

# ONJ UPDATE 2024

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### Abstract Submission FORM

#### A STORY OF RECHALLENGE: CASE REPORT OF MEDICATION-RELATED OSTEONECROSIS OF THE JAW DURING TREATMENT WITH DENOSUMAB

SECTION: 2B

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**Background.** Bone metastases (BM) are responsible for high morbidity and limit the quality of life (QoL) of patients. Treatment of BM from solid tumors often includes the use of bone antiresorptive agents (BA) beside tumor-directed specific treatment. Denosumab (DmB), a receptor activator of nuclear factor kappa-B ligand (RANK-L), is a BA that exists as a fully humanized antibody against RANK-L. By inhibiting osteoclast function and associated bone resorption, it is effective in reducing BM skeletal-related events (SREs). However, medical-related osteonecrosis of the jaw (MRONJ) is a rare yet severe and treatment-limiting adverse event. The question of whether and how DmB can be rechallenged after a MRONJ remains a topic of ongoing discussion.

**Patients and methods.** We reported a case of MRONJ linked to DmB in a breast cancer patient. Despite potential treatment-related risks, DmB was rechallenged.

**Results.** A 77-year-old caucasian female patient, initially diagnosed with breast cancer in 2005, experienced a BM relapse in 2018. She initiated first line therapy with Palbociclib, Letrozole and concurrent subcutaneous DmB in September 2018. Given the stable skeletal disease (SD), DmB was suspended after 24 months of treatment. After ten months of DmB suspension and bone SD, a computed tomography (CT) scan showed skeletal progressive disease (PD), leading to the reintroduction of DmB in July 2021. Eleven months later, the patient developed MRONJ; thus, DmB injections were halted. Following an attempt with conservative therapy, the patient underwent surgical debridement in March 2023. DmB remained discontinued for 16 months. In September 2023, upon experiencing uncontrolled pain, later confirmed by a staging CT scan to be caused by skeletal PD, DmB rechallenge was thoroughly discussed with a dental specialist and the patient. In the process of evaluating whether to rechallenge DmB, careful consideration was given to the risks and benefits of continuing treatment, as well as determining the frequency of oral check-ups in the context of confirmed skeletal PD. The patient has currently been undergoing DmB rechallenge for 7 months, with regular dentistry follow-ups, no signs of MRONJ relapse and a good BM control.

**Conclusions.** The possible reintroduction of BA after MRONJ is a matter of debate and should be taken into consideration prioritizing its benefits on BM and QoL. To optimize bone health management and minimize the risk of complications, a multidisciplinary, patient-centered approach is essential, involving consultations with dental specialists.

#### REFERENCES:

1. Campisi, Giuseppina, et al. "Medication-related osteonecrosis of jaws (MRONJ) prevention and diagnosis: Italian consensus update 2020." (2020): 5998.
2. Di Fede, Olga, et al. "The dental management of patients at risk of medication-related osteonecrosis of the jaw: new paradigm of primary prevention." *BioMed research international* 2018 (2018).

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