

OSTEOPENIA E OSTEOPOROSE QUANDO TRATAR ?

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47º CBOT – São Paulo - 2015



47º CBOT
Congresso Brasileiro de
Ortopedia e Traumatologia
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São Paulo, SP

**Não apresento
conflito de
interesses.**



OBJETIVO

- Orientar critérios que possibilitem identificar, dentre os pacientes que apresentam perda de massa óssea, aqueles que são eletivos para o tratamento



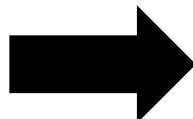
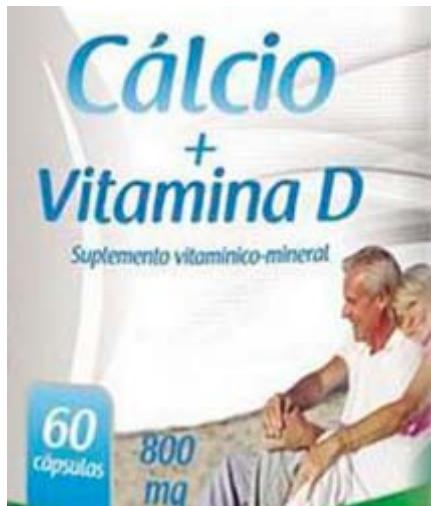
O OBJETIVO DO TRATAMENTO DA
OSTEOPOROSE É EVITAR FRATURAS !!!!

O que é tratar Osteoporose ?

- Uso de drogas que interfiram no metabolismo ósseo reduzindo o risco de fraturas por fragilidade

