"A ONE YEAR CROSS SECTIONAL STUDY ON ATTAINMENT OF TARGET BLOOD PRESSURE IN HYPERTENSIVES AT KLE DR. PRABHAKAR KORE HOSPITAL, BELAGAVI"

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A ONE YEAR CROSS SECTIONAL STUDY ON ATTAINMENT OF TARGET BLOOD PRESSURE IN HYPERTENSIVES AT KLE DR. PRABHAKAR KORE HOSPITAL, BELAGAVI

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With reference to the above, we wish to inform you that your proposed research project titled **"A ONE YEAR CROSS SECTIONAL STUDY ON ATTAINMENT OF TARGET BLOOD PRESSURE IN HYPERTENSIVES AT KLE HOSPITAL BELAGAVI."** is ethical and justifiable. The proposed research project has been cleared by the JNMC Institutional Ethics Committee.

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ABBREVIATION

NFHS	National Family Health Survey
BP	Blood pressure
SBP	Systolic blood pressure
DBP	Diastolic blood pressure
CKD	Chronic kidney disease
CVD	Cardiovascular disease
ASCVD	Atherosclerotic cardiovascular disease
DM	Diabetes mellitus
IR	Insulin Resistance
LDL	Low density lipoprotein
HDL	High density lipoprotein
CRP	C-reactive protein
ACC	American College of Cardiology
AHA	American Heart Association
ESC	European Society of Cardiology
ESH	European Society of Hypertension
TOD	Target-organ damage
HTN	Hypertension
CVS	Cardiovascular system
ICP	Intracranial pressure

JNC	Joint National Committee
CCB	Calcium chain blockers
MI	Myocardial Infarction
ACE	Angiotensin-converting enzyme
ARB	Angiotensin receptor blocker
GRF	Glomerular filtration rate
MSPSS	Multidimensional scale of perceived social support
IQR	Interquartile range
IPAQ	International physical activity questionnaire

ABSTRACT

A ONE YEAR CROSS SECTIONAL STUDY ON ATTAINMENT OF TARGET BLOOD PRESSURE IN HYPERTENSIVES AT KLE DR. PRABHAKAR KORE HOSPITAL, BELAGAVI

Introduction

Currently 1.3 billion people have hypertension globally. Almost half of the population with hypertension is not aware of their condition. In India, the prevalence of hypertension among men and women were reported as 24% and 21% respectively from the National Family Health Survey - 5 (NFHS-5) which was conducted in the year 2019-2020.

The study aimed to estimate the proportion of patients with hypertension attaining target blood pressure. This study also aimed to compare the profile of two groups of patients who have and have not attained target blood pressure in aspects of patient factor, socio-economic status and education in order to prevent hypertensive retinopathy and stroke.

Methods

An observational cross-sectional study was conducted among patients admitted to a tertiary care centre in Karnataka. The study period was between 1st January 2023 to 31st December 2023. The individuals who satisfy the inclusion and exclusion criteria were included in the study.

Results

A total of 400 study participants were included in this study. The mean age of the study participants was 58.97 ± 12.83 years. Majority of the study participants were in the age group of 31 to 60 years (n=212, 53%). Most of the study participants were

male (n=259, 64.8%). Among the study participants, 44.5% (n=178) had smoking habit and 33.25% (n=133) had alcohol habits. Adequate amount of physical activity was followed by only 26.5% (n=106) of the study participants only. Single, double and triple drugs for treatment of hypertension was taken by 55%, 30.75% and 14.25% respectively. Among the study participants, knowledge and adherence questions were asked. Among 400 individuals, 77% (n=308) were aware of the adverse effects of increased blood pressure. Among the study participants, 70.25% (n=281) were taking their anti-hypertensive medications regularly. Among the study participants, 55.75% (n=223) of the study participants were aware of the benefits of taking anti-hypertensives and 62.5% (n=250) were aware of the adverse effects of them. Majority of their physicians (88.5%, n=354) explained the benefits of taking anti-hypertensives.

Conclusion

In our study, only 21.5% achieved target blood pressure. The mean age of the study participants was 58.97 ± 12.83 years. Study variables significantly associated with control of hypertension were education, socio-economic status, heart rate, treatment of hypertension, newly diagnosed hypertension, total cholesterol, urea levels and urine protein in our study.

INDEX

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Hypertension is characterized as increased blood pressure in the systemic arteries in a persistent way. Hypertension is also known as systemic arterial hypertension. Hypertension is calculated as systolic blood pressure divided by the DBP (diastolic blood pressure). Systolic blood pressure (SBP) is the pressure that exerts on the arterial walls when heart contracts and the diastolic blood pressure is the pressure when the heart relaxes (1). Majority of the people with hypertension has primary hypertension or essential hypertension. The etiology of this primary or essential hypertension is usually multifactorial gene-environment cause. The most prevalent preventable risk factor for chronic kidney disease (CKD), cognitive impairment, myocardial infarction, heart failure, stroke, and cardiovascular disease (CVD) is hypertension. It also serves as the primary cause of all-cause death and disability globally. Gradient and continuous, the association between increased BP and the risk of CVD begins as low as 115/75 mmHg, well within the range generally accepted as normotensive (2).

Reducing the burden of disease and increasing life expectancy among people worldwide depend on the effective prevention and treatment of hypertension. Predicted atherosclerotic CVD (ASCVD) risk should be taken into account while treating hypertension, as individuals with high CVD risk benefit most from blood pressure reducing therapy (3).

Currently 1.3 billion people have hypertension globally. Almost half of the population with hypertension is not aware of their condition. In the year 1990, the people with disease were 650 million. Whereas, in 2019, the disease affected 1.3

billion people which is double the population (4). Prevalence of hypertension among men and women were reported as 24% and 21% respectively from the National Family Health Survey - 5 (NFHS-5) which was conducted in the year 2019-2020 in India (5).

AIM AND OBJECTIVES

This study aimed to estimate the proportion of patients with hypertension attaining target blood pressure.

This study also aimed to compare the profile of two groups of patients who have and have not attained target blood pressure in aspects of patient factor, socio-economic status and education in order to prevent hypertensive retinopathy and stroke.

REVIEW OF LITERATURE

Hypertension is the most important risk factor for morbidity and mortality in India (6). There are different stages of hypertension according to the progression of disease. This can be used to assess the cardiovascular risk in the individuals. Cardiovascular risk assessment helps in predicting the future likelihood of occurrence of cardiovascular events like myocardial infarction and stroke.

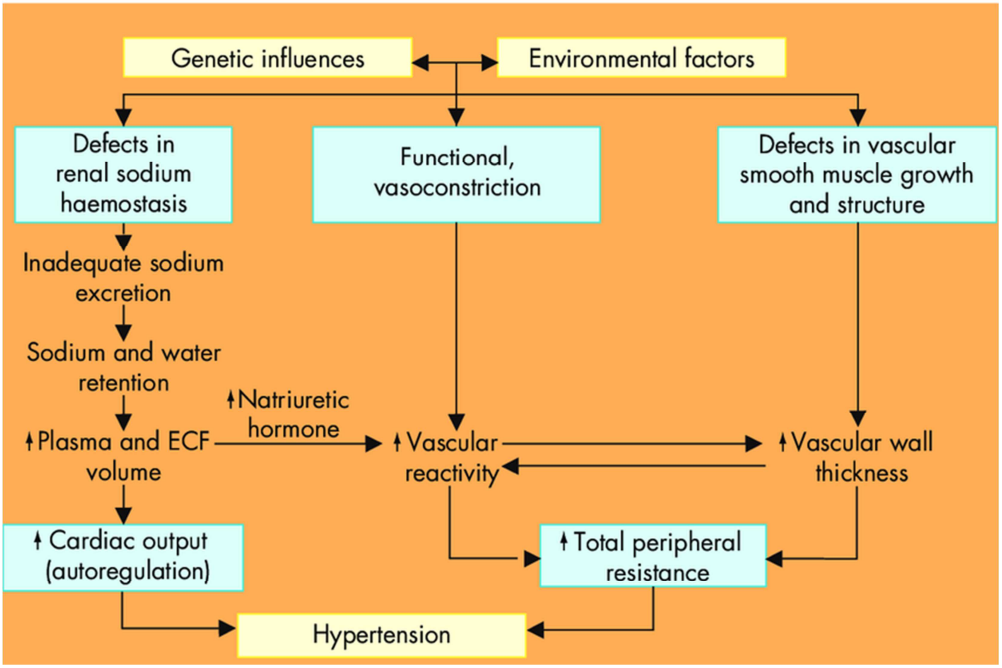
The progression of hypertension in an order of early to advanced was represented as Stage 1, Stage 2 and Stage 3 hypertension. It is characterized by the cumulative presence or absence of markers of hypertensive cardiovascular disease and evidence of target organ damage regardless of the blood pressure levels. Blood pressure is considered as a biomarker for hypertension (7).

Pathophysiology of hypertension

Normal blood pressure is linked to the lowest risk of cardiovascular disease, but people in the "high-normal" range are at danger of hypertension unless they change their diet to include more calcium, magnesium, and potassium as well as less fat. A shift in the pressure–natriuresis relationship and a rise in vascular tone are brought on by the dysfunction of these hormones as well as changes in the sympathetic nervous system and the renin–angiotensin–aldosterone system. Retention of sodium causes water to be retained as well, increasing blood volume and raising blood pressure. Tissue ischaemia and renal vasoconstriction accompany the subtle renal damage. In addition to contributing to renal inflammation, tissue ischaemia also affects the kidneys' internal structure—specifically, the glomeruli and tubules—which in turn encourages the kidneys to retain more sodium. Increases in resting blood pressure eventually result from this vicious cycle, which also causes hypertension.

One aspect of the pathophysiology of hypertension is inflammation. Vasoactive inflammatory cytokines are released as a result of endothelial damage and tissue ischaemia. While several of these cytokines—like histamine—have vasodilatory effects during acute inflammatory damage, chronic inflammation plays a role in smooth muscle contraction and vascular remodelling. Reduced release of vasodilators, like nitric oxide, and increased release of vasoconstrictors, like endothelin, are further characteristics of endothelial damage and dysfunction in primary hypertension. Finally, those without clinical DM, IR is frequently associated with hypertension. Thirteen Reduced endothelial release of nitric oxide and other vasodilators is linked to insulin resistance. It also makes the kidneys retain water and salt, which impairs renal function. The renin-angiotensin-aldosterone system and the sympathetic nervous system hyperactivity are linked to insulin resistance (8).

Figure 1: Pathophysiology of primary hypertension



Risk factors for development of hypertension

Risk factors of hypertension is classified as Modifiable and non-modifiable risk factors of hypertension. Unhealthy diet including excessive salt consumption, diet high in saturated and trans-fat, and low intake of fruits and vegetables, physical inactivity, consumption of tobacco and alcohol and overweight or obese are considered as modifiable risk factors.

Non-modifiable risk factors are age (above 65 years), family history of hypertension, co-existing diseases like diabetes or kidney disease (Table 1) (4).

Table 1: Modifiable and non-modifiable risk factors of hypertension

Modifiable risk factors	Non-modifiable risk factors
1. Diet Excessive salt intake High in saturated fat and trans fat Low intake of fruits and vegetables 2. Physical activity 3. Consumption of tobacco and alcohol 4. Overweight or obesity	1. Age above 65 years 2. Family history of hypertension 3. Co-morbidities like diabetes or kidney disease

Cardiovascular risk factors and classification of hypertension

The below table describes the risk factors associated in each stage of hypertension (Table 2).

Table 2: Cardiovascular risk factors and hypertension

Stages	Cardiovascular risk factors
Normal	None or few
Stage 1	Several risk factors present
Stage 2	Many risk factors present
Stage 3	Many risk factors present

Cardiovascular risk factors are:

1. Increased age
2. Elevated blood pressure
3. High heart rate
4. Overweight or obese
5. Central obesity (increased abdominal circumference, increased abdominal adiposity)
6. Dyslipidemia (elevated LDL or non-HDL cholesterol, low HDL cholesterol, and elevated triglycerides)
7. Elevated blood glucose, insulin resistance and/ or diabetes
8. Chronic kidney disease
9. Smoking
10. Family history of premature CVD (Men less than 50 years, women less than 60 years)
11. Sedentary lifestyle
12. Psychosocial stressors
13. Elevated high sensitivity-CRP (C-reactive protein)

These markers are either absent or few of them are present in normal individuals. In stage 1 hypertension, several risk factors may be present. In stage 2 and stage 3 several risk factors mentioned above will be prevalent (7).

Blood pressure and hypertension

There are few guidelines worldwide for diagnosis and staging of hypertension. The first, Joint National Committee (Eighth) classification as below Table 3.

Table 3: JNC8 Hypertension classification

Blood pressure	Systolic blood pressure	Diastolic blood pressure
Normal	<120	And <80
Prehypertension	120-139	Or 80-90
Stage 1 hypertension	140-159	Or 90-99
Stage 2 hypertension	≥160	Or ≥100

The normal blood pressure according to JNC8 is less than 120 and 80 of systolic and diastolic blood pressure. Prehypertension is determined as either systolic blood pressure of 120-139 or diastolic blood pressure of 80-90. Stage 1 hypertension is considered as 140-159 of systolic blood pressure or 90-99 of diastolic blood pressure. Stage 2 hypertension is considered as either more than 160 of systolic blood pressure or more than 100 of diastolic blood pressure (9).

The ACC/ AHA guidelines for classification of hypertension is mentioned below in Table 4.

Table 4: ACC/ AHA hypertension classification

Blood pressure	Systolic blood pressure	Diastolic blood pressure
Normal	<120	And <80
Elevated	120-129	Or <80
Stage 1 hypertension	130-139	Or 80-89
Stage 2 hypertension	≥140	Or ≥90

ACC (American College of Cardiology)/ AHA (American Heart Association) recommendations for normal blood pressure is less than 120 systolic and less than 80 diastolic blood pressure. A person has elevated blood pressure when the systolic is between 120 and 129 or the diastolic above 80. Stage 1 hypertension is considered as 130 to 139 systolic blood pressure or 80 to 89 DBP. Stage 2 hypertension is considered as SBP is 140 or above and DBP 90 or above (10).

The ESC (European Society of Cardiology)/ ESH (European Society of Hypertension) guidelines for classification of hypertension is mentioned below in Table 5.

Table 5: Classification of blood pressure based on ESC/ ESH guidelines

Blood pressure	Systolic blood pressure	Diastolic blood pressure
Optimal	<120	And <80
Normal	120-129	And 80-84
Elevated	130-139	Or 85-89
Grade 1 hypertension	140-159	Or 90-99
Grade 2 hypertension	160-179	Or 100-109
Grade 3 hypertension	≥180	Or ≥110

In ESC/ ESH guidelines, optimal blood pressure is considered as SBP of less than 120 and diastolic blood pressure of less than 80. Normal blood pressure is 120-129 SBP and 80-84 DBP. Elevated or prehypertensive is considered as 130-139 SBP or 85-89 DBP. Grade 1 hypertension is 140 to 159 SBP or 90-99 DBP. Grade 2 hypertension is 160 to 179 SBP or 100 to 109 of DBP. Grade 3 hypertension is considered as SBP of 180 or above Or DBP of 110 or above (11).

Complications of hypertension

Complications of hypertension includes ventricular hypertrophy, heart failure, accelerated atherosclerosis, cerebrovascular disease, stroke, renal failure, retinopathy, dissecting aneurysm, retinal hemorrhages, hypertensive encephalopathy (12, 13).

Hypertensive retinopathy

Retinal, cardiovascular, renal, and cerebrovascular systems are among the systems that are impacted by poorly managed hypertension. Target-organ damage (TOD) is the term for the harm done to these systems. Three forms of visual injury are brought on by hypertension: optic neuropathy, retinopathy, and choroidopathy (14). Since retinal vessels are the only blood vessels visible during a regular examination,

screening for hypertensive retinopathy is primarily done for this reason. Hypertensive retinopathy and choroidopathy are two obvious symptoms of persistently increased HTN, and they are a reflection of vascular alterations taking place in other systems. Together, general practitioners and ophthalmologists can guarantee that patients with hypertension are effectively screened and treated promptly to lower the risk of both ocular and systemic morbidity and death (15).

The severity of the condition determines how hypertensive retinopathy is managed:

Mild:

Treatment for mild hypertensive retinopathy involves regular blood pressure monitoring.

Moderate:

A doctor's referral is necessary for moderate hypertensive retinopathy in order to rule out other possible causes, like DM, and check in the CVS. Normal care, such as blood pressure monitoring and control, is essential.

Severe:

Because severe hypertensive retinopathy has the highest fatality rate, it needs to be treated and sent to a specialist immediately. The kidney, heart, and brain are among the other systems that need to be watched for indications of TOD (14).

Only rarely may persistent hypertensive retinopathy result in noticeable vision loss. Treatment of hypertension can stop the alterations in the retina. Arteriolar constriction and AV alterations nevertheless continue. The death rate for untreated

malignant hypertension is as high as 50% after two months of diagnosis and over 90% after a year. Either secondary optic atrophy following protracted papilloedema or retinal pigmentary alterations following exudative retinal detachment induce vision loss in hypertensive retinopathy.

