Online Resource 1

Zoledronic Acid and Bone Health in Older Adults with Cognitive Impairment

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Supplemental Table 1: Effect of Zoledronic Acid on Bone Health Outcomes

Outcome	Cognitively Impaired				Cognitively Unimpaired				Differential Treatment Effect *p*-Value
	Zoledronic Acid Mean ± SD	Placebo Mean ± SD	Adjusted Difference ± SE	*p*-Value	Zoledronic Acid Mean ± SD	Placebo Mean ± SD	Adjusted Difference ± SE	*p*-Value	
Lumbar spine BMD percent change:									
6 months	1.6±3.2	0.1±2.2	1.5±1.2	0.198	2.3±3.7	0.7±3.2	1.6±0.7	0.017	0.946
12 months	2.7±4.4	0.2±2.6	1.9±1.2	0.117	3.2±3.8	1.4±4.5	1.8±0.7	0.009	0.931
Total hip BMD percent change:									
6 months	2.0±3.4	-1.2±3.7	3.2±1.2	0.008	1.6±3.9	0.2±2.7	1.4±0.7	0.046	0.172
12 months	3.7±5.1	-0.3±3.8	4.3±1.3	<.001	2.6±3.8	-0.6±3.6	2.8±0.7	<.001	0.321

Femoral neck BMD percent change:									
6 months	3.5±4.3	0.9±4.0	2.2±1.8	0.209	2.1±6.0	0.6±5.1	1.3±1.0	0.178	0.661
12 months	3.7±5.8	-1.3±5.5	5.3±1.9	0.005	2.0±6.1	-1.3±5.2	3.0±1.0	0.004	0.284
CTX change (nmol/L BCE):									
6 months	-0.10±0.13	0.04±0.20	-0.17±0.05	0.001	-0.20±0.19	0.06±0.18	-0.24±0.03	<.001	0.211
12 months	-0.04±0.10	0.01±0.16	-0.07±0.05	0.182	-0.12±0.20	0.09±0.22	-0.18±0.03	<.001	0.085
P1NP change (μg/L):									
6 months	-24.0±22.6	-0.1±15.7	-20.1±4.9	<.001	-24.2±25.6	-1.1±18.9	-22.4±2.8	<.001	0.686
12 months	-19.4±19.7	-9.1±12.1	-6.3±5.0	0.212	-22.7±28.1	-10.0±25.5	-12.1±2.8	<.001	0.318

SD = Standard deviation, SE = Standard error, BMD= Bone mineral density, CTX = C telopeptide crosslinks type I collagen, PINP = N-terminal propeptide type I procollagen