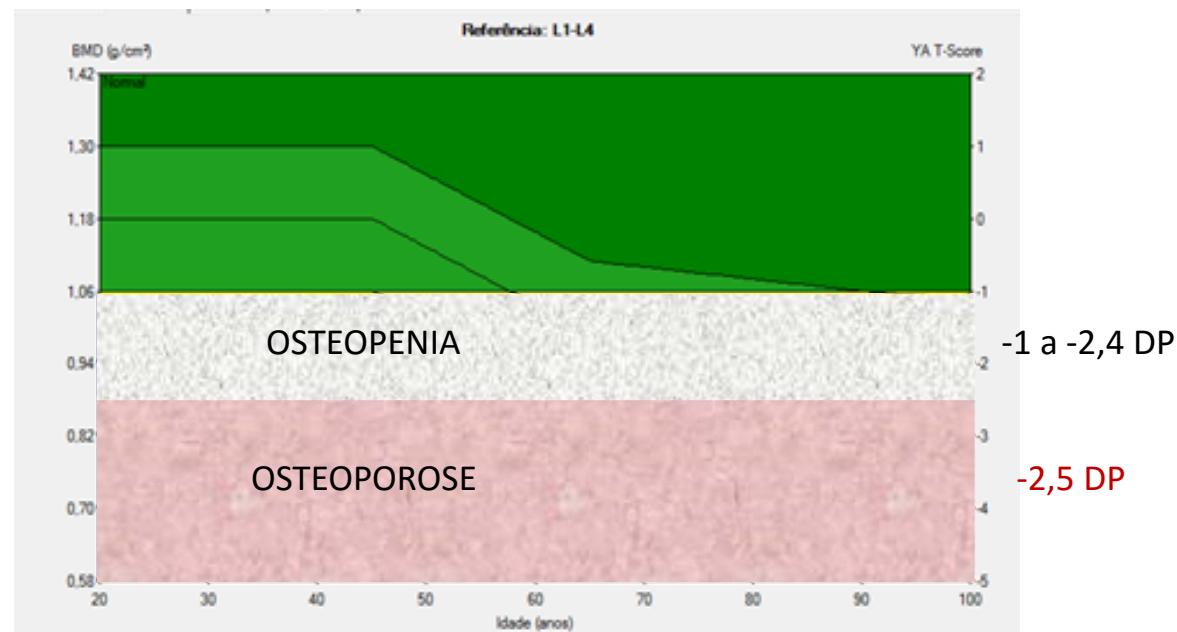


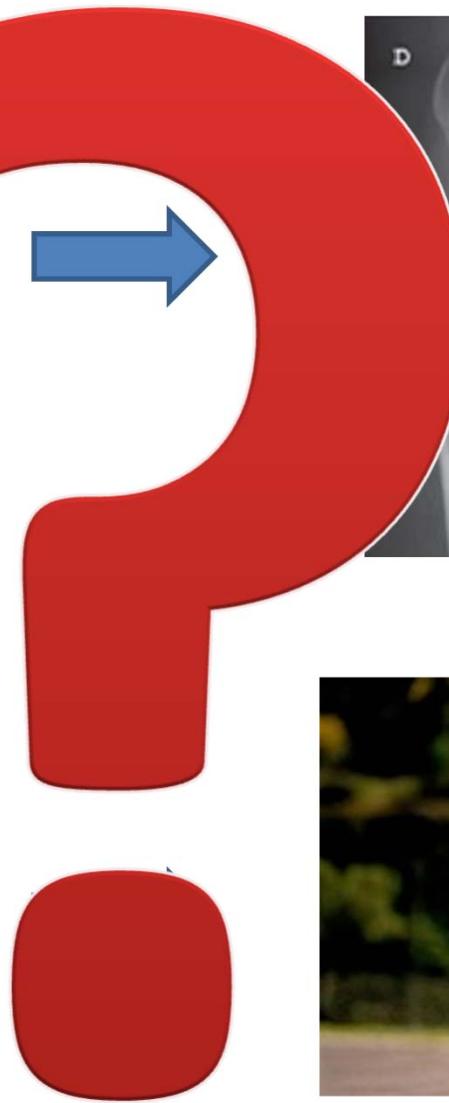
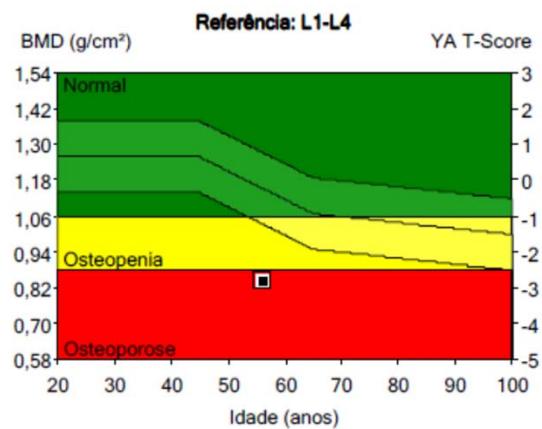
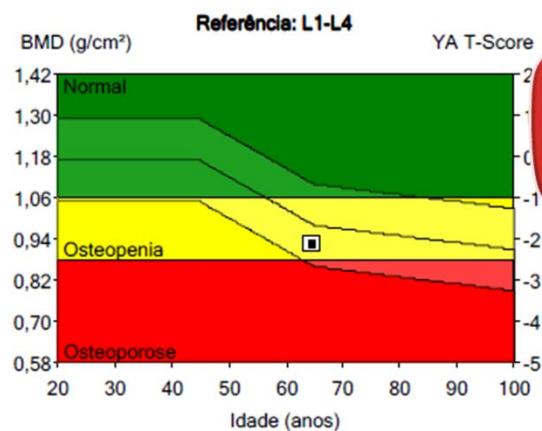
E o Cálcio e a Vitamina D ?



SUPLEMENTAÇÃO
ALIMENTAR

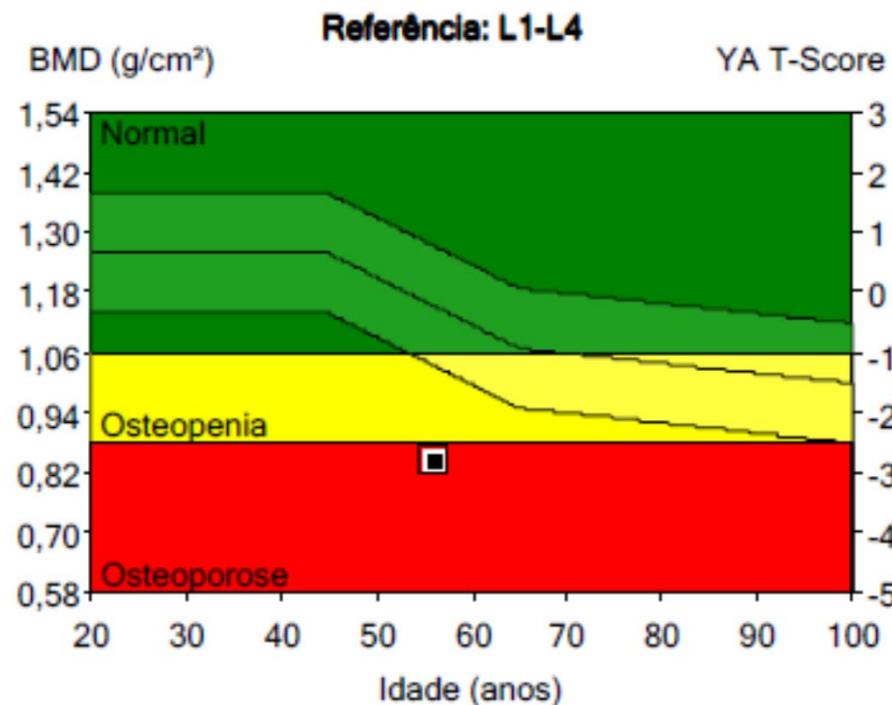
Critério densitométrico para Osteopenia X Osteoporose





Densitometria Óssea

Método quantitativo e não qualitativo



Quem tratar ?

