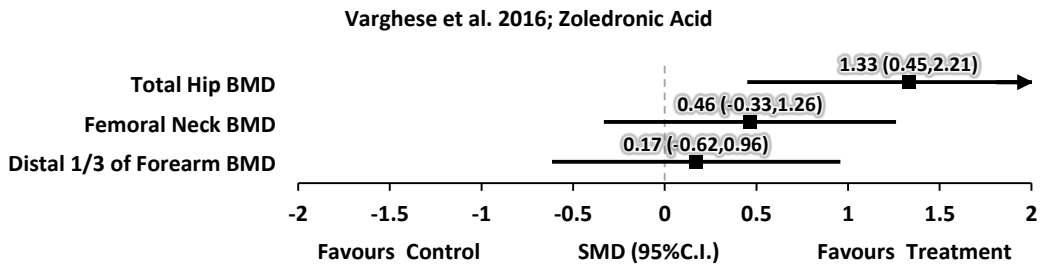
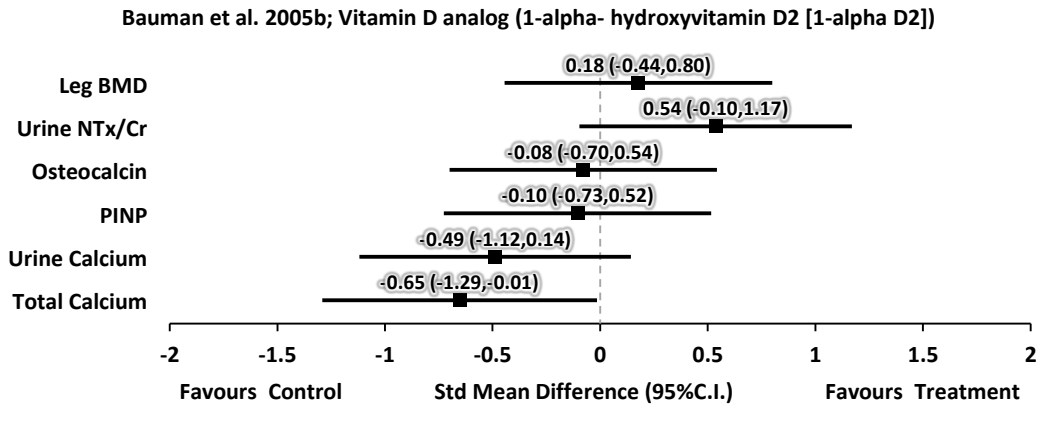
Author Year; Country Score Research Design Total Sample Size	Methods	Outcome
Varghese et al. 2016 India PEDro=10 RCT Level 1 N=25	**Population:** 25 participants (22 men, 3 women) with traumatic chronic SCI; age: 38.3 ± 10.4 years; TPI: 12.2 (6.8) years; 5 cervical/upper thoracic, 20 lower thoracic/lumbar **Treatment:** Infusion of zoledronic acid (4 mg) or placebo (saline) **Outcome measures**: BMD by DXA at baseline and 12-months post-treatment.	1. Significant within-group decrease in total hip BMD in placebo group only (0.607±0.073 to 0.491±0.169 g/cm^2) 2. Significant within-group decreases in femoral neck BMD in placebo (0.548±0.111 to 0.480±0.163 g/cm^2) and zoledronic acid group (0.576±0.064 to 0.552±0.074 g/cm^2) 3. Significant within-group increases in BMD of distal third of forearm in placebo (0.713±0.031 to 0.747±0.028 g/cm^2) and zoledronic acid group (0.717±0.066 to 0.760±0.072 g/cm^2) 4. No significant between-group differences in percentage changes of BMD and BMC
	Effect Sizes: Forest plot of standardized mean differences (SMD ± 95%CI) as calculated from pre- and post-intervention data 	

Author Year; Country Score Research Design Total Sample Size	Methods	Outcome
Bauman et al. 2005b USA PEDro=10 RCT Level 1 N=40	**Population:** 40 participants (39 men, 1 woman) with complete motor injuries; age 43 ± 13 years; TPI: 12 ± 10 years (range: 1–34 years); 17 participants with tetraplegia and 23 participants with paraplegia. **Treatment:** Vitamin D_2 analogue, 24 months. 1. Treatment group received calcium 1300 mg daily, vitamin D 800 IU daily, and 1-alpha vitamin D_2 4 µg daily (n = 19). 2. Control group received calcium 1300 mg daily, vitamin D 800 IU daily, and placebo in place of vitamin D_2. **Outcome measures**: BMD by DXA, biomarkers at 6, 12, 18, and 24 months.	1. Significant changes noted in leg BMD only in the vitamin D_2 (treatment) group at 6, 12, 18, and 24 months. There was significant interaction for group by time. 2. In the vitamin D_2 (treatment) group, smoking compromised the response to treatment and changes in BMD. 3. In the vitamin D_2 (treatment) group, urinary marker of bone resorption was significantly reduced, but markers of bone formation were not changed.
	Effect Sizes: Forest plot of standardized mean differences (SMD ± 95%CI) as calculated from pre- and post-intervention data 	

Author Year; Country Score Research Design Total Sample Size	Methods	Outcome
Zehnder et al. 2004b Switzerland PEDro=7 RCT Level 1 N=65	**Population:** 65 men; age: 38.3 years; TPI: 8.7 years (range, 0.1–29.5); traumatic complete injuries between T1-L3; AIS: A, B. **Treatment:** Alendronate for 24 months. 1) 10mg per day plus 500mg calcium per day (n=33) or 2) Calcium alone (500mg per day) (n=32). **Outcome measures**: BMD by DXA and bone turnover markers.	1. Decrease in BMD of the tibia in Calcium group but remained stable in the Treatment group (group difference, p = 0.017). There was no change in wrist BMD and a significant increase in lumbar spine BMD in both groups. BMD of the mid-shaft tibia and hip were maintained in the Treatment group and decreased in the calcium group. 2. Biochemical markers of bone absorption significantly decreased from baseline in the Treatment group.

