

# **New Orleans Summer Cancer Meeting**

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**New Orleans, Louisiana**

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# **Disclosure - Active**

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**Drug Induced  
Osteonecrosis Of The  
Jaws (DIONJ)**

**We are on your side.**

# Goals Of This Brief Presentation

1. **DIONJ is real**
2. **Support for uninterrupted oncologic therapy**
3. **Control of pain**
4. **Control of infection**
5. **Support nutrition**

# **Drug Induced Osteonecrosis Of The Jaws (DIONJ)**

**Medicine Related  
Osteonecrosis Of The Jaws  
(MIRONJ)**

# Drugs Reported To Cause DIONJ

1. Bisphosphonates
2. RANKL inhibitors
3. Antiangiogenic drugs

# Drugs Reported To Cause DIONJ

1. Denosumab 120 mg/mo.
2. Zoledronate 4 mg/mo.
3. Pamidronate 90 mg/mo.
4. Sunitinib
5. Bevacizumab





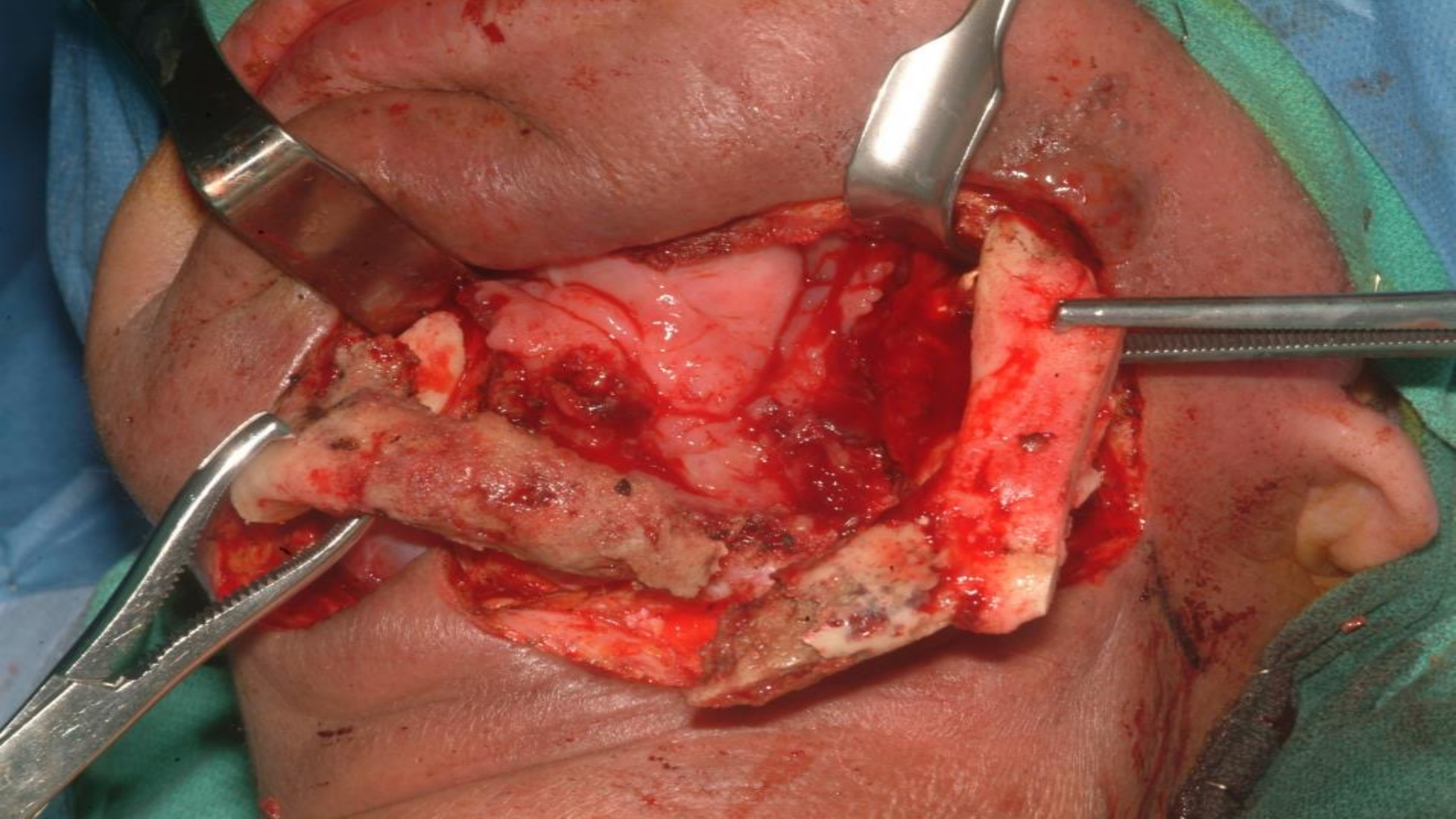












# Initiators Of DIONJ

1. Tooth removals 62%
2. Occlusal overload  
(bad bite) 33%
3. Others 5%



# Recommendation #1

Refer to a dentist/oral surgeon before beginning antiresorptive therapy.

# IV BP's & Denosumab

## Recommendations Before Therapy

1. Remove unsalvageable teeth
2. Prophylaxis (dental cleaning)
3. Treat caries
4. Treat periodontitis
5. Balance the occlusion



