

ERRATA

CORRIGENDUM TO:

Evaluation of bone mechanical strength and fracture risk assessment (FRAX®) in patients with hip joint replacement surgery

Rodrigues A, Caetano-Lopes J, Nery A, Vieira-Sousa E, Polido-Pereira J, Vale M, Amaral P, Romeu JC, Viana Queiroz M, Monteiro J, Vaz MF, Fonseca JE, Canhão H

Acta Reumatol Port. 2009;34:504-510, published in September 2009; corrected after print 15 March 2017

A FRAX model for the estimation of osteoporotic fracture probability in Portugal

Marques A, Mota A, Canhão H, Romeu JC, Machado P, Ruano A, Barbosa AP, Aroso Dias A, Silva D, Araújo D, Simões E, Águas F, Rosendo I, Silva I, Crespo J, Delgado Alves J, Costa L, Mascarenhas M, Lourenço O, Ferreira PL, Lucas R, Roque R, Branco JC, Tavares V, Johansson H, Kanis J, da Silva JA

Acta Reumatol Port. 2013;38:104-112, published in June 2013; corrected after print 15 March 2017

Multidisciplinary Portuguese recommendations on DXA request and indication to treat in the prevention of fragility fractures

Marques A, Rodrigues AM, Romeu JC, Ruano A, Barbosa AP, Simões E, Águas F, Canhão H, Alves JD, Lucas R, Branco JC, Laíns J, Mascarenhas M, Simões S, Tavares V, Lourenço O, da Silva JA

Acta Reumatol Port. 2016;41:305-321, published in December 2016; corrected after print 15 March 2017

In the first version of these three articles a misinformation concerning the affiliation of FRAX tool with the World Health Organization (WHO) has been identified. The correction of this information has been requested by the WHO and rectified by the authors, and new versions of these articles are available online. The respective *Corrigendum* is published in Acta Reumatol Port. 2017;42 Jan-Mar edition.

ERRATUM AND CORRIGENDUM TO:

Multidisciplinary Portuguese recommendations on DXA request and indication to treat in the prevention of fragility fractures

Marques A, Rodrigues AM, Romeu JC, Ruano A, Barbosa AP, Simões E, Águas F, Canhão H, Alves JD, Lucas R, Branco JC, Laíns J, Mascarenhas M, Simões S, Tavares V, Lourenço O, da Silva JA

Acta Reumatol Port. 2016;41:305-321, published online 28 December 2016; corrected after print 15 March 2017

In the first version of this article, errors were identified in Table I, Table III and Figure 3. These errors have been corrected in the online version of the article and an *Erratum* and *Corrigendum* are published in Acta Reumatol Port. 2017;42 Jan-Mar edition.

