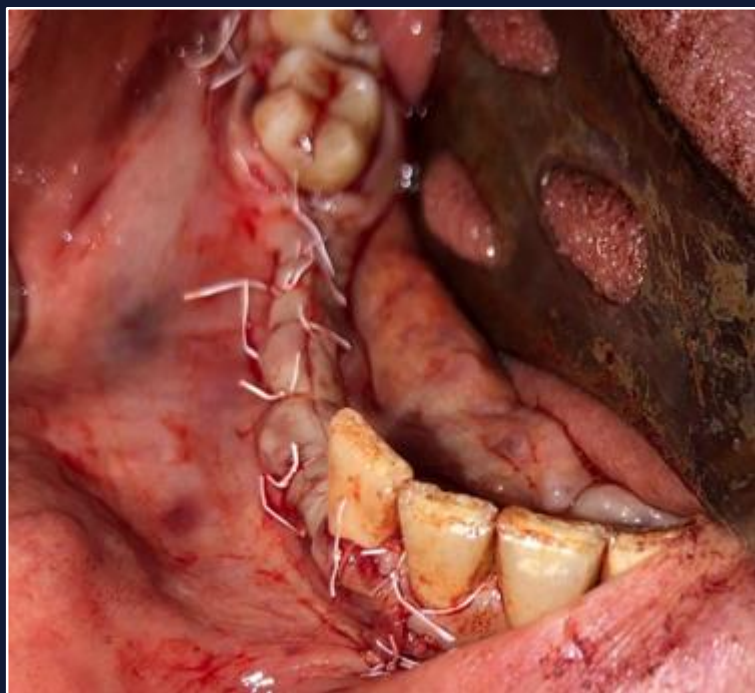


48h later - 1 application





## Surgery wound after implant placement



T0



T1: 48h later





# Ozosan<sup>®</sup> gel

## Epithelial Lesion



T0



Ozosan Gel application



48 hours later



# Ozosan<sup>®</sup> gel



I've been using **Ozosan Gel** for many years with excellent clinical outcomes and significant reduction in infectious complications: it's definitely my go-to in periodontology and oral surgery.