# IV BP's & Denosumab

## Recommendations During Therapy

1. Avoid invasive procedures (extractions, perio surgery, implants)
2. Treat caries: if needed, RCT and amputate crown
3. Supragingival scaling
4. Splint mobile teeth, lighten occlusion
5. If extractions are unavoidable, provide informed consent of increased risk

# Recommendation #2

Continue communication  
with dentist/oral surgeon  
during oncologic/  
antiresorptive therapy.

**Managing Or  
Resolving DIONJ In  
The Cancer Patient**



# **The Goal In Cancer Patients With DIONJ**

- 1. Control pain/infection**
- 2. Support cancer management**
- 3. Preventative dentistry**
- 4. Avoid surgical resection if possible**



# Treat With Either

1. Amoxicillin 500 mg t.i.d.
2. Doxycycline 100 mg q.d.
3. Add Metronidazole 500 mg t.i.d. for flare ups
4. 0.12% Chlorhexidine or dry mouth mouthwash t.i.d.

# Why PCN?

If not allergic, Penicillin is not toxic, low side effects, effective against known organisms, and low cost.

# Why Doxycycline ?

Well tolerated, few side effects, can be taken long term, effective against known organisms, easy to take at once daily, and low cost.

**NOTE:** Advise not to be taken with dairy products.

# Why Metronidazole?

Works exceedingly well with penicillin's and doxycycline, broadens the spectrum of coverage, and is inexpensive.

