



Osteoporosi: quando i farmaci, quali farmaci

Fabio Vescini



Stima del rischio

- Infarto Miocardico  predittore di evento

75% dei pazienti riceve terapia preventiva

Sottostima del rischio !!!



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Italian association of clinical endocrinologists (AME) position statement: drug therapy of osteoporosis

Treatment of osteoporosis is aimed to prevent fragility fractures and to stabilize or increase bone mineral density. Several drugs with different efficacy and safety profiles are available. The long-term thera...

F. Vescini, R. Attanasio, A. Balestrieri... in *Journal of Endocrinological Investigation* (2016)

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CHI TRATTARE

CONSENSUS STATEMENT

Italian association of clinical endocrinologists (AME) position statement: drug therapy of osteoporosis

F. Vescini¹ · R. Attanasio² · A. Balestrieri³ · F. Bandeira⁴ · S. Bonadonna⁵ ·
V. Camozzi⁶ · S. Cassibba⁷ · R. Cesareo⁸ · I. Chiodini⁹ · C. Maria Francucci^{10,11} ·
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Soglia di trattamento (NOF – FDA)

Major osteoporotic > 20%

Hip fracture > 3%

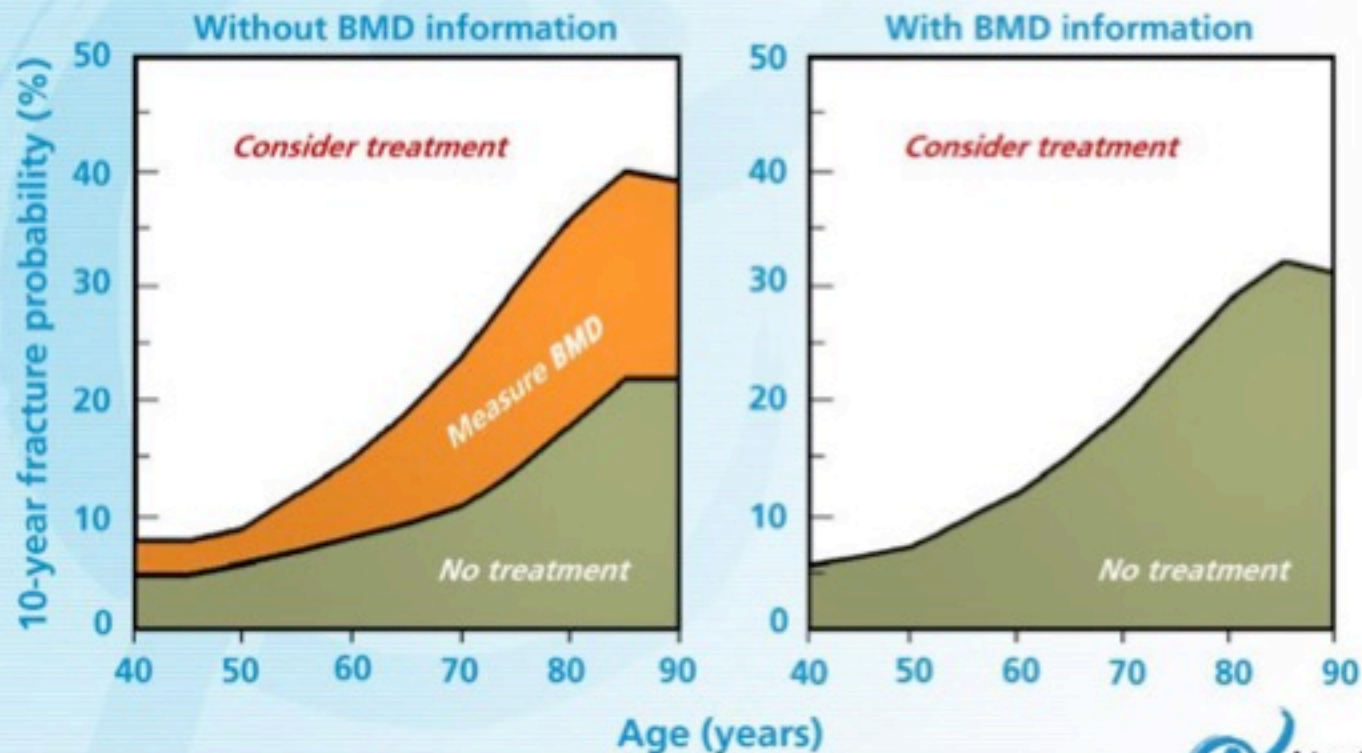
National Osteoporosis Foundation, Treatment Guidelines, 2013