Quem já teve fratura por fragilidade óssea

Prevenção Secundária

Quem poderá vir a ter fratura por fragilidade

Prevenção Primária

Prevenção Secundária

- Tratamento de pacientes que já tiveram uma fratura por fragilidade tendo **ELEVADO RISCO DE FRATURAS SUBSEQUENTES**
- Indicação de tratamento independente do resultado Densitometria Óssea
- Risco de novas fraturas permanece elevado 5 a 10 anos após uma fratura por fragilidade

Cascata Fraturária

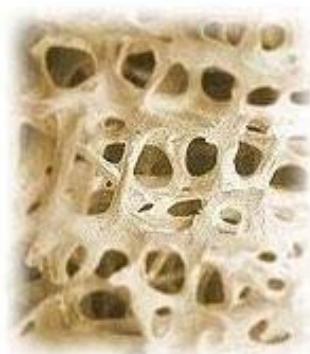




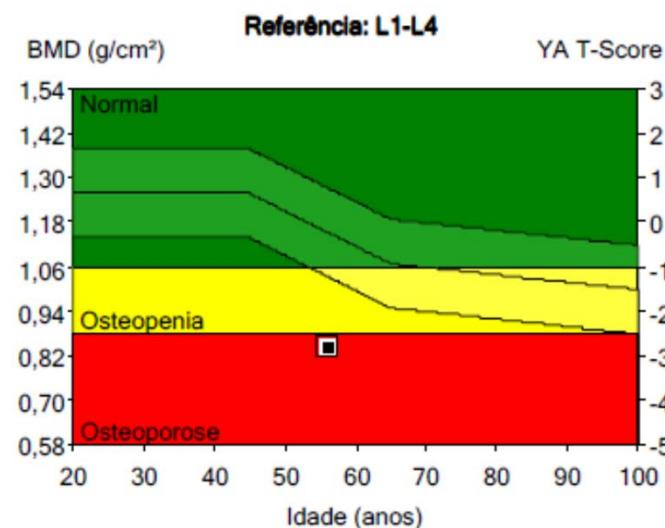
Osteoporose Densitométrica



Osso com osteoporose



Osso normal



**Mulheres pós-menopausadas com Osteoporose
devem ser tratadas!**



Mas e as pacientes pós-menopausadas Osteopênicas ?



Estudo NORA

North American Assesment Risk

ORIGINAL INVESTIGATION

Bone Mineral Density Thresholds for Pharmacological Intervention to Prevent Fractures

Ethel S. Siris, MD; Ya-Ting Chen, PhD; Thomas A. Abbott, PhD; Elizabeth Barrett-Connor, MD;
Paul D. Miller, MD; Lois E. Wehren, MD; Marc L. Berger, MD

Background: Treatment intervention thresholds for prevention of osteoporotic fractures can be derived from reports from the World Health Organization (diagnostic criteria) and National Osteoporosis Foundation (treatment criteria). It is not known how well these thresholds work to identify women who will fracture and are therefore candidates for treatment interventions. We used data from the National Osteoporosis Risk Assessment (NORA) to examine the effect of different treatment thresholds on fracture incidence and numbers of women with fractures within the year following bone mineral density measurement.

Methods: The study comprised 149 524 white postmenopausal women aged 50 to 104 years (mean age, 64.5 years). At baseline, bone mineral density was assessed by peripheral bone densitometry at the heel, finger, or forearm. New fractures during the next 12 months were self-reported.

Results: New fractures were reported by 2259 women, including 393 hip fractures; only 6.4% had

baseline T scores of -2.5 or less (World Health Organization definition for osteoporosis). Although fracture rates were highest in these women, they experienced only 18% of the osteoporotic fractures and 26% of the hip fractures. By National Osteoporosis Foundation treatment guidelines, 22.6% of the women had T scores of 2.0 or less, or -1.5 or less with 1 or more clinical risk factors. Fracture rates were lower, but 45% of osteoporotic fractures and 53% of hip fractures occurred in these women.

Conclusions: Using peripheral measurement devices, 82% of postmenopausal women with fractures had T scores better than -2.5. A strategy to reduce overall fracture incidence will likely require lifestyle changes and a targeted effort to identify and develop treatment protocols for women with less severe low bone mass who are nonetheless at increased risk for future fractures.

