Table S1 Important characteristics of the included studies

Study	n	Design	Follow-up (months)	HTN condition	Age (years)	Females (%)	BMI (kg/m^2)	HTN years	SBP	DBP	HR	LVMI	EF (%)	FS (%)	LVPWT (mm)	E/A ratio	LVEDD (mm)
Adalet 1995	19	PROSP	26	Primary	52	32			163±20	102±5	80±7	147±20	68±9.1			1±0.1	
Beltman 1998	35	RCT	10	Diastolic	53±01	49	27.2±4.3		158±16	102±5	69±9	88±21			9.5±1.2		44.9±4.8
Bilge 2005	14	RCT	6	Essential	46±6	43	25.9±3.7		144±8	94±4	82±5	122±26					
Cerasola 1997	11	PROSP	6	Essential	50±5	45			165±5	105±3	76±2	139±4		39±2	13.6±0.4	1±0.1	52±2
Fak 1996	30	PROSP	6	Mild/ Moderate	56±8	27		7±1.3	164±14	104±6	78±8	160±30			10±1	1±0.1	49±5
Fogari 2012	91	RCT	12	Mild/ Moderate	64±9	49	27.4±4.3	9.7±7.2	147±11	92.1±7	75±9	132±24	64.2±4.4		10.3±1.1	1±0.2	
Gaudio 2003	30	RCT	6	Essential	53.4±14	43		3.8	164±13	106±5	74±7	138±18			11.8±0.9		54±3.3
Islim 2001	33	PROSP	5	Essential	56.8±9	42		6.6±9	173±15	104±6	78±11		66±2.5	36±1.3			
Kloner 1995	37	PROSP	5									158±7			11.6±0.3		53.1±1.1
Leenen 1996	17	RCT	6	Essential	55±3	24			158±3	102±2		107±5					
Libhaber 2004	61	RCT	6		54±10.5	70	30.8±6.5		153±15	97±8					10±1.2		49.1±5.2
Martina 1999	25	RCT	4	Mild/ Moderate	51±9	12	30±3		145±7	100±5	76±9	136±25					
Matsuno 2011	15	RCT	36		63.8±9	27	24.7±3.3		166±5	93.9±11		142±6					
Motoki 2014	16	RCT	12		60±9	25	25.3±4.4		169±21	101±15	72±13	145±35			12±2		47±7
Picca 1997	32	RCT	18	Essential	48±8	47			170±8	102±6			61±2	34±2		1±0.5	52±3
Rosendorff 2009	38	RCT	24	Primary	64.1±11	2			162±4	90±3							
Rutuparana 2017	14	RET	8		50±11	50			149±15	90±7		139±27			12.7±1.2		47.6±3.6
Sarkar 2017	24	PROSP	12	Primary	57±3	42	23±3.5					96±27	64.4±4.8	35.4±4.6			
Skoulurigis 1995	21	PROSP	3	Severe	48±10			5	181±14	119±6		140±50	59±9	32±6			46.8±5.2
Takami 2003	15	RCT	6	Essential	60.7±3	0	23.1±0.7		174±3	97±3	67±3	130±8		39.9±0.8		1±0.02	47.1±1.2
Terpstra2001	81	RCT	24		67±4	53	28.2±3.4		175±15		92±8		109±20				0.78±0.18
Yamamoto 2011	28	RCT	18	Mild/mod	61±9	33			157±18	96±14		143±47	73±8				
Yasunari 2004	50	RCT	6		64±12	42	24.3±2.8		152±6	92±6		161±39					

BMI, body mass index; DBP/SBP, Diastolic/systolic blood pressure; E/A ratio, ratio of peak early diastolic filling velocity to peak filling velocity at atrial contraction; EF, ejection fraction; FS, fractional shortening; HR, heart rate (beats per minute); HTN, hypertension; LVEDD, left ventricular end-diastolic diameter; LVPWT, left ventricular posterior wall thickness; PROSP, prospective; RCT, randomized controlled trial; RET, retrospective; LVMI, left ventricular mass index.

