

# Osteoporosetherapie: Wie und wie lange?

Christian Meier

Endokrinologische Praxis & Labor, Basel  
und  
Klinik für Endokrinologie, Diabetes und Metabolismus  
Universitätsspital Basel



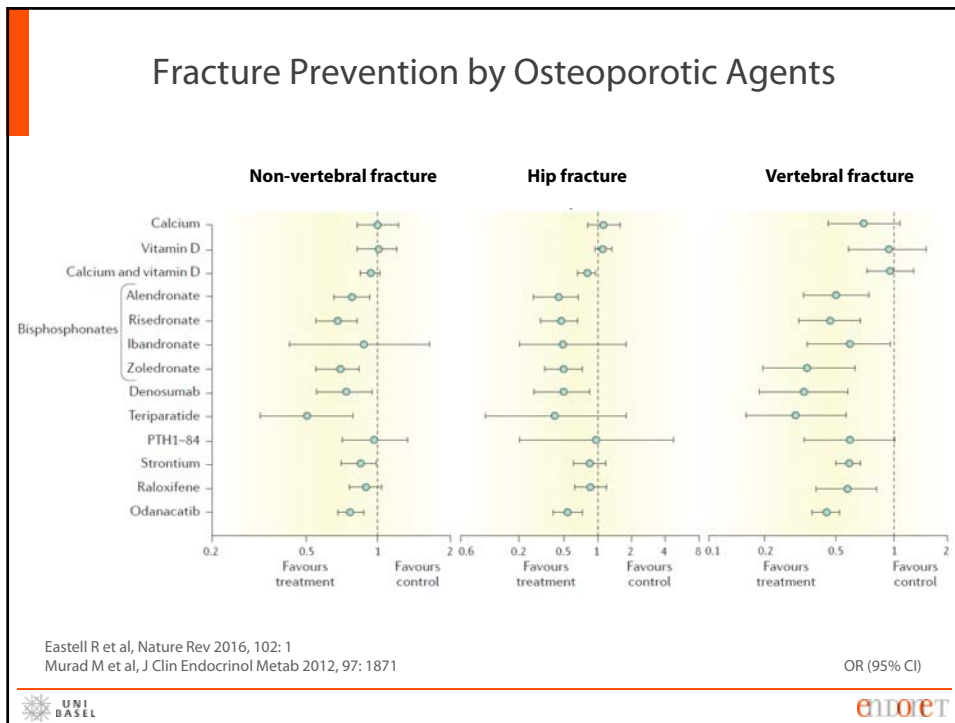
## Individualisierte Osteoporosetherapie

Wahl des Therapieprinzips basierend auf:

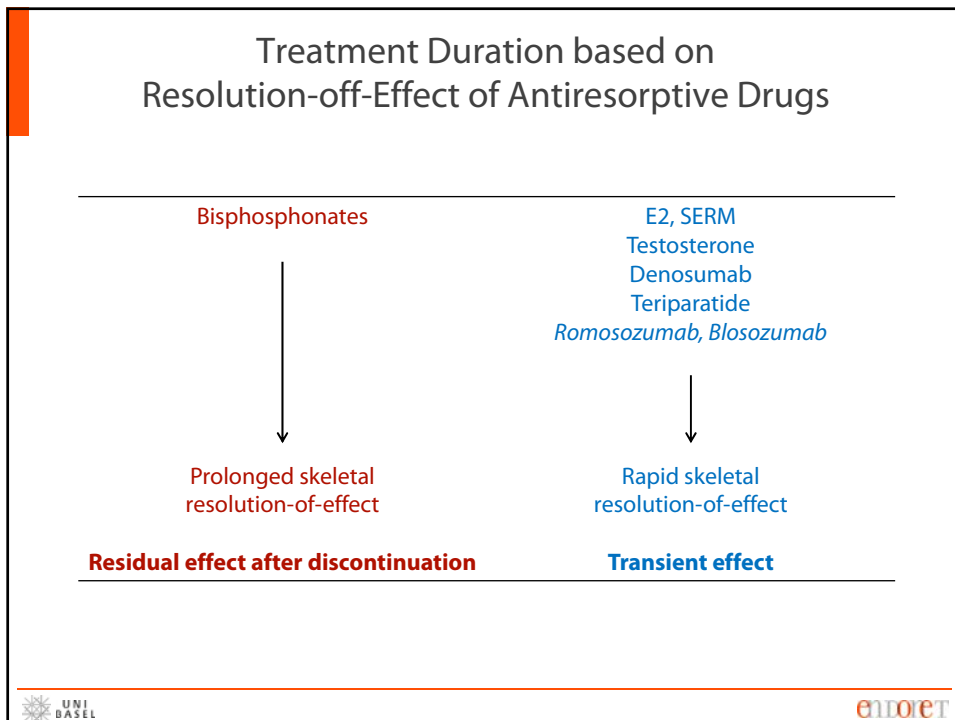
- Wirksamkeit, Frakturrisiko
- Wirkmechanismus
- Nebenwirkungsprofil
- Zusatznutzen
- Komorbiditäten (Alter, Nierenfunktion)
- Compliance, Patientenpräferenz
- Kosten



