

Table 3. Main characteristics of the studies showing effect either in BMD or in bone markers with the use of statins

Author	Study design	Statin	Period of use of statins	Patients	Age	Effect on BMD	Bone markers
Uysal et al 2007 ⁶²	Cross-sectional	Simvastatin;		37 women with type 2 diabetes	No available data	Borderline, no significant increase	No data available
Majima et al 2007 ⁶³	Open label	Atorvastatin 10mg/day	3 months	22 hypercholesterolemic Japanese males	62.36±10.1	No data available	Ca 9.58-9.44 BALP 22.42-21.76 NTX 15.84-12.20
Majima et al 2007 ⁶⁴	Open control	Pitavastatin 1mg/day	3 months	101 hypecholesterolemic Japanese (57 men, 44 women, 63 users, 35 non-users)	58.6±12	No data available	Ca 9.56-9.44 P 3.38-3.38 BALP 23.39-23.09 NTX 14.19-12.52
Safaei H et al 2007 ⁶⁵	Open label clinical trial	Lovastatin 20mg/day	18 months	55 diabetic post-menopausal women	54-67	LS 0.946-0.978 Ward's triangle 0.685-0.780	No available data
Bone GH et al 2007 ⁶⁶	Prospective randomized double-blind, placebo-controlled, dose ranging comparative	Placebo, atorvastatin 10, 20, 40, 80mg/day	52 weeks	626 dyslipidemic postmenopausal women with T-score 0 to -2.5	40-75	No significant change	No significant change
Pérez-Castrillón JL et al 2008 ⁶⁷	OR	Atorvastatin 10-20mg/day and 40-80mg/day	1 year	62 patients (35 males, 27 females)	60	GG genotype LS 1.107-1.129 (p=0.0001)	No data available
Patil S et al 2009 ⁶⁸	Prospective double-blind RCT	Simvastatin 20mg/day	12 weeks	62 patients (31 users, 31 non-users)	25-81	No significant change	BALP 23.5-28.2 OC 19.5-18.9 P1NP 61.8-65.9 CTX 0.20-0.21
Yavuz B et al 2009 ⁶⁹	Prospective cohort	Rosuvastatin 10-20mg/day	8 weeks	91 hyperlipidemic patients	59±12.5	No available data	25(OH)D 14-36.3 1.25(OH)2D 22.9-26.6 OC 3.5-3.6 BALP 17.7-9.5 Ca 9.4-9.3 P 3.1-3.1
Kanazawa et al 2009 ⁷⁰	Open label randomized	Rosuvastatin 2.5mg/day		36 Japanese	60.1±7.4 (users), 64.7±2.7 (non-users)	No data available	BALP 29.7-33.1 NTX 46.4-51.6 DPD 5.8-6.4
Cheungsamarn et al 2010 ⁷¹	Prospective RCT	Simvastatin 40-80mg/day	18 months	212 patients (106 users, 106 non-users, 63 male, 149 female)	>40	BMD increased (p<0.01)	Bone formation increased (p < .0001) bone resorption reduced (p=0.017)

BMD measured in gr/cm³; LS|: lumbar spine; FN: femoral neck; TH: total hip; Troch: trochanter; OR: opens randomized; RCT: randomized control trial.