

Treatment – Why, Whom, When, What drug, How long

E Seeman

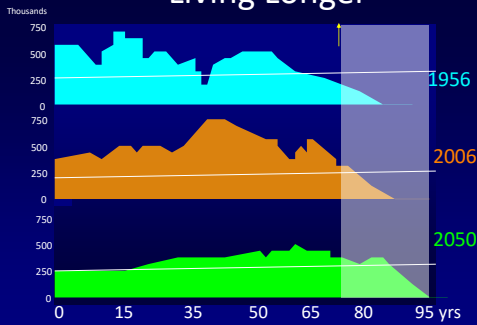
Depts Endocrinology and Medicine
Austin Health
University of Melbourne
Melbourne . Australia

Potential Conflicts of Interest

Research support: Amgen, MSD, Asahi, Lilly. He is a Director of the board and shareholder in StraxCorp.

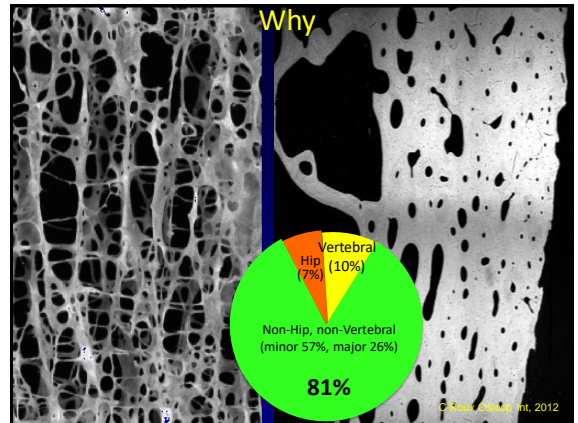
Fasting CTX

Living Longer

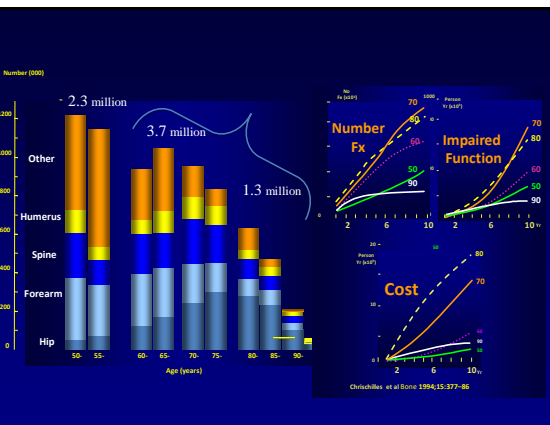


Vaupel Nature 2010; 464: 536-42
Christensen et al Lancet 2009; 374:1196-208

Why

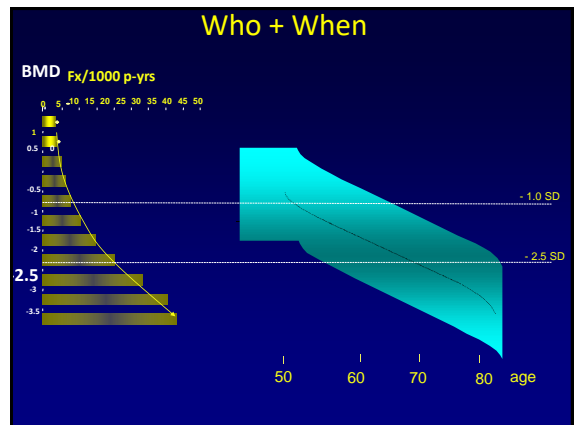


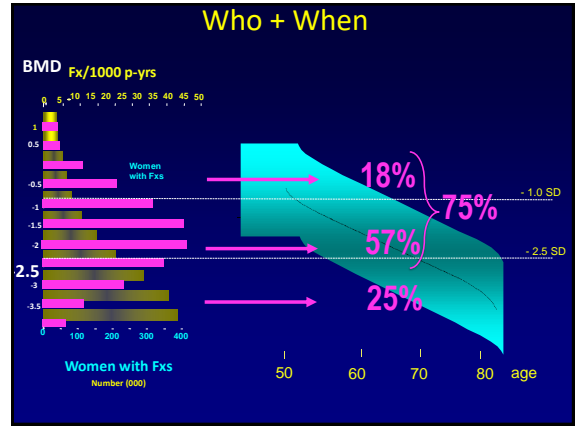
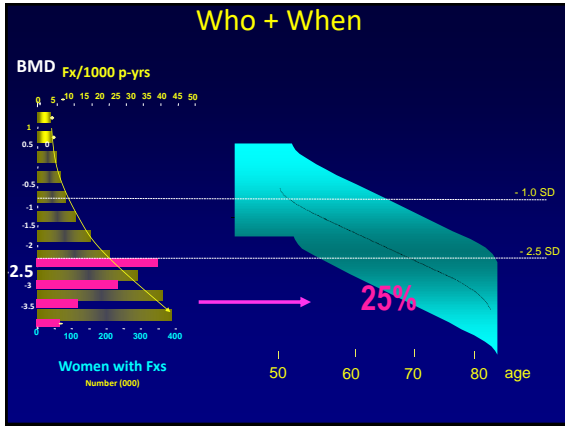
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Christilles et al Bone 1994;15:377-86