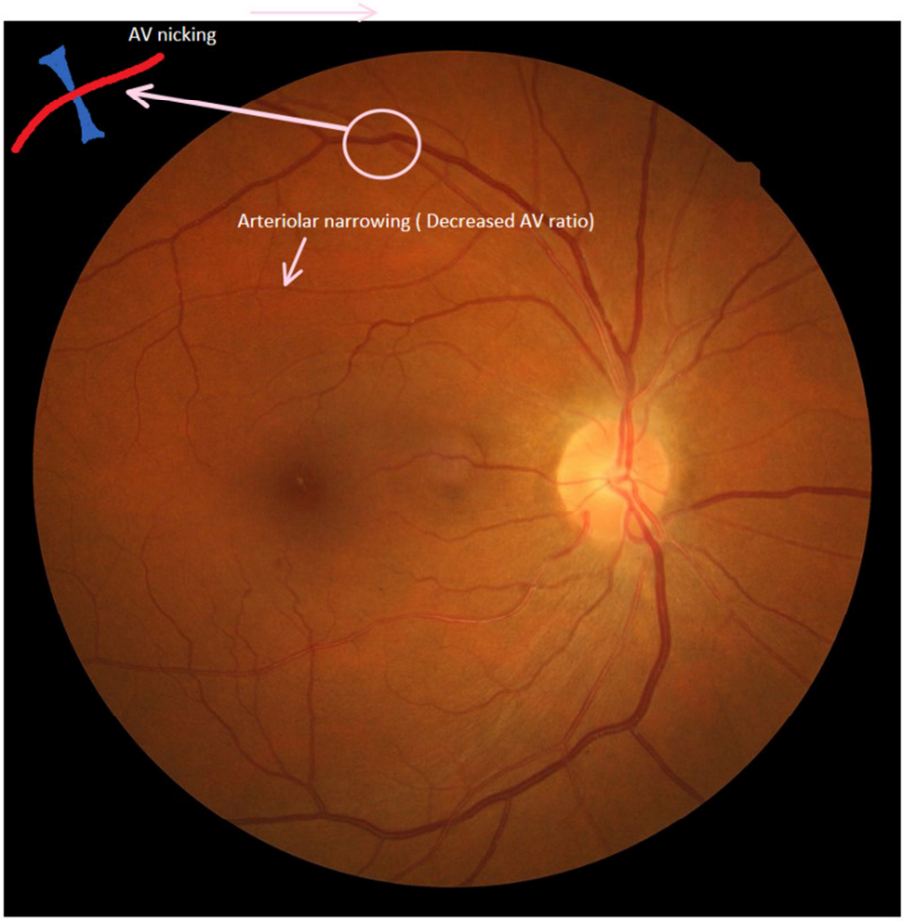


Figure 2: Hypertensive retinopathy

Hypertensive stroke

Depending on the stroke subtype and the stage at which the illness manifests, there are differences in the cause of stroke and its hemodynamic effects. As a result, controlling blood pressure (BP) in stroke patients is difficult and necessitates a clear diagnosis as well as the establishment of treatment objectives (16) (Figure 3).

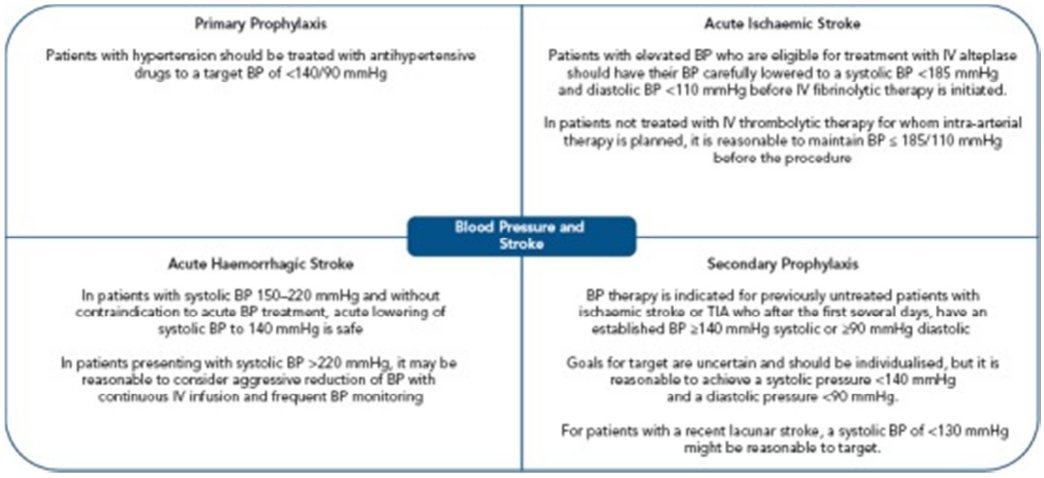


Figure 3: Hypertension and stroke

When an intracranial or cervical artery is blocked, a portion of the brain is deprived of blood and oxygen, which leads to acute ischemic strokes. A central ischemic lesion forms in the brain a few minutes after an artery occlusion; however, if recanalization therapies are used, a greater area at risk of hypoperfusion may be salvageable. Acute blood pressure drops can jeopardise perfusion in vital locations, which is why the salvageable area, also known as the ischemic penumbra, is mostly dependent on collateral blood flow (17).

Early antihypertensive medication commencement or restart is recommended only in patients receiving recombinant tissue-type plasminogen activator treatment or in cases of severe hypertension during the immediate phase of an ischemic stroke. Antihypertensive medication is advised for patients who qualify for IV thrombolysis so long as their systolic and diastolic blood pressures are ≤185 mmHg and ≤110 mmHg, respectively, before to therapy and for the first 24 hours following treatment (18). Although there were no long-term gains in independence or mortality from a recently published clinical trial assessing stricter blood pressure objectives following

IV thrombolysis for acute ischemic stroke, lower blood pressure levels were linked to a lower risk of hemorrhagic transformation (19).

Reduction of acute blood pressure is unclear among individuals with acute ischemic stroke in which the thrombolysis was not yet developed. Treatment for these people should only be started if the patient has another obvious indication or if the SBP or DBP is greater than 220 mmHg or 120 mmHg. Even lowering blood pressure quickly to less than hypertensive levels can have negative effects. Therefore, within the first 24 hours following the beginning of stroke, BP should be carefully decreased by approximately 15% if indicated. When BP is lower than 180/105 mmHg within the three days following an acute ischemic stroke, patients do not appear to benefit from starting or continuing to use blood pressure-lowering medication. After an acute ischemic stroke, stable patients who maintain hypertension (≥140/90 mmHg) for longer than three days may benefit from starting or restarting blood pressure-lowering medication. For stable hypertension individuals, it is reasonable to resume blood pressure control after the first twenty-four hours (18).

After ischemic stroke, spontaneous, non-traumatic intracerebral haemorrhage is next reason for development of stroke. Frequent reasons include drug abuse, vascular abnormalities, amyloid angiopathy, hypertension, and bleeding diatheses (20). Another variety of hemorrhagic stroke is subarachnoid haemorrhage. The two main causes of subarachnoid haemorrhage are bleeding from vascular abnormalities located close to the pial surface and rupture of arterial aneurysms located at the base of brain (21).

In a major randomised clinical trial, intensive BP lowering (<140 mmHg) was safe and related with a little better functional recovery in stroke survivors; nevertheless, it did not clearly improve clinical prognosis in these patients. Additionally, there was a positive trend towards a decline in the traditional clinical end goal of death and significant impairment. In a different clinical trial utilising intravenous nicardipine, however, more severe BP lowering (<120 mmHg) was linked to more renal side events in addition to not demonstrating any therapeutic advantages (22). According to American Heart Association guidelines, it is safe and beneficial to drop a patient's SBP to 140 mmHg immediately after experiencing an intracerebral haemorrhage if they do not have a contraindication to receiving acute blood pressure medication. This can improve the patient's functional prognosis. Another crucial factor to take into account while treating patients who have experienced intracerebral bleeding is intracranial pressure. CPNs should be kept between 61 and 80 mmHg if the systolic blood pressure is greater than 180 mmHg and there is evidence or suspicion of excessive ICP. A slight drop in blood pressure (160/90 mmHg) is advised if there is no indication or reason to suspect elevated intracerebral pressure. It is probably safe to abruptly drop blood pressure to 140 mmHg if it is 150–200 mmHg (20).

Treatment for hypertension

List of antihypertensive drugs are listed below in Table 6.

Table 6: Antihypertensive drugs

Class of antihypertensive drugs	
Diuretics	Thiazides (Hydrochlorothiazide, Chlorthalidone, Indapamide). High ceiling (Furosemide) Potassium sparing (Spironolactone, Amiloride)
ACE inhibitors	Captopril, Enalapril, Lisinopril, Ramipril, Perindopril
ARBs	Losartan, Telmisartan, Valsartan, Candesartan, Irbesartan
Calcium channel blockers	Amlodipine, Cilnidipine, Diltiazem, Verapamil, Nifedipine
Beta adrenergic blockers	Propranolol, Metoprolol, Atenolol
Alpha adrenergic blockers	Prazosin, Phenoxybenzamine, Phentolamine
Alpha + Beta blockers	Labetalol, Carvedilol
Central sympatholytic	Clonidine, Methyl dopa
Vasodilators	Arteriolar (Hydralazine, Minoxidil, Diazoxide) Arteriolar + Venous (Sodium nitroprusside)
Direct renin inhibitor	Aliskerin

Thiazide:

Eighth Joint National Committee recommended thiazide to be given as preferred medicine for hypertension. It can be given as monotherapy or as one of the drugs in multitherapy for everyone regardless of age, ethnicity. Only contraindication was to avoid in CKD patients, in which case an angiotensin-converting enzyme inhibitor or angiotensin II receptor blocker is indicated. Lipid-Lowering and Antihypertensive Treatment Trial to Prevent Heart Attack Unless there are contraindications, the ALLHAT research advised starting treatment for hypertension with thiazide diuretics.

Calcium chain blockers (CCB)

Calcium chain blockers were advised by Eighth Joint National Committee guidelines to be given as preferred medicine for hypertension. It can be given as monotherapy or as one of the drugs in multitherapy for everyone regardless of age, ethnicity, patients with chronic kidney disease, on the other hand, should use ACE inhibitors or ARBs as recommended as the first-line treatment. Like thiazide diuretics, CCBs have been demonstrated to reduce all cardiovascular outcomes except heart failure. When patients are unable to tolerate thiazides, they might be utilised as the most effective substitute. Dihydropyridines and non-dihydropyridines are the two categories of CCBs.

Dihydropyridines are more frequently used to treat hypertension since they are stronger vasodilators. Their impact on cardiac conduction and contractility is minimal. They are therefore more frequently utilised in the treatment of HTN. In this group, amlodipine and nifedipine are the most commonly utilised drugs. Non-

dihydropyridines have a greater impact on cardiac conduction and contractility but are less effective as vasodilators. They are used less to treat HTN and more as antiarrhythmic drugs.

ACE Inhibitors and ARBs

The preferred antihypertensives for people with heart failure and chronic renal disease are ACE inhibitors and ARBs. For those with chronic renal disease who exhibit proteinuria, they are recommended as the initial line of treatment. With first and second drugs, these two kinds of antihypertensive drugs are listed in JNC8 guidelines as the first-line treatment for HTN in non-Black individuals. They have been shown to have a cardioprotective impact in people at high risk of cardiovascular disease, independent of their antihypertensive action. Both classes are advised as first-line treatments for individuals with left ventricular failure and either ST-elevation MI or non-ST elevation MI combined with diabetes, systolic dysfunction, or anterior infarct. They also have comparable efficacies and treatment indications. When it comes to lowering blood pressure, preventing stroke, and preventing heart failure, thiazide is superior to ACE inhibitors; CCBs are superior to ACE inhibitors in these areas.

Beta-blockers

It is not recommended to use beta-blockers as the sole treatment for hypertension unless there is a clear sign of myocardial infarction and heart failure. When administered in younger individuals, beta-blockers are linked to lower cardiovascular morbidity and mortality; however, in older patients, they are less protective and have been linked to an increased risk of strokes (23).

A study conducted in Latvia, Europe, was evaluated the patients who were treated for hypertension on whether they achieved adequacy of blood pressure control. This study included 455 individuals between age 18 to 80 years with history of hypertension of at least 1 year duration. The target blood pressure for this study participants were less than 140/ 90 mm Hg with low or moderate cardiovascular risk and less than 135/85 to 125/75 mm Hg for high-risk individuals. Among the study participants, almost half of them (46.2%) had attained the targeted blood pressure values. Individuals in the low and moderate risk group were higher in proportion in achieving the target blood pressure when compared to high-risk group (61.7% vs 34.4%, $p<0.0001$. In this study, majority of the individuals were given combination of two (26.2%) or three (31.6%) anti-hypertensive drugs. Overall conclusion was in the sample of treated hypertension patients, the rate of effective blood pressure management was less than 50%, and it was considerably lower (34.4%) in patients with high or very high increased cardiovascular risk (24).

A retrospective cohort study conducted in Turkey included 437 individuals with hypertension diagnosed during the study. The study aimed to estimate the proportion of study participants diagnosed as hypertensive on achievement of target blood pressure. The study also aimed to determine the factors responsible for not achieving the target blood pressure among the study participants. The follow-up data of 63.1% of individuals were available and collected. In the baseline visit, 18.1% and in the follow-up visit 48.6% of the individuals achieved target blood pressure (according to JNC8 guidelines). Diabetes mellitus and baseline systolic blood pressure were positively impacted in achieving systolic blood pressure. Age, addition of more anti-hypertensive medications impacted negatively on the systolic blood pressure target. Diabetes mellitus, baseline diastolic blood pressure, duration of

hypertension was positively associated with diastolic blood pressure improvement whereas GFR values and additional anti-hypertensive drugs negatively impacted the diastolic blood pressure target. Study concluded only 50% of patients had attained the hypertension objectives, despite significant improvement in meeting BP targets. Patients with hypertension should get both comprehensive management techniques and appropriate pharmaceutical treatments (25).

A cross-sectional study conducted in Ethiopia during 2021 aimed to explore the determinants of blood pressure control status of individuals with history of hypertension. The study was aimed to conduct during the COVID-19 pandemic period. The study included individuals diagnosed with hypertension at least 3 months of treatment and included individuals above 18 years of age. A total of 360 individuals were included in the study. Multidimensional scale of perceived social support (MSPSS), a 12-item check-list was also administered to the patients to understand the perceived social support. Prevalence of uncontrolled hypertension among the study participants was 55.8%. Poor medication adherence, male gender, secondary education, and low social support were the determinants of uncontrolled blood pressure among the study participants (26).

Another cross-sectional study conducted in Japan aimed to determine the rate of controlled blood pressure according to Japanese hypertension management guidelines and the factors associated in achieving the same. The study was conducted between 2012 and 2015. The residents, the study participants were grouped into 6 groups. First group includes young, middle-aged, and early-phase elderly patients (G1). Second group includes patients with cerebrovascular disease (G2). Third group includes patients with cardiovascular diseases (G3). Fourth group includes individuals

with chronic kidney disease with proteinuria (G4). Fifth group includes individuals with diabetes (G5). Sixth group includes individuals with chronic kidney disease without proteinuria (G6). Target blood pressure was achieved in 52.6%, 84.3%, 50.6%, 45.6%, 48.7% and 75% in G1, G2, G3, G4, G5 and G6 respectively. Body mass index and intake of anti-lipidemic medication were associated factors with uncontrolled blood pressure (27).

A study conducted in India to examine the hypertension care continuum among 1.7 million individuals between 18 to 98 years. The nationally representative data from the National Family Health Survey (NFHS) was conducted in 2 phases; one in 2019-2020 and another in 2020-2021. From the study, 28.1% had hypertension, of which 36.9% had already diagnosed with the disease. among the individuals with known hypertension, 44.7% were taking medication for it. Among the individuals who were under treatment, 52.5% had their hypertension under control (28).

A cross-sectional study from South India aimed to evaluate the prescription pattern for hypertension and factors affecting controlled blood pressure. The study included 650 individuals with known hypertension and are on treatment. Among 650 individuals, 39.54% achieved target blood pressure levels. Age, occupational status, monthly family income, locality, physical activity, diet was significantly associated in achieving target blood pressure. Among individuals who achieved target blood pressure, 37.35% were on monotherapy and 48.25% were on multiple drug therapy (29).

METHODOLOGY

An observational cross-sectional study was conducted among patients visiting the Department of General Medicine (outpatient department) and admitted to the medical ward of KLES Dr Prabhakar Kore Hospital and Medical Research Centre, Belagavi. The study period was between 1st January 2023 to 31st December 2023. The individuals who satisfy the inclusion and exclusion criteria were included in the study.

Inclusion criteria

- Patients age 18 or above
- History of known hypertension
- Duration of hypertension minimum 3 months
- Provide consent to participate in the study

Exclusion criteria

- Critically ill and mentally unstable individuals
- Patients with chronic kidney disease

Patients who were attending the Outpatient Department and Inpatient ward of Department of General Medicine of KLES Dr Prabhakar Kore Hospital and Medical Research Centre, Belagavi between the period of January 2023 to December 2023 were checked for the inclusion and exclusion criteria of our study. If the patient satisfied the inclusion and exclusion criteria, the individual was considered as eligible to participate in the study. Eligible participants who provided informed consent were included in the study. Blood pressure of each individual was recorded. Steps followed while measuring the blood pressure were as below:

1. The study participant was asked to sit, relax and stay quiet for 5 minutes.
2. Had the patient bladder empty, and checked for intake of caffeine, exercise and smoking in the past 30 minutes.
3. Removed the clothing from the arm.
4. Used a properly validated and calibrated blood pressure measurement device.
5. Supported patient's arm and position cuff on bare arm at the level of right atrium.
6. Used the correct cuff size.
7. For first record, recorded BP in both the arms, and used the one with higher reading.
8. Separate similar readings after 1 to 2 minutes.
9. Recorded systolic and diastolic blood pressure.
10. Used an average of 2 readings obtained on 2 occasions to estimate the individual's BP.
11. Recorded the systolic and diastolic blood pressure.

The blood pressure, personal details, and other study variables were recorded from the patient and the previous records as required in the pre-designed study proforma.

The individuals were categorized based on the JNC8 guidelines. The patients who attained the target blood pressure and those who didn't achieve the target blood pressure were compared for socio-economic and education.

Sample size calculation

The sample size formula used to calculate the sample size of our current study was:

Sample size formula = $\frac{Z^2(pq)}{d^2}$

Where , Z^2 - standard normal variant at a 95%

degree of confidence = 1.96

p - Expected proportion from population prevalence

q = 100-p

d - margin of error = 5%.

Sample size n = 384 should be taken.

Hence, the sample size is 384.

Statistical analysis

Data was collected and entered in the Excel sheet. IBM SPSS Version 25 was used to analyse the data. The continuous variables were reported as mean and standard deviation. The categorical variables were reported as number and percentages. Multiple logistic regression was carried out. Chi-square was done to see the association. ANOVA was carried out to see the significant difference.

RESULTS

A total of 400 study participants were included in this study.

Age and Gender distribution

The mean age of the study participants was 58.97 ± 12.83 years. The age distribution is tabulated as Table 7 (and Figure 4). Majority of the study participants were in the age group of 31 to 60 years (n=212, 53%).