We recommend considering for treatment all subjects with DEXA-based T-scores between -2.5 and -1 SD and with an increased 10-year fracture risk evaluated with a fracture risk algorithm (FRAX or DeFRA)



Il NOGG Inglese ha definito le soglie di intervento sulla base del rischio di frattura stimato con il FRAX

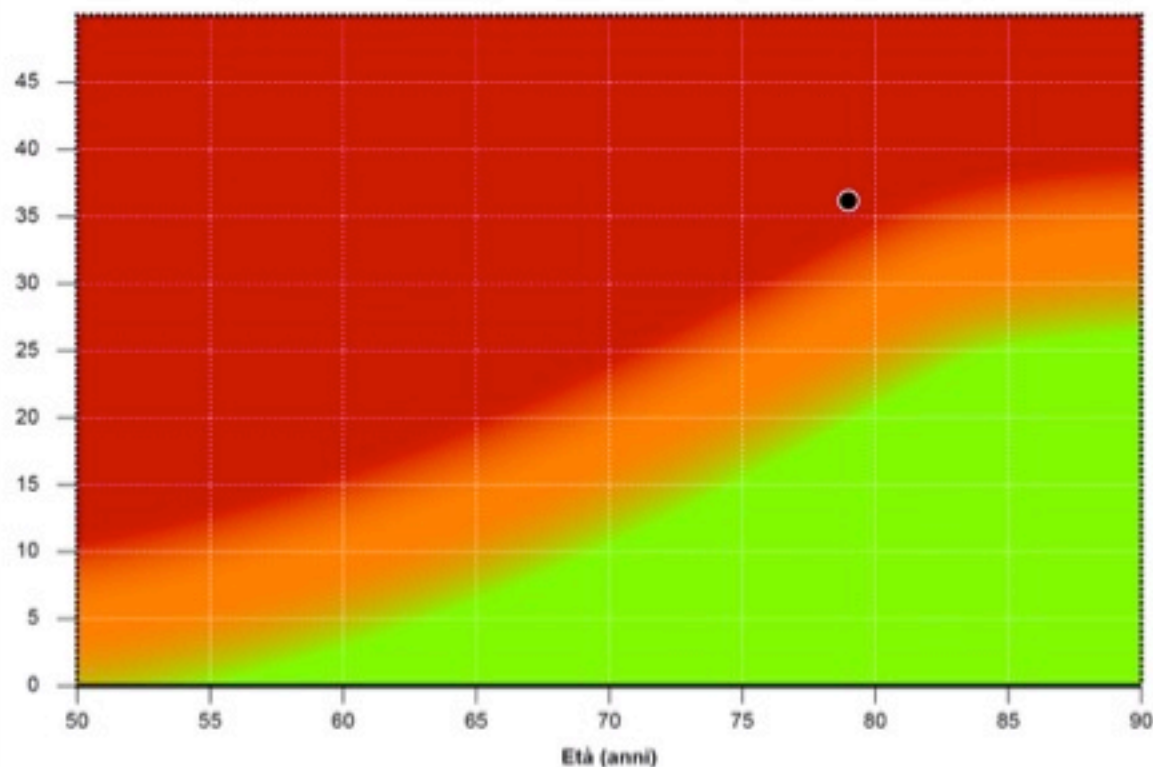
Management of osteoporosis based on fracture probabilities



Adapted from Kanis et al., Osteoporos Int. 2008, Erratum 2009

DEFRA: Dal rischio di frattura alla soglia di trattamento

Carta del rischio



Rischio di fratture maggiori a 10 anni: 36%

NOTE: Eligibile nota 79

DATA VISITA: 31/03/2013 10:41

PAZIENTE: FSRMRA

ETÀ: 79

PESO: 62 Kg

ALTEZZA: 168 cm

FUMO: No

CORTISONICI: No

ALCOOL: No

STORIA FAMILIARE: No

PREGRESSE FRATTURE: Sì (1)

PREGRESSE FRATTURE
NON TRAUMATICHE: No

ARTRITE REUMATOIDE
E ALTRE CONNETTIVITI: No



SCARICA



STAMPA

www.defra-osteoporosi.it

CASO CLINICO

Paziente maschio, 74 anni, ricoverato per frattura del collo femorale destro.