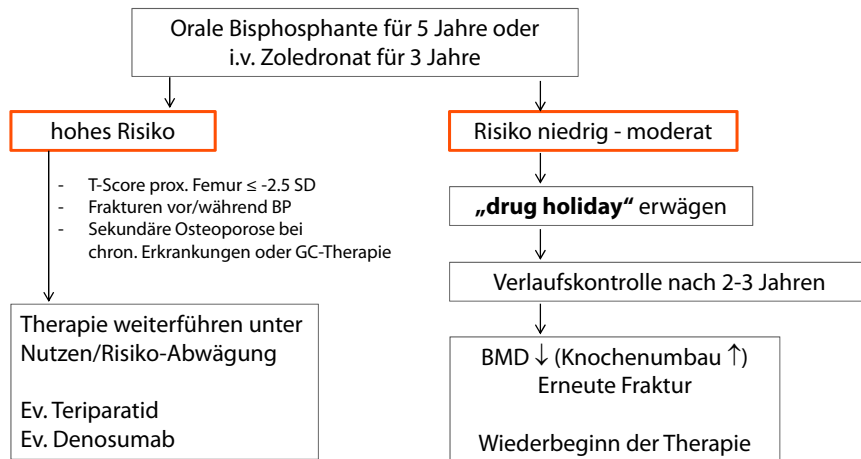
## Fracture Prevention by Osteoporotic Agents



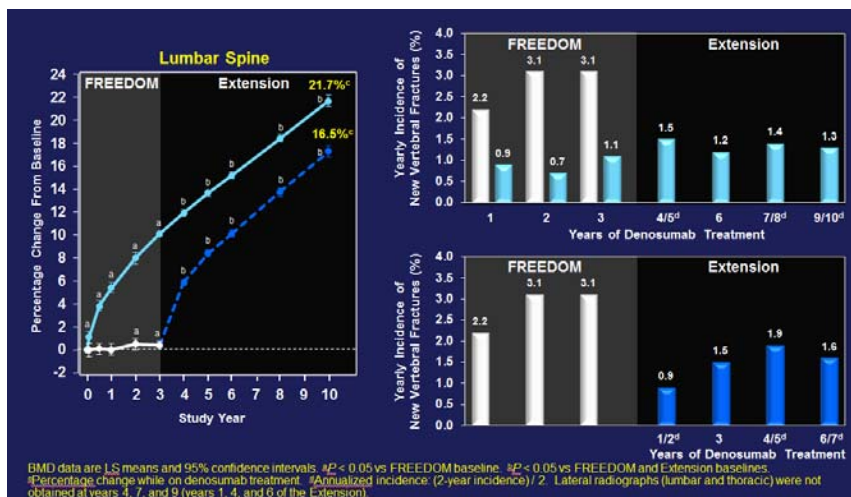
## Treatment Duration based on Resolution-off-Effect of Antiresorptive Drugs



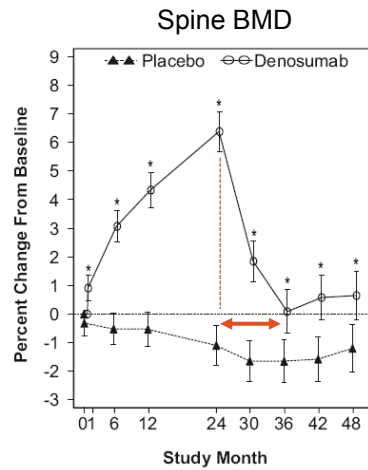
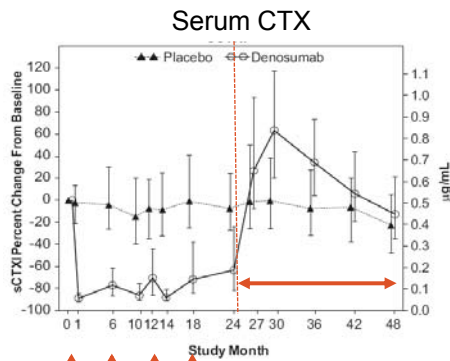
## Approach to the Management of Postmenopausal Women on Long-term Bisphosphonate Therapy



## Long-term Effects of Denosumab from FREEDOM Extension (LSBMD, VFx)



## Effect of Denosumab Treatment and Discontinuation on Bone Markers and BMD



Off treatment extension of a phase 3 RCT  
Postmenopausal women, n=256  
T-Score -1.6