Who + When





Who + When

Patient

- Older
- Chronic illness
- Propensity for falls
- Lower body weight
- Frailty
- Patients wishes

Bone

- Presence of fracture
- Low BMD
- High remodelling
- Decayed Microarchitecture (high porosity, trabecular decay)

Drug

- Efficacy
- Safety
- Convenience

% placebo treated women having a fracture during year 2 and 3 in the Horizon Trial

Black, Seeman. Osteo Intern. 2011

nogg NATIONAL OSTEOPOROSIS GUIDELINE GROUP

Updated May 2011

Graphs

Intervention Threshold

Major Fracture - 10 year fracture probability

Hip - 10 year hip fracture probability

Age (years)

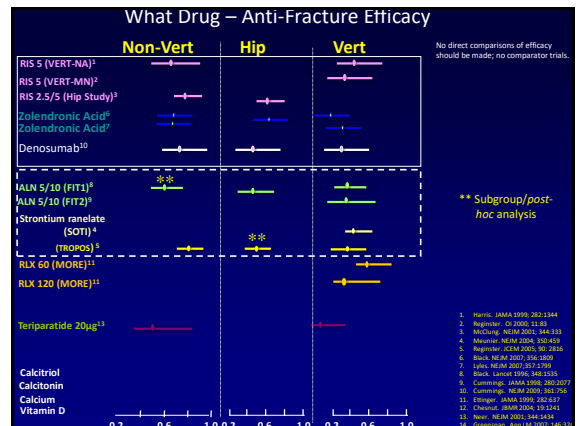
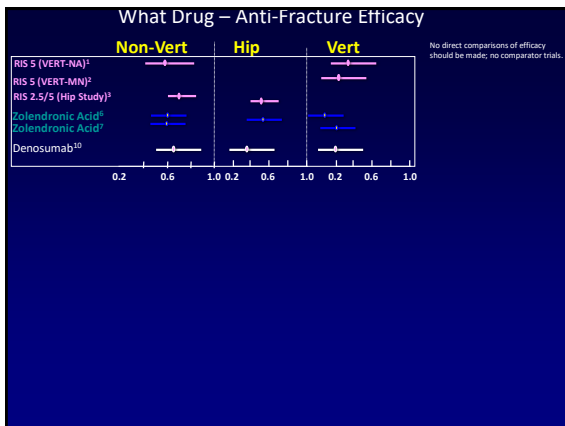
Treat