Arch Intern Med. 2004;164:1108-1112

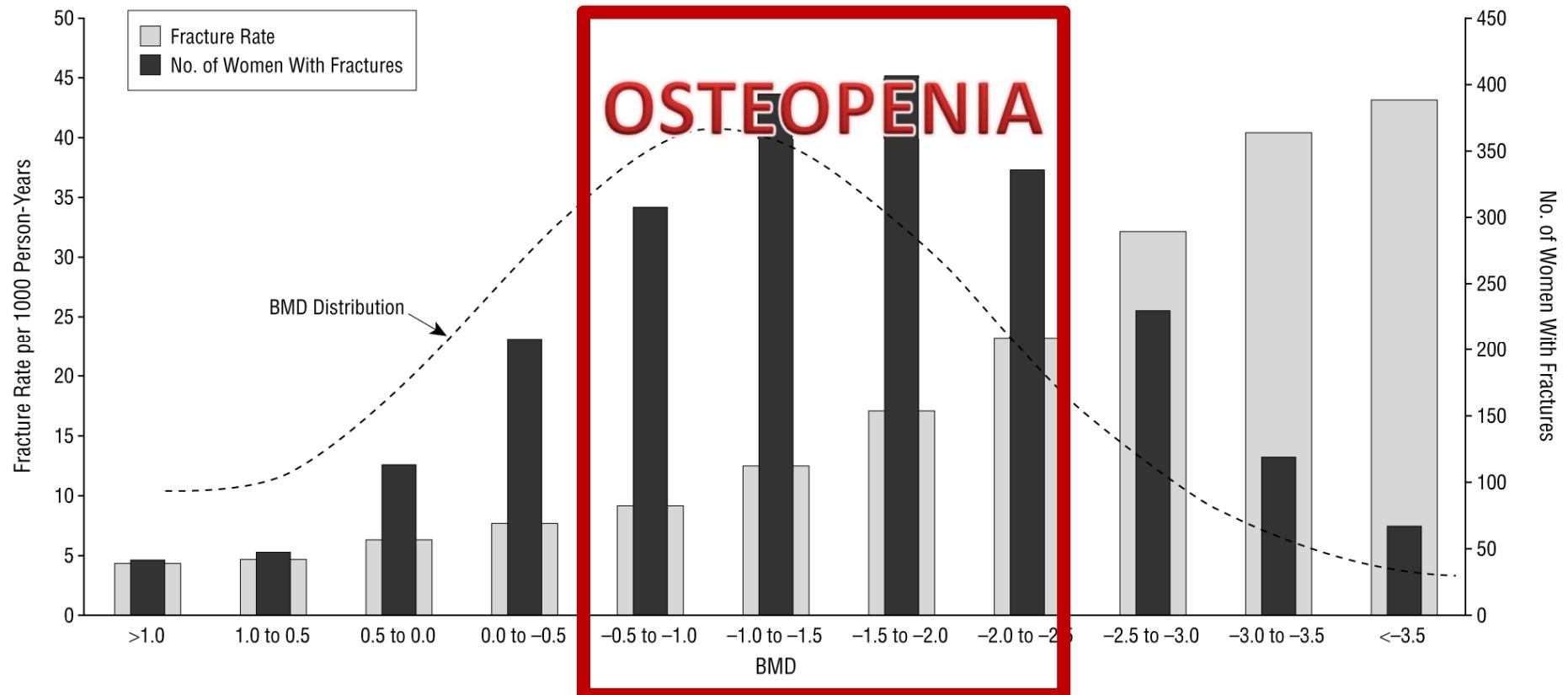
149.524 MULHERES BRANCAS DE 50 A 104 ANOS