Anamnesi:

fino ai 60 anni attività sportiva moderata/intensa.

No fumo; no alcol.

Morbo di Parkinson esordito a 68 anni (in terapia farmacologica).

Osteoartrosi diffusa, con limitazione funzionale del ginocchio destro.

frattura della spalla a 73 anni per caduta accidentale.

T-score: NON DISPONIBILE



Lo trattereste coi farmaci?

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Table 1 Approved drugs for osteoporosis

Class	Molecule	Oral	Injectable
Bisphosphonates	Alendronate	×	
	Risedronate	×	
	Ibandronate	×	×
	Zoledronate		×
	Clodronate	×	×
Strontium ranelate		×	
Anti-RANKL antibody	Denosumab		×
SERMs	Raloxifene	×	
	Bazedoxifene	×	
	Lasofexifene	×	
Hormone therapy	Estrogens (±progestins)	×	
PTH analogs	Teriparatide		×

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DRUGS EFFECTS ON BONE MINERAL DENSITY

	Women	Men
Alendronate	↑	↑
Risedronate	↑	↑
Zoledronate	↑	↑
Ibandronate	↑	
Hormone replacement therapy	↑	
Raloxifene/Bazedoxifene	↑	
Lasofloxifene	↑	
Denosumab	↑	↑
Teriparatide	↑	↑

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Efficacy of different treatments on fracture risk in postmenopausal women

Drug	Vertebral	Non-vertebral	Hip
Alendronate	+	+	+
Risedronate	+	+	+
Ibandronate	+	±	-
Zoledronate	+	+	+
Clodronate (800 mg/day, orally)	+	+	-
Strontium ranelate	+	+	±
Denosumab	+	+	+
Raloxifene	+	-	-
Bazedoxifene	+	±	-
Lasofexifene	+	+	-
Teriparatide	+	+	-



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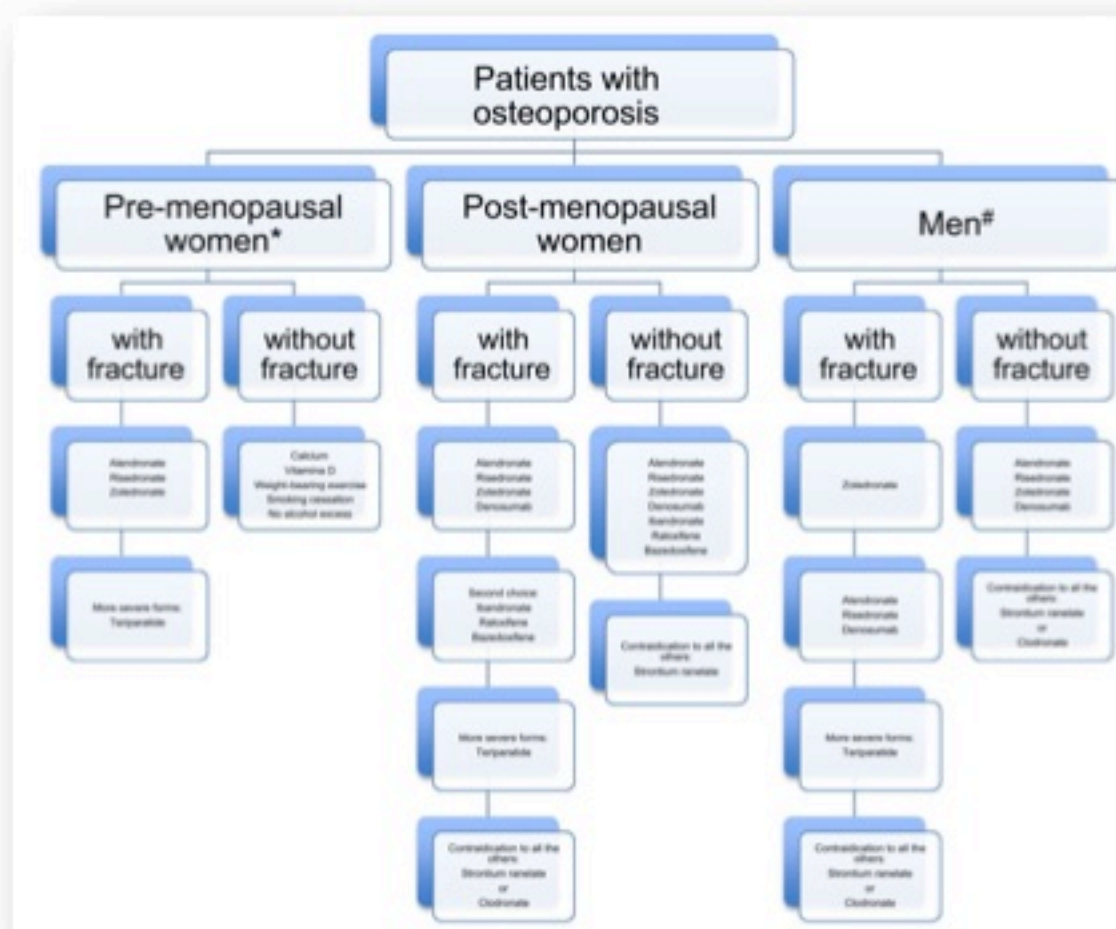
Efficacy of different treatments on BMD and fracture risk in males

