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# **Abstract Submission FORM**

## COMPARING THE EFFICACY OF HUMAN AMNIOTIC MEMBRANE IN TREATING STEGE II VERSUS STAGE III MRONJ

SECTION: 4A

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#### Objectives

The purpose of this article is to present the findings of a study that utilized human amniotic membrane (HAM) to promote surgical wound healing and decrease the likelihood of relapse in patients with medication-related osteonecrosis of the jaw (MRONJ). The study aimed to compare the effectiveness of HAM in treating Stage II and Stage III of the condition.

#### **Materials and Methods**

A total of 52 patients with the diagnosis of MRONJ (only stage II and stage III), were treated between October 2016 to June 2023 at the unit of Maxillofacial Surgery of the Ca'Foncello Hospital in Treviso. The patients underwent MRONJ surgical treatment with the placement of amniotic membrane patches at the wound site. Staging of the lesions was performed according to the classification of MRONJ set by the Italian Society of oral medicine with the Italian Society of maxillofacial surgery.

#### Results

In the Stage II group, there were a total of 18 patients (3 males and 15 females) with 23 surgical sites. The average age of the patients was  $67.34 \pm 10.41$  years. In the Stage III group, 34 patients (11 males and 23 females) with 35 surgical sites were enrolled, with an average age of  $69.13 \pm 13.27$  years. Of these patients, 35 were taking Zoledronic acid, 10 were under treatment with other bisphosphonates, and the remaining 7 were treated with denosumab. Antiresorptive agents were being taken by 32 oncological patients (61.5%). The median follow-up period was 18.75 months. After 30 days from the surgical treatment, only 4 patients (1 in Stage II group and 3 in Stage III group) showed persistent bone exposure. However, all of the patients were successfully retreated.

#### Conclusion

The use of amniotic membrane has a fast learning curve that justifies its routine use to improve the predictability of interventions for managing medication-related osteonecrosis of the jaw (MRONJ). The success of using human amniotic membrane (HAM) does not seem to be related to the severity of MRONJ, as it has been found to be helpful in both mild and moderate cases.

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