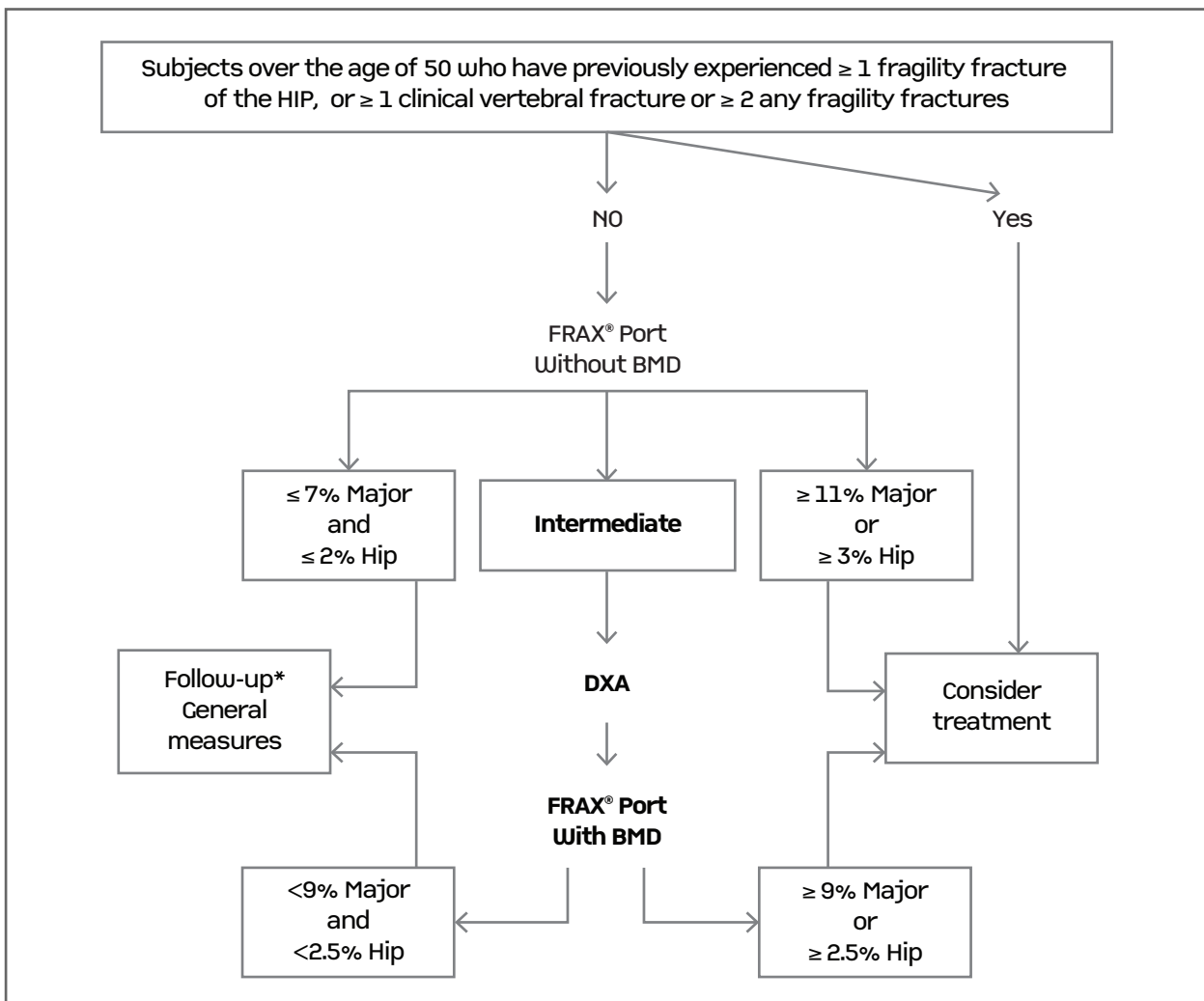
For the convenience of the readers the corrected versions of Table I, Table III and Figure 3 are presented below:

