Summary: In this meta-analysis we compare the efficacy and safety profiles of AZI-M/CT with OLM/HCTZ. This supplementary file includes detailed search strategy, data extracted from the included studies for outcomes, quality assessment of the included studies and funnel plots for efficacy outcomes and adverse events.

Supplemental Table 1: Detailed search strategy

PubMed	(Efficacy OR tolerability OR safety) AND (azilsartan OR ARB OR Angiotensin receptor blocker OR medoxomil AND (Chlorthalidone OR thiazides) AND (Olmesartan) AND (hydrochlorothiazide) AND (chronic kidney disease) OR (chronic renal disease) No filters applied	93
Google Scholar	(Efficacy OR tolerability OR safety) AND (azilsartan OR ARB OR Angiotensin receptor blocker OR medoxomil AND (Chlorthalidone OR thiazides) AND (Olmesartan) AND (hydrochlorothiazide) AND (chronic kidney disease) OR (chronic renal disease) No filters applied	10
ClinicalTrials.gov	(Efficacy OR tolerability OR safety) AND (azilsartan OR ARB OR Angiotensin receptor blocker OR medoxomil AND (Chlorthalidone OR thiazides) AND (Olmesartan) AND (hydrochlorothiazide) AND (chronic kidney disease) OR (chronic renal disease) No filters applied	15

Supplemental Table 2: Quality assessment of Randomized controlled trials by Cochrane's risk of bias tool

Article	Selection Bias		Performance Bias	Detection bias	Attrition bias	Reporting Bias	Other bias	Our evaluation
	Random Sequence Generation	**Allocation concealment**	**Blinding of participants and personnel**	**Blinding of outcome assessment**	**Incomplete outcome data**	**Selective Reporting**	**Anything else, ideally prespecified**	
Cushmann (2012) [5]	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk	Good quality
Neutel (2017) [11]	Low risk	High risk	High risk	High risk	Low risk	Low risk	Low risk	Poor quality
Cushmann (2018) [12]	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk	Good quality
Bakris (2018) [13]	Low risk	High risk	High risk	High risk	Low risk	Low risk	Low risk	Poor quality

Supplemental Table 3a: Primary outcomes data extracted from included studies

Study and year	Total no of patients		Any TEAE (n)		Serious adverse events (n)		Death (n)		Mean SBP mm of hg (SD)		Mean DBP mm of hg (SD)		Achievement of target Blood pressure (n)		Patients who were titrated to higher dose (n)	
	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ
Cushmann (2012) [5]	707	364	502 (71%)	219 (60.1%)	83 (11.7 %)	26 (7.14%)	-	-	121.65 (0.94)	122.5 (1.13)	68.55 (0.86)	71.2 (0.8)	446 (63%)	238 (65.38 %)	-	-
Neutel (2017) [11]	418	419	328 (78.4%)	320 (76.37 %)	79 (18.89 %)	43 (10.26 %)	2 (0.48%)	2 (0.477%)	125 (11.2)	129.6 (11.13)	77.3 (9.1)	80.1 (13.71)	-	-	-	-
Cushmann (2018) [12]	729	356	392 (53.7%)	171	12 (1.64 %)	6 (1.68% (	-	-	125.7 (1.31)	131.6 (1.28)	76.3 (1)	78.9 (1)	713 (97.8%)	353 (99.1%)	266 (36.48%)	184 (51.7%)
Bakris (2018) [13]	77	76	68 (88.3%)	58	8 (10.38 %)	9 (11.84 %)	0	1 (1.31%)	127 (17.88)	126 (17.17)	76 (9.6)	76 (9.25)	45 (58.4)	55 (72.3%)	-	

Abbreviations: AZI-M/CT: Azilsartan-medoxomil/Chlorthalidone, OLM/HCTZ: Olmesartan medoxomil/Hydrochlorothiazide, TEAE: treatment emergent adverse events, SBP: Systolic blood pressure, DBP: Diastolic blood pressure
N= number of patients, SD: standard deviation

Supplemental Table 3b: Adverse events

Study and year	Hypotension (n)		Dizziness (n)		Headache (n)		Diarrhea (n)		Fatigue (n)		Myocardial infraction (n)		Cardiac arrest (n)		Pharyngitis (n)	
	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ
Cushmann (2012) [5]	-	--	99 (14%)	29 (7.96%)	32 (4.52 %)	26 (7.14%)	-	-	47 (6.64%)	16 (4.39%)	-	-	-	-	-	-
Neutel (2017) [11]	-	-	68 (16.26 %)	53 (12.6%)	31 (7.41 %)	46 (10.97 %)	-	-	21 (5%)	17 (4.05%)	0	1 (0.238 %)	1 (0.239 %)	0	-	-
Cushmann (2018) [12]	7 (0.96 %)	1 (0.28 %)	49 (6.74%)	20 (5.61%)	28 (3.856 %)	18 (5.05%)	27 (3.71%)	5 (1.40%)	21 (2.89%)	5 (1.4%)	-	-	-	-	-	-
Bakris (2018) [13]	4 (5.19 %)	3 (3.94 %)	6 (7.8%)	5 (6.6%)	8 (10.4 %)	2 (2.63%)	1 (1.3%)	4 (5.26%)	3 (3.9%)	4 (5.26%)	-	-	-	-	0	4 (5.26%)