AVALIAÇÃO DA DENSIDADE PERIFÉRICA

ACOMPANHAMENTO DE NOVAS FRATURAS POR 12 MESES

Estudo NORA

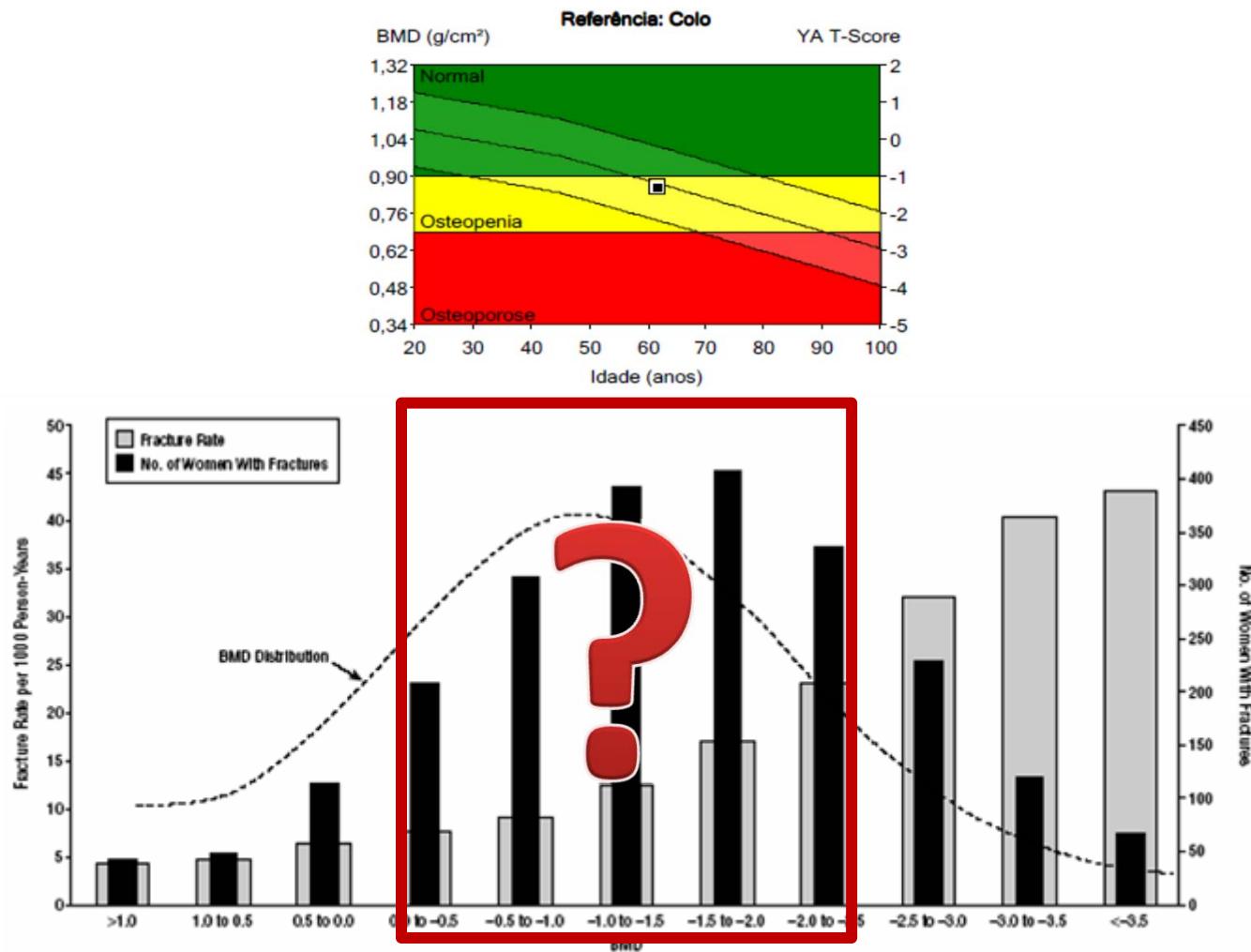
North American Assesment Risk



Adapted from Siris et al, Arch Intern Med,2004

INFORMAÇÕES DO ESTUDO NORA

- Em números absolutos, houve mais fraturas em pacientes com Osteopenia do que com Osteoporose densitométrica
- Risco de fratura em pacientes com Osteoporose foi 4X maior do que em mulheres normais. Nas osteopênicas 1,8X.
- 82% das pacientes que apresentaram fratura não tinham Osteoporose densitométrica
- A Densitometria óssea por si só não é critério definitivo pra indicar quem deve iniciar tratamento



Não se indica tratamento baseando-se somente na Densitometria óssea!

Prevenção Primária nas Osteopênicas

- Tratar quem poderá vir a ter uma fratura por fragilidade
- Mas como saber quem tratar ?





**AVALIAR, CONJUNTAMENTE COM A
DENSITOMETRIA ÓSSEA, OS FATORES
DE RISCO PARA FRATURA POR
FRAGILIDADE ÓSSEA!**

Avaliação de fatores de risco para fratura por fragilidade

- Avaliação de:
 - Densitometria óssea
 - Exames laboratoriais
 - História familiar pregressa de fratura (pais)
 - Histórico pessoal de doenças pregressas e atuais
 - Uso de medicamentos
 - Hábitos de vida