Drug	BMD increase	Fractures		
		Vertebral	Non-vertebral	Hip
Testosterone	Yes	–	–	–
Alendronate	Yes	±	–	–
Risedronate	Yes	±	–	–
Zoledronate	Yes	+	–	–
Denosumab	Yes	±	–	–
Teriparatide	Yes	±	–	–

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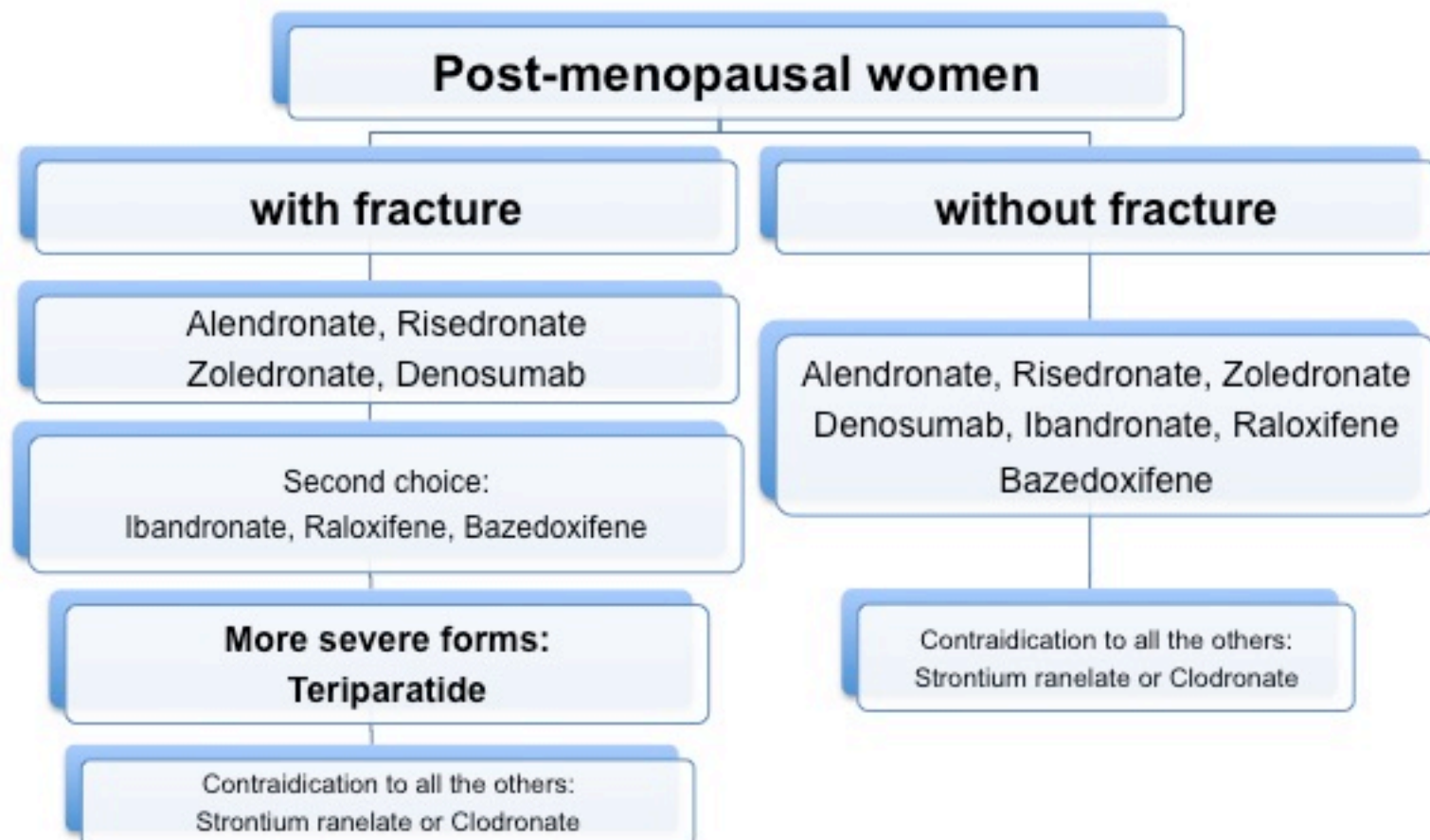
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