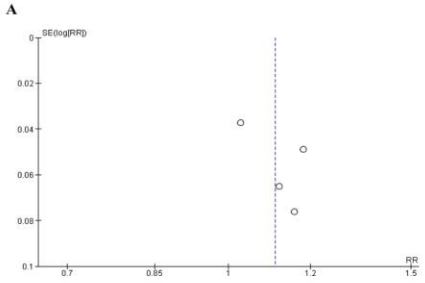
N= number of patients

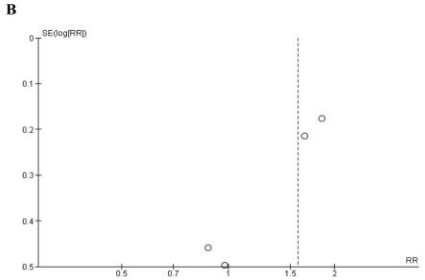
Supplemental table 3c: Laboratory parameters

Study and year	Creatinine: 2 consecutive elevations (1.5 baseline and >ULN) (n)		Cr increased (n)		Mean fasting glucose (SD)		fasting glucose Shift from <7.0 to ≥7.0 mmol/L, (n)		Shift from ≥7.0 to <7.0 mmol/L, (n)		Hyperkalemia (n)		Hypokalemia (n)		hyperuricemia (n)		Sodium from normal -low, (n)	
	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ	AZI-M/CT	OLM/HCTZ
Cushmann (2012) [5]	20 (2.82%)	10 (2.747%)	144 (20.4%)	34 (9.34%)	-	-	57 (8.06%)	26 (7.14%)	30 (4.24%)	15 (4.12%)	-	-	16 (2.26%)	5 (1.37%)	28 (4%)	8 (2.2%)	119 (16.8%)	26 (7.14%)
Neutel (2017) [11]	21 (5.02%)	5 (1.19%)	90 (21.53%)	36 (8.6%)	100.2 (1.19)	1000.24 (1.22)	29 (6.93%)	26 (6.2%)	23 (5.5%)	11 (2.6%)	7 (1.76%)	2 (0.47%)	3 (0.71%)	2 (0.477%)	13 (3.11%)	5 (1.19%)	95 (22.7%)	60 (14.3%)
Cushmann (2018) [12]	5 (0.68%)	4 (1.12%)	81 (11.14%)	25 (7.02%)	99.25 (13.65%)	99.8 (28.03%)	48 (6.79%)	29 (8.146%)	-	-	-	-	13 (1.79%)	5 (1.4%)	11 (1.51%)	1 (0.28%)	101 (14.28%)	22 (6.18%)
Bakris (2018) [13]	-	-	34 (44.15%)	29 (38.15%)	-	-	-	-	-	-	-	-	4 (5.2%)	3 (3.95%)	-	-	3 (3.9%)	4 (5.26%)

N= number of patients, SD= Standard Deviation

Supplemental Figure 1: Funnel plots of efficacy outcomes and adverse events





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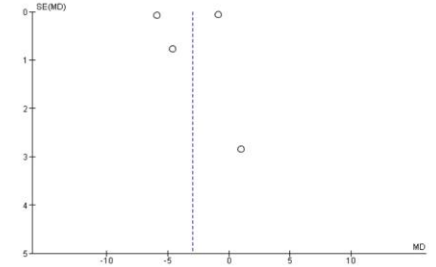

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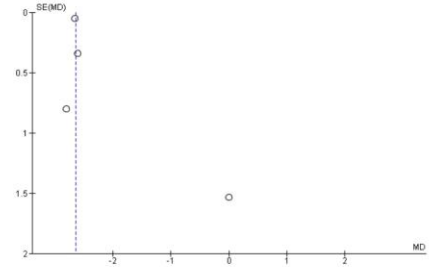

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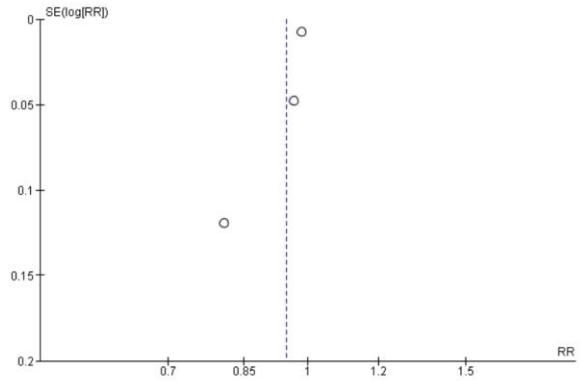

(A) Any TEAE, (B) Serious Adverse Event, (C) Mean SBP, (D) Mean DBP, (E) Achievement of target blood pressure