Table 7: Distribution of age among study participants

Age category	Number (n=400)	Percentage
18-30 Years	7	1.7%
31-60 Years	212	53%
Above 60 Years	181	45.3%

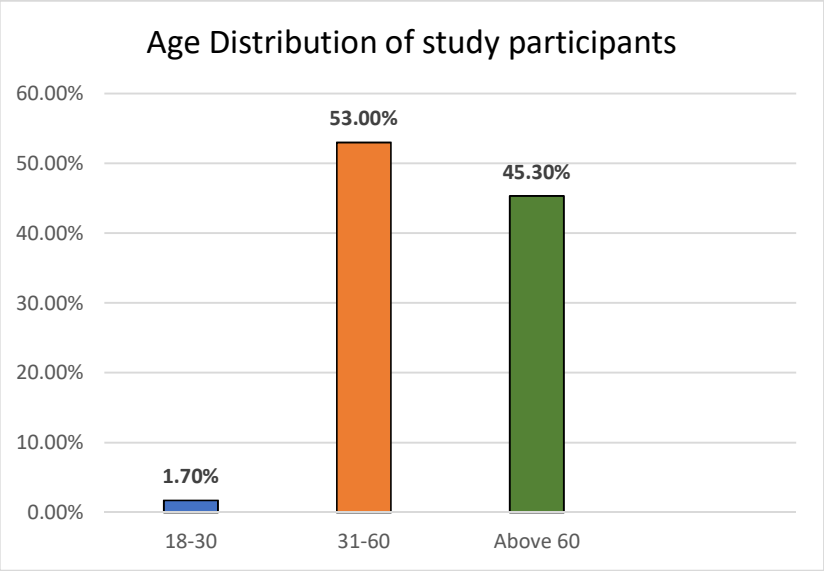


Figure 4: Age distribution of study participants

Majority of the study participants were male (n=259, 64.8%) (Table 8) (Figure 5).

Table 8: Distribution of gender among study participants

Gender	Number (n=400)	Percentage
Male	259	64.8%
Female	141	35.2%

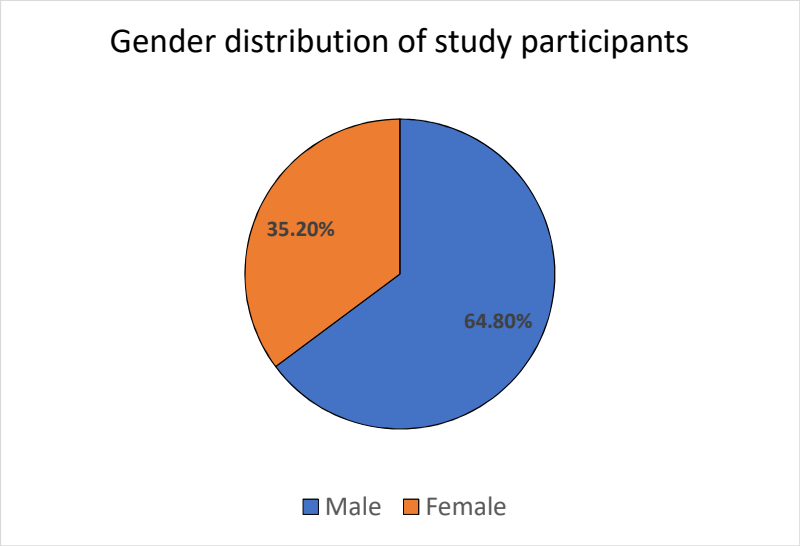


Figure 5: Gender distribution of study participants

Body Mass Index

The mean BMI of the study participants was 23.52 ± 2.38. The majority of the study participants were categorized as overweight (BMI of 23 to 24.9) based on their BMI (n=164, 41%) (Table 9 and Figure 6).

Table 9: Distribution of BMI among study participants

Body Mass Index		Number (n=400)	Percentage
Less than 18.5	Underweight	3	0.75%
18.5 to 22.9	Normal	150	37.5%
23 to 24.9	Overweight	164	41%
25 to 29.9	Pre-Obese	77	19.25%
30 to 40	Obese (Type 1)	6	1.5%

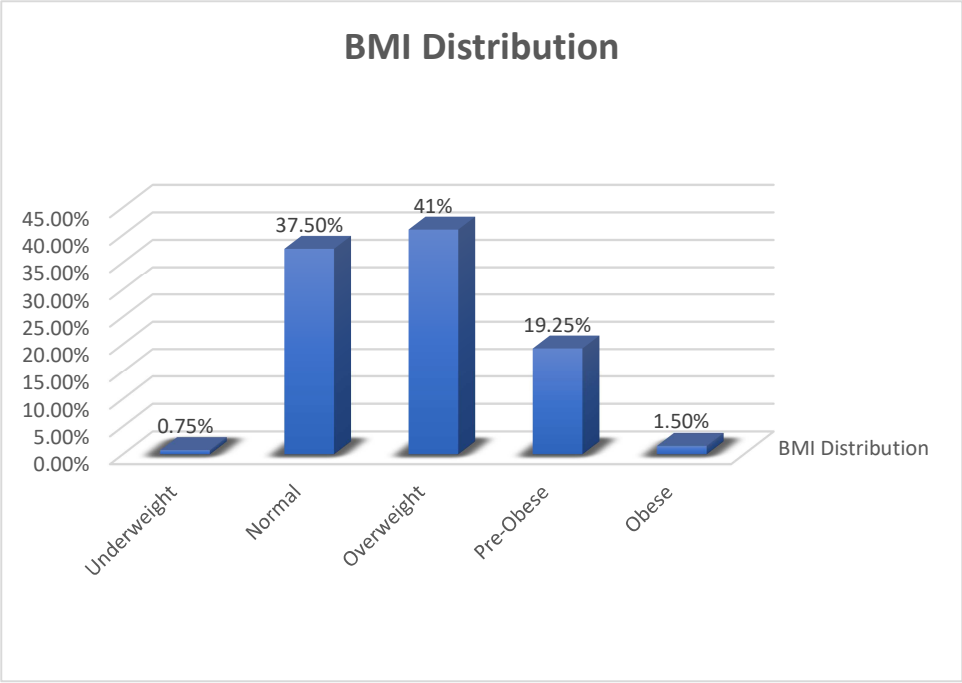


Figure 6: BMI distribution among study participants

Salt Intake of study participants

Salt intake of the study participants was similar (that is, low intake: n=200, 50% and high intake n=200, 50%) (Figure 7).

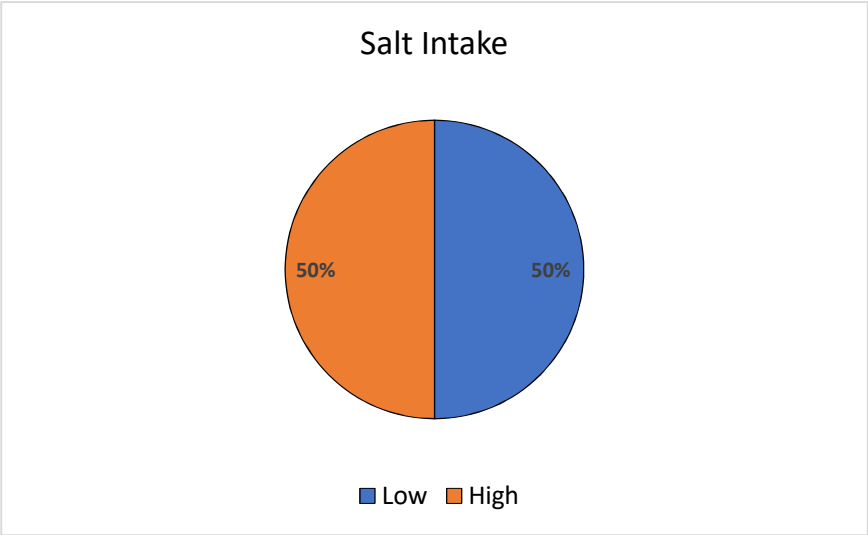


Figure 7: Salt intake of study participants

Personal Habits – Smoking and Alcohol

Among the study participants, 44.5% (n=178) had smoking habit and 33.25% (n=133) had alcohol habits (Table 10 and Figure 8).

Table 10: Smoking and Alcohol habits of the study participants

Habit	Number (n=400)	Percentage
Smoking	178	44.5%
Alcohol	133	33.25%

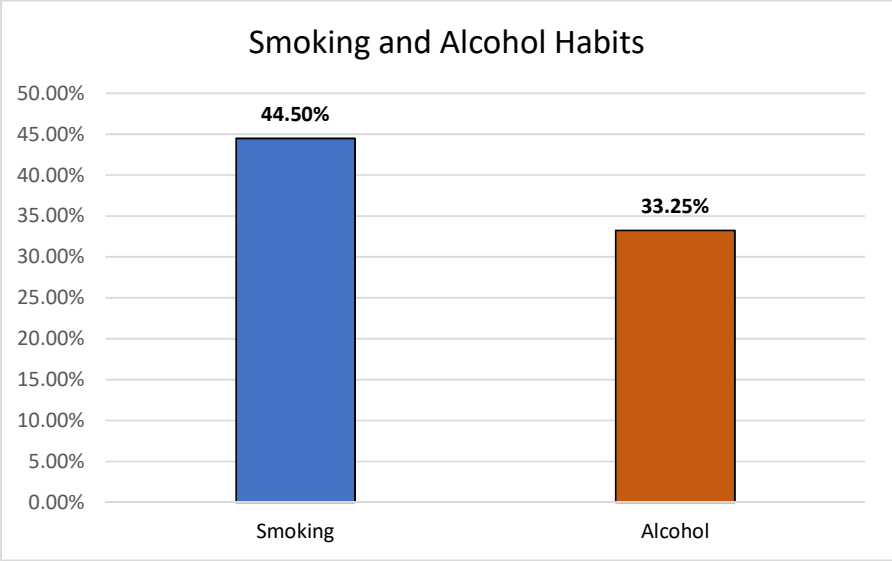


Figure 8: Personal habits of study participants

Physical activity

Adequate amount of physical activity was followed by only 26.5% (n=106) of the study participants. Low amount of physical activity was reported in 61% (n=244) of the study participants. No physical activity or sedentary lifestyle was recorded in 12.5% (n=50) of the study participants (Table 11 and Figure 9).

Table 11: Physical activity among study participants

Physical activity	Number (n=400)	Percentage
Sedentary	50	12.5%
Low	244	61%
Adequate	106	26.5%

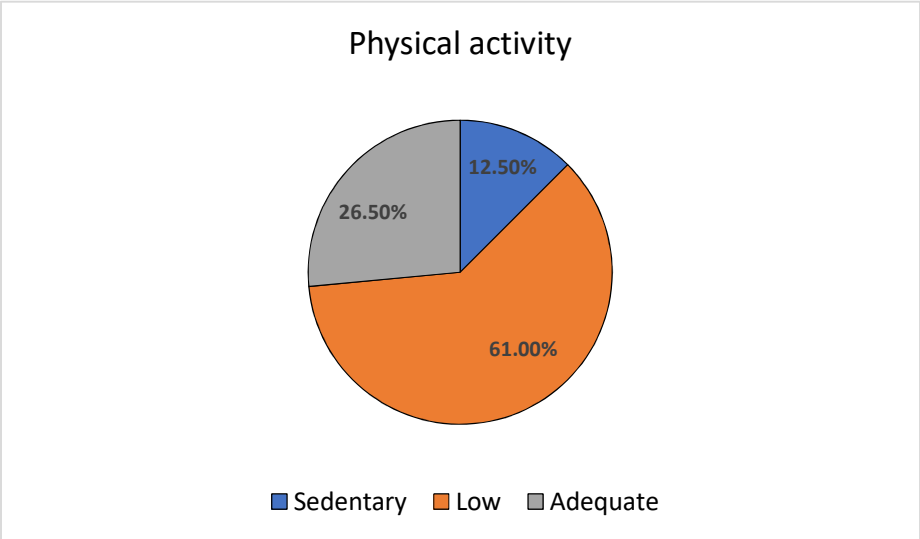


Figure 9: Physical activity among study participants

Diet of study participants

Majority of the study participants had mixed diet (n=306, 76.5%). Only 23.5% (n=94) of the study participants followed vegetarian diet (Figure 10).

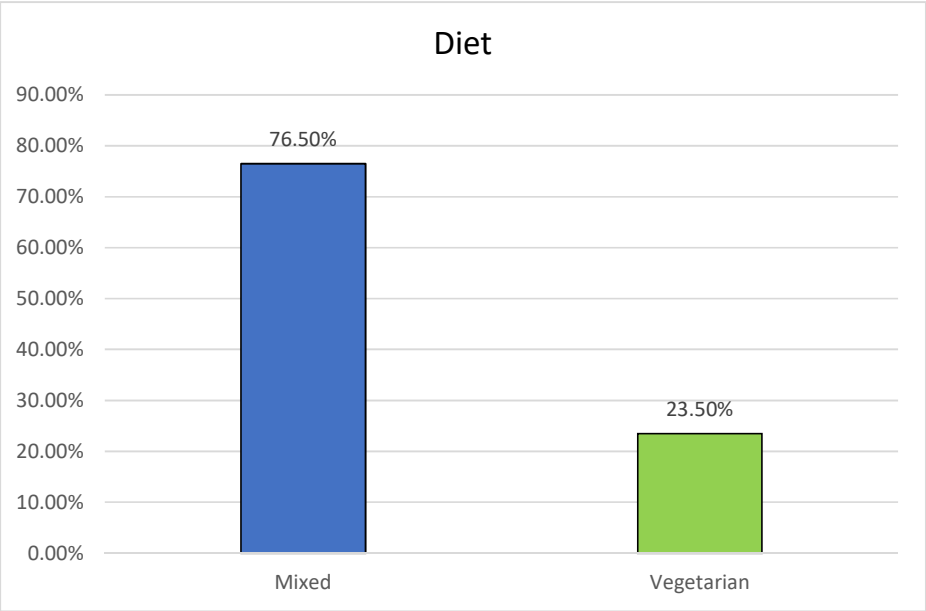


Figure 10: Diet followed by the study participants

Blood pressure and Heart rate

Mean systolic blood pressure of the study participants was 167.4 ± 15.9. Mean diastolic blood pressure of the study participants was 97.5 ± 6.5. The mean heart rate of the study participants was 89.8 ± 7.4.

Hypertension profile

Among the study participants, 184 (46%) were newly diagnosed hypertension cases and the rest 216 (54%) were known cases of hypertension.

Among the study participants, only 49.5% (n=198) of them were under treatment for hypertension. Majority of the study participants had uncontrolled hypertension (n=314, 78.5%).

Number of drugs taken for hypertension

Majority of the study participants take single drug for hypertension (n=220, 55%). Two drugs for control of hypertension were taken by 30.75% (n=123) study participants. Three drugs for control of hypertension were taken by 14.25% (n=57) of the study participants (Table 12 and Figure 11).

Table 12: Number of drugs for control of hypertension

Number of drugs	Number (n=400)	Percentage
1	220	55%
2	123	30.75%
3	57	14.25%

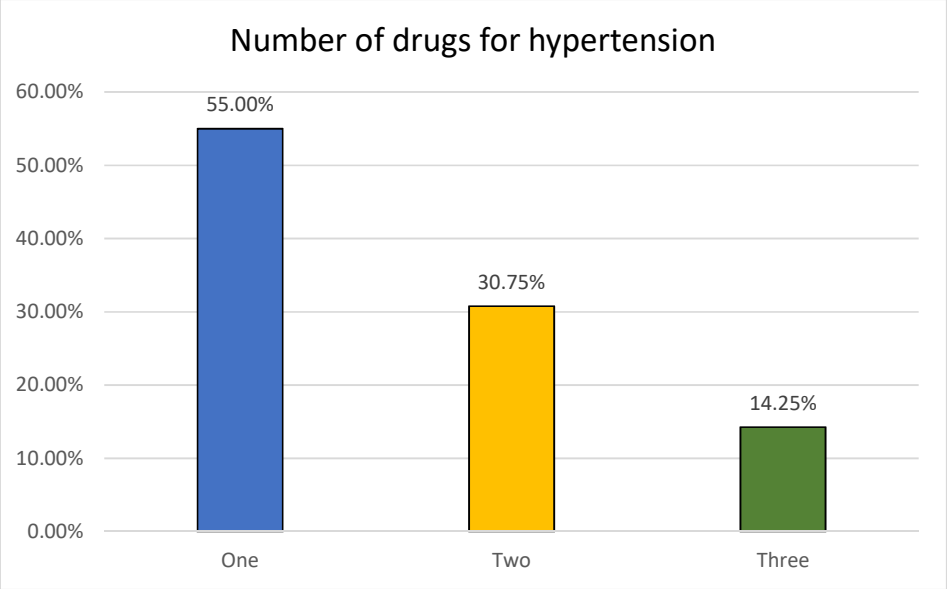


Figure 11: Number of drugs taken for control of hypertension

Lipid profile

Mean value of total cholesterol, triglycerides, low-density lipoprotein and high-density lipoprotein of the study participants were 244.4 ± 44.1, 261.6 ± 90.4, 150.7 ± 44.5, and 34.1 ± 6.1 respectively (Table 13).

Table 13: Mean value of lipid profile

Lipid profile	Mean	Standard deviation
Total cholesterol	244.4	44.1
Triglycerides	261.6	90.4
Low density lipoprotein	150.7	44.5
High density lipoprotein	34.1	6.1

Serum Creatinine and Urea

Mean value of serum creatinine and urea among the study participants were 0.96 ± 0.37 and 28.39 ± 8.1 respectively.

Urine protein

Urine protein was not found in 40.25% (n=161) study participants. Trace protein was found in (1) 34.5% (n=138) study participants. Urine protein of 1+ was found in 25.25% (n=101) of the study participants (Figure 12).

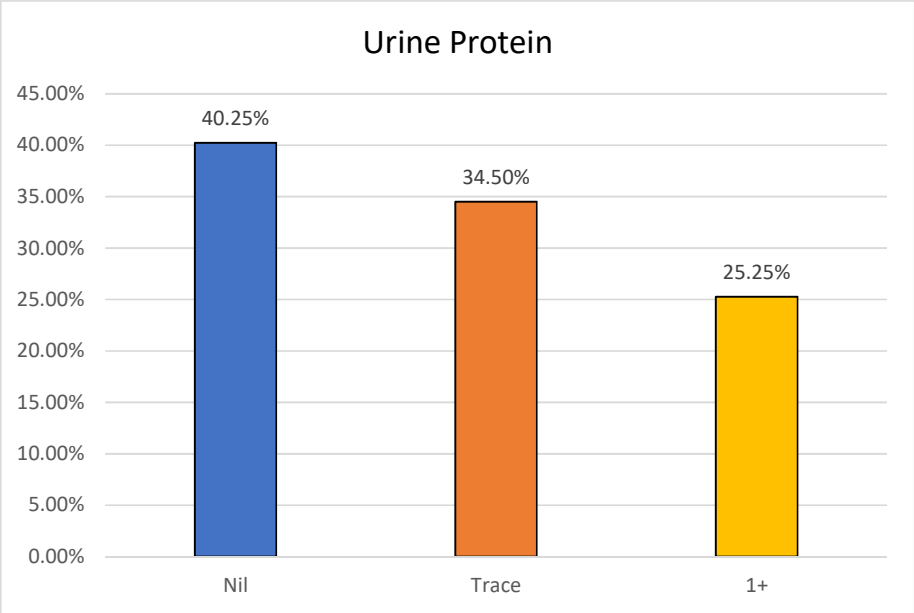


Figure 12: Urine protein among study participants

Knowledge and adherence of the study participants

Among the study participants, knowledge and adherence questions were asked. Among 400 individuals, 77% (n=308) were aware of the adverse effects of increased blood pressure in village setup. Among the study participants, 70.25% (n=281) were taking their anti-hypertensive medications regularly. Among the study participants, 55.75% (n=223) of the study participants were aware of the benefits of taking anti-hypertensives and 62.5% (n=250) were aware of the adverse effects of them. Majority of their physicians (88.5%, n=354) explained the benefits of taking anti-hypertensives (Figure 13).

