

Response to Letter to the Editor: Thresholds based on bone mineral density for therapeutic decision-making in postmenopausal women and men older than 50 years old under glucocorticoid therapy



Respuesta carta al editor: Umbráles densitométricos de densidad mineral ósea para considerar tratamiento en pacientes mujeres postmenopáusicas y hombres mayores de 50 años en tratamiento con glucocorticoides

Dear Editor,

We thank the Editors for allowing us to respond to the letter to the editor about our recently published article in *Reumatología Clínica* titled "Threshold based on bone mineral density for therapeutic decision-making in postmenopausal women and men over 50 years old under glucocorticoid therapy".

In addition, we thank the author of the letter to the editor for his interest in this article.

The PICO questions from Guidelines for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis were developed by a prestigious expert panel on behalf of the three national societies from Argentina linked to bone metabolism and are intended to provide an evidence-based framework to guide health care professionals treating patients under glucocorticoid therapy. The involved societies consider adherence to the recommendations within this guideline to be voluntary, with the decision regarding their application to be made by the physician according to each patient's circumstances. Guidelines and recommendations are intended to promote beneficial or desirable outcomes but cannot guarantee any specific outcome and cannot adequately all circumstances.

In these guidelines all the authors agreed to stratify the populations in premenopausal women and men <50 years; postmenopausal women and men aged 50 and older, and pediatrics.^{1,2}

Dr. Messina refer that "no modern clinical practice guideline considers the *T*-score value almost exclusively like this article". First, we do not consider the *T*-score exclusively, we invite you to read our article carefully. Second, many guidelines listed below have historically defined *T*-score arbitrarily.^{3–7}

Further, the guidelines for the prevention and treatment of glucocorticoid-induced osteoporosis: an update of Brazilian Society of Rheumatology (2020), recommends for example a *T*-score for prevention and treatment in men: "Recommendation: For prevention, we consider a *T*-score ≤ -1 SD for men, and for treatment, a *T*-score ≤ -1.89 SD is considered (A)".

T-score threshold of ≤ -1.7 by DXA, was not arbitrarily chosen, as was described in methodology section. But is important to highlight that this article only consider the methodological procedure that explain why *T*-score ≤ 1.7 was chosen as threshold based on BMD for therapeutic decision-making in postmenopausal women and men over 50 years old under glucocorticoid therapy.⁸ In the Guidelines previously published you can find all the reasons – including FRAX – explained in detail, beyond the densitometric threshold.^{1,2}

Finally, we did not include some references because, as the author of the editor's letter should have noted, the guideline included systematic literature searches up to October 2020. The articles mentioned as not quoted were published after (Pereira RMR, et al. Arch Osteoporos. 2021 Mar 1;16(1):49 and Messina OD, et al. Aging Clin Exp Res. 2022 Nov;34(11):2591–2602). Further, the article by Messina OD was published after (2022 November) we submitted our article (2022 August).

We respect the opinion, but it should be noted that the published guidelines and recommendations were developed by a group of experts on behalf of the three national scientific societies linked to bone metabolism: AAOMM (Argentinean Association of Osteology and Mineral Metabolism), SAO (Argentinean Osteoporosis Society) and SAR (Argentinean Rheumatology Society). In addition, the guidelines were carried out according to GRADE methodology, they were submitted to external review by prestigious experts in bone diseases, in addition to peer review carried out by each journal.

Authors' contribution

All authors read, discussed, and approved the final manuscript.

Conflicts of interest

No conflicts of interest.

References

- Brance ML, Larroudé MS, Zamora NV, Bagur A, Graf CE, Giacoia E, et al. Argentine guidelines for the prevention and treatment of glucocorticoid-induced osteoporosis in postmenopausal women and men aged 50 years and older. *J Clin Rheumatol.* 2023;29:e59–70, <http://dx.doi.org/10.1097/RHU.00000000000001951>.
- Brunetto O, Cassinelli HR, Espada G, Viterbo GL, Meiorin SM, Ahumada MF, et al. Guidelines for the prevention and treatment of glucocorticoid-induced osteoporosis in pediatrics. *Arch Argent Pediatr.* 2023;e202202948, <http://dx.doi.org/10.5546/aap.2022-02948.eng>. English, Spanish.
- Recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis: 2001 update. American College of Rheumatology Ad Hoc Committee on Glucocorticoid-Induced Osteoporosis. *Arthritis Rheum.* 2001;44:1496–503.
- Working group in collaboration with The Royal College of Physicians, The Bone, Tooth Society of Great Britain, The National Osteoporosis Society. In: *Glucocorticoid-induced Osteoporosis;* 2002.
- Grossman JM, Gordon R, Ranganath VK, Deal C, Caplan L, Chen W, et al. American College of Rheumatology 2010 recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis. *Arthritis Care Res (Hoboken).* 2010;62:1515–26.
- Hansen KE, Wilson HA, Zapalowski C, Fink HA, Minisola S, Adler RA. Uncertainties in the prevention and treatment of glucocorticoid-induced osteoporosis. *J Bone Miner Res.* 2011;26:1989–96.
- Buckley L, Guyatt G, Fink HA, Cannon M, Grossman J, Hansen KE, et al. 2017 American College of Rheumatology guideline for the prevention and treatment of glucocorticoid-induced osteoporosis. *Arthritis Rheumatol.* 2017;69:1521–37.
- Brance ML, Larroudé MS, Somma LF, Giacoia E, Diehl M, Galich AM, et al. Threshold based on bone mineral density for therapeutic decision-making in postmenopausal women and men over 50 years old under glucocorticoid therapy. *Reumatol Clin (Engl Ed).* 2023;19:279–84, <http://dx.doi.org/10.1016/j.reumaec.2022.10.002>.

María Lorena Brance,^{a,b,c,*} María Silvia Larroudé,^d Luis Fernando Somma,^e Luis Agustín Ramirez Stieben,^{a,b,f} Lucas R. Brun^{b,c}

^a Reumatología y Enfermedades Óseas, Rosario, Argentina

^b Bone Biology Laboratory, School of Medicine, Rosario National University, Argentina

^c National Council of Scientific and Technical Research (CONICET), Argentina

^d Centro Rossi, Buenos Aires, Argentina

^e Consultorio de Reumatología y Osteoporosis, Lujan, Argentina

^f Hospital Privado de Rosario (Grupo Gamma), Rosario, Argentina

* Corresponding author.

E-mail address: lorenabrance@gmail.com (M.L. Brance).

<https://doi.org/10.1016/j.reumae.2023.09.005>

2173-5743/ © 2023 Elsevier España, S.L.U. and Sociedad Española de Reumatología y Colegio Mexicano de Reumatología. All rights reserved.