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Tables S2 Quality assessment of the randomized controlled trials

Study	Other bias	Selective reporting	Incomplete outcome data	Blinding of outcome assessment	Blinding of participants /personnel	Allocation concealment	Random sequence generator
Beltman 1998	L	L	L	L	L	L	L
Bilge 2005	L	L	L	U	U	U	L
Fogari 2012	L	L	L	L	U	H	L
Gaudio 2003	L	L	L	L	H	L	L
Leenen 1996	L	L	L	U	H	L	L
Libhaber 2004	L	L	L	U	U	U	L
Martina 1999	L	L	L	L	L	L	L
Matsuno 2011	L	L	L	L	H	H	L
Motoki 2014	L	L	L	U	H	U	L
Picca 1997	L	L	L	U	L	U	L
Rosendorff 2009	L	H	L	L	L	L	L
Takami 2003	L	L	L	U	U	U	L
Terpstra 2001	L	L	L	L	L	L	L
Yamamoto 2011	L	L	L	L	H	H	L
Yasunari 2004	L	L	L	L	L	L	L

H, high risk; L, low risk; U, unclear risk.

Table S3 Newcastle-Ottawa scale for assessment of quality of observational cohort studies (each asterisk represents if individual criterion within the subsection was fulfilled)

Study	Representativeness of exposed cohort?	Selection of non-exposed cohort?	Ascertainment of exposure	Demonstration that outcome of interest was not present at start	Comparability of cohorts on basis of design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow up of cohort
Adalet 1995	★		★	★		★	★	★
Cerasola 1997	★		★	★		★	★	★
Fak 1996	★		★	★	★	★	★	★
Islim 2001	★		★	★		★	★	
Kloner 1995	★		★	★		★		★
Rutuparna 2017	★		★	★		★	★	
Sarkar 2017	★		★	★	★	★	★	★
Skoularigis 1995	★	★	★	★		★		★

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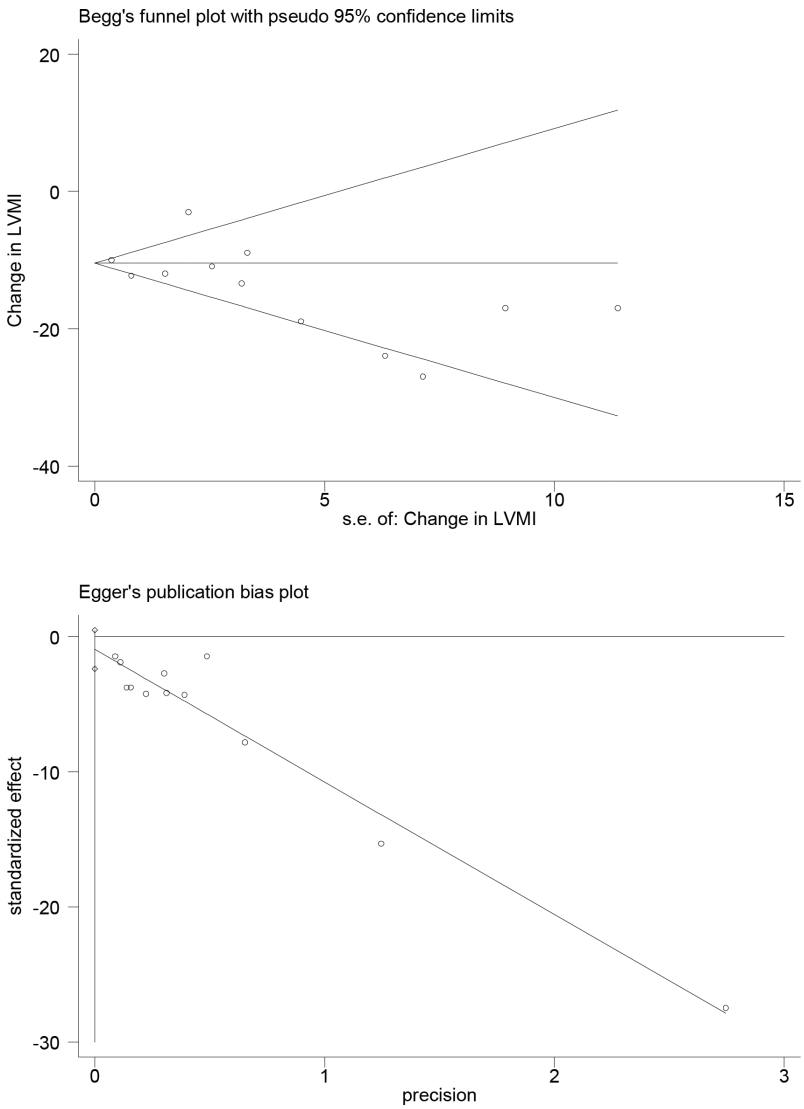