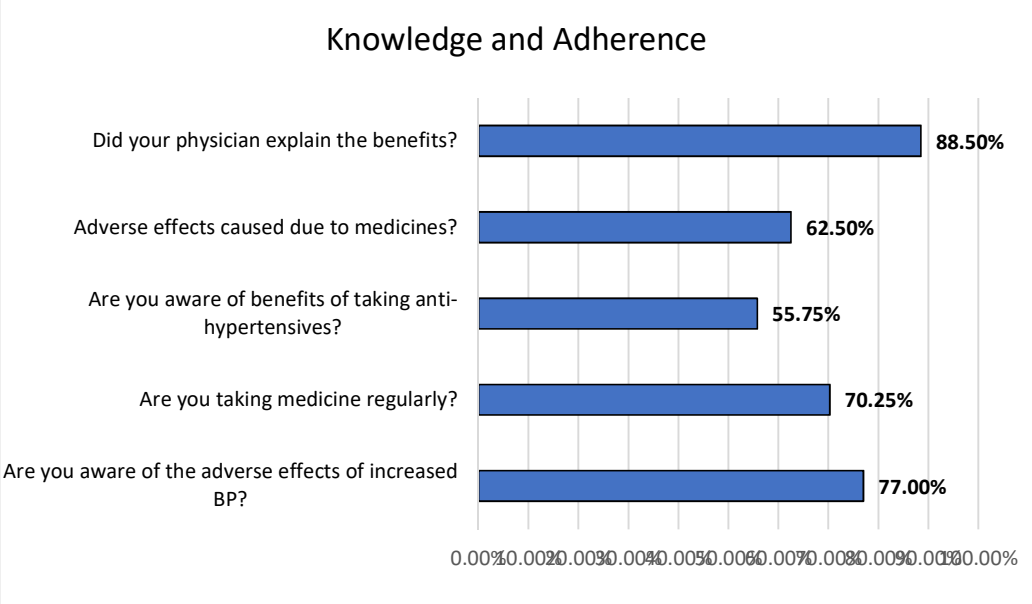


Figure 13: Knowledge and adherence of study participants regarding hypertension and its medication

Comparison of socio-demographic profile and control of hypertension

On comparison of socio-demographic profile with controlled and uncontrolled hypertension groups, education and socio-economic status were significantly associated (p= 0.003 and 0.003 respectively) (Table 14).

Table 14: Comparison of socio-demographic variables with control of hypertension

Variables	Controlled BP (n=86)	Uncontrolled BP (n=314)	P value
Age			
18-30 Years	1 (1.2%)	6 (1.9%)	
31-60 Years	47 (54.7%)	165 (52.5%)	0.051
Above 60 years	38 (43.9%)	143 (45.5%)	
Gender			
Male	55 (64%)	204 (65%)	0.478
Female	31 (36%)	110 (35%)	
Education			
School	18 (20.9%)	27 (8.6%)	
High school	34 (39.5%)	100 (31.8%)	
Diploma	19 (22.1%)	113 (36%)	**0.003**
Undergrad	12 (14%)	63 (20.1%)	
Postgrad	3 (3.5%)	11 (3.5%)	
Socioeconomic status			
Upper	6 (7%)	9 (2.9%)	
Middle	49 (57%)	236 (75.1%)	**0.003**
Lower	31 (36%)	69 (22%)	

Education and locality

Educational status was significantly associated with locality of the study participants (rural or urban) (p=0.0003). Study participants who went to some school in rural and urban locality were 11.6% (n=27) and 10.7% (n=18) respectively. Study participants who went to high school and residing in rural and urban settings were 40.1% (n=93) and 24.4% (n=41) respectively. Study participants who went to high school and residing in rural and urban settings were 32.8% (n=76) and 33.4% (n=56) respectively. Individuals with under-graduation among the rural and urban settings were 14.2% (n=33) and 25% (n=42) respectively. Study participants who had completed post-graduation and residing in rural and urban settings were 1.3% (n=3) and 6.5% (n=11) respectively (Table 15).

Table 15: Comparison of Education and locality

Education	**Rural (n=232)**	**Urban (n=168)**	**P value**
School	27 (11.6%)	18 (10.7%)	
High school	93 (40.1%)	41 (24.4%)	
Diploma	76 (32.8%)	56 (33.4%)	0.0003
Undergrad	33 (14.2%)	42 (25%)	
Postgrad	3 (1.3%)	11 (6.5%)	

Comparison of personal habits, diet & physical activity and control of hypertension

Personal habits like smoking and alcohol habits, salt intake, diet and physical activity were compared with controlled and uncontrolled blood pressure groups. There were no significant association with control of blood pressure (Table 16).

Table 16: Comparison of personal habits, diet and physical activity of study participants

Variables	Controlled BP (n=86)	Uncontrolled BP (n=314)	P value
Salt intake			
Low	48 (55.8%)	152 (48.4%)	0.137
High	38 (44.2%)	162 (51.6%)	
Smoking	38 (44.2%)	140 (44.6%)	0.523
Alcohol	23 (26.7%)	110 (35%)	0.093
Physical activity			
Sedentary	7 (8.1%)	43 (13.7%)	
Low	54 (62.8%)	190 (60.5%)	0.368
Adequate	25 (29.1%)	81 (25.8%)	
Diet			
Vegetarian	21 (24.4%)	73 (23.2%)	0.461
Mixed	65 (75.6%)	241 (76.8%)	

Comparison of BMI & Heart rate and control of hypertension

BMI and heart rate was compared with controlled and uncontrolled blood pressure groups. Heart rate was significantly associated with control of blood pressure (p=0.000) (Table17).

Table 17: Comparison of BMI and heart rate of study participants

Variables	**Controlled BP (n=86)**	**Uncontrolled BP (n=314)**	**P value**
BMI			
Less than 18.5	1 (1.2%)	2 (0.6%)	
18.5 to 22.9	32 (37.2%)	118 (37.6%)	
23 to 24.9	32 (37.2%)	132 (42%)	0.434
25 to 29.9	21 (24.4%)	56 (17.8%)	
More than 30	0 (0%)	6 (1.9%)	
Heart Rate	87.74 ± 6.6	93.07 ± 7.3	**0.000**

Comparison of hypertension profile and control of hypertension

Known or newly diagnosed hypertension, treatment of hypertension and number of drugs taken to control hypertension were compared with controlled and uncontrolled blood pressure groups. Known/ newly diagnosed hypertension, and treatment taken for hypertension were significantly associated with control of blood pressure in the study participants (p=0.003, and 0.000 respectively) (Table 18).

Table 18: Comparison of hypertension profile

Variables	**Controlled BP (n=86)**	**Uncontrolled BP (n=314)**	**P value**
Hypertension			
Newly diagnosed	28 (32.6%)	156 (49.7%)	**0.003**
Known HTN	58 (67.4%)	158 (50.3%)	
Treatment for HTN	57 (66.3%)	141 (44.9%)	**0.000**
No. of drugs taken			
1	49 (57%)	171 (54.5%)	
2	29 (33.7%)	94 (29.9%)	0.321
3	8 (9.3%)	49 (15.6%)	

Comparison of biochemical parameters and control of hypertension

Total cholesterol, triglycerides, low-density lipoprotein, high-density lipoprotein, creatinine, urea and urine protein were compared with controlled and uncontrolled hypertension. Total cholesterol (p=0.021), urea (p=0.017) and urine protein (p=0.009) were significantly associated with control of blood pressure (Table 19).

Table 19: Comparison of biochemical parameters and urine protein among study participants

Variables	**Controlled BP (n=86)**	**Uncontrolled BP (n=314)**	**P value**
TC	241.79 ± 41.96	246.12 ± 45.33	**0.021**
TG	262.15 ± 88.91	261.27 ± 91.56	0.097
LDL	151.62 ± 43.87	150.22 ± 45.04	0.280
HDL	33.80 ± 5.83	34.31 ± 6.32	0.079
Creatinine	1.01 ± 0.37	0.96 ± 0.37	0.152
Urea	29.07 ± 8.23	27.95 ± 8.01	**0.017**
Urine Protein			
Nil	33 (38.4%)	128 (40.8%)	
Trace	21 (24.4%)	117 (37.3%)	**0.009**
1+	32 (37.2%)	69 (22%)	

Knowledge and Adherence compared with status of hypertension

Awareness of adverse effects of blood pressure, regular intake of medication, awareness of benefit of intake of anti-hypertensive, awareness of adverse effects due to intake of medicines and explanation of adverse effects due to medications were not significantly associated with control of blood pressure (Table 20).

Table 20: Knowledge and adherence of study participants and the control of hypertension

Variables	Controlled BP (n=86)	Uncontrolled BP (n=314)	P value
Are you aware of the adverse effects of increased BP?	71 (82.6%)	237 (75.5%)	0.106
Are you taking medicine regularly?	59 (68.6%)	222 (70.7%)	0.400
Are you aware of benefits of taking anti-hypertensives?	45 (52.3%)	178 (56.7%)	0.274
Are you aware of adverse effects caused due to medicines?	50 (58.1%)	200 (63.7%)	0.206
Did your physician explain the benefits?	76 (88.4%)	278 (88.5%)	0.548

DISCUSSION

This cross-sectional study includes 400 study participants.

Prevalence of controlled hypertension

In our study, only 21.5% of the study participants achieved target blood pressure. Few studies showed higher rates of achieving target blood pressure. In a study conducted in South Africa, 61.2% achieved target blood pressure (30). In a nationwide cohort study from United Kingdom, 52.8% of the study participants had achieved target blood pressure (31). In a study conducted in Singapore reported 49.7% achieved target blood pressure in their study (32). Target blood pressure rate of 39.54% was reported in a cross-sectional study conducted in Tamil Nadu, India (29). In an observational study conducted in India, the target blood pressure was attained in 25.3% of the study participants (32).

According to Eight Joint National Committee (JNC8), the normal blood pressure is less than 120 and 80 of systolic and diastolic blood pressure. Prehypertension is determined as either systolic blood pressure of 120-139 or diastolic blood pressure of 80-90. Stage 1 hypertension is considered as 140-159 of systolic blood pressure or 90-99 of diastolic blood pressure. Stage 2 hypertension is considered as either more than 160 of systolic blood pressure or more than 100 of diastolic blood pressure (9).

Age and gender

Mean age of the study participants was 60.7 years Rayner B et al (30). Median age of the study participants was 71 (IQR 68 to 77) years in Todd et al (31). The mean

age of study participants was 57.12 ± 12.23 years in Anusha C et al (33). In our study, mean age of the study participants was 58.97 ± 12.83 years.

Comparison of age between the study participants who had achieved blood pressure and who didn't achieve blood pressure was not significant in our study. Contradictory results were seen in other studies (29, 34).

In our study, 64.8% of the study participants were male. Majority of the study participants were male in (55.85%) Shanmugapriya et al study (29) and in Anusha C et al (Male: Female ratio of 2.06:1) (33). In Koh KH study, majority of the study participants were females (59.9%) (32). Similar results were found in Rayner B et al with 56.3% of female study participants (30).

Gender was not associated with target achievement of blood pressure in our study. Similar results were seen in other studies (29, 32).

Education and socio-economic status

Education and socio-economic status were significantly associated with control of blood pressure in our study. Among the study participants, 5.5%, 74.8% and 8.3% were illiterate, primary education and diploma/ undergrad or postgrad respectively. Educational status was significantly associated with control of blood pressure (34). Educational status was not statistically significant in control of hypertension in Shanmugapriya et al (29). Monthly family income was statistically significant in control of hypertension in Shanmugapriya et al (29).

Body mass index

The mean BMI of the study participants in our study was 23.52 ± 2.38. Percentage of underweight, normal, overweight, pre-obese and obese in our study participants were 0.75%, 37.5%, 41%, 19.25% and 1.5% respectively. Normal BMI was reported in 25.1% and overweight was reported in 74.8% of the study participants (34). BMI of less than 23 was found in 14.1% and more than 23 was found in 85.9% of the study participants (32). Prevalence of underweight, normal, overweight and obese were found in 3.37%, 50.19%, 34.08% and 12.36% respectively (29). Mean BMI was 28.2 ± 5.15 in Todd et al (31). BMI was not associated with control of hypertension in our study. Similar results were found in Shanmugapriya et al (29). Contradicting results were found in a few studies (32, 33, 34).

Salt consumption and dietary habits

Salt consumption in our study was similar in low and high intake category (n=200, 50% in each category). Salt intake was not significantly associated with control of hypertension in our study. Contradictory result was recorded in Shanmugapriya et al study (29).

Majority of the study participants had mixed diet (n=306, 76.5%). Only 23.5% (n=94) of the study participants followed vegetarian diet in our study. Diet was significantly associated with control of hypertension in our study. Diet was not significant in Shanmugapriya et al study (29).

Personal habits

Among the study participants, 44.5% (n=178) had smoking habit and 33.25% (n=133) had alcohol habits. Prevalence of smoking and alcohol were 5.6% and 1.8% (32). Prevalence of smoking was 15.7% in Rayner B et al (30) and 8.8% in Todd et al (31). Smoking and alcohol were prevalent in 22% and 24.7% of the study participants (33).

Smoking and alcohol were significantly not associated with control of hypertension in our study. Similar results, smoking or alcohol was not significantly associated in a cross-sectional study (32). Contradictory results were found in Shanmugapriya et al (29). None of the study participants who had a habit of smoking achieved target blood pressure in Anusha C et al (33).

Adequate amount of physical activity was followed by only 26.5% (n=106) of the study participants. Low amount of physical activity was reported in 61% (n=244) of the study participants. No physical activity or sedentary lifestyle was recorded in 12.5% (n=50) of the study participants. High IPAQ score was found in 65.85% of the study population and moderate IPAQ scores was reported in 32.77% of the study participants (29).

Physical activity was not significant in achieving target blood pressure in our study. In Shanmugapriya et al, physical activity was significantly associated with control of blood pressure (29).

Antihypertensive drugs

Majority of the study participants take single drug for hypertension (n=220, 55%). Two drugs for control of hypertension were taken by 30.75% (n=123) study participants. Three drugs for control of hypertension were taken by 14.25% (n=57) of the study participants in our study. In Kandasamy G et al, 60.9% of the study participants had taken single drug and 39.1% had taken combination of two or more drugs for hypertension (34). Among study participants, intake of one, two, three, and four drug combination were taken by 43.38%, 34.92%, 16.61% and 4.15% respectively (29). Among study participants, 30.7%, 42.8% and 26.5% were taking single, double and more than three drugs for control of hypertension (30). Average drugs taken by the study participants in controlled and uncontrolled blood pressure group were 1.78 ± 0.73 and 1.92 ± 0.91 respectively (33).

Intake of number of drugs was not significantly associated with control of blood pressure in our study. Similar result was also found in literature (33). Contradictory results were found in Shanmugapriya et al study (29).

Long-term research on antihypertensive medications show that monotherapy usually lowers the risk of CVD in a sizable number of patients while keeping a good safety record. Choosing the right monotherapy for different kinds of patients could be the main obstacle. The most sensible course of action is frequently to choose a drug that has the greatest potential to lower blood pressure while having the fewest negative effects on a certain patient (34).

Biochemical parameters

Mean value of total cholesterol, triglycerides, low-density lipoprotein and high-density lipoprotein of the study participants were 244.4 ± 44.1, 261.6 ± 90.4, 150.7 ± 44.5, and 34.1 ± 6.1 respectively.

Total cholesterol was significantly associated with control of blood pressure in our study. Dyslipidemia was significantly associated in Koh KH et al (32) and not significantly associated with control of blood pressure in Anusha C et al (33).

Mean value of serum creatinine and urea among the study participants were 0.96 ± 0.37 and 28.39 ± 8.1 respectively.

Urea was significantly associated with control of blood pressure in our study. Urine protein was not found in 40.25% (n=161) study participants. Trace protein was found in (1) 34.5% (n=138) study participants. Urine protein of 1+ was found in 25.25% (n=101) of the study participants. There were not relevant studies to compare these results with to our knowledge.

Knowledge and adherence

Among the study participants, knowledge and adherence questions were asked.

Among 400 individuals, 77% (n=308) were aware of the adverse effects of increased blood pressure. Knowledge of adverse reactions was found in 8.6% of study participants (35).

Among the study participants, 55.75% (n=223) of the study participants were aware of the benefits of taking anti-hypertensives and 62.5% (n=250) were aware of the adverse effects of them. Among the study participants, 70.25% (n=281) were taking their anti-hypertensive medications regularly. Only 28.4% of the individuals had taken medications regularly in the past two weeks (35). Among good knowledge individuals, majority were taking medications regularly (36).

There are few limitations in the current study. Prevalence of comorbid diseases, locality (urban or poor) and duration of hypertension were few important factors which were not included in the data collection.

Main strength of our study was, inclusion of education and socio-economic status.

CONCLUSION

In our study, only 21.5% of the study participants achieved target blood pressure. The mean age of the study participants was 58.97 ± 12.83 years. Study variables significantly associated with control of hypertension were education, socio-economic status, heart rate, treatment of hypertension, newly diagnosed hypertension, total cholesterol, urea levels and urine protein in our study.

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ANNEXURES-I

KAHERs JNMC BELAGAVI

INFORMED CONSENT FORM

Title Of Research Study: "A ONE YEAR CROSS SECTIONAL STUDY ON ATTAINMENT OF TARGET BLOOD PRESSURE IN HYPERTENSIVES AT KLE HOSPITAL BELAGAVI.