**NOTE:** Limit length of time to no more than ten days due to uncommon gastritis side effect.

# Indications For Surgery

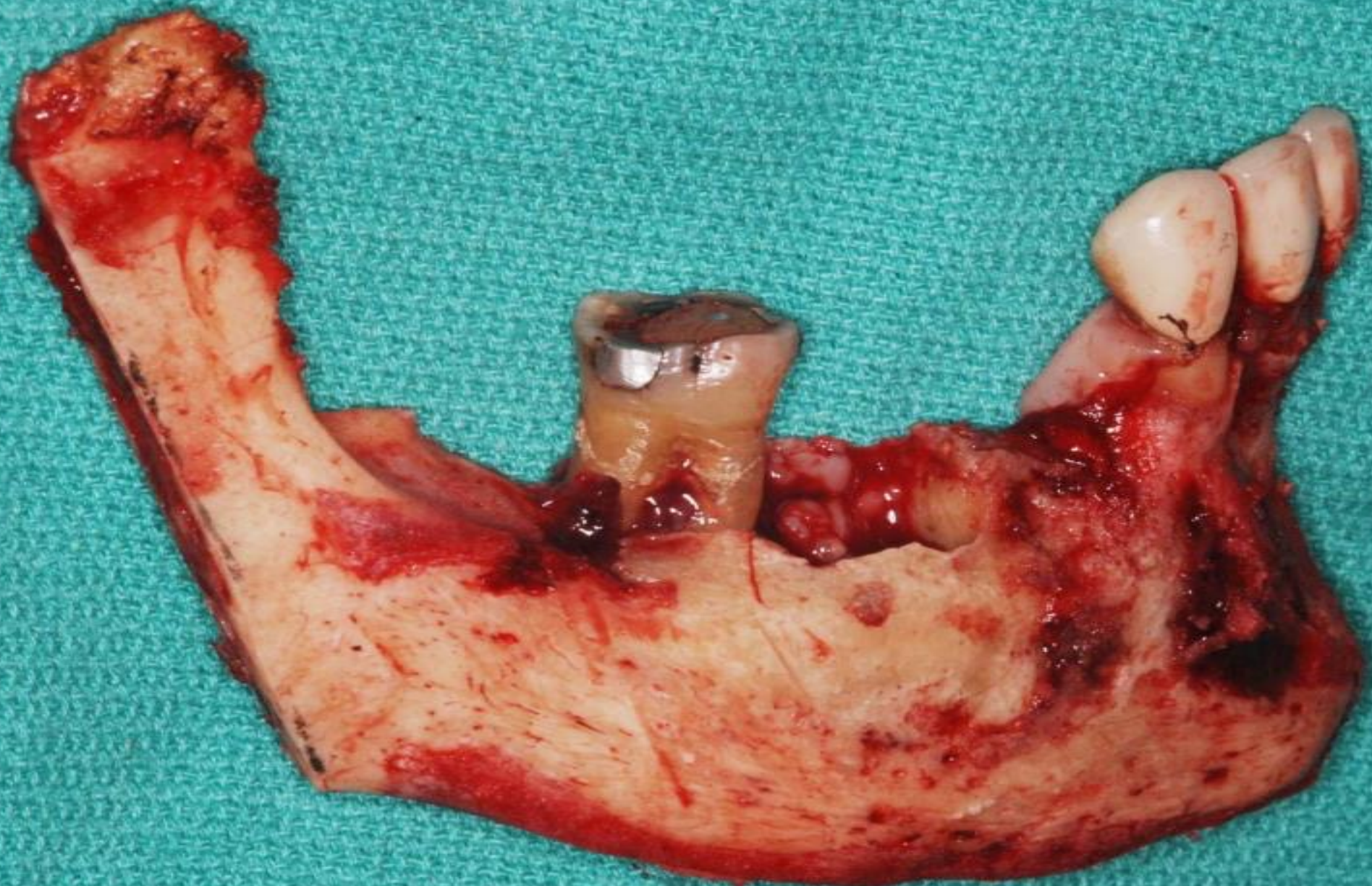
1. Symptomatic cases refractory to nonsurgical treatment
2. Pathologic fractures
3. Direct sinus communication













**What Is The  
Outcome Of his  
Protocol?**

# 5 Year Outcome Analysis Of 412 IV/SC DIONJ Cases

1. Died from their cancer  
74/412 (18.0%)
2. Required a resection  
128/412 (31.0%)
3. Pain free living with exposed bone  
210/412 (51.0%)

A tropical sunset scene with palm trees and a body of water, overlaid with a blue gradient background and the text "The End". The scene is a tropical sunset with a large body of water in the foreground. The sky is a mix of orange, red, and purple, with the sun low on the horizon. Several palm trees are silhouetted against the bright sky. The water reflects the colors of the sunset. The text "The End" is written in a white, cursive font in the bottom right corner. The entire image is framed by a blue gradient background with some geometric shapes on the right side.

*The End*

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