

**Mazziotti G et al. Treatment of Acromegalic Osteopathy in Real-life Clinical Practice: The BAAC (Bone Active Drugs in Acromegaly) Study. J Clin Endocrinol Metab. 2020 Sep 1;105(9):e3285-92. doi: 10.1210/clinem/dgaa363.**

**BACKGROUND:** Vertebral fractures (VFs) are a frequent complication of acromegaly, but no studies have been so far published on effectiveness of antiosteoporotic drugs in this clinical setting.

**OBJECTIVE:** To evaluate whether in real-life clinical practice bone active drugs may reduce the risk of VFs in patients with active or controlled acromegaly.

**STUDY DESIGN:** Retrospective, longitudinal study including 9 tertiary care endocrine units.

**PATIENTS AND METHODS:** Two hundred and forty-eight patients with acromegaly (104 males; mean age  $56.00 \pm 13.60$  years) were evaluated for prevalent and incident VFs by quantitative morphometric approach. Bone active agents were used in 52 patients (20.97%) and the median period of follow-up was 48 months (range 12-132).

**RESULTS:** During the follow-up, 65 patients (26.21%) developed incident VFs in relationship with pre-existing VFs (odds ratio [OR] 3.75;  $P < .001$ ), duration of active acromegaly (OR 1.01;  $P = .04$ ), active acromegaly at the study entry (OR 2.48;  $P = .007$ ), and treated hypoadrenalism (OR 2.50;  $P = .005$ ). In the entire population, treatment with bone active drugs did not have a significant effect on incident VFs ( $P = .82$ ). However, in a sensitive analysis restricted to patients with active acromegaly at study entry (111 cases), treatment with bone active drugs was associated with a lower risk of incident VFs (OR 0.11;  $P = .004$ ), independently of prevalent VFs (OR 7.65;  $P < .001$ ) and treated hypoadrenalism (OR 3.86;  $P = .007$ ).

**CONCLUSIONS:** Bone active drugs may prevent VFs in patients with active acromegaly.