Principal Investigator:-

Introduction and Purpose:- study of attainment of target blood pressure in both attained and non attained groups and further reduce morbidity and mortality associated

Procedure:

If you agree to be part of the research study, you will be asked the relevant history and will be subjected to relevant clinical examination and investigations. You will also have to give blood and urine samples for the necessary investigations.

-Risk and Benefits:

The only risk and possible discomfort you might get is while taking blood from your arm for the investigations. It may cause swelling, pain, redness (rarely happens) at the site from where the blood is drawn.You may not be benefitted by these investigations but you will be part of this study which is going to be useful to others in the future.

Alternatives:

Taking part in this study is voluntary. You may choose not to take part in this study.

If you decide to take part you can later change your mind and withdraw from the study. Your decision will not change the present or future health care or other services that you receive. The study doctor or sponsor may stop your participation in this study at any time. If you choose not to take part in the study, you will receive the standard treatment for patients with your condition.

Privacy and Confidentiality:

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. The code numbers will identify you in this research record. Information from this study may be published but your identity will be confidential in any publication.

Institution / Sponsor s policy:

Does not apply to this research

Financial incentives for participation:

You will not be paid / offered any gifts /incentives for participating in the study.

Authorization to publish the results:

The results of the study would be forwarded to the KLE University, Belgaum as part of requirement towards the completion of MD degree, review and publishing.

In case of the queries during study or in future you may contact following persons, Dr. HARSHA HEGDE Chairman, College Ethical Dissertation Research Committee J. N. Medical. College Nehru Nagar, Belagavi 590010.

ANNEXURES-II

A ONE YEAR CROSS SECTIONAL STUDY ON ATTAINMENT OF TARGET BLOOD PRESSURE IN HYPERTENSIVES AT KLE DR. PRABHAKAR KORE HOSPITAL, NEHRUNAGAR, BELAGAVI

Case Proforma

Name **Date**

Age **Phone Number**

Sex **IPD/OPD Number**

Area of residence: urban/rural/semi urban

Marital status:

Level of education: uneducated/Primary/Secondary/Graduation/Masters

Occupation:

Nature of employment:

Monthly family income:

Height:

Weight:

BMI:

Comorbidities

Diabetes Mellitus: Yes/No

Left ventricular heart failure: Yes/No

Right ventricular heart failure: Yes/No

Asthma: Yes/No

Chronic kidney disease: Yes/No

Hyperlipidemia: Yes/No

Metabolic Syndrome: Yes/No

Habit/diet history

History of smoking

History of alcohol intake:

Diet: Vegetarian/Non-vegetarian

Salt intake:

Physical activity: no activity/ low /adequate

AHA guidelines	
Adequate	At least 150 minutes of moderate intense aerobic activity per week (approx. 30 min brisk walk for 5 days)
Low physical activity	Less than 150 of intense activity. Eg: Leisure activity, light swimming, housework etc.
No physical activity	(Sedentary lifestyle)

Details related to hypertension

Hypertension: previously diagnosed/ newly diagnosed

Treatment for hypertension: yes/no

Hypertension control at baseline: yes/no

Antihypertensive medication at baseline: (drug name and dose)

Number of drugs

Medication adherence

Blood Pressure

Systolic BP

Diastolic BP

Hear rate

Blood pressure categories based on JNC 8.

Normal	<120/<80mmHg
Prehypertension	1220-139/80-89 mmHg
Stage 1 Hypertension	140-159/90-99 mmHg
Stage 2 Hypertension	≥160/≥100 mmHg

Please note: the above table is just for reference. While collecting data please add the systolic and diastolic BP values separately in the excel sheet so that it will be easier for categorization and analysis.

Laboratory Investigations

LDL

HDL

TG

VLDL

Renal function tests findings:

Routine urine and Microscopy findings

Knowledge of Hypertension and related effects

1. Are you aware of adverse effects of increased blood pressure related to heart, kidney and stroke?
2. Are you taking your medications regularly?
3. Are you aware of benefits of taking antihypertensive medication?
4. Are you aware of adverse effects caused due to medication non-compliance?

5. Did your physician explain the benefits of antihypertensive medication and effects of medication non-compliance?

ANNEXURE –III MASTER CHART

Age	Age_Cat	Gender	Height	WEIGHT	BMI	SALT INTAKE	Smoking	Alcohol	PA	Diet	SBP	DBP		HR	HR	HTN	Treatment of HTN	CONTROLLED HTN	BORDERLINE HTN	Medication	No. of Drugs	Medication adherence	LDL	HDL	TRIGLYCERIDE	TOTAL CHOLESTROL	S-CREATININE	UREA	Urine Protein	Aware of adverse effects of BP	Medication regularly	Aware of benefits of taking antihypertensive	Adverse effect caused due to medicines	Physician explain about benefits of medication
50	2	1	154	57	24	1	2	2	2	2	150	96			88	2	1	2	YES	AMLODIPINE -2.5 mg	1	YES	60	27	120	102	0.5	13	0	YES	YES	YES	NO	YES
67	3	1	173	74	24.7	1	1	1	2	2	150	100			80	1	2	2	YES	AMLODIPINE -5 mg	1	NO	176	39	241	274	0.7	34	1	YES	YES	YES	NO	YES
71	3	1	153	48	20.5	1	1	2	2	2	176	104			98	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	180	48	351	246	1.4	38	1	NO	NO	NO	NO	YES
62	3	2	170	78	27	1	2	2	2	2	180	100			84	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	150	38	204	287	0.9	12	0	NO	YES	NO	YES	YES
45	2	1	166	57	20.7	1	1	2	2	2	154	98			84	2	1	1	YES	NIFIDIPINE -15 mg	1	YES	166	48	199	215	1.4	29	1+	YES	YES	YES	NO	YES
47	2	1	170	75	26	1	1	1	2	2	180	106			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	240	49	500	300	1.4	27	1	YES	YES	YES	YES	YES
60	2	2	178	70	22.1	1	2	2	3	2	166	94	0		84	2	2	2	NO	TELMISARTAN -40mg	1	YES	145	40	200	217	1.4	29	1+	YES	NO	YES	YES	YES
71	3	1	168	65	23	1	1	1	3	2	150	90			84	1	1	2	YES	AMLODIPINE -2.5 mg	1	NO	175	39	195	287	0.5	39	0	YES	NO	YES	YES	YES
56	2	2	158	59	23.6	2	2	2	2	2	160	98			82	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	150	41	462	250	1.2	29	1+	NO	NO	NO	YES	NO

83	3	2	171	75	25.6	1	1	1	1	2	178	104			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	149	32	210	108	1.5	27	0	YES	YES	YES	YES	YES
27	1	2	150	48	21.3	1	2	2	1	2	140	90			80	1	2	1	YES	AMLODIPINE -2.5 mg	1	NO	90	30	241	254	1.1	10	0	YES	YES	NO	NO	YES
57	2	1	166	74	26.8	2	1	1	3	1	146	90			86	2	1	1	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	116	45	211	265	1.4	19	1	NO	NO	NO	NO	NO
52	2	1	170	59	20.4	1	2	1	3	2	156	110			84	2	1	2	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	NO	120	36	330	230	0.7	17	0	YES	YES	YES	YES	YES
78	3	1	159	57	22.5	1	1	2	2	2	160	104			84	1	2	2	NO	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	NO	202	47	196	256	1	11	1	NO	NO	NO	NO	YES
82	3	1	174	70	23.1	2	1	1	2	2	170	100			90	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	170	39	250	254	0.9	15	0	NO	NO	NO	NO	NO
68	3	1	157	68	27.5	1	1	2	2	1	156	98			100	2	1	1	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	160	28	196	203	1.2	19	1+	YES	YES	YES	YES	YES
84	3	1	160	60	23.4	2	1	1	2	2	162	94			92	2	2	2	YES	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	150	38	323	214	0.9	12	0	NO	YES	NO	YES	YES
78	3	1	172	69	23.3	1	1	2	2	2	180	100			82	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	175	34	248	234	0.9	25	0	YES	NO	YES	NO	YES
45	2	2	154	56	23.6	1	2	2	3	1	156	96			90	2	1	1	YES	TELMISARTAN - 20mg	1	YES	174	29	210	298	1.4	29	1	YES	YES	YES	YES	YES
24	1	2	159	57	22.5	1	2	2	3	2	150	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	150	40	352	300	1.4	35	0	YES	YES	YES	YES	YES
47	2	2	163	68	25.6	2	2	2	3	2	190	110			100	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	180	39	245	245	1.5	38	1	NO	YES	NO	NO	YES
59	2	1	180	80	24.6	2	2	2	1	1	154	96			80	1	2	2	YES	TELMISARTAN - 20mg	1	YES	105	28	354	256	0.3	35	0	NO	YES	NO	NO	YES
65	3	1	150	50	22.2	1	1	1	2	2	186	110			98	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	98	29	129	200	0.9	13	0	YES	YES	YES	NO	YES
46	2	1	178	79	24.9	2	1	2	2	2	150	90			88	1	2	2	YES	TELMISARTAN + AMLODIPINE (40	2	NO	220	48	410	300	0.7	25	1	YES	YES	YES	YES	YES

																				mg/5 mg)																	
57	2	1	154	54	22.7	1	2	2	2	2	152	98			80	2	2	2	YES	TELMISARTAN - 20mg	1	YES	97	28	198	210	1.4	19	0	YES	YES	NO	NO	YES
51	2	2	155	57	23.7	2	2	2	2	2	154	96			86	2	1	1	YES	NIFIDIPINE -10 mg	1	NO	110	34	215	247	0.9	35	1	YES	NO	NO	NO	YES
55	2	1	174	69	22.7	1	1	1	2	2	188	100			94	2	1	2	NO	NIFIDIPINE -20 mg	1	YES	174	27	245	297	1.2	29	0	YES	YES	YES	YES	YES
72	3	2	152	71	30.7	2	2	2	2	1	166	96			82	2	1	2	NO	CLONIDINE -0.1mg twice a day to thrice a day	1	NO	150	29	259	245	0.8	35	1+	NO	YES	NO	NO	YES
51	2	2	151	49	21.4	2	2	2	3	1	154	94			90	1	2	2	YES	TELMISARTAN - 20mg	1	NO	93	28	240	280	0.6	15	1	YES	NO	NO	NO	YES
71	3	1	169	76	26.6	2	1	2	1	2	170	100			80	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	90	35	195	275	0.9	11	1+	NO	YES	NO	NO	YES
65	3	1	168	75	26.5	1	1	1	2	2	144	90			86	2	1	1	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	175	39	350	300	0.5	19	0	YES	YES	YES	YES	YES
63	3	2	158	59	23.6	2	2	2	3	1	160	98			84	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	150	50	400	289	1.1	29	1+	NO	NO	NO	NO	NO
46	2	1	164	65	24.1	2	1	2	3	1	162	98			100	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	180	40	243	278	0.8	27	0	NO	NO	NO	NO	YES
40	2	1	151	90	39.4	1	2	2	3	2	154	88			84	1	2	2	YES	TELMISARTAN -40mg	1	YES	174	29	250	264	0.6	15	0	YES	YES	YES	YES	YES
32	2	1	149	46	20.7	1	2	2	1	2	154	98			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	152	34	299	245	0.9	37	1	NO	NO	NO	NO	NO
74	3	2	158	63	25.2	2	2	2	2	1	166	102			82	1	2	2	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	1	NO	167	36	222	256	0.9	15	0	NO	NO	NO	NO	NO
58	2	2	167	69	24.7	1	2	2	2	2	170	90			84	2	1	2	NO	TELMISARTAN - 20mg	1	NO	154	29	241	239	1.4	12	1+	YES	YES	YES	YES	NO
19	1	2	151	47	20.6	1	2	2	3	2	166	90			86	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	150	39	254	245	0.3	35	1	YES	YES	NO	YES	YES
38	2	1	163	49	18.4	2	1	1	1	1	150	90			88	1	2	2	YES	TELMISARTAN - 20mg	1	NO	250	36	451	287	0.6	38	0	YES	YES	NO	NO	YES
75	3	1	159	57	22.5	2	2	1	2	2	184	94			88	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	163	40	195	248	0.7	12	1+	YES	YES	YES	YES	YES
75	3	2	152	51	22	1	1	1	2	2	180	98			92	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	148	35	222	236	0.7	31	1	NO	NO	NO	NO	YES
45	2	2	178	79	24.9	2	2	1	2	1	174	92			82	1	2	2	YES	METOPROLOL +TELMISARTAN (25mg/40mg)	1	YES	147	37	245	289	0.3	25	0	YES	YES	YES	YES	YES
68	3	1	157	55	22.3	1	1	1	2	2	150	90			88	1	2	2	YES	METOPROLOL	1	NO	151	31	233	256	1.4	19	0	NO	NO	NO	NO	NO

																				+TELMISARTAN (25mg/40mg)																
65	3	2	172	57	19.2	2	2	2	2	2	178	100			92	1	2	2	YES	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	147	29	210	263	0.3	33	0	YES	NO	NO	NO	YES
70	3	1	166	65	23.5	1	1	2	2	2	174	98			96	2	1	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	170	39	241	126	1.4	39	1	YES	NO	YES	YES	YES
60	2	1	165	71	26	1	2	2	1	1	178	101			82	2	1	2	NO	TELMISARTAN -40mg	1	NO	180	36	320	290	1.4	12	1+	NO	YES	NO	YES	YES
52	2	2	150	50	22.2	1	2	2	2	1	152	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	80	41	350	200	0.9	37	1	YES	YES	YES	NO	YES
74	3	1	171	70	23.9	2	1	1	2	2	176	94			82	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	65	28	159	198	0.3	35	1	NO	YES	YES	NO	YES
53	2	1	167	65	23.3	1	1	2	2	2	156	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	89	29	170	300	0.7	12	1+	YES	YES	YES	YES	YES
87	3	1	178	80	25.2	2	1	1	2	2	180	110			94	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	165	39	365	287	1.5	38	1+	NO	NO	YES	YES	YES
56	2	1	155	55	22.8	1	1	1	2	2	160	100			90	2	2	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	150	35	279	300	0.7	12	1+	YES	YES	NO	NO	YES
67	3	2	150	50	22.2	1	2	2	2	2	174	96			88	2	1	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	166	28	299	271	1.4	12	1+	NO	NO	NO	NO	NO
56	2	1	168	57	20.2	2	1	2	2	2	166	92			82	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	130	27	385	278	0.3	35	1	YES	YES	YES	NO	YES
47	2	1	170	72	24.9	2	1	1	2	2	154	92			86	1	2	2	YES	TELMISARTAN - 40mg	1	NO	245	32	187	224	0.5	32	1+	YES	YES	NO	YES	YES
50	2	2	150	48	21.3	1	2	2	2	1	160	98			94	1	2	2	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	YES	90	36	201	180	0.9	12	1	YES	YES	NO	YES	YES
46	2	1	175	70	22.8	2	1	1	2	2	174	100			92	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	99	27	176	245	1.4	39	0	YES	YES	NO	NO	YES
64	3	1	152	51	22	1	2	2	2	1	158	88			90	1	2	2	YES	TELMISARTAN -20mg	1	YES	174	36	245	290	0.5	28	1	NO	YES	NO	YES	YES
61	3	1	178	76	23.9	2	2	2	2	2	170	100			92	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	99	39	241	183	0.9	11	1	YES	YES	NO	YES	YES
50	2	1	168	78	27.6	2	1	1	3	2	158	90			88	1	2	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	100	26	299	300	0.5	19	0	YES	NO	NO	YES	YES
44	2	2	161	60	23.1	1	2	2	3	2	176	100			98	2	1	2	YES	TELMISARTAN -40mg	1	YES	174	29	250	297	0.9	35	1	YES	NO	NO	YES	YES

71	3	1	170	75	25.9	1	2	2	2	2	166	100			86	2	1	1	YES	AMLODIPINE -2.5 mg	1	NO	152	32	199	245	1.2	29	0	YES	YES	YES	YES	NO
86	3	1	182	81	24.4	2	1	1	2	2	140	90			80	1	2	2	YES	METOPROLOL +TELMISARTAN (25mg/40mg)	1	YES	167	36	222	210	0.8	35	1+	NO	YES	NO	NO	YES
75	3	1	169	59	20.6	1	1	2	2	2	170	102			98	1	2	2	NO	TELMISARTAN - 20mg	1	NO	154	29	241	102	0.7	34	1	YES	NO	YES	YES	NO
40	2	2	153	50	21.3	1	2	2	2	1	146	90			84	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	101	28	230	150	0.3	35	1	YES	YES	YES	YES	NO
87	3	1	152	51	22	1	1	1	2	2	178	98			94	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA ZIDE (40mg/5mg/12.5)	3	NO	148	35	222	199	0.7	31	1	NO	NO	NO	NO	YES
70	3	1	161	61	23.5	1	1	1	2	2	174	94			94	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	69	27	179	245	1.4	19	0	NO	NO	NO	NO	YES
39	2	1	155	55	22.8	2	2	2	2	2	190	100			98	2	1	2	NO	TELMISARTAN - 40mg	1	NO	106	27	190	275	0.7	39	0	NO	YES	YES	YES	YES
80	3	2	150	48	21.3	1	2	2	2	2	184	98			82	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA ZIDE (40mg/5mg/12.5)	3	YES	158	39	350	250	1.4	29	0	NO	YES	NO	YES	YES
60	2	1	175	74	24.1	2	1	1	3	2	156	92			84	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA ZIDE (40mg/5mg/12.5)	1	YES	181	35	200	256	0.7	25	1	YES	YES	YES	YES	YES
63	3	1	165	65	23.8	2	2	2	3	1	154	88			90	1	2	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	241	49	485	300	1.4	19	0	NO	NO	NO	NO	NO
63	3	1	153	50	21.3	1	1	1	2	1	180	106			94	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA ZIDE (40mg/5mg/12.5)	1	YES	195	34	204	254	0.9	35	1	YES	YES	YES	YES	YES
60	2	2	169	65	22.7	1	2	2	2	2	160	100			86	1	2	2	YES	NIFIDIPINE – 15 mg	1	NO	166	44	199	215	0.7	25	1	YES	YES	NO	NO	YES
59	2	1	173	57	19	1	1	2	1	2	178	104			88	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	120	28	204	289	1.5	38	1	YES	YES	YES	YES	YES
68	3	1	170	68	23.5	2	2	2	2	2	166	94			86	1	2	2	YES	TELMISARTAN - 20mg	1	YES	119	28	187	215	0.3	25	1	YES	NO	NO	YES	YES
54	2	2	166	65	23.5	2	2	2	3	1	152	100			96	2	1	1	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	95	32	150	200	0.3	19	1	YES	YES	NO	NO	NO
63	3	1	178	79	24.9	2	2	1	2	1	174	92			82	1	2	2	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	1	YES	147	37	245	289	0.3	25	0	YES	YES	YES	YES	YES
88	3	1	157	55	22.3	1	1	1	2	2	150	90			88	1	2	2	YES	METOPROLOL +TELMISARTAN (25mg/40mg)	1	NO	151	31	233	182	1.4	19	0	NO	NO	NO	NO	NO

