

# ONJ UPDATE 2024

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### Abstract Submission FORM

#### SURVIVAL DATA OF PATIENTS WITH MEDICATION-RELATED OSTEONECROSIS OF JAW (MRONJ). A MONOINSTITUTIONAL EXPERIENCE

SECTION: 1A

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**Background.** Survival of patients with Medication-Related Osteonecrosis of Jaws (MRONJ)<sup>1-2</sup> is not fully explored. Survival of metastatic cancer and myeloma patients after diagnosis of bone lesions is largely variable; appropriate medical therapy (improved in latest twenty years), together with antiresorptive treatment, including bisphosphonates or denosumab (Bone Modifying Agents, BMAs) can obtain prolonged survival with adequate quality of life. MRONJ is not rare in patients with bone metastatic cancer and myeloma patients, occurring mostly after prolonged BMA treatment but sometimes early (in the first 18 months of BMA treatment). Expected survival might influence the choice of BMA treatment (e.g., drug and/or duration), the perception of MRONJ risk, and even the MRONJ management.

**Patients and methods.** We reviewed survival data after start of BMA treatment of MRONJ patients observed in Alessandria Hospital in years 2005-2023. A ClinicoPath system was adopted to calculate survival and draw Kaplan-Meier survival curves.

**Results.** We analyzed survival data of 130 patients. Main characteristics: 48 males, 82 females; median age: 66 years (95% C.I. 59-74); 86 dead, 44 alive. Underlying disease: metastatic cancer (MC group) in 88 (43 breast cancer, 24 prostate cancer, 8 renal cancer, 13 other cancers); multiple myeloma (MM group) in 14; osteoporosis and other non-malignant diseases (OP group) in 28.

Median survival (range) after the start of antiresorptive treatment was 58.3 months (95% CI 46-80) for MC patients, 177.8 months (95% CI 45-NA) for MM patients, and not yet evaluable for OP groups (28 alive; only 5 dead).

Among MC patients, median survival was 68.4 months for breast cancer patients, 55.9 months for prostate cancer patients, 28.5 months for renal cancer patients. Three- and five-year survival rates were respectively 90% and 53% (breast), 82% and 45% (prostate), 37% and 25% (renal), 76% and 60% (myeloma).

Time to MRONJ onset was 26.8 months for MC patients (95% CI 23-32); 17.1 months (95% CI 9-110) for MM patients: 70.7 months (95% CI 49-101) for OP patients; it was particularly short for renal cancer patients (median 11.3 months).

Median survival (range) after MRONJ diagnosis was: 26.1 months (95% CI 20-40) for MC patients (36 breast /32 prostate/20 renal), 144.4 months (95% CI 27-NA) for MM patients, not yet evaluable for OP patients.

**Conclusions.** Our data show a not short survival of MRONJ patients, even in MC and in MM patients. Data of survival support careful evaluation of short and long-term cumulative MRONJ risk (versus short-term absolute risk) in the choice of BMA treatment duration for bone metastatic cancer and myeloma patients.

As surgery has become the optimal MRONJ treatment (unless of deteriorated Performance Status) in recent years, exclusion of jawbone surgery due to a presumed expected short survival is not more justifiable: in most of MRONJ patients with metastatic bone cancer and myeloma, surviving for years, a surgical approach could be available, and possibly giving a better Quality of Life

#### REFERENCES:

1. Bedogni et al Italian position paper (SIPMO-SICMF) on medication-related osteonecrosis of the jaw (MRONJ). *Oral Disease* 2024 at <https://doi.org/10.1111/odi.14887>
2. Fusco et al. Expected survival of cancer and myeloma patients undergoing bisphosphonates or denosumab. Potential impact on diagnosis and management of Osteonecrosis of Jaws (ONJ) *Oeios* 2021 at <https://www.oeios.com/read/MO21YG>

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