Dr. Giacomo Tarquini - Roma, Italy



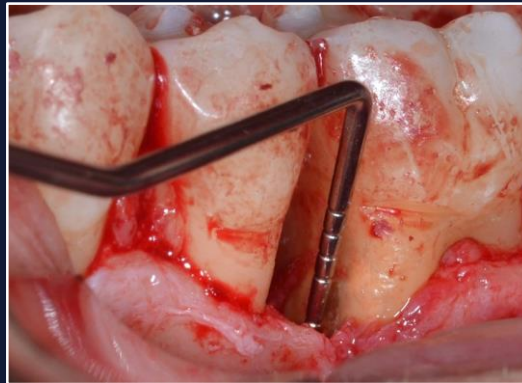
# Ozosan<sup>®</sup> gel

## Intrabony defect

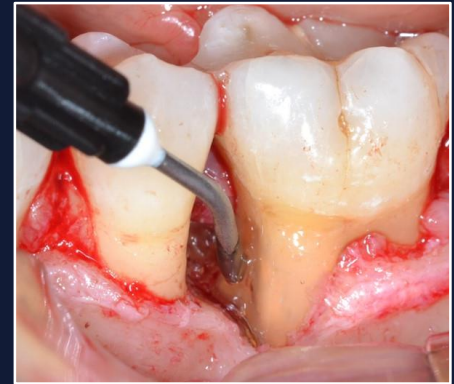
T0



Measurement



Ozosan Gel



Biomaterial



Membrane Fixed



4 Months



# Ozosan<sup>®</sup> gel

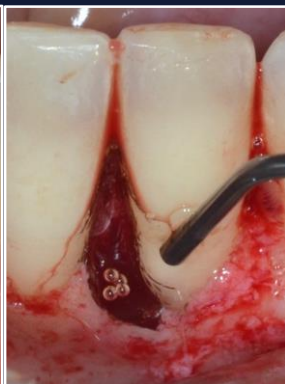
## Intrabony Defect



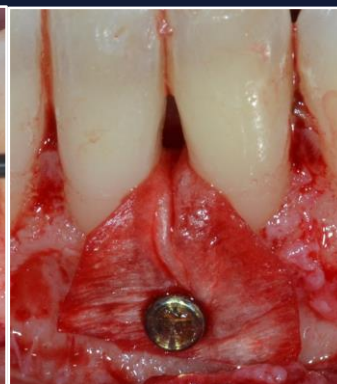
T0



Measurement



Ozosan Gel application



Membrane



Follow up 12 months





# Ozosan<sup>®</sup> gel

## Gingival Recession



Courtesy of Dr. Roberto Cirmeni - Salerno, Italy





# Ozosan<sup>®</sup> gel

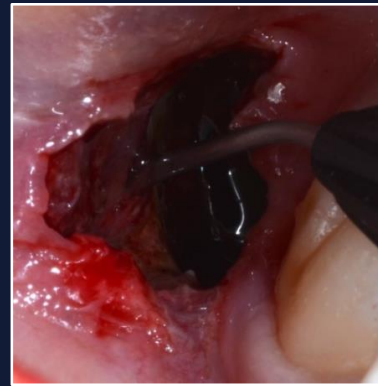
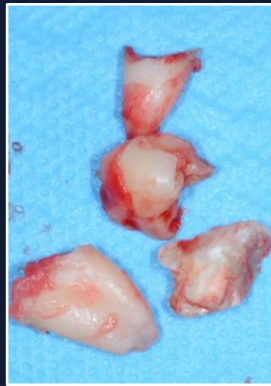
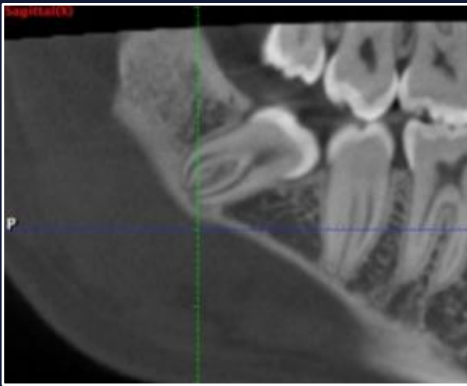


I started using **Ozosan Gel** in the post-extraction sockets of the lower eighths to try to reduce the incidence of sockets. I was very skeptical but I had to change my mind: out of 200 extractions of lower octaves only 4 alveolitis (=2%)!!! In the literature the percentage varies from 30 to 45%. In our practice it was around 21%.  
With these data, **Ozosan Gel** convinced me!!!  
At the end of the procedure, I fill the alveolus with gel and leave it to act for about two minutes.  
Then I remove it by washing and vacuuming and close the surgical wound.

Dr. Alberto Materni - Genova, Italy



# Ozosan<sup>®</sup> gel



Ozosan Gel application

Tissue Healing 30 days



# Ozosan<sup>®</sup> gel



Dr. Angelo Comanzo - Ariano Irpino (AV), Italy

I have been using **Ozosan Gel** since 2019 and I consider it a reliable and at the same time incredible medical device.

Already from its first application it is easy to manage and leads to clinically significant results.

From regenerative surgery to the extractions of complex molars, by now all my patients' surgical wounds have improved thanks to **Ozosan Gel** and I could no longer do without it.