53	2	1	172	57	19.2	2	2	2	2	2	180	100			92	1	2	2	NO	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	YES	147	29	210	178	0.3	33	1	YES	YES	YES	NO	YES
56	2	1	166	65	23.5	1	2	2	2	2	174	94			86	1	2	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	95	50	200	249	1.4	19	1+	YES	YES	YES	YES	NO
56	2	1	173	74	24.7	2	1	1	2	2	156	90			84	2	1	1	YES	TELMISARTAN -40mg	1	YES	99	27	247	240	0.4	29	1+	YES	YES	YES	NO	NO
76	3	1	151	49	21.4	1	2	2	2	2	180	110			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	179	37	250	264	1.2	29	0	YES	YES	YES	YES	YES
47	2	2	161	60	23.1	1	2	2	1	2	174	100			100	2	1	2	NO	TELMISARTAN -40mg	1	YES	174	29	250	279	0.9	35	1	YES	NO	NO	YES	YES
70	3	1	170	75	25.9	1	2	2	2	2	168	98			86	2	1	1	YES	AMLODIPINE -2.5 mg	1	YES	240	27	199	245	1.2	29	0	YES	YES	YES	YES	NO
39	2	1	151	60	26.3	1	2	2	3	2	154	90			84	1	2	2	YES	TELMISARTAN -40mg	1	YES	174	29	250	187	0.6	15	0	YES	YES	YES	YES	YES
83	3	1	182	80	24.1	2	1	2	1	2	140	98			80	1	2	2	YES	METOPROLOL +TELMISARTAN (25mg/40mg)	1	YES	174	36	250	160	0.8	35	1+	NO	YES	YES	NO	YES
42	2	1	153	54	23	1	1	2	2	1	200	110			98	2	2	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	101	28	230	265	0.3	25	1	YES	NO	YES	YES	NO
67	3	2	166	70	25.4	1	2	2	3	1	166	96	0		88	1	2	2	YES	AMLODIPINE+ATENOLOL (5mg/50mg)	1	NO	150	29	200	245	1.4	29	1+	YES	NO	YES	YES	YES
53	2	1	164	67	24.9	1	1	2	2	2	152	100			88	2	1	1	YES	AMLODIPINE -5 mg	1	YES	98	39	178	260	0.5	19	0	YES	YES	YES	NO	NO
56	2	1	151	52	22.8	2	2	2	3	2	156	90			90	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	103	50	210	274	0.6	38	0	YES	NO	NO	NO	YES
53	2	1	160	60	23.4	2	1	2	2	1	170	90			98	1	2	2	NO	TELMISARTAN -40mg	1	YES	90	28	200	275	0.9	31	1+	NO	YES	NO	YES	YES
60	2	1	178	74	23.3	2	1	1	3	2	170	96			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	117	27	254	223	1.4	29	1+	YES	YES	NO	NO	YES
49	2	1	180	85	26.2	2	1	1	3	2	140	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	119	32	145	228	0.9	19	1	NO	NO	NO	NO	NO
66	3	2	161	79	30.4	2	2	2	2	1	170	100			98	1	2	2	NO	AMLODIPINE - 5 mg	1	NO	110	31	201	290	0.8	11	1	YES	YES	YES	YES	YES
65	3	1	178	85	26.8	2	1	1	3	2	174	100			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	110	28	150	245	1.1	11	1	NO	NO	NO	YES	YES
30	1	1	174	70	23.1	2	1	1	3	2	150	92			88	1	2	2	YES	TELMISARTAN - 40mg	1	NO	100	30	158	224	0.5	35	1+	YES	YES	YES	YES	YES
47	2	2	162	59	22.4	1	2	2	2	1	162	98			98	2	1	1	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	NO	240	29	185	246	0.3	12	1	YES	YES	NO	NO	YES
70	3	1	175	70	22.8	2	1	1	2	2	174	100			96	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	189	27	176	245	1.4	39	0	YES	YES	NO	NO	YES
60	2	2	155	57	23.7	1	2	2	2	1	190	102			88	2	1	2	NO	TELMISARTAN - 40mg	1	NO	106	24	190	245	0.6	39	1	YES	YES	YES	YES	YES
40	2	2	160	61	23.8	1	2	2	2	2	172	100			86	2	1	2	NO	TELMISARTAN +	3	YES	150	28	205	233	1.4	29	1	YES	YES	YES	NO	YES

																				AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)															
80	3	1	176	65	20.9	2	1	1	2	2	196	104			88	2	1	2	NO	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	NO	179	35	210	210	1.2	39	0	YES	YES	NO	YES	NO
70	3	1	153	55	23.5	2	1	2	3	2	170	108			86	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	107	34	175	300	0.8	37	1+	YES	YES	NO	NO	YES
44	2	1	157	85	34.4	2	1	1	3	2	176	100			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	110	27	190	200	1.1	11	0	NO	NO	NO	NO	NO
61	3	1	150	60	26.6	1	1	2	2	2	166	100			84	2	1	1	YES	TELMISARTAN - 40mg	1	YES	100	26	158	210	0.5	15	0	YES	NO	NO	YES	YES
70	3	1	173	57	19	1	1	2	1	2	178	104			90	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	120	28	204	289	1.5	38	1	YES	YES	YES	YES	YES
55	2	1	170	68	23.5	2	2	2	2	2	162	94			90	1	2	2	YES	TELMISARTAN - 20mg	1	YES	119	32	187	215	0.3	25	1	YES	NO	NO	YES	YES
48	2	2	154	48	20.2	1	2	2	1	1	156	92			86	1	2	2	YES	AMLODIPINE -2.5 mg	1	NO	156	32	187	240	0.8	24	1	YES	YES	YES	NO	YES
39	2	1	169	63	22	2	1	2	3	2	156	88			90	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	181	39	452	247	0.5	12	0	YES	YES	YES	YES	YES
75	3	1	179	78	24.3	1	2	2	2	1	180	106			92	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	165	35	250	300	1.4	38	1+	NO	YES	NO	NO	YES
60	2	1	180	80	24.6	2	1	1	2	2	178	94			82	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	195	34	204	278	0.6	24	1	NO	NO	YES	NO	YES
65	3	2	164	55	20.4	2	2	2	2	2	178	106			100	2	2	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	180	39	243	193	0.8	27	0	NO	NO	NO	NO	YES
68	3	1	173	71	23.7	2	1	2	2	2	156	90			86	1	2	1	YES	TELMISARTAN -40mg	1	NO	109	35	247	263	0.4	25	1+	YES	YES	YES	YES	YES
49	2	1	158	59	23.6	1	2	2	2	1	180	110			100	2	2	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	179	37	250	264	1.2	29	0	YES	YES	YES	YES	YES
62	3	2	161	60	23.1	1	2	2	2	2	174	100			98	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	174	35	245	268	0.9	35	1+	YES	YES	NO	YES	YES
55	2	2	154	55	23.1	1	2	2	2	1	168	98			84	2	1	1	NO	AMLODIPINE -5 mg	1	YES	152	32	199	278	1.2	29	1	NO	NO	YES	YES	NO
74	3	1	175	75	24.4	1	2	2	3	2	154	90			88	1	2	2	YES	TELMISARTAN -20mg	1	NO	174	32	245	179	0.6	15	0	YES	YES	YES	YES	YES
60	2	1	182	80	24.1	2	1	2	3	2	140	90			80	1	2	1	YES	ATENOLOL - 25mg	1	YES	174	36	260	260	0.3	15	1+	YES	YES	YES	YES	YES

48	2	1	153	54	23	1	1	1	1	2	162	92			98	1	2	2	YES	TELMISARTAN - 20mg	1	NO	87	36	210	245	0.3	25	0	YES	YES	YES	YES	YES
81	3	1	166	70	25.4	1	1	2	2	2	190	108	0		86	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	150	29	244	178	0.7	29	0	YES	YES	YES	YES	YES
59	2	1	165	60	22	1	1	1	2	2	170	102			96	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	107	34	245	312	0.8	37	1	NO	NO	NO	NO	YES
65	3	2	162	64	24.3	1	2	2	3	2	152	94	0		84	1	2	1	YES	TELMISARTAN -40mg	1	YES	165	35	211	288	1.4	39	1	NO	YES	NO	YES	YES
48	2	1	178	69	21.7	1	1	2	3	2	150	90			80	1	2	1	YES	TELMISARTAN -20mg	1	YES	142	34	224	173	1.4	30	1+	YES	YES	YES	YES	YES
72	3	2	162	61	23.2	1	2	2	1	2	180	110			96	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	120	33	204	289	1.5	38	0	NO	NO	NO	YES	YES
71	3	2	154	57	24	2	2	2	2	1	160	98			86	1	2	2	YES	TELMISARTAN - 20mg	1	NO	99	28	178	300	0.3	25	0	YES	YES	NO	YES	YES
55	2	1	165	68	24.9	1	1	1	3	2	178	108			92	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	137	35	500	147	0.7	35	1	YES	YES	YES	NO	YES
62	3	2	152	53	22.9	2	2	2	3	2	162	96			88	2	2	1	YES	METOPROLOL +TELMISARTAN (25mg/40mg)	1	YES	136	28	201	270	0.3	32	1	NO	YES	YES	YES	YES
51	2	2	160	57	22.2	1	2	2	3	2	154	88			86	1	2	1	YES	TELMISARTAN - 20mg	1	NO	78	50	201	247	1.4	29	0	YES	YES	NO	NO	YES
58	2	1	173	57	19	2	1	1	3	2	178	104			90	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	120	28	120	289	1.5	38	1	YES	YES	YES	YES	YES
57	2	1	170	74	25.6	1	2	2	1	2	162	94			82	2	1	1	YES	TELMISARTAN - 40mg	1	YES	119	29	187	300	0.3	35	1	YES	NO	YES	YES	YES
55	2	1	152	51	22	2	2	1	2	2	150	88			94	1	2	2	YES	TELMISARTAN - 20mg	1	YES	111	32	222	299	0.7	28	1	YES	YES	YES	NO	YES
73	3	1	178	79	24.9	1	2	2	2	1	174	92			80	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	147	34	241	172	0.7	37	0	YES	YES	YES	YES	YES
46	2	1	180	80	24.6	2	1	1	2	2	166	96			92	2	1	1	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	YES	152	26	211	269	0.3	33	0	YES	NO	NO	NO	YES
54	2	1	166	65	23.5	1	2	2	2	2	174	90			88	1	2	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	95	39	470	281	1.4	19	1+	YES	YES	YES	YES	NO
30	1	1	173	71	23.7	2	1	1	2	2	168	98			92	2	1	2	NO	TELMISARTAN -40mg	1	YES	170	33	247	249	0.4	39	0	YES	YES	YES	NO	YES
70	3	1	178	76	23.9	2	1	2	2	2	180	108	0		100	1	2	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	241	48	250	233	1.2	29	0	YES	YES	YES	YES	YES
48	2	2	154	57	24	1	2	2	2	2	166	98			84	1	2	2	YES	TELMISARTAN -40mg	1	NO	175	27	241	248	0.9	35	0	YES	NO	YES	YES	YES
56	2	2	150	47	20.8	1	2	2	2	1	150	90			82	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	140	28	174	245	1.2	32	1+	YES	YES	NO	YES	YES
65	3	2	164	60	22.3	1	2	2	2	1	154	90			80	1	2	2	YES	TELMISARTAN -20mg	1	NO	144	24	262	236	0.9	15	0	YES	YES	NO	YES	NO
64	3	1	180	82	25.3	2	1	1	3	2	150	90			82	1	1	1	YES	AMLODIPINE -2.5 mg	1	YES	68	24	204	152	0.8	35	0	YES	YES	YES	YES	YES
53	2	1	168	67	23.7	1	1	1	3	2	200	110			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE	3	NO	180	40	250	263	1.4	39	1+	NO	YES	NO	YES	YES

																				(40mg/5mg/12.5)																		
56	2	2	163	67	25.2	1	2	2	1	2	152	96	0		88	1	2	1	YES	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	150	30	241	123	0.9	29	0	YES	NO	YES	YES	YES			
45	2	1	164	60	22.3	2	1	1	3	2	174	106			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	102	35	178	261	0.5	28	1	YES	NO	NO	YES	YES			
55	2	1	174	75	24.7	2	2	2	2	2	182	104			92	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	200	32	419	277	0.6	39	1	YES	YES	YES	YES	YES			
60	2	2	160	60	23.4	2	2	2	3	2	170	106			100	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	178	39	369	262	0.9	40	0	NO	NO	YES	NO	YES			
51	2	1	176	74	23.8	2	1	1	2	2	184	108			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	225	39	195	287	0.5	39	0	YES	NO	YES	YES	YES			
59	2	1	158	59	23.6	2	2	2	3	1	160	94			82	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	150	32	452	249	1.1	29	0	YES	YES	YES	YES	YES			
54	2	1	171	80	27.3	1	2	2	3	1	180	106			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	180	40	250	301	1.5	40	1+	YES	YES	YES	YES	YES			
79	3	2	155	52	21.6	2	2	2	3	1	170	100			88	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	102	32	180	299	1.1	21	1	YES	YES	YES	YES	YES			
58	2	1	153	50	21.3	1	1	1	3	2	180	96			86	2	1	2	NO	AMLODIPINE -2.5 mg	1	YES	156	32	187	240	0.9	13	0	YES	YES	YES	YES	YES			
45	2	1	163	65	24.4	2	1	1	1	2	196	108			98	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	179	37	250	108	1.2	29	0	YES	YES	YES	YES	YES			
75	3	2	153	45	19.2	1	2	2	2	1	150	90			80	2	1	1	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	97	27	248	190	0.8	37	1+	YES	YES	NO	NO	YES			
68	3	2	178	70	22	1	2	2	2	2	166	96	0		88	2	2	2	YES	TELMISARTAN -40mg	1	NO	150	40	200	193	1.4	29	1+	YES	NO	YES	YES	YES			
43	2	1	178	74	23.3	2	1	1	2	2	170	98			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	117	27	254	248	1.4	29	1+	YES	YES	NO	NO	YES			
37	2	2	157	53	21.5	2	2	2	2	2	182	104			100	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	180	40	243	279	1.4	19	0	YES	NO	YES	NO	YES			
64	3	1	158	57	22.8	2	1	2	1	2	170	104			98	1	2	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a	1	YES	71	39	209	246	1	29	1+	YES	YES	YES	YES	YES			

																			day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)																	
87	3	2	153	54	23	1	2	2	3	2	182	108			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	149	38	201	299	1.4	27	0	YES	YES	YES	YES	YES
72	3	1	152	57	24.6	2	2	2	1	2	174	94			82	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	147	28	241	270	0.9	14	1	YES	YES	YES	YES	YES
90	3	2	166	58	21	1	2	2	2	1	162	94			88	2	1	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	174	32	245	188	1.4	35	1+	YES	YES	NO	NO	YES
37	2	1	178	79	24.9	2	1	2	2	2	152	98			96	1	2	1	YES	TELMISARTAN - 40mg	1	NO	153	27	194	214	0.6	38	1+	YES	YES	NO	NO	YES
51	2	2	151	70	30.7	2	2	2	2	2	168	100			98	1	2	2	NO	TELMISARTAN -40mg	1	YES	154	29	201	221	0.6	35	0	YES	YES	NO	YES	YES
44	2	1	163	68	25.5	2	1	2	2	2	160	90			82	1	2	2	YES	AMLODIPINE -5 mg	1	YES	122	45	240	299	0.9	27	1	YES	YES	NO	YES	YES
71	3	1	172	71	24	2	2	2	2	2	152	92			80	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	98	47	442	275	0.8	15	0	NO	YES	NO	NO	YES
49	2	2	167	57	20.4	1	2	2	2	2	170	102			92	2	2	2	NO	TELMISARTAN - 40mg	1	NO	132	29	199	277	1.4	32	0	YES	YES	YES	NO	YES
56	2	2	151	49	21.4	2	2	2	2	1	166	92			84	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	150	29	333	246	0.3	35	1+	YES	NO	YES	NO	YES
48	2	1	163	53	19.9	2	1	1	2	2	162	90			88	1	2	2	YES	TELMISARTAN - 20mg	1	NO	144	35	226	177	0.6	28	0	YES	YES	YES	NO	YES
55	2	2	159	57	22.5	2	2	2	2	1	152	94			92	2	1	1	YES	TELMISARTAN -20mg	1	YES	103	29	195	295	0.7	22	1+	YES	YES	YES	YES	YES
72	3	2	166	65	23.5	1	2	2	2	2	174	106			94	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	140	30	180	240	0.8	14	0	NO	NO	NO	NO	YES
75	3	2	169	67	23.4	1	2	2	3	2	172	106			102	2	1	2	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	2	YES	92	33	397	259	0.5	32	1	YES	YES	YES	YES	YES
60	2	2	158	50	20	1	2	2	3	1	160	100			94	2	1	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	248	50	480	300	1.4	18	1+	NO	NO	NO	NO	YES
55	2	2	150	45	20	2	2	2	1	2	162	100			98	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	199	25	471	221	0.6	24	1	NO	NO	YES	NO	YES
82	3	2	157	54	21.9	2	2	2	3	2	178	106			100	2	1	2	NO	TELMISARTAN +	3	NO	248	39	500	274	1.6	38	1+	YES	YES	NO	NO	YES

