Table 1 Included studies (by class)

Study	Year	Groups (N)	Dosage (daily)	Time of administration	Duration	Age* Mean (SD) (yrs)	Baseline (O)* SBP/DBP (mmHg)	Inclusion criteria	Study design
ACEIs									
Witte	1993	Enalapril (10)	10mg	Morning (07:00)	3 wks	NR	NR	Mild-to-moderate EH	RCOT; washout period: 1 week
		Enalapril (10)	10mg	Bedtime (19:00)	3 wks				
Macchiarulo	1999	Lisinopril (40)	20mg	Morning (08:00)	2 mths	45.0 (10.0)**	160.1/100.7 **	Mild-to-moderate EH	RCOT; washout period: 1 week
		Lisinopril (40)	20mg	Bedtime (10:00)	2 mths				
Kuroda	2004	Trandolapril (16)	1-2mg	Morning (NR)	8 wks	68.0 (9.0)	158.0/93.0	Mild-to-moderate EH	Multicenter, open-label, RCT
		Trandolapril (14)	1-2mg	Bedtime (NR)	8 wks	66.0 (13.0)	161.0/92.0		
Hermide	2009	Ramipril (60)	5mg	Awakening (NR)	6 wks	46.9(12.3)	150.0/91.2	Grade 1-2 EH	Multicenter, parallel-group PROBE trial
		Ramipril (60)	5mg	Bedtime (NR)	6 wks	46.5(10.2)	147.6/92.0		
Hermida	2009a	Spirapril (83)	6mg	Awaking (NR)	12 wks	42.4 (12.9)	144.6/86.6	Grade 1-2 EH	Open-label, parallel-group, blinded-endpoint trial
		Spirapril (82)	6mg	Bedtime (NR)	12 wks	42.6 (14.8)	146.8/85.8		
ARBs									
Hermida	2003	Valsartan (46)	160mg	Morning (NR)	3 mths	49.3 (12.3)	157.0/92.0	Grade 1-2 EH	Randomized, open-label trial
		Valsartan (44)	160mg	Bedtime (NR)	3 mths	48.7 (16.2)	158.3/91.6		
Hermida	2005a	Valsartan (72)	160mg	Awakening (NR)	3 mths	53.1 (12.1)	160.7/92.1	Grade 1-2 EH	PROBE trial
		Valsartan (76)	160mg	Bedtime (NR)	3 mths	52.9 (13.0)	160.0/92.1		
Hermida	2005b	Valsartan (50)	160mg	Awakening (NR)	3 mths	68.3 (4.7)	161.1/87.4	Grade 1-2 EH	PROBE trial
		Valsartan (50)	160mg	Bedtime (NR)	3 mths	68.1 (5.3)	161.3/87.1		
Hermida	2007	Telmisartan(107)	80mg	Morning (NR)	12 wks	46.4(11.5)	151.8/90.9	Grade 1-2 EH	PROBE trial

		Telmisartan(108)	80mg	Bedtime (NR)	12 wks	46.5(12.6)	153.5/91.6		
Hermida	2009b	Olmesartan (73)	20mg	Awakening (NR)	3 mths	45.5(11.9)	151.8/89.9	Untreated grade 1-2 UEH	PROBE trial
		Olmesartan (71)	20mg	Bedtime (NR)	3 mths	47.6 (12.7)	150.4/88.4		
Mori	2013	Olmesartan (110)	NR	Morning (NR)	6 mths	62.1 (13.6)	161.2/91.0*	Siting SBP/DBP≥140/90	RCT
		Olmesartan (108)	NR	Evening (NR)	6 mths	60.8 (9.4)	156.2/89.6*	mmHg	
Ushijima	2015	Olmesartan (11)	20mg	Morning (NR)	4 mths	64.3 (13.0)	143.8/86.3	NR	Multicenter, open-label,
		Olmesartan (12)	20mg	Evening (NR)	4 mths	66.2 (7.0)	140.2/12.9	NR	randomized, parallel trial
Kario	2009	Candesartan(221)	NR	Awakening (NR)	24 wks	66.6 (13.3)	NR	NR	RCT
		Candesartan(229)	NR	Bedtime (NR)	24 wks	66.6 (12.6)	NR	NR	
Duretics									
Calvo	2006	Torasemide (30)	5mg	Morning (NR)	NR	NR	NR	Grade 1-2 EH	RCT
		Torasemide (28)	5mg	Bedtime (NR)	NR	NR	NR		
Hermida	2008	Torasemide (61)	5mg	Morning (NR)	6 wks	53.3 (10.8)	154.1/86.6	Grade 1-2 EH	PROBE trial
		Torasemide (60)	5mg	Bedtime (NR)	6 wks	49.7 (10.1)	153.1/88.2		
CCBs									
Hermida	2007a	Nifedipine (39)	30mg	Morning (NR)	8 wks	51.5 (11.1)	155.4/92.1	Grade 1-2 EH	RCT
		Nifedipine (41)	30mg	Bedtime (NR)	8 wks	52.6 (10.3)	157.3/92.8		
Hermida	2008a	Nifedipine (88)	30mg	Morning (NR)	8 wks	52.1 (11.2)	157.0/94.0	Untreated grade 1-2 EH	PROBE trial
		Nifedipine (92)	30mg	Bedtime (NR)	8 wks	52.8 (10.2)	158.0/93.0		
Hermida	2009c	Nifedipine (118)	30mg	Awaking (NR)	8 wks	53.5 (11.8)	159.1/94.8	Untreated grade 1-2 UEH	PROBE trial
		Nifedipine (120)	30mg	Bedtime (NR)	8 wks	53.1 (11.1)	160.8/93.2		
Nold	1998	Amlodipine (12)	5mg	Morning (08:00)	3 wks	46.9 (13.8) **	NA	Mild to moderate EH	Open, two-period, RCOT;
		Amlodipine (12)	5mg	Bedtime (20:00)					washout period: 1 week
BBs									