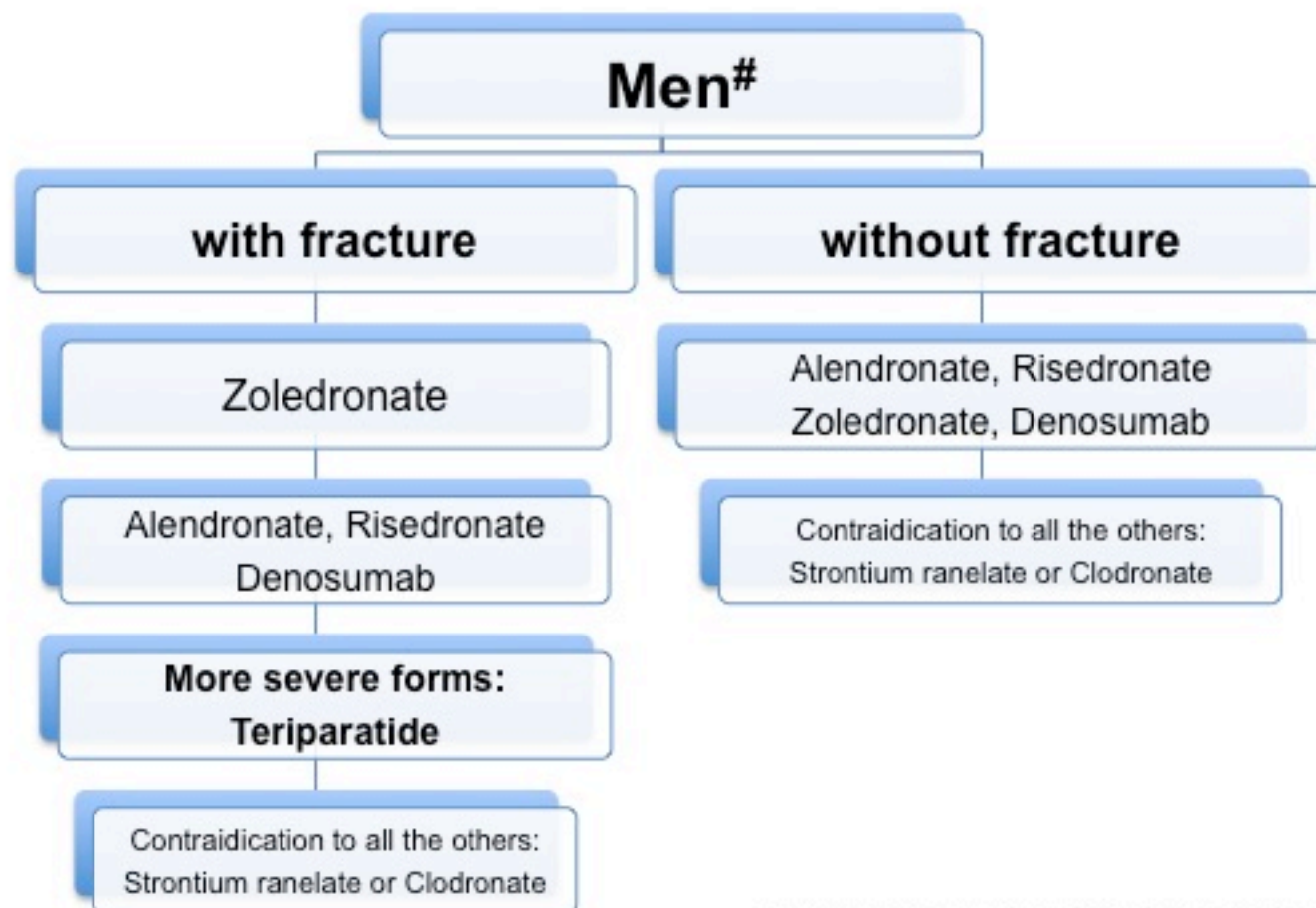
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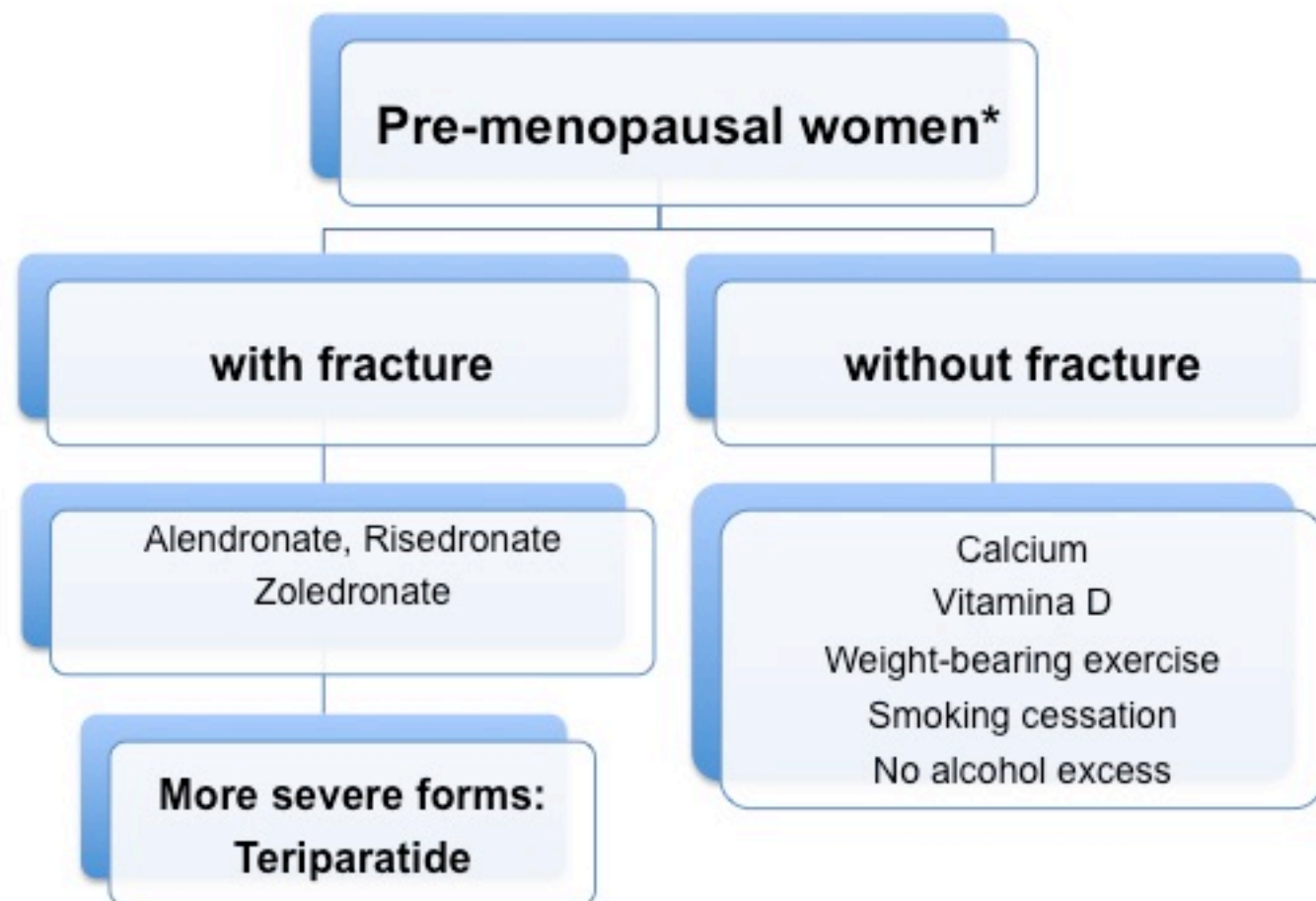