Bone H. et al, J Clin Endocrinol Metab 2011, 96: 972



## Rebound-associated Vertebral Fractures after Discontinuation of Denosumab



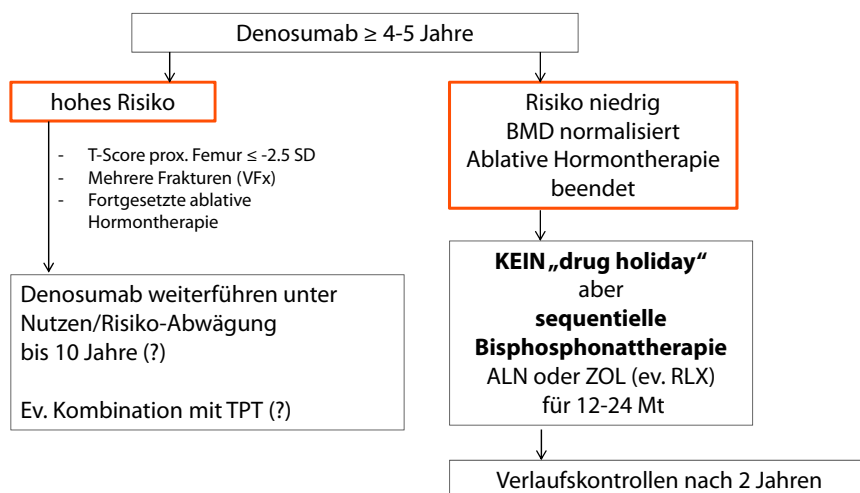
Case	Denosumab doses (n)	Lumbar spine before	Lumbar spine after	Total hip before	Total hip after
1	5	-3.1 sd	-2.3 sd	-2.5 sd	-2.1 sd
2	8	-2.8 sd	-2.2 sd	-2.5 sd	-2.7 sd
3	7	-3.1 sd	-2.4 sd	-2.0 sd	-1.2 sd
4	2	-1.7 sd	NR	-1.0 sd	NR
5	2	-3.9 sd	-3.5 sd	-1.9 sd	-1.6 sd
6	8	-3.0 sd	-2.3 sd	-1.9 sd	-1.7 sd
7	2	-4.5 sd	-3.1 sd	NA	NA
8	6	-3.9 sd	-3.1 sd	-1.1 sd	-1.2 sd
9	5	-4.1 sd	-3.7 sd	-3.4 sd	-3.6 sd

n: number; NA: not available (bilateral hip replacement); NR: not realized; sd: standard deviation.

Popp A et al, Osteoporos Int 2016, 27: 1917  
Aubry-Rozier B et al, Osteoporos Int 2016, 27: 1923  
Anastasilakis AD et al, Osteoporos Int 2016, 27: 1929  
Lamy O. et al, J Clin Endocrinol Metab 2016, epub



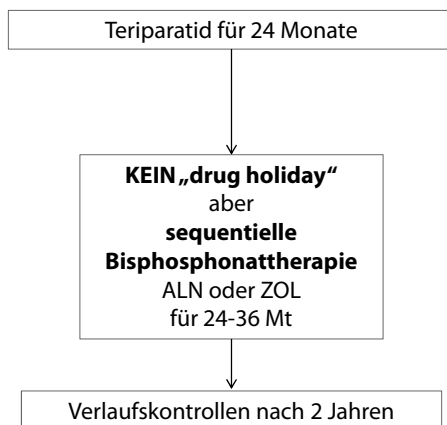
## Approach to the Management of Postmenopausal Women on Long-term Denosumab Therapy



## Candidates for Anabolic Treatment with Teriparatide

- ▶ Suboptimal response to antiresorptive treatment
  - Fracture or bone loss on treatment
- ▶ Patients on glucocorticoid treatment and high fracture risk
- ▶ Patients at high risk of fracture (men and women)
  - Vertebral fracture or other osteoporosis-related fractures with low BMD < -2.5 to -3 SD
  - BMD T-score ≤ -3.5 SD in absence of fragility fractures or other risk factors
  - Low BMD < -2.5 to -3 SD and additional risk factors

## Approach to the Management of Postmenopausal Women on Teriparatide Therapy



## Take Home Message

- ▶ Osteoporosetherapie sollte individualisiert erfolgen
  - inkl. präventive und therapeutische Massnahmen
- ▶ Medikamentöse Osteoporose-therapien (BP, DMAB) zeigen bei erhöhtem Frakturrisiko ein günstiges Nutzen/Risikoprofil
- ▶ Behandlungsdauer einer anti-resorptiven Therapie abhängig von
  - Frakturrisiko
  - Wirkmechanismus der eingesetzten Präparate
  - Verträglichkeit
- ▶ Wirksubstanzen ohne residuelle skelettale Wirkung benötigen eine sequentielle Folgetherapie (DMAB, TPT)