Figure S1 Graphical outcomes of the publication bias assessment tests. LVMI, left ventricular mass index.

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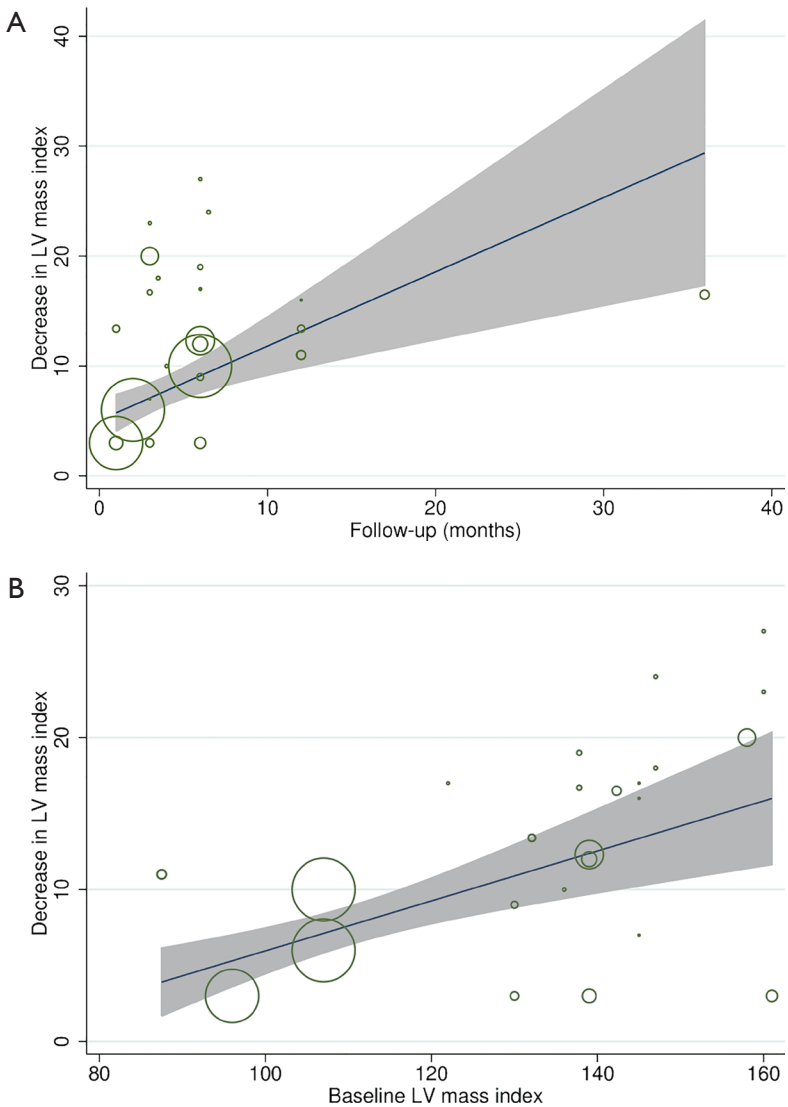

Figure S2 Meta-regression scatterplots showing the relationship between the decrease in Left ventricular (LV) mass index after amlodipine treatment and (A) follow-up duration and (B) baseline LV mass index.

