ty-nine patients (56.5%) had osteoporosis. Nine patients (13%) had moderate to severe VF with predominance at the thoracic spine (77.8%). There was a negative correlation between MOF-FRAX score and lumbar spine BMD ($r = 0.473; p < 0.001$), and also hip BMD ($r = -0.530; p < 0.001$), while there was no correlation between MOF-FRAX score, HF-FRAX and TBS. The areas under curves were $0.824, 0.800, 0.792, and 0.443$ for the FRAX-MOF score with BMD, FRAX-MOF score, FRAX-MOF score adjusted for TBS, and TBS, respectively.

Conclusion: In this study, MOF-FRAX score showed a better correlation with BMD than TBS. It was also superior to TBS and adjusted FRAX in identifying prevalent VFs in RA patients.

Disclosure of Interests: None declared.


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**AB1027**

**CLINICAL EFFICACY OF SEQUENTIAL TREATMENT AFTER ROMOSOZUMAB IN PATIENTS WITH RHEUMATOID ARTHRITIS**

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Background: Romosozumab (ROMO), a monoclonal antibody that binds sclerostin, increases bone formation and decreases bone resorption. And although it is a novel therapeutic agent for osteoporosis, which has shown high effects of increasing bone density and inhibiting fragile fracture in overseas clinical trials. However the clinical efficacy for rheumatoid arthritis complicated with osteoporosis (RA-OP) is unknown.

**Objectives:** To evaluate the clinical efficacy of ROMO for 12months and denosumab (DMB) 6months in patients with RA-OP for 18 months.

**Methods:** RA patients diagnosed according to the 2010 ACR/EULAR criteria. All patients met at least one of the following criteria were eligible; a bone mineral density T score of -2.5 or less at the lumbar spine or total hip and either one or more moderate or severe vertebral fractures or two or more mild vertebral fractures. All patients were initiated ROMO from between April, 2019 and March, 2020. The total number of patients was 12 cases. The ROMO dose was 210mg at once every 1 months. After 12 months of ROMO, all cases were changed to DMB. In all cases native or activated vitamin D has been used. We reviewed the results for 12 months about the increase and decrease of bone mineral density (BMD) of lumbar spine and total hip (TH-BMD) by DXA and bone turnover markers, intact n-terminal propeptide type I procollagen(PINP) and tartrate-resistant acid phosphatase form 5b(TRACP-5b).

**Results:** he gender was all female. The mean age was 72.8 ± 7.0; disease duration was 17.7 ± 16.5 years; the body mass index was 19.4 ± 3.1 and the FRAX was 36.0 ± 14.9. Clinical findings related to RA-OP at baseline were as follows; CRP 1.25 ± 1.75; DAA28-CP3.45 ± 0.99; HAG 1.56 ± 0.99 and bone turnover markers and bone mineral density at baseline were as follows, PINP 61.5 ± 43.2 and TRACP-5b 485 ± 262. LS-BMD and T-score 0.79 ± 0.14g/cm² and -1.15 ± 0.49g/cm². The rate of increased PINP from baseline to 1, 3, 6, 12 and 18 months was each 116.3 ± 68.7% at 1 month, 135.0 ± 131.3% at 3 month, 126.1 ± 177.0% at 6 month, 83.7 ± 179.1% at 12 month and -45.1 ± 35.7% at 18 month and decreased TRACP-5b were -13.0 ± 9.3% at 1 month, 8.9 ± 10.6% at 3 month, 12.0 ± 13.1% at 6 month, 14.8 ± 13.6% at 12 month and 26.4 ± 28.3% at 18 month. The rate of increased LS-BMD from baseline to 6, 12 and 18 months were 10.8 ± 8.0%, 15.2 ± 9.5% and 18.9 ± 10.4% and TH-BMD were 4.1 ± 4.5%, 5.7 ± 6.3% and 8.4 ± 8.1% (Figure 1, 2).

**Conclusion:** Clinical efficacy of treatment with ROMO for 12months and DMB for 6months for RA-OP was extremely effective and has the high potential to be an important option in the treatment of RA-OP.