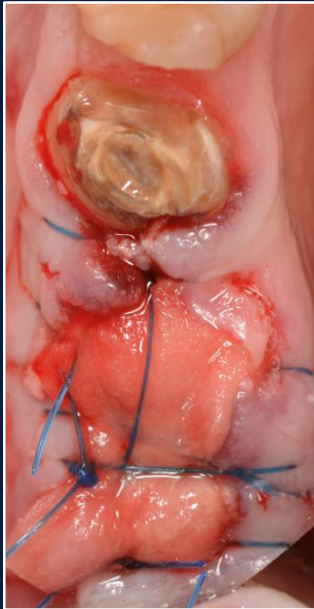


# Ozosan<sup>®</sup> gel

Courtesy of Dr. Angelo Comanzo - Ariano Irpino (AV), Italy



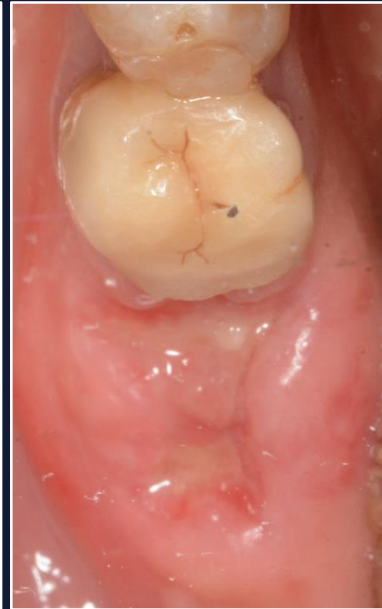
T0



biomaterial + membrane



10 min later **Ozosan Gel**



tissue healing 10 days later

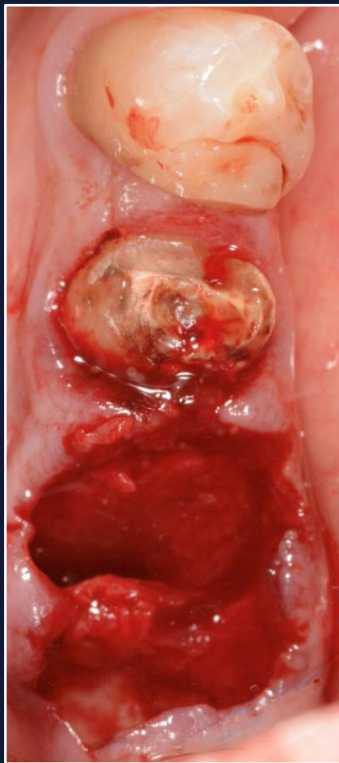


tissue healing 20 days later



# Ozosan<sup>®</sup> gel

Courtesy of Dr. Angelo Comanzo - Ariano Irpino (AV), Italy



10 days







# Ozosan<sup>®</sup> gel

## Epithelioma on the back (off label)

One application every two days



T0



T1: 8 days later



# Ozosan<sup>®</sup> gel

Used in skin wound healing (off label) one application every day



december 16 th 2020  
date of motorcycle accident

[www.bioactiva.it](http://www.bioactiva.it)



stitches at emergency room



december 28 th 2020

[info@bioactiva.it](mailto:info@bioactiva.it)



# Ozosan<sup>®</sup> gel

Used in skin wound healing (off label) one application every day



12 days





# Ozosan<sup>®</sup> gel

**Surgical wound that doesn't heal in diabetic patient (off label)**  
one application every 10 days



T0



10 days later





# Ozosan<sup>®</sup> gel

**Surgical wound that doesn't heal in diabetic patient (off label)**  
one application every 10 days







# Ozosan<sup>®</sup> gel

**Surgical wound that doesn't heal in diabetic patient (off label)**  
one application every 10 days



**50 days**





# Ozosan<sup>®</sup> gel

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### **Effectiveness of the ozone application in two-visit indirect pulp therapy of permanent molars with deep carious lesion: a randomized clinical trial**

*Durmus N1, Tok YT2, Kaya S2, Akcay M3.*

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*Bianco E1, Maddalone M2, Porcaro G3, Amosso E3, Baldoni M3*

### **Topical ozonated oil versus hyaluronic gel for the treatment of partial- to full-thickness second-degree burns: a prospective, comparative, single-blind, non-randomised, controlled clinical trial**

*Campanati A.1, De Blasio S., Giuliano A., Ganzetti G., Giuliadori K., Pecora T., Consales V, Minnetti I., Offidani A.*

### **Efficacy and safety of medical ozone (O<sub>3</sub>) delivered in oil suspension applications for the treatment of osteonecrosis of the jaw in patients with bone metastases treated with bisphosphonates: preliminary results of a phase I-II study**

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