

# ONJ UPDATE 2024

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### Abstract Submission FORM

**THE MANAGEMENT OF PATIENTS AT RISK OF CANCER TREATMENT INDUCED BONE LOSS (CTIBL): FOCUS ON DENTAL ISSUES.**

SECTION: 3A

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**Background.** Patients affected by breast and prostate cancer, treated with adjuvant therapy (aromatase inhibitors, GnRH agonists and androgen deprivation) can develop CTIBL, a benign condition characterized by a significant decrease in bone mineral density. Patients at risk of CTIBL should be early treated with Bone Modifying Agents (BMAs) such as bisfosfonates and denosumab, even in a prevention context. BMAs can cause osteonecrosis of the jaws (ONJ): the real prevalence of ONJ in oncologic patients, treated with low doses of BMAs to treat or prevent osteoporosis (oncologic osteometabolic patients), is not clear: it is estimated to range from 0 to 5%, although data are insufficient. ONJ prevalence among metastatic patients treated with high BMAs doses is nearly 20% and among osteometabolic, non oncologic, patients is nearly  $\leq 1\%$ . Also considering local and systemic risk factors (such as comorbidities and concomitant treatments, first of all dental surgeries), all oncologic patients could potentially develop ONJ and must be referred to dentists, before starting BMAs.

The Familial Cancer Clinic worked out an algorithm to manage patient at risk of ONJ in order to 1) give patients the best interventions to prevent/treat ONJ; 2) estimate the real prevalence of ONJ in oncologic osteometabolic patients.

**Patients and methods.** All patients followed by the Istituto Oncologico Veneto, affected by breast and prostate cancer, treated with adjuvant therapy, undergo an osteometabolic evaluation at the Familial Cancer Clinic (nearly 700 new patients/year). Prior to this evaluation, patients undergo to biochemical exams (phospho-calcium metabolism), radiological exams (bone densitometry, spinal x-ray, orthopantomography) and dental evaluation (clinical and radiological evaluation) with their dentist (a written BMAs feasibility assessment is required). Patients with an incomplete or doubtful evaluation are referred the Unit of Oral Pathology and Surgery for a more accurate examination (as stated by SIPMO\SICMF "The aim of primary prevention of ONJ is to identify and remove all oral conditions that are known to trigger ONJ and restore sound oral health"). If needed, dentists of the Unit of Oral Pathology and Surgery take charge of these patients in a priority context, in order to start, as fast as possible, the BMAs treatment. During BMAs treatment, patients are recommended to have a good personal dental care and to continue with regular dental follow-up, either by the Unit of Oral pathology and Surgery, or by their own dentist.

**Results.** We expect that such a defined path will allow us to estimate the real prevalence of ONJ in oncologic osteometabolic patients and to give patients the best dental supportive care during BMAs treatments.

**Conclusions.** A dental evaluation is mandatory before starting BMAs; patients should be encouraged to have regular dental follow-up during BMAs treatment. The collaboration between clinicians and dentists plays a fundamental role in the management of patients at risk of ONJ.

**REFERENCES:**

1. *Italian position paper (SIPMO-SICMF) on medication-related osteonecrosis of the jaw (MRONJ)* Alberto Bedogni et al, *Oral Diseases*. 2024;00:1–31.
2. *Raccomandazioni clinico-terapeutiche sull'osteonecrosi delle ossa mascellari (ONJ) farmaco-relata e sua prevenzione* Campisi G et al, 2020
3. *A retrospective study on the incidence of medication-related osteonecrosis of the jaws (MRONJ) associated with different preventive dental care modalities* Bacci C et al. *Support Care Cancer*. 2022 Feb;30(2):1723-1729.

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