Lifestyle advice and reassurance

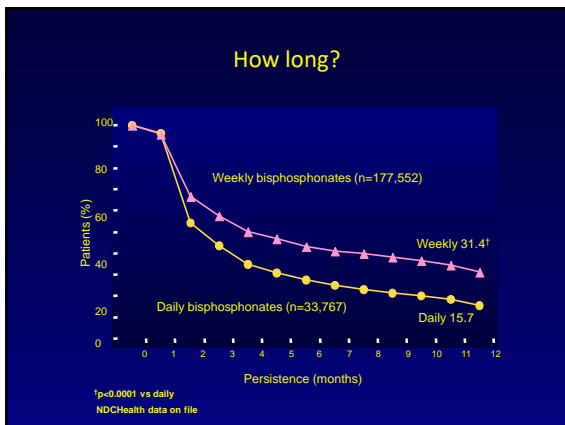
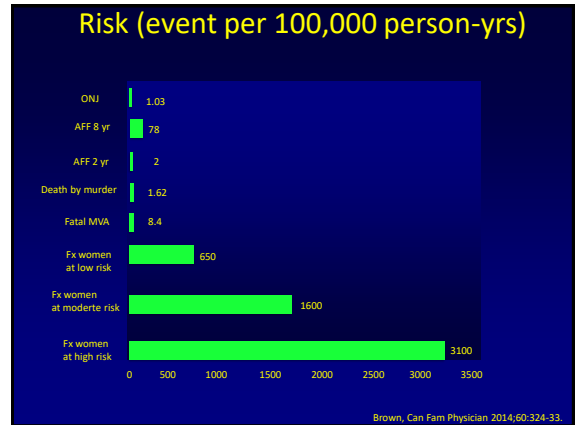
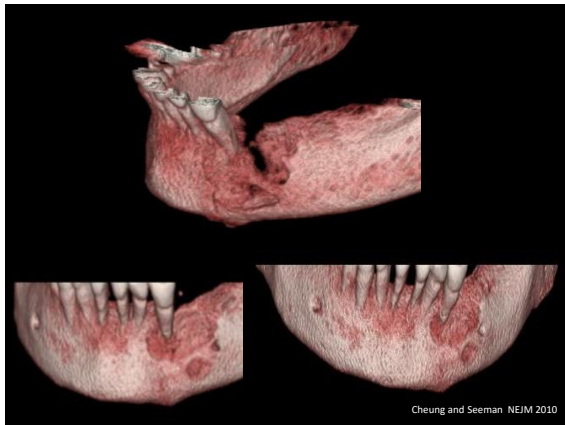
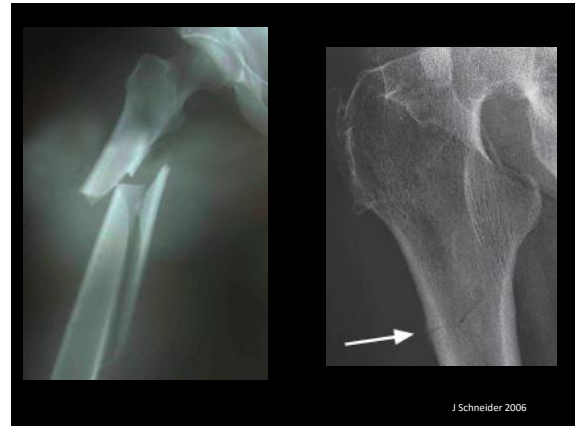
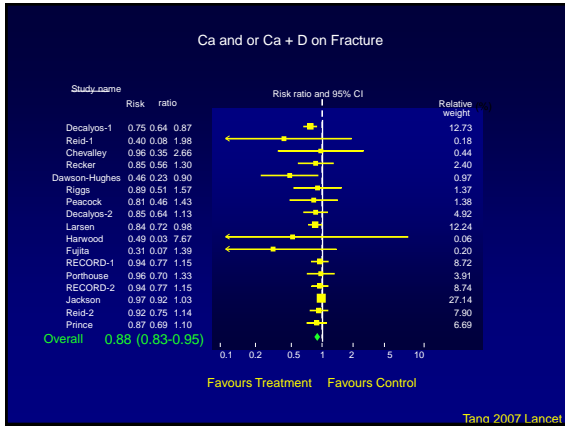
Interpretation

The intervention thresholds depicted by the lines between the green and red areas above are the 10 year probabilities of a major osteoporotic fracture (left graph) or a hip fracture (right graph) in women with a prior fracture.

In individuals with probabilities of a major osteoporotic fracture **and/or** hip fracture AT or ABOVE the intervention threshold, treatment should be strongly considered.



- Harris, JAMA 1999; 282:1344
- Reginster, Osteo Intern 2005; 11:83
- MacLure, JAMA 2005; 293:1313
- Masumori, NEJM 2004; 350:459
- Reginster, JAMA 2005; 293:1314
- Black, NEJM 2007; 356:1809
- Lips, NEJM 2007; 357:1289
- Black, Lancet 1996; 348:1535
- Cambridge, JAMA 1996; 276:2077
- Cambridge, NEJM 2000; 343:796
- Enger, JAMA 1998; 279:2623
- Chen, JAMA 2004; 291:241
- Neer, NEJM 2001; 344:848
- Greenman, JAMA 2001; 285:1412



Summary

- Why Fractures
- Who & When Absolute Risk
- What drug Evidence
- How long Persisting risk