																				AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)													
50	2	1	165	71	26	1	1	1	3	2	150	90			82	2	1	1	YES	TELMISARTAN -40mg	1	YES	78	26	330	271	1.4	32	0	YES	YES	YES	YES	YES
72	3	1	174	73	24.1	2	1	1	1	2	180	110			100	2	1	2	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	2	YES	147	38	365	287	1	27	1	YES	YES	NO	NO	YES
79	3	2	155	51	21.2	2	2	2	2	1	152	96			84	2	1	1	YES	TELMISARTAN + AMLODIPINE (20 mg/2.5 mg)	2	YES	175	32	187	266	0.3	30	0	NO	YES	YES	YES	YES
52	2	1	166	67	24.3	1	1	2	2	2	166	100			100	2	1	2	YES	TELMISARTAN + AMLODIPINE (80 mg/5 mg)	2	NO	108	39	415	122	0.3	19	1	YES	YES	NO	YES	YES
40	2	1	174	70	23.1	2	1	1	2	2	174	104			101	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	248	49	473	293	1.4	39	0	YES	YES	YES	YES	YES
75	3	1	166	65	23.5	2	1	2	2	2	192	100			98	2	1	2	NO	TELMISARTAN - 40mg	1	NO	106	27	230	275	0.7	39	0	NO	YES	YES	YES	YES
56	2	2	150	48	21.3	1	2	2	2	2	176	98			82	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	150	39	405	220	1.4	29	0	NO	YES	NO	YES	YES
66	3	2	163	65	24.4	2	1	1	2	2	196	108			98	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	110	37	250	246	1.2	29	0	YES	YES	YES	YES	YES
67	3	1	153	45	19.2	1	2	2	2	1	150	90			80	2	1	1	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	97	27	248	227	0.8	37	1+	YES	YES	NO	NO	YES
52	2	1	178	70	22	1	2	2	2	2	166	94	0		86	2	2	2	YES	TELMISARTAN -40mg	1	NO	248	40	488	230	1.4	29	1+	YES	NO	YES	YES	YES
61	3	1	167	68	24.3	2	2	2	3	2	174	104			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	71	37	245	229	1.4	28	1	NO	NO	NO	NO	NO
39	2	1	173	57	19	1	1	2	2	2	178	104			90	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	120	28	223	289	1.5	38	1	YES	YES	YES	YES	YES
87	3	1	170	68	23.5	2	2	2	3	2	164	92			92	1	2	2	YES	TELMISARTAN - 20mg	1	YES	119	29	289	215	0.3	25	1	YES	NO	NO	YES	YES
77	3	2	160	62	24.2	1	2	2	3	2	160	90			90	2	1	2	YES	AMLODIPINE -5 mg	1	YES	199	47	351	244	1.1	30	0	YES	YES	NO	YES	YES
62	3	2	166	52	18.8	2	2	2	1	1	150	90			94	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	241	33	447	265	1.4	29	1	YES	YES	YES	NO	YES
52	2	2	152	46	19.9	1	2	2	2	2	166	96			88	2	1	2	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	NO	220	36	482	233	0.7	17	0	YES	YES	YES	YES	YES

49	2	2	159	57	22.5	1	1	2	3	2	160	104			84	1	2	2	NO	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	123	28	479	222	1	33	1	YES	YES	YES	YES	YES
18	1	1	170	60	20.7	2	2	2	2	2	150	90			88	1	2	2	YES	AMLODIPINE - 2.5 mg	1	NO	98	47	152	200	0.9	15	0	YES	YES	YES	NO	YES
77	3	1	177	71	22.6	1	1	1	1	2	162	92			92	2	1	2	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	160	33	220	221	1.2	23	1+	YES	NO	NO	YES	YES
69	3	1	160	62	24.2	2	1	1	3	2	174	106			100	2	2	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	148	38	241	229	0.9	12	0	NO	YES	YES	YES	YES
64	3	1	172	70	23.6	2	2	2	3	2	178	100			84	1	2	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	144	34	455	245	0.9	36	1	YES	YES	NO	YES	YES
63	3	1	178	87	27.4	1	1	1	1	2	152	90			80	1	2	2	YES	AMLODIPINE -5 mg	1	YES	100	32	226	278	1.3	19	1	YES	YES	YES	NO	YES
44	2	2	151	44	19.3	1	2	2	3	1	150	92			82	1	2	2	YES	AMLODIPINE - 2.5 mg	1	NO	111	31	220	263	1	32	1	NO	NO	NO	NO	YES
59	2	1	163	67	25.2	1	2	2	3	1	150	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	NO	90	33	362	293	1.1	30	1	YES	YES	NO	YES	YES
72	3	1	174	78	25.7	2	2	2	2	1	174	100			100	2	1	2	NO	TELMISARTAN - 80mg	1	YES	170	38	247	196	1.4	34	1+	YES	YES	YES	YES	YES
78	3	1	166	59	21.4	2	1	1	1	2	156	90			84	2	1	2	NO	TELMISARTAN - 40mg	1	NO	100	32	410	245	0.7	33	0	YES	YES	YES	YES	YES
69	3	1	178	71	22.4	2	1	2	3	2	166	98			80	2	1	2	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	YES	96	33	440	248	0.6	25	1	YES	YES	YES	YES	YES
39	2	1	178	74	23.3	2	1	1	2	2	170	96			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	117	27	444	214	1.4	29	1+	YES	YES	NO	NO	YES
60	2	1	163	59	22.2	2	1	1	3	1	154	98			90	1	2	2	YES	TELMISARTAN - 20mg	1	YES	211	34	210	160	0.9	35	0	YES	YES	YES	YES	YES
45	2	2	150	48	21.3	1	2	2	1	2	180	100			94	1	2	2	NO	NIFIDIPINE – 10 mg	1	YES	110	27	193	256	1.2	29	0	YES	YES	YES	YES	YES
52	2	2	161	71	27.3	2	2	2	2	1	164	94			82	2	1	2	YES	CLONIDINE -(0.1mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	140	29	389	299	0.9	35	1+	YES	YES	YES	YES	YES
51	2	2	156	51	20.9	2	2	2	2	1	158	96			84	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	145	28	241	264	0.7	25	1	YES	NO	NO	YES	YES
57	2	1	168	58	20.5	2	1	1	2	2	172	106			100	2	1	2	NO	TELMISARTAN + AMLODIPINE (80 mg/5 mg)	2	YES	240	48	440	248	1.4	38	1	YES	YES	YES	YES	YES
68	3	1	170	72	24.9	1	2	2	2	2	172	104			92	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	150	38	222	269	0.9	18	0	NO	YES	NO	YES	YES
76	3	1	166	63	22.8	1	1	1	2	2	154	88			84	1	2	2	YES	NIFIDIPINE – 10 mg	1	YES	145	50	220	248	1.4	29	1+	YES	YES	YES	NO	YES
63	3	2	164	67	24.9	2	2	2	2	1	166	94			87	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	185	32	243	180	0.8	27	0	NO	YES	YES	YES	YES

72	3	2	151	87	38.1	1	2	2	2	2	178	104			96	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	178	35	470	222	1.5	35	0	YES	NO	YES	YES	YES
48	2	2	149	47	21.1	1	2	2	2	2	156	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	147	35	197	275	0.9	37	1	NO	NO	YES	YES	YES
72	3	2	162	61	23.2	2	2	2	2	2	172	106			96	2	1	2	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	1	NO	167	36	445	256	0.9	15	0	NO	NO	NO	NO	NO
60	2	2	167	69	24.7	1	2	2	2	2	170	90			84	2	2	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	154	36	241	230	1.4	12	0	YES	YES	YES	YES	YES
56	2	1	159	59	23.3	2	1	1	3	2	166	98			86	1	2	2	YES	AMLODIPINE -5 mg	1	YES	147	39	299	288	0.3	35	1+	YES	YES	NO	YES	YES
60	2	1	174	78	25.7	2	1	2	3	2	182	108			96	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	177	32	241	182	0.9	27	0	YES	NO	YES	NO	YES
70	3	2	152	47	20.3	2	2	2	1	2	174	98			84	2	1	2	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	2	YES	145	38	163	223	1.4	29	1	YES	YES	YES	YES	YES
36	2	1	174	74	24.4	1	1	1	2	2	154	92			82	1	2	2	YES	TELMISARTAN -40mg	1	YES	144	29	488	262	0.6	34	0	YES	YES	NO	NO	YES
76	3	1	182	85	25.6	2	1	1	3	2	200	110			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	180	36	250	200	0.8	37	1+	YES	YES	NO	YES	YES
56	2	1	169	67	23.4	1	1	1	1	2	190	108			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	90	28	201	210	0.9	31	1	YES	YES	NO	YES	YES
53	2	2	152	47	20.3	2	2	2	2	1	170	98	0		102	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	1	NO	150	29	418	345	1.4	29	1+	YES	NO	YES	YES	YES
76	3	1	164	66	24.5	2	1	1	3	2	178	100			98	2	1	2	NO	NIFIDIPINE – 20 mg	1	YES	174	39	241	199	0.5	29	0	NO	NO	NO	NO	NO
72	3	1	157	54	21.9	1	2	2	2	1	150	90			82	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	98	34	210	287	0.6	38	1+	YES	YES	YES	YES	YES
78	3	2	169	70	24.5	1	2	2	2	2	174	98			82	2	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	173	39	240	187	1.4	39	1	YES	NO	YES	NO	YES
41	2	2	149	45	20.2	1	2	2	2	2	162	90			84	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	120	39	195	287	0.5	39	1	YES	YES	YES	YES	YES
48	2	1	167	59	21.1	2	1	1	3	2	150	94			82	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	163	35	250	122	1.2	35	1+	NO	YES	YES	YES	YES
47	2	2	158	60	24	2	2	2	2	2	202	102			96	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	179	35	210	280	1.5	37	0	YES	YES	YES	YES	YES

50	2	1	178	85	26.8	1	2	2	1	2	182	108			98	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	102	41	145	245	1.1	31	1	YES	YES	YES	YES	YES
68	3	1	174	70	23.1	2	1	1	3	2	150	92			88	1	2	1	YES	AMLODIPINE -5 mg	1	NO	103	32	180	264	0.6	35	1+	YES	YES	YES	YES	YES
56	2	1	162	65	24.7	1	1	2	3	2	178	104			104	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	90	29	198	287	0.7	32	0	YES	NO	NO	YES	YES
40	2	2	159	47	18.5	1	2	2	2	2	160	98			100	2	1	1	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	103	35	482	245	1.4	40	1	YES	YES	YES	NO	YES
65	3	1	155	61	25.3	2	1	2	2	2	180	106			102	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	110	38	411	220	0.6	39	0	YES	YES	YES	YES	YES
67	3	1	160	65	25.3	2	1	1	2	2	170	104			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	154	32	210	239	1.1	33	1+	NO	NO	NO	NO	YES
42	2	1	176	78	25.1	2	2	2	2	1	200	110			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (80mg/5mg/12.5)	3	YES	179	41	210	274	1.2	39	0	YES	YES	NO	YES	YES
55	2	1	155	56	23.3	2	1	1	2	2	170	108			82	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	107	26	175	365	0.8	30	0	YES	NO	NO	YES	YES
51	2	1	170	75	25.9	1	1	1	3	2	170	98	0		84	2	2	2	NO	TELMISARTAN -40mg	1	YES	150	40	473	274	1.4	29	1+	YES	NO	YES	YES	YES
72	3	2	159	53	20.9	1	2	2	3	1	152	98			98	1	2	2	YES	TELMISARTAN - 20mg	1	YES	174	39	254	269	1.4	30	0	YES	YES	YES	YES	YES
65	3	2	158	59	23.6	1	2	2	1	2	160	94			82	1	2	2	YES	TELMISARTAN -20mg	1	YES	142	34	211	175	1.4	34	1+	YES	YES	YES	YES	YES
64	3	1	162	66	25.1	1	1	1	2	2	174	104			96	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	140	33	241	249	1.5	38	1	YES	YES	YES	YES	YES
71	3	1	154	57	24	2	2	2	2	2	166	92			82	1	2	2	YES	TELMISARTAN - 40mg	1	YES	130	33	199	301	0.3	26	1+	YES	NO	YES	NO	YES
62	3	1	178	80	25.2	1	2	2	3	1	174	108			96	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (80mg/5mg/12.5)	3	YES	65	26	121	120	0.3	25	0	YES	YES	YES	YES	YES
71	3	2	157	55	22.3	1	1	1	2	2	152	90			84	1	2	2	YES	METOPROLOL +TELMISARTAN (25mg/40mg)	1	NO	151	33	422	284	1.7	19	0	YES	YES	YES	YES	NO
77	3	1	172	71	24	2	1	1	3	2	180	102			106	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	147	33	380	298	0.3	33	0	YES	NO	YES	NO	YES
54	2	2	166	65	23.5	1	2	2	1	2	174	100			96	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA	1	YES	140	39	229	160	1.2	22	0	NO	NO	NO	NO	YES

																					ZIDE (40mg/5mg/12.5)																
57	2	2	148	44	20	1	2	2	2	1	152	90			80	1	2	1	YES	TELMISARTAN -20mg	1	NO	90	30	166	274	0.4	25	0	YES	YES	NO	NO	YES
75	3	1	168	74	26.2	1	1	1	2	2	180	110			104	2	2	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	179	37	250	226	1.2	29	0	YES	YES	YES	YES	YES
44	2	1	161	60	23.1	1	2	2	2	2	174	108			102	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	240	47	490	290	0.9	34	0	YES	YES	NO	YES	YES
44	2	1	159	57	22.5	1	2	2	2	2	160	92			84	1	2	2	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	NO	109	32	196	223	1	21	0	YES	YES	YES	YES	YES
41	2	1	174	78	25.7	1	2	1	3	2	170	102			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	120	28	214	210	0.8	16	1	YES	YES	YES	YES	YES
77	3	1	166	68	24.6	2	1	1	2	2	156	98			84	1	2	2	YES	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	120	30	199	298	1	29	0	NO	NO	NO	NO	YES
63	3	1	160	66	25.7	1	1	2	3	2	154	92			98	2	1	1	YES	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	162	33	207	174	0.9	22	1	YES	YES	NO	NO	YES
55	2	1	172	70	23.6	2	2	2	1	2	180	106			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	175	38	248	228	0.9	35	1+	YES	YES	YES	YES	YES
78	3	1	177	78	24.9	1	1	2	2	2	180	110			86	2	1	2	NO	TELMISARTAN - 40mg	1	YES	180	33	210	270	1	29	1	YES	YES	YES	YES	NO
55	2	1	159	59	23.3	1	2	2	3	2	150	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	150	29	411	301	1.4	22	1	YES	NO	NO	NO	YES
51	2	1	163	66	24.8	2	1	1	2	2	190	110			104	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	180	26	133	299	1.5	38	1	YES	YES	NO	YES	YES
50	2	2	152	50	21.6	2	2	2	1	1	154	96			88	1	2	2	YES	TELMISARTAN - 20mg	1	YES	111	28	174	220	0.8	35	1+	YES	YES	YES	YES	YES
66	3	1	150	47	20.8	1	1	1	2	2	148	88			86	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	147	28	150	200	0.9	15	0	YES	YES	YES	YES	YES
50	2	1	178	81	25.5	2	1	1	2	2	150	90			80	1	2	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	106	26	165	254	0.7	35	1	YES	YES	YES	YES	YES
68	3	1	165	67	24.6	2	1	1	3	2	170	104			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	108	29	229	274	1.4	28	0	YES	YES	YES	YES	YES
52	2	2	155	55	22.8	2	2	2	2	2	154	96			86	1	2	2	YES	NIFIDIPINE – 10 mg	1	YES	111	33	222	133	1.1	35	0	YES	YES	YES	NO	YES

41	2	2	157	54	21.9	2	2	2	1	2	200	110			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	179	33	245	152	1.2	31	1	YES	YES	YES	YES	YES
57	2	2	149	44	19.8	1	1	2	2	2	152	92			106	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	247	50	440	245	1.1	22	0	YES	YES	NO	NO	NO
64	3	1	177	71	22.6	2	1	1	3	2	186	104			100	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	117	35	174	298	0.7	35	1+	YES	YES	YES	YES	YES
72	3	1	173	78	26	1	2	2	1	1	150	92			90	1	2	2	YES	TELMISARTAN - 40mg	1	YES	180	28	223	280	1	35	0	NO	NO	NO	NO	NO
63	3	2	165	60	22	1	2	2	2	2	166	96			84	1	2	2	YES	AMLODIPINE -5 mg	1	YES	114	32	178	220	0.8	37	1	YES	YES	NO	YES	YES
43	2	1	155	56	23.3	2	2	2	3	2	186	98			86	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	175	36	246	227	1.5	40	1+	YES	YES	YES	YES	YES
40	2	2	150	43	19.1	1	2	2	2	2	160	98			84	1	2	2	YES	TELMISARTAN - 20mg	1	YES	111	28	196	243	1	21	1	YES	YES	YES	YES	YES
76	3	1	174	70	23.1	2	1	1	2	2	170	100			90	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	170	39	250	262	0.9	25	0	YES	YES	YES	YES	YES
51	2	2	157	66	26.7	1	2	2	2	1	156	90			82	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	116	37	226	296	1.2	28	1+	YES	NO	NO	NO	YES
69	3	2	160	63	24.6	2	2	1	2	2	202	106			98	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	150	38	204	163	0.9	22	0	YES	YES	YES	YES	YES
62	3	2	153	59	25.2	1	2	2	2	2	180	100			82	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	110	27	248	333	0.9	25	1	NO	NO	NO	NO	NO
44	2	2	154	52	21.9	2	2	2	3	1	156	90			88	1	2	2	YES	TELMISARTAN - 20mg	1	YES	174	32	123	220	1.4	29	1	YES	NO	NO	YES	YES
65	3	2	159	62	24.5	1	2	2	2	2	150	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	142	28	200	240	1.4	40	0	YES	YES	YES	YES	YES
63	3	1	163	70	26.3	2	1	2	1	2	190	110			100	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	180	41	245	298	1.5	38	1	YES	YES	YES	YES	NO
83	3	1	180	80	24.6	2	1	1	2	2	210	110			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	243	38	130	278	1.4	35	1+	NO	YES	NO	YES	YES
58	2	1	158	57	22.8	1	1	1	2	1	190	110			104	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	174	33	180	279	0.9	33	1	NO	NO	NO	NO	YES
43	2	2	160	61	23.8	2	2	2	3	2	150	98			82	1	2	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	97	29	150	200	0.7	25	1	YES	YES	YES	YES	YES
60	2	2	163	60	22.5	2	2	2	2	2	188	98			88	2	2	2	NO	TELMISARTAN - 40mg	1	YES	105	29	198	133	1.2	19	0	YES	YES	NO	NO	YES
46	2	1	160	58	22.6	2	1	1	1	1	160	98			82	1	2	2	YES	NIFIDIPINE – 10 mg	1	YES	74	27	146	236	1.4	24	1	YES	YES	NO	NO	YES
32	2	1	174	71	23.4	1	1	2	3	2	150	92			94	1	2	2	YES	AMLODIPINE -2.5 mg	1	NO	124	32	224	201	1.2	27	0	NO	YES	YES	YES	YES
77	3	1	180	85	26.2	2	1	1	3	2	140	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	119	38	163	228	0.9	19	1	NO	NO	NO	NO	NO
56	2	1	161	68	26.2	2	2	2	2	2	170	92			98	2	2	1	NO	AMLODIPINE - 5 mg	1	YES	115	27	197	290	0.8	21	1	YES	YES	YES	YES	YES
58	2	1	170	78	26.9	2	1	1	2	2	158	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	99	27	260	247	1.1	25	0	YES	YES	YES	YES	YES
60	2	1	166	65	23.5	1	2	2	2	2	152	90			86	1	1	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN +	1	YES	123	35	178	287	1.2	24	1	YES	YES	YES	YES	YES