TABLE I. SUMMARY OF RECOMMENDATIONS ON DXA REQUEST AND INDICATION TO TREAT IN THE PREVENTION OF FRAGILITY FRACTURES

Recommendation	Votes	Average agreement
1 The implementation of general, non-pharmacological, preventive measures for osteoporosis, such as diet, vitamin D supplementation, exercise, falls prevention and monitoring the use of any bone active drug should apply to all ages, whenever correctable risk factors are identified, irrespective of FRAX® and BMD.	Approved 17/17 favorable votes	97.0% (75-100)
2 Pharmacological treatment for osteoporosis should be recommended, unless contraindicated, in all subjects over the age of 50, who have previously experienced either: A. ≥ 1 fragility fracture of the hip or ≥ 1 symptomatic vertebral fragility fracture or B. ≥ 2 fragility fractures, independently of the site of fracture or the absence of symptoms (e.g. two asymptomatic vertebral fractures).	Approved 17/17 favorable votes	95.6% (70-100)
3 All Portuguese women and men over the age 50 should have their ten-year risk of osteoporotic fracture estimated with the FRAX®Port tool, with or without DXA.	Approved 17/17 favorable votes	95.9 % (80-100)
4 For FRAX®Port estimates, without DXA, between 7% and 11% for major osteoporotic fracture AND between 2.0% and 3% for hip fracture, BMD of the femoral neck should be obtained and entered into a new FRAX®Port ten-year risk estimation (see Figure 2). DXA may be justified in additional special conditions, as described in text.	Approved 16 favorable votes and one abstention	90.9% (60-100)
5 A. In men and women with a fracture risk estimate (without BMD) below 7% for major osteoporotic fractures AND 2% for hip fracture a decision not to treat with pharmacological agents may be warranted, without the need to perform DXA. Applicable general preventive measures should be applied.	Approved 16 favorable votes and one abstention	95.0% (50-100)
5 B. In such cases, FRAX®Port estimates should be repeated with a frequency that depends on how close the previous estimate is to lower limit of indication to DXA and also on the occurrence of significant changes in clinical risk factors. (see Figure 2A).	Approved 16 favorable and 1 abstention	93.8% (60-100)
6 In men and women with a fracture risk estimate, without DXA, above, 11% for major osteoporotic fracture OR 3% for hip fracture, pharmacological treatment with generic alendronate is cost-effective and should be advised (unless contra-indicated), without the need to perform DXA. (see figure 2A).	Approved 16 favorable votes and one abstention	95.3% (80-100)
7 In men and women with a FRAX®Port ten-year risk estimate, including DXA, at or above 9% for major osteoporotic or 2.5% for hip fractures pharmacological treatment for osteoporosis with generic alendronate is cost-effective and should be advised (unless contra-indicated). (see Table I and Figure 2B).	Approved 17/17 favorable votes	93.2% (60-100)
8 The decision to start anti-osteoporotic treatment with agents other than generic alendronate should be informed by their respective cost-effectiveness thresholds (see Table III).	Approved 16 favorable votes and one against	88.1% (0-100)
9 A. In men and women with a FRAX®Port ten-year risk estimate, including DXA, below 9% for major osteoporotic AND below 2.5% for hip fractures, pharmacological agents are not cost-effective and a decision not to use them may be warranted. Applicable general preventive measures should be applied.	Approved 17/17 favorable votes	96.5% (80-100)
9 B. In such patients, DXA and FRAX®Port assessments should be repeated every 2 years or whenever clinical risk factors change significantly (see figure 2). DXA may not be needed in case the previous BMD values are reassuring.	Approved 16 favorable votes and one abstention	92.8% (75-100)
10 While using FRAX®Port for the sake of these recommendations, health professionals should be aware of several limitations of this tool and considerer judicious adjustments of the risk estimates provide by this tool in specific circumstances, described below.	Approved 17/17 favorable votes	97.6% (70-100)

TABLE III. CONDITIONS/DISEASES AND TREATMENTS WITH IMPACT UPON BMD, AS ESTABLISHED BY SYSTEMATIC LITERATURE REVIEWS AND/OR META-ANALYSIS

Patients with the following conditions/diseases	Patients starting or under the following medications
Fragility fracture age ≤ 50 years (58)	Androgen deprivation therapy (59-61)
Prolonged immobilization and paralysis(62, 63)	Glucocorticoids (64)
Falls history (5, 6, 8, 11, 18)	Anticonvulsants (65)
Anorexia nervosa (66, 67)	Gonadotropin-releasing hormone analogues (GnRH) (68-70)
Calcium and vitamin D deficiency (5, 8, 71, 72)	Aromatase inhibitors (73-77)
Intestinal malabsorption (8, 78)	Antiretroviral therapy (72, 79)
Rheumatoid arthritis (80)	
Hyperparathyroidism (81, 82)	

**FIGURE 3.** Integrated approach of osteoporosis intervention thresholds and DXA request for Portuguese patients according to the current recommendations. Intervention thresholds described in this figure are appropriate for generic alendronate. Consider recommendation 8 (Table IV) for other agents.

BMD = bone mineral density; DXA= Dual-energy X-ray absorptiometry; *Follow up – Repeat assessments as suggested in recommendations 5B and 9B