

# ONJ UPDATE 2024

## Torino, 24 febbraio 2024

### Abstract Submission FORM

**TRUST THE SYMPTOMS: CASE REPORT OF MEDICATION-RELATED OSTEONECROSIS OF THE JAW DURING TREATMENT WITH ZOLEDRONATE AND OSIMERTINIB**

SECTION: 2A

AUTHORS (max 8): Contrassegnare SPEAKER con “\*”

Selma Ahcene-Djaballah\*<sup>1</sup>; Iacopo Iachini<sup>2</sup>; Davide Napetti<sup>1,3</sup>; Anna Roma<sup>1</sup>; Sara Lonardi<sup>1</sup>

**AFFILIATION:**

1 Medical Oncology Unit 3, Veneto Institute of Oncology IOV – IRCCS, Padua, Italy

2 Department of Oral and Maxillofacial Surgery, Castelfranco Veneto Hospital, Treviso, Italy

3 Department of Surgery, Oncology, and Gastroenterology, University of Padua, Padua, Italy

**Background.** Medication-related osteonecrosis of the jaw (MRONJ) is a severe adverse drug reaction, consisting of progressive bone destruction in the maxillofacial region of patients (Pts) treated with either antiresorptives, mainly denosumab and zoledronic acid (ZA), or antiangiogenic drugs. Also Tyrosine kinase inhibitor (TKI)-induced ONJ has been reported. The clinical presentation is an exposed bone or presence of an intraoral or extraoral fistula persisting for more than 8 weeks. However, a large multicenter European study showed that up to a quarter of Pts with MRONJ remain undiagnosed because their symptoms do not conform to the traditional case definition and 24% MRONJ could not be diagnosed because of non-visible necrotic bone.

**Patients and methods.** We reported a case of MRONJ associated with ZA and Osimertinib, a third generation TKI with initial diagnostic difficulty due to the lack of bone exposure for the first months.

**Results.** A 73-year-old caucasian female patient was diagnosed in September 2020 with EGFR mutated (ex 21) non-small cell lung cancer (NSCLC) with bone metastasis. She started a first-line treatment with Osimertinib from September 2020 and concomitant ZA. An oral examination and a Maxillofacial computed tomography scan (MFCTs) were performed before starting ZA. After 20 months of treatment, she felt persistent periauricular pain and paresthesia irradiated to the right mandibula without swelling. She discontinued ZA from June 2022, was treated with analgesics and was referred to the Department of Oral and Maxillofacial Surgery for assessment. Clinical examination, orthopantomography and MFCTs excluded signs of MRONJ. In September 2022 for persistence of gingival and mandibular pain, the patient underwent treatment with antibiotic therapy. In November 2022, oral examination showed a mucous fistula in the right retromolar trigone without any bone exposure. She was treated conservatively and performed a Dentalscan Cone Beam which revealed sequestrum. In January 2023 the patient presented bone exposure, compromised dental implants and anesthesia of the inferior alveolar nerve region. She underwent surgical debridement of the necrotic bone removal of dental implants and mandibular osteoplasty. Histopathological analysis of the bone biopsy confirmed a diagnosis of MRONJ.

**Conclusions.** Combination of TKI with ZA has been reported to increase the risk of MRONJ, dental consultation is important both prior to and during treatments to better prevent the risk and choose the therapeutic strategy. Despite a correct prevention, our patient had suffered from prime symptoms after 20 months of treatment and another 8 months before a visible bone exposure with a negative impact on quality of life. Non-exposed MRONJ are not so rare and are challenging, multidisciplinary consultation is necessary to give the best care for these pts.

**REFERENCES:**

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2. British Journal of Oral and Maxillofacial Surgery, (2015), 13-17, 53(1)
3. International Journal of Cancer, (2019), 2003-2005, 145(7)

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