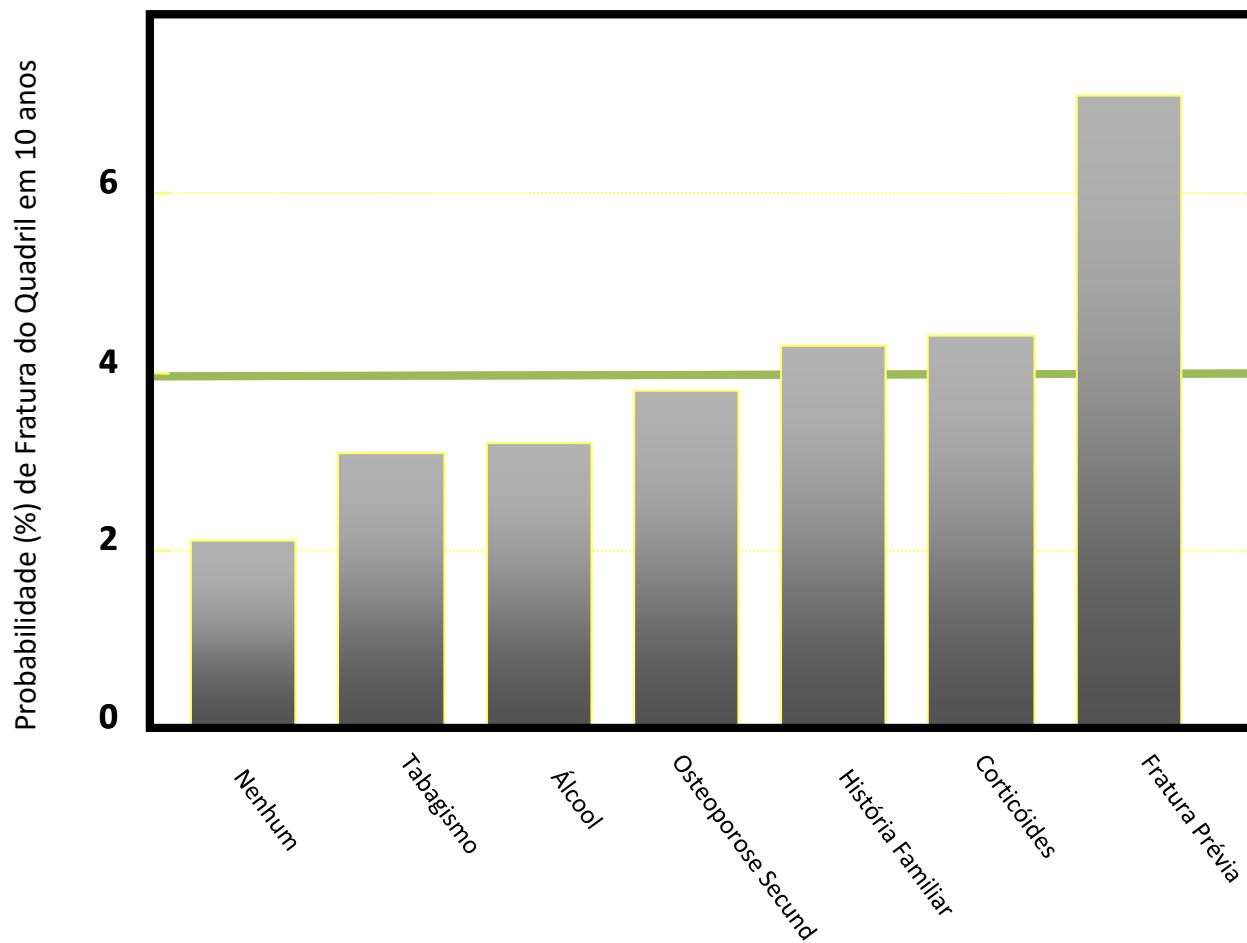
Fatores de risco

| Coeficiente | Valor 1 | 2 vezes | 4 vezes | 8 vezes | Absoluto |
|--------------|-----------|-----------|-----------|-------------|-------------|
| Gênero | Masculino | | Feminino | | |
| Etnia | Negra | Parda | Branca | Amarela | |
| Idade | 20 | 50 | 60 | 70 | 80 |
| IMC | > 30 | 27 a 30 | 24 a 27 | 20 a 24 | |
| Idade menop. | > 52 | 48 a 52 | 44 a 48 | Até 44 | |
| FxOP País | | Outras | Vért. | Fêmur | |
| Hábitos | Tabaco | Álcool | Café | | |
| Ativ. física | Diária | Frequente | Ocasional | Sedentária | |
| ISDA | | | Anticonv. | Artr. reum. | Corticoter. |

Passini, M.

Rev. bras. ortop. vol.45 no.3 São Paulo Maio/Junho 2010

Fatores de Risco Clínico e Probabilidades de Fratura



Kanis JA, et al. apresentação 28th Annual Meeting – ASBMR, Philadelphia, 2006

| FATORES DE RISCO MAIORES | OUTROS FATORES DE RISCO |
|--|-------------------------|
| FRATURA PRÉVIA POR FRAGILIDADE | BAIXO IMC |
| LONGO PERÍODO DE USO DE GLICOCORTICÓIDES | ARTRITE REUMATÓIDE |
| FRATURA DE FÊMUR PROXIMAL NOS PAIS | TABAGISMO |

Estudo NORA

North American Assesment Risk

ORIGINAL INVESTIGATION

An Approach to Identifying Osteopenic Women at Increased Short-term Risk of Fracture

Paul D. Miller, MD; Suna Barlas, PhD; Susan K. Brenneman, PT, PhD; Thomas A. Abbott, PhD; Ya-Ting Chen, PhD; Elizabeth Barrett-Connor, MD; Ethel S. Siris, MD

Background: Identification and management of women to reduce fractures is often limited to T scores less than -2.5, although many fractures occur with higher T scores. We developed a classification algorithm that identifies women with osteopenia (T scores of -2.5 to -1.0) who are at increased risk of fracture within 12 months of peripheral bone density testing.

Methods: A total of 57 421 postmenopausal white women with baseline peripheral T scores of -2.5 to -1.0 and 1-year information on new fractures were included. Thirty-two risk factors for fracture were entered into a classification and regression tree analysis to build an algorithm that best predicted future fracture events.

Results: A total of 1130 women had new fractures in 1 year. Previous fracture, T score at a peripheral site of -1.8

or less, self-rated poor health status, and poor mobility were identified as the most important determinants of short-term fracture. Fifty-five percent of the women were identified as being at increased fracture risk. Women with previous fracture, regardless of T score, had a risk of 4.1%, followed by 2.2% in women with T scores of -1.8 or less or with poor health status, and 1.9% for women with poor mobility. The algorithm correctly classified 74% of the women who experienced a fracture.