Always consider testosterone substitution in hypogonadal men

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* No safety data for use in pregnancy. Always consider contraception

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Men on ADT should receive drug therapy if they have a high risk of fracture as follows:

Recommendations

We recommend alendronate or zoledronate treatment and *suggest* risedronate, pamidronate or neridronate treatment in men on ADT if they have a high risk of fracture

We recommend denosumab treatment in men on ADT

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In women taking aromatase inhibitors, treatment should be initiated in the presence of:

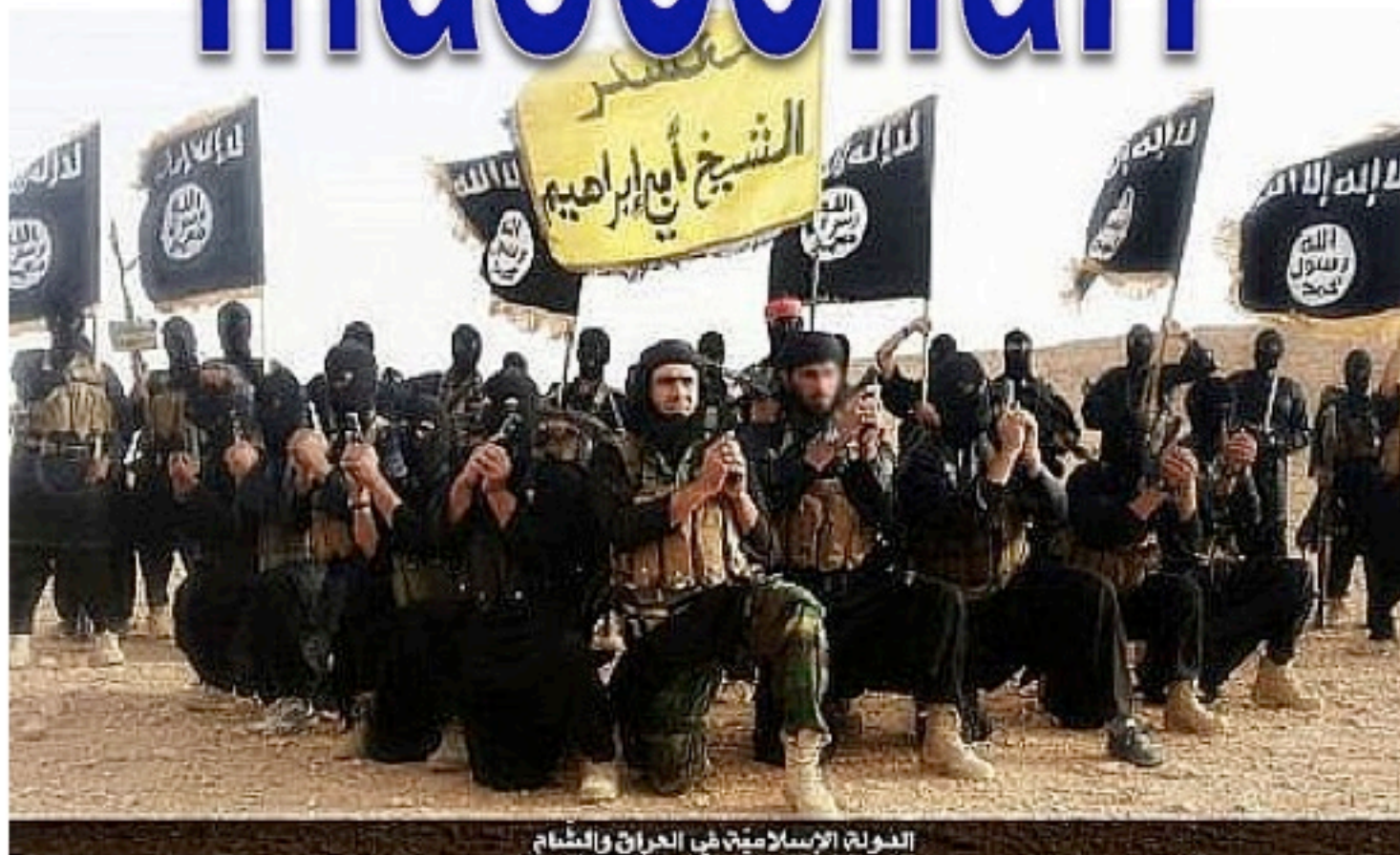
Recommendations

We recommend using oral BPs (risedronate, ibandronate, alendronate) or IV zoledronate, or SC denosumab to prevent bone loss in women treated with AI

We recommend using IV zoledronate or SC denosumab and *suggest* using oral BPs (risedronate, ibandronate, alendronate) to reduce fracture risk in women treated with AI

We recommend continuing anti-resorptive treatment possibly as long as AI therapy

Osteonecrosi dei mascellari

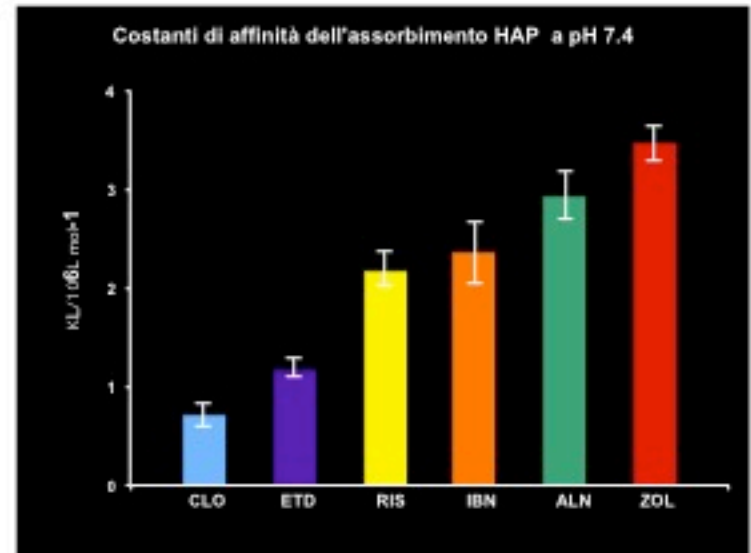


الدولة الإسلامية في العراق والشام

Danni da farmaci anti-riassorbitivi

PROBLEMI

- BPs si accumulano nell'osso (emivita ossea variabile)
- Il Dmab non si accumula nell'osso, ma inibisce potentemente il turnover osseo
- Trattamento prolungato (oltre 5 anni) associato a:
 - Fratture atipiche
 - ONJ





Bisphosphonate-Associated Osteonecrosis of the Jaw: Report of a Task Force of the American Society for Bone and Mineral Research

JBMR. 2007;22(10):1479-91

**“Less than 1 in 100.000
patient-treatment years”**

FATTORI DI RISCHIO PER ONJ

Ruolo delle Farmaco

Pazienti con metastasi: dose cumulativa media dei BP all'insorgenza ONJ

Farmaco	Mesi	Dose media mg (range)
Zoledronato	15,5- 23	62 (4-240)
Ibandronato	42	210 mg (180-310)

Per soggetti che sono in trattamento prolungato con BF da oltre 4 anni (con compliance > 80%)

In caso di intervento odontoiatrico invasivo (estrazione), soprattutto se sono presenti fattori di rischio individuali (diabete, immunosoppressione, steroidi, fumo, alcol):

- è consigliata un'adeguata profilassi antibiotica (Amoxicillina, eventualmente combinata a metronidazolo, da iniziarsi qualche giorno prima e da protrarsi per almeno 10-15 giorni dopo l'intervento, fino alla guarigione della mucosa gengivale)
- abbinata a chirurgia estrattiva che preveda la chiusura primaria del sito estrattivo con la mobilizzazione di lembi mucoperiosteali



... Overall to date, the risk would seem clinically not significant, however, not enough to justify the refusal by the dentist to refer to dental treatment the patient receiving NBP, in the absence of other specific contraindications. Indeed, the lack of treatment could prolong or precipitate inflammatory conditions / infections that may increase the risk of BRONJ.



grazie per l'attenzione