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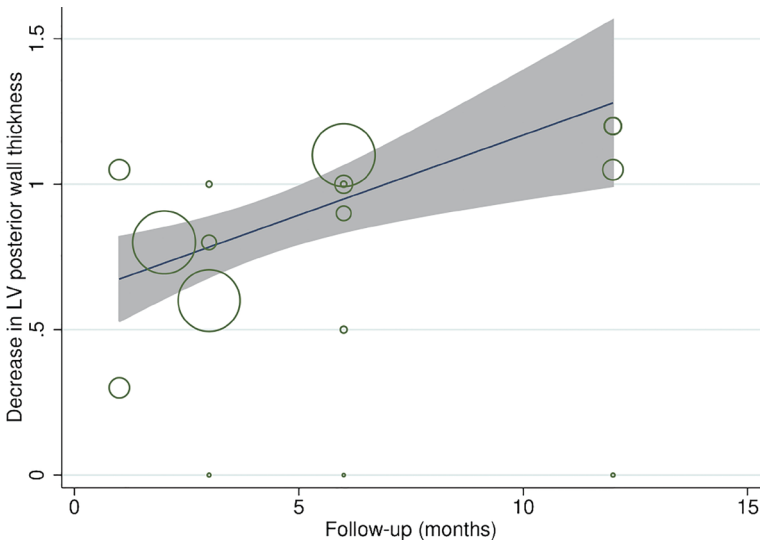

Figure S3 Meta-regression scatterplots showing the relationship between the decrease in Left ventricular (LV) posterior wall thickness after amlodipine treatment and the follow-up duration.