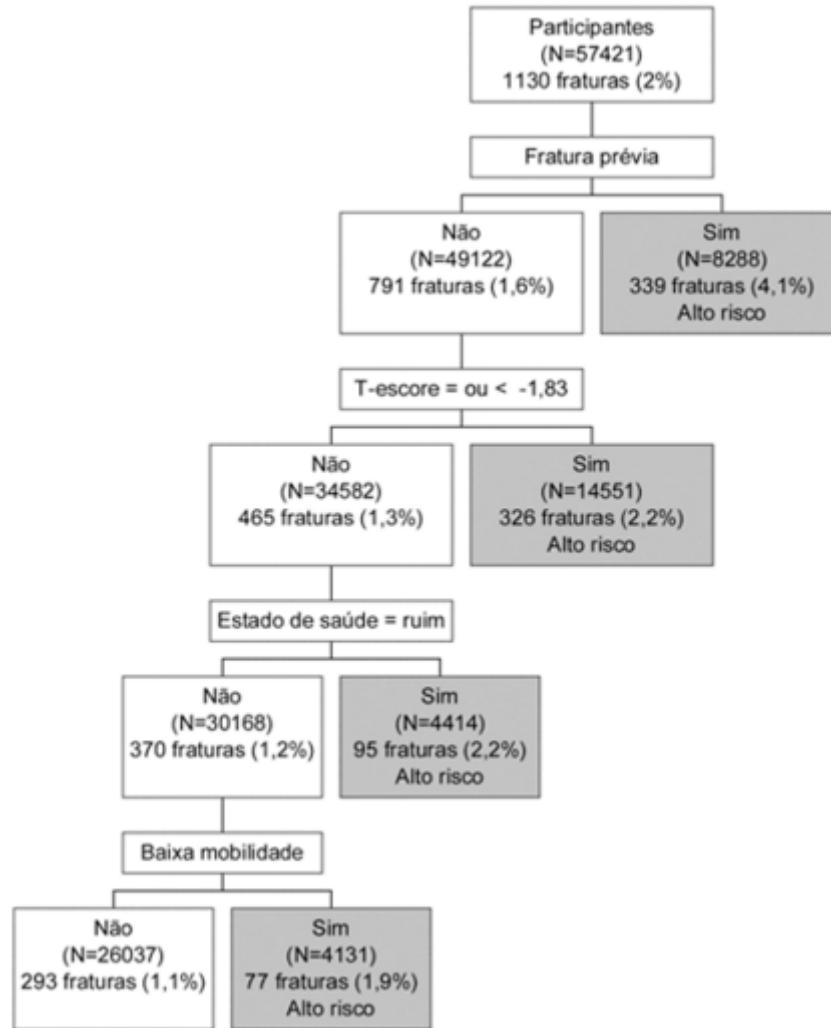
Conclusions: This classification tool accurately identified postmenopausal women with peripheral T scores of -2.5 to -1.0 who are at increased risk of fracture within 12 months. It can be used in clinical practice to guide assessment and treatment decisions.

Arch Intern Med. 2004;164:1113-1120

57421 MULHERES BRANCAS PÓS-MENOPAUSADAS COM OSTEOPENIA DENSITOMÉTRICA

AVALIAÇÃO DE NOVAS FRATURAS EM 1 ANO

Algoritmo para avaliação do risco de fratura por fragilidade em mulheres com Osteopenia (NORA)



Traduzido de Miller PD, Barlas S, Brenneman SK, Abbott TA, Chen Y-T, Barrett-Connor E, Siris E. An Approach to Identify Osteopenic Women at Increased Short-term Risk of Fracture. Arch Inter Med 2004; 164:1113-1120. APUD bracco Ol, Oliveira JH, Albergaria BH, Chahade WH. Pacientes com osteopenia devem ser tratados ? (http://www.moreirajr.com.br/revistas.asp?id_materia=3020&fase=imprime=)



FRAX® WHO Fracture Risk Assessment Tool

[Home](#)[Calculation Tool](#)[Paper Charts](#)[FAQ](#)[References](#)

English

Calculation Tool

Please answer the questions below to calculate the ten year probability of fracture with BMD.

Country: **Brazil**Name/ID: [About the risk factors](#)

Questionnaire:

1. Age (between 40 and 90 years) or Date of Birth

Age: Date of Birth: Y: M: D:

10. Secondary osteoporosis

 No Yes

11. Alcohol 3 or more units/day

 No Yes12. Femoral neck BMD (g/cm²)

Select BMD

2. Sex

 Male Female

3. Weight (kg)

[Clear](#) [Calculate](#)