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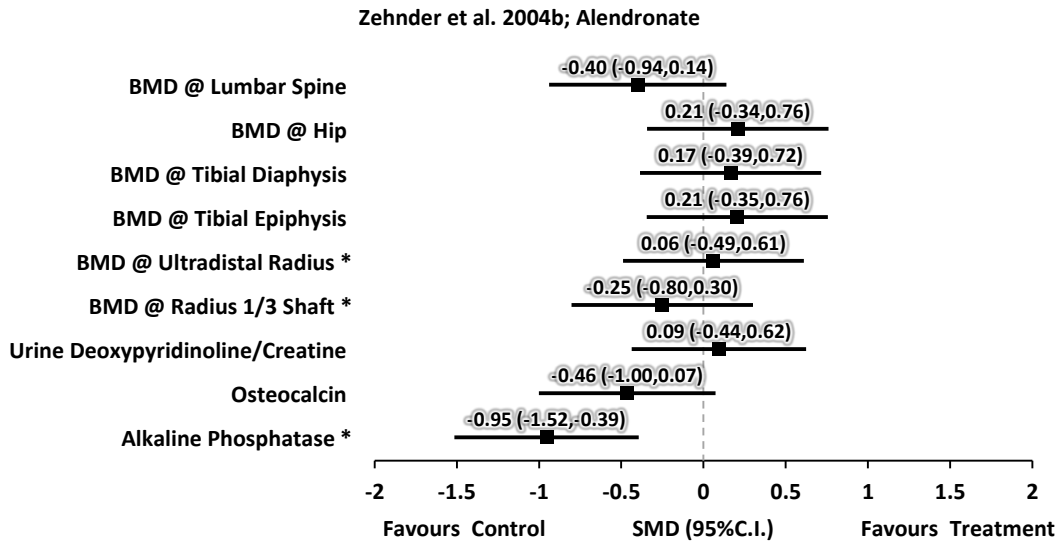
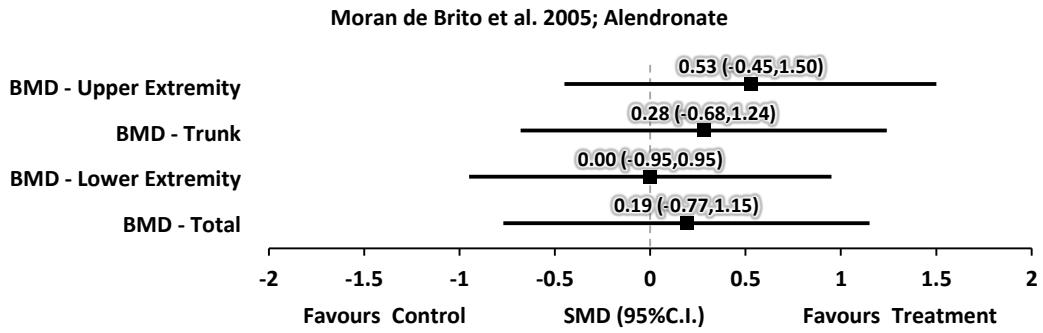
	Effect Sizes: Forest plot of standardized mean differences (SMD ± 95%CI) as calculated from pre- and post-intervention data  *SMD calculated using SD of pre-post difference instead of baseline SD	
Moran de Brito et al. 2005 Brazil PEDro=6 RCT Level 1 N=19	**Population:** 15 men and 4 women; age: 30.8 (range: 17-47) years; TPI: 49.8 months (range: 13.1–255.7); 18 traumatic and 1 nontraumatic; para/tetraplegia; AIS: A, B, or C. **Treatment:** Alendronate for 6 months. 1. 10 mg and Calcium 1000 mg bid (n=10) and 2. Calcium (1000 mg bid) (n=9). **Outcome measures:** BMD by DXA	1. There was a mean increase in upper extremity BMD that was greater in Treatment vs. calcium group although not statistically significant. There were significant differences for total *T*-score and BMD.

Author Year; Country Score Research Design Total Sample Size	Methods	Outcome
	Effect Sizes: Forest plot of standardized mean differences (SMD ± 95%CI) as calculated from pre- and post-intervention data 	
Gifre et al. 2016 Spain Post-test Level 4 N=14	**Population:** 14 men with traumatic SCI & osteoporosis; age: 39 ±15 (range: 19-65) years; TPI: 15.2 ± 4 (8-21) months; AIS-A/B/C: 12/1/1; 43% paraplegia, 57% tetraplegia **Treatment:** Denosumab 60 mg every 6 months up to 12 months **Outcome measures:** Biochemical measurements: Serum creatinine, calcium, phosphate, 25OHD Bone turnover markers: Bone ALP, P1NP, serum CTX BMD by DXA at lumbar spine, femoral neck, total hip.	1. Significant within-group increase in BMD at total hip (2.4±3.6%), femoral neck (3.0±3.6%) and lumbar spine (7.8±3.7%) at 12 months 2. Significant within-group decreases in ALP (42%), P1NP (-58%) and serum CTX (-57%) at 12 months 3. BMD changes unrelated to Bone turnover markers or 25OHD changes 4. No serious treatment-related adverse events were noted.

* All data expressed as mean±SD, unless expressed otherwise.