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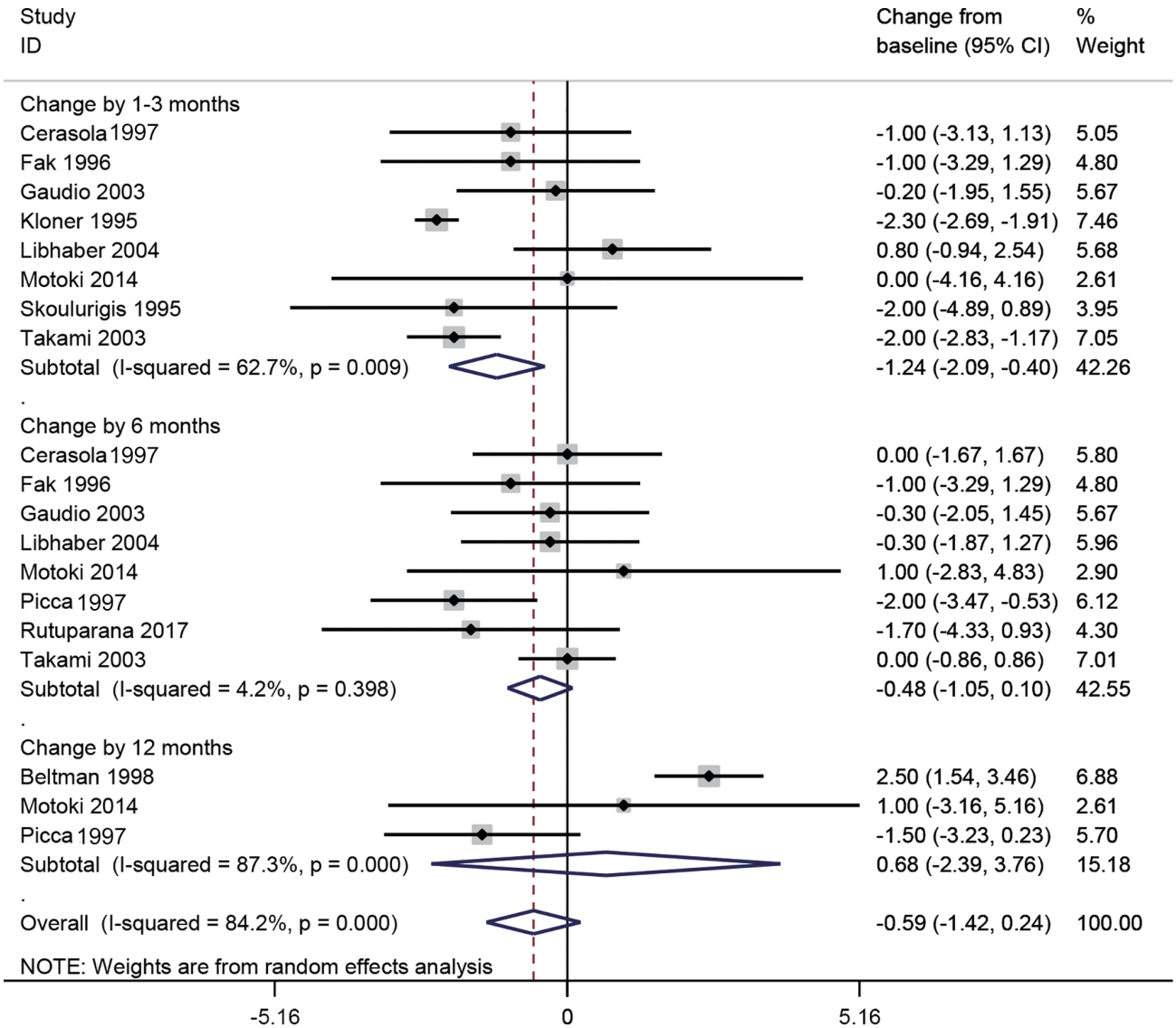

Figure S4 A forest graph showing the outcomes of the meta-analysis of changes from baseline in Left ventricular (LV) end-diastolic diameter.

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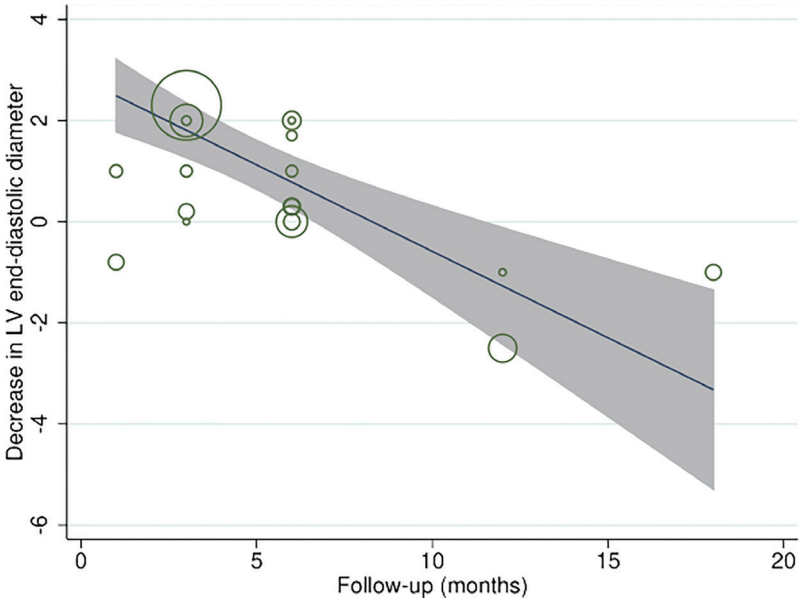

Figure S5 Meta-regression scatterplots showing the relationship between the decrease in Left ventricular (LV) end-diastolic diameter and the follow-up duration.

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