4. Height (cm)

5. Previous Fracture

 No Yes

6. Parent Fractured Hip

 No Yes

7. Current Smoking

 No Yes

8. Glucocorticoids

 No Yes

9. Rheumatoid arthritis

 No Yes

Weight Conversion

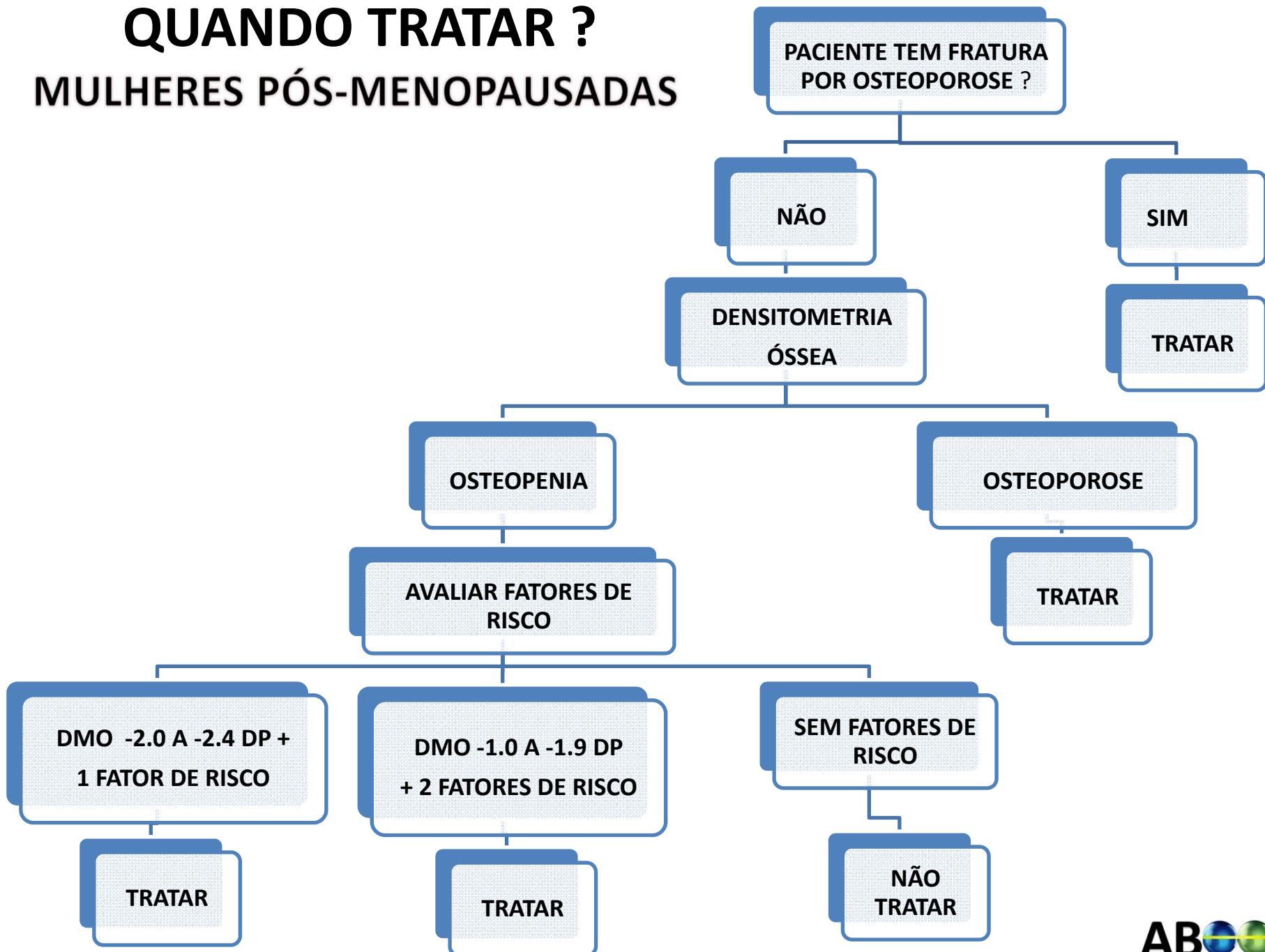
Pounds  kg[Convert](#)

Height Conversion

Inches  cm[Convert](#)**00095589**Individuals with fracture risk
assessed since 1st June 2011[Print tool and information](#)<https://www.shef.ac.uk/FRAX/tool.aspx?country=55>

QUANDO TRATAR ?

MULHERES PÓS-MENOPAUSADAS



E AS MULHERES PRÉ-MENOPAUSADAS?

- Se apresenta baixa massa óssea: AVALIAR CAUSA SECUNDÁRIA
- Osteoporose não significa necessariamente necessidade de tratamento medicamentoso nessas pacientes
- A maioria das fraturas por fragilidade ocorrem após os 65 anos
- Se apresentar fratura por fragilidade ?
- Na maioria dos casos há uma causa secundária que deve ser tratada
- Não há um consenso





CBOOM

**XII CONGRESSO BRASILEIRO
ORTOPÉDICO DE OSTEOMETABOLISMO**

**III CONGRESSO NORTE-NORDESTE
DE OSTEOPOROSE**

16 a 18 de junho de 2016 - Fortaleza - CE

OBRIGADO!!!