Neutel	2005	Propranolol (23)	120mg	Morning (08:00)	4 wks	54.1 (8.61)	151.7/100.4	Stage 1-2 EH	Multicenter, double-blind, double-dummy, randomized blind endpoint, crossover trial
		Propranolol (21)	120mg	Bedtime (22:00)	4 wks	52.6 (8.44)	151.4/99.5		
Acelajado	2012	Nebivolol (38)	5-10mg	Morning (NR)	3 wks	52.0 (12.0)**	152.4/92.8**	Mild to moderate EH	Single center, double-blind RCOT; washout period: 2 weeks
		Nebivolol (38)	5-10mg	Bedtime (NR)	3 wks				
Combination									
Hermida	2010	Valsartan/amlodipine (50)	160/5mg	Morning (NR)	12 wks	54.0 (12.3)	162.9/95.4	Untreated uncomplicated EH	PROBE trial
		Valsartan/amlodipine (52)	160/5mg	Bedtime (NR)	12 wks	59.7 (9.3)	161.0/92.3		
Asmar	2011	Valsartan/amlodipine (278)	160/5mg	Morning (06-10:00)	8 wks	56.0 (10.0)	144.0/86.0	Untreated EH	PROBE trial
		Valsartan/amlodipine (268)	160/5mg	Evening(18:00-22:00)	8 wks	56.0 (10.0)	144.0/86.0		
Kario	2016	Telmisartan/Amlodipine (41)	5/40mg	Morning(NR)	12 wks	NR	NR	HTN with paroxysmal AF†	Multicentered, PRO trial
		Telmisartan/Amlodipine (40)	5/40mg	Bedtime(NR)	12 wks	NR	NR		
Peng	2013	Telmisartan/Amlodipine (26)	5/80mg	Morning (6:00-08:00)	8 wks	58.3 (10.7)	158.1/93.3	> stage 2 EH	Single-blinded, randomized, parallel-controlled trial
		Telmisartan/Amlodipine (28)	5/80mg	Bedtime(19:00-21:00)	8 wks	57.1 (10.5)	157.2/95.4		
Hermida	2011	Valsartan/HCTZ (104)	160/12.5mg	Morning (NR)	12 wks	49.1 (10.7)	158.0/94.3	Untreated uncomplicated EH	PROBE trial
		Valsartan/HCTZ (100)	160/12.5mg	Bedtime (NR)	12 wks	50.4 (11.4)	156.7/92.4		
Huangfu	2015	Losartan/ Indapamide(20)	2.5/50mg	Morning (06-08:00)	12 wks	NR	NR	Stage 2-3 EH	Single-blinded, randomized, parallel-controlled trial
		Losartan/ Indapamide(21)	2.5/50mg	Bedtime (19-21:00)	12 wks	NR	NR		
Zeng	2011	Amlodipine/HCTZ (40)	5/25mg	Morning (08:00)	12 wks	66.9 (9.3)	158.5/92.4	Stage 1 to 2 EH	Multicenter, open-label, RCT (participants: blinded)
		Amlodipine/HCTZ (40)	5/25mg	Bedtime (22:00)	12 wks	68.5(10.0)	155.6/92.2		

*Data of patients who completed the trial in each study; ** The relevant data about all patients completing the trial; † Enrolled subjects were hypertensive individuals with paroxysmal AF;

ACEI=angiotensin converting enzyme inhibitor; N.=number; SD=standard deviation; O=office; wks=weeks; yrs=years; DBP=dilated blood pressure; RCOT=randomized crossover trial; PROBE=prospective, randomized, open-label, blinded endpoint; PRO=prospective, randomized, open-label; ARB=angiotensin II receptor blocker; EH=essential hypertension; UEH=uncomplicated essential hypertension; HTN=hypertension; AF=atrial fibrillation; CCBs=calcium channel blockers; BBs=beta-adrenergic receptor blockers; ABs=alpha-adrenergic receptor blockers; NR=not reported