																				AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)																
40	2	1	170	81	28	1	2	2	1	2	160	94			90	1	2	2	YES	TELMISARTAN - 20mg	1	YES	102	35	224	300	0.7	28	1	YES	YES	YES	YES	YES	YES
50	2	1	166	62	22.5	2	2	2	3	1	150	90			84	1	1	2	YES	AMLODIPINE - 5 mg	1	YES	110	40	489	297	0.4	12	1	YES	YES	YES	YES	YES	YES
50	2	1	174	78	25.7	1	1	1	2	2	200	110			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	180	39	250	219	1.4	34	0	YES	NO	YES	YES	YES	YES
82	3	1	149	49	22	1	1	1	2	2	198	104			100	2	1	2	NO	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	163	35	241	271	1.2	27	1+	NO	NO	NO	NO	NO	NO
75	3	1	164	61	22.6	2	2	2	2	2	150	94			84	1	2	2	YES	NIFIDIPINE – 10 mg	1	YES	150	32	220	183	0.9	40	0	YES	YES	YES	YES	YES	YES
72	3	2	160	62	24.2	1	2	2	2	2	178	100			98	2	1	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	225	47	210	261	1	25	1	NO	NO	YES	YES	YES	YES
59	2	1	168	62	21.9	2	1	1	2	2	162	92			90	1	2	2	YES	TELMISARTAN - 20mg	1	YES	149	50	472	300	1.1	29	0	YES	YES	NO	YES	YES	YES
57	2	1	166	65	23.5	2	1	1	3	2	152	88			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	247	42	446	256	0.5	21	1+	NO	NO	NO	NO	NO	NO
63	3	1	157	54	21.9	1	1	2	2	2	210	104			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	172	28	352	212	0.7	21	1	YES	YES	YES	YES	YES	YES
47	2	2	160	58	22.6	2	2	2	2	1	152	94			84	1	2	2	YES	TELMISARTAN - 40mg	1	YES	110	29	359	265	0.3	21	0	YES	YES	NO	YES	YES	YES
65	3	1	168	80	28.3	2	2	2	2	2	158	90			82	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	114	27	341	275	0.8	24	0	YES	YES	YES	YES	YES	YES
58	2	1	170	71	24.5	1	2	2	3	2	174	100			78	2	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	214	32	198	290	0.7	24	1	YES	YES	YES	YES	YES	YES
72	3	2	155	54	22.4	1	2	2	2	1	208	110			94	2	1	2	NO	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	YES	118	27	400	210	1.4	34	1+	NO	NO	NO	NO	NO	YES
65	3	2	154	58	24.4	2	2	2	2	1	168	98			86	2	1	2	YES	TELMISARTAN - 80mg	1	YES	178	27	210	201	0.4	29	1	YES	YES	YES	YES	YES	YES
62	3	1	166	65	23.5	1	1	2	2	2	154	90			84	1	2	2	YES	AMLODIPINE -5 mg	1	YES	201	26	410	249	1.4	35	1	YES	YES	NO	YES	YES	YES
62	3	2	163	66	24.8	1	2	2	2	2	190	110			100	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	180	39	210	203	1.5	28	0	NO	YES	YES	YES	YES	YES
81	3	1	174	80	26.4	2	1	1	2	2	166	96			84	2	1	1	YES	TELMISARTAN - 40mg	1	YES	103	28	289	220	0.3	36	1	YES	YES	YES	YES	YES	YES
57	2	2	150	45	20	1	2	2	2	1	152	88			82	1	2	1	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA	1	YES	90	32	150	256	0.9	33	1	YES	YES	YES	YES	YES	YES

																				ZIDE (40mg/5mg/12.5)																	
57	2	1	150	48	21.3	1	1	1	3	2	160	102			86	1	2	2	NO	TELMISARTAN+HYDROCHLOROTHIAZIDE (40mg/12.5 mg)	2	NO	109	37	337	247	1	21	0	YES	YES	YES	YES	YES
39	2	1	174	71	23.4	2	1	1	1	2	150	90			80	1	2	2	YES	AMLODIPINE - 2.5 mg	1	YES	220	27	309	279	0.5	15	0	YES	YES	YES	YES	YES
57	2	1	152	51	22	2	2	2	2	2	150	90			80	1	2	2	YES	TELMISARTAN - 20mg	1	NO	90	27	127	110	0.6	10	0	YES	YES	YES	YES	YES
53	2	1	181	82	25	2	2	2	3	2	162	96			102	2	1	1	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	117	29	452	221	0.9	20	0	YES	YES	YES	YES	YES
65	3	2	159	57	22.5	2	2	2	2	2	180	104			98	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	180	38	241	163	1.2	35	1+	NO	NO	NO	NO	NO
62	3	1	169	70	24.5	2	2	2	2	1	160	94			80	1	2	2	YES	TELMISARTAN - 20mg	1	YES	210	43	150	260	1	29	1	YES	YES	YES	YES	YES
54	2	1	159	57	22.5	1	2	2	3	2	150	98			82	1	2	2	YES	AMLODIPINE -5 mg	1	YES	240	44	418	284	1.1	25	1	NO	NO	YES	NO	YES
35	2	1	163	68	25.5	1	1	1	3	2	152	92			90	1	2	2	YES	TELMISARTAN - 20mg	1	NO	248	47	385	296	1	22	1	YES	YES	YES	YES	YES
64	3	2	162	65	24.7	2	2	2	2	2	154	88			86	1	2	2	YES	TELMISARTAN - 20mg	1	YES	221	39	351	256	0.3	35	0	YES	YES	YES	YES	YES
73	3	2	150	50	22.2	1	1	1	2	2	188	110			98	2	1	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	188	29	251	200	0.9	13	0	YES	YES	YES	NO	YES
29	1	2	155	50	20.8	2	2	2	2	2	158	98			88	1	2	2	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	174	34	180	298	0.7	30	1	YES	YES	YES	YES	YES
59	2	1	178	74	23.3	2	1	1	1	1	160	100			84	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	216	32	296	187	1.4	38	1	YES	YES	YES	YES	YES
62	3	2	170	68	23.5	2	2	2	3	2	162	92			86	1	2	2	YES	TELMISARTAN - 40mg	1	YES	178	38	287	301	0.3	25	1	YES	YES	YES	YES	YES
60	2	1	176	74	23.8	2	1	2	1	2	210	108			98	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	247	47	398	302	1.1	30	0	YES	NO	NO	YES	NO
56	2	2	163	52	19.5	2	2	2	2	1	150	90			86	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA	1	YES	220	39	248	258	0.7	19	0	NO	YES	NO	NO	YES

																			ZIDE (40mg/5mg/12.5)																
72	3	1	174	69	22.7	2	1	1	2	2	188	92			88	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	198	35	259	236	1.2	39	1+	YES	NO	NO	YES	YES
71	3	1	167	62	22.2	1	1	2	2	2	204	106			98	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	149	27	188	298	0.6	24	1+	NO	NO	NO	NO	YES
60	2	1	163	67	25.2	1	1	1	3	2	170	104			96	2	1	1	NO	METOPROLOL +TELMISARTAN (25mg/40mg)	2	YES	110	27	401	187	1.4	31	0	YES	NO	NO	NO	YES
63	3	1	172	73	24.6	2	1	1	1	2	156	90			90	1	2	2	YES	TELMISARTAN - 40mg	1	NO	180	32	246	258	1.4	27	1	YES	YES	YES	YES	YES
54	2	1	174	77	25.4	2	2	1	2	2	182	100			90	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	170	37	250	241	0.9	25	0	NO	NO	NO	NO	NO
78	3	1	162	66	25.1	1	1	1	2	1	150	92			88	1	2	2	YES	AMLODIPINE -5 mg	1	YES	120	32	154	245	1.2	28	0	YES	YES	YES	YES	YES
71	3	1	160	67	26.1	1	1	2	2	2	204	110			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	172	38	245	260	1.4	38	1+	YES	YES	YES	YES	YES
53	2	1	167	62	22.2	1	2	2	2	2	180	104			100	2	1	1	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	103	32	180	240	0.9	25	0	YES	YES	YES	NO	NO
60	2	1	178	80	25.2	2	1	1	2	2	150	88			88	1	2	2	YES	TELMISARTAN - 20mg	1	NO	220	30	258	245	1.4	29	0	NO	NO	NO	NO	YES
46	2	1	159	61	24.1	1	2	2	1	2	150	92			82	2	1	1	YES	AMLODIPINE -2.5 mg	1	YES	142	28	200	267	1.4	40	0	YES	YES	YES	YES	YES
56	2	1	174	70	23.1	2	1	1	2	2	170	100			90	2	1	2	YES	CLONIDINE -(0.1mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	110	26	180	200	0.9	25	0	YES	YES	YES	YES	YES
58	2	2	153	52	22.2	1	2	2	2	1	156	88			82	1	2	1	YES	AMLODIPINE -2.5 mg	1	YES	120	29	187	256	0.5	28	1+	YES	NO	YES	YES	YES
72	3	1	174	78	25.7	2	1	1	3	2	174	108			98	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	130	32	215	220	0.9	25	0	YES	YES	YES	YES	YES
65	3	1	168	66	23.3	2	1	1	2	1	158	92			82	1	2	2	YES	TELMISARTAN - 40mg	1	YES	126	35	220	274	1.3	30	1+	NO	NO	NO	NO	NO
72	3	1	160	60	23.4	2	1	1	2	2	204	106			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	180	38	245	259	1.4	39	0	YES	YES	YES	YES	YES
37	2	1	173	72	24	1	2	2	3	2	140	90			82	1	2	1	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN +	1	YES	91	27	339	205	0.3	10	0	YES	YES	YES	YES	YES

																				AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)																	
70	3	2	155	52	21.6	2	2	2	2	1	144	92			80	1	2	1	YES	TELMISARTAN - 20mg	1	NO	250	29	274	256	1.4	29	1	YES	NO	YES	YES	YES
49	2	1	159	49	19.3	1	2	2	1	2	146	90			80	1	2	2	YES	AMLODIPINE -2.5 mg	1	YES	248	36	447	223	1.4	21	1	YES	YES	YES	YES	YES
72	3	2	148	45	20.5	1	2	2	2	2	190	108			100	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	179	40	299	300	0.7	38	0	YES	YES	YES	YES	YES
66	3	1	180	82	25.3	2	1	1	2	2	210	110			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	113	28	222	221	1.4	21	1+	YES	YES	YES	NO	YES
46	2	1	158	59	23.6	1	2	2	3	1	148	86			80	1	2	2	YES	TELMISARTAN - 20mg	1	YES	174	33	391	256	0.9	33	1	YES	YES	YES	YES	YES
61	3	2	160	63	24.6	1	2	2	2	2	140	90			84	1	2	2	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	YES	98	29	385	256	0.7	35	1	YES	YES	NO	NO	YES
60	2	1	180	80	24.6	2	1	1	3	2	200	100			98	2	1	1	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	170	37	247	290	1.4	38	1+	YES	NO	YES	NO	YES
56	2	1	158	59	23.6	1	2	2	3	1	146	86			80	1	2	2	YES	TELMISARTAN - 20mg	1	YES	221	33	382	256	0.9	33	1	YES	YES	YES	YES	YES
56	2	1	160	66	25.7	1	2	2	2	2	140	90			82	1	2	2	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	NO	111	29	160	255	0.7	35	1	YES	YES	NO	NO	YES
62	3	1	179	82	25.5	2	1	1	2	2	198	104			102	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	174	28	247	227	1.5	38	0	YES	YES	YES	YES	YES
76	3	2	162	67	25.5	2	2	2	2	2	201	108			100	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	178	39	232	188	1.2	29	0	YES	NO	NO	NO	YES
43	2	1	153	48	20.5	1	2	2	2	1	152	92			86	1	2	1	YES	TELMISARTAN - 20mg	1	YES	98	39	198	278	0.8	37	0	NO	NO	NO	NO	YES
65	3	2	155	52	21.6	1	2	2	2	2	160	98	0		88	1	2	2	YES	TELMISARTAN -20mg	1	YES	123	27	193	225	0.8	29	1+	YES	YES	NO	YES	NO
56	2	1	178	77	24.3	2	1	1	2	2	172	100			90	2	1	1	YES	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	170	38	241	193	1.4	29	1+	YES	NO	NO	NO	YES
65	3	2	162	62	23.6	1	2	2	2	1	204	102			98	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	138	39	240	239	1.5	38	1+	YES	YES	NO	NO	YES
45	2	2	142	47	23.3	2	2	2	3	2	196	108			100	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	NO	152	37	214	199	1.2	29	1	NO	NO	NO	NO	NO
57	2	2	162	65	24.7	1	2	2	2	1	184	98			92	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	108	26	441	228	0.8	37	1+	YES	YES	NO	YES	YES
68	3	1	178	81	25.5	1	1	2	1	2	182	100	0		98	2	1	2	NO	TELMISARTAN -80mg	1	YES	112	33	239	300	0.5	20	0	YES	YES	NO	NO	YES
64	3	1	168	71	25.1	2	2	2	2	2	166	98			100	2	1	1	YES	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	147	28	216	201	1.4	29	1+	YES	YES	NO	YES	YES
53	2	1	173	80	26.7	1	1	2	3	2	152	92			82	1	2	1	YES	AMLODIPINE -5 mg	1	YES	170	35	241	180	1.5	38	1	YES	YES	YES	YES	YES

70	3	2	158	57	22.8	2	2	2	2	2	178	98			100	1	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	190	50	289	187	1.4	34	1	YES	YES	YES	YES	YES
67	3	2	160	62	24.2	1	2	2	3	2	160	94			90	2	1	1	YES	AMLODIPINE -5 mg	1	YES	199	48	369	244	1.1	30	0	YES	YES	NO	YES	YES
50	2	2	147	41	18.9	2	2	2	2	1	152	92			82	1	2	2	YES	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	NO	229	47	293	241	0.5	29	1	NO	NO	NO	NO	YES
52	2	2	155	52	21.6	2	2	2	2	1	150	90			80	1	2	2	YES	NIFIDIPINE – 10 mg	1	NO	113	30	170	210	1.1	32	1	NO	NO	NO	NO	YES
48	2	1	174	70	23.1	1	1	1	2	2	188	106			100	2	1	2	NO	NIFIDIPINE – 30 mg	1	YES	166	36	245	150	1.2	29	0	YES	NO	NO	NO	YES
80	3	1	161	62	23.9	2	1	1	2	2	168	94			90	2	1	2	YES	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	172	32	241	266	0.8	35	0	YES	YES	YES	YES	YES
38	2	1	180	80	24.6	2	1	1	1	2	178	104			106	2	1	1	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	125	39	320	271	1.1	29	1+	YES	YES	NO	YES	YES
65	3	2	152	51	22	1	2	2	2	2	150	94			82	1	2	1	YES	TELMISARTAN -40mg	1	YES	110	28	271	289	0.4	21	0	YES	YES	YES	YES	YES
77	3	1	140	48	24.4	2	1	1	2	2	196	105			100	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	210	38	293	247	1.2	29	0	YES	YES	YES	YES	YES
60	2	1	168	64	22.6	1	2	2	2	2	192	100			82	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	149	36	241	229	0.8	37	1+	YES	YES	NO	NO	YES
88	3	1	180	70	21.6	1	2	2	2	1	140	90	0		80	1	2	2	YES	TELMISARTAN -40mg	1	NO	148	28	229	247	0.8	17	1+	YES	YES	NO	YES	YES
49	2	1	140	44	22.4	2	2	2	3	2	188	98			86	2	1	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	145	27	247	300	1.2	38	1+	YES	NO	NO	YES	YES
56	2	1	171	62	21.2	1	1	2	2	1	164	92			80	2	1	1	YES	AMLODIPINE -5 mg	1	YES	249	48	419	204	0.8	37	1+	YES	YES	NO	YES	YES
67	3	2	149	40	18	1	2	2	2	1	148	88	0		88	1	2	2	YES	TELMISARTAN -20mg	1	YES	112	31	203	223	0.7	29	1+	YES	YES	NO	YES	YES
68	3	2	155	50	20.8	2	2	2	2	2	152	92			84	2	1	1	YES	AMLODIPINE+ATENOLOL (5mg/50mg)	2	NO	210	40	360	223	1.4	29	1+	YES	YES	NO	NO	YES
53	2	1	180	78	24	1	2	2	1	2	168	92			80	1	2	2	YES	TELMISARTAN + AMLODIPINE (20 mg/5 mg)	2	YES	120	49	422	276	1.5	38	1	YES	YES	YES	YES	YES
39	2	1	170	77	26.6	2	1	1	2	2	178	96			86	2	2	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	199	38	443	284	1.1	34	1	YES	YES	YES	YES	YES
67	3	2	162	60	22.8	1	2	2	2	2	188	98			94	2	1	1	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	114	28	247	298	1.1	30	1+	YES	NO	NO	NO	YES
50	2	1	172	71	24	2	1	2	3	2	174	98			82	1	2	2	NO	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	YES	176	33	233	248	1.4	38	1	YES	YES	NO	YES	YES
61	3	2	152	57	24.6	1	2	2	2	2	152	90			88	1	2	1	YES	TELMISARTAN - 40mg	1	NO	250	35	407	293	0.7	17	0	YES	YES	YES	YES	YES
65	3	1	169	61	21.3	2	2	2	2	2	170	98			100	2	1	2	NO	TELMISARTAN+HYDR	2	YES	215	29	240	285	1	33	1	YES	YES	YES	NO	YES

																				OCHLOROTHIAZIDE (40mg/12.5 mg)															
32	2	1	178	80	25.5	1	1	1	1	2	174	96			98	2	2	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	245	44	296	278	1.4	21	1	YES	YES	NO	NO	YES
55	2	2	142	42	20.8	1	2	2	2	2	154	88			80	1	2	1	YES	AMLODIPINE -5 mg	1	YES	250	39	229	289	0.7	28	1	NO	YES	NO	NO	YES
63	3	2	154	52	21.9	2	2	2	2	2	210	110			102	2	1	2	NO	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	3	YES	147	35	338	259	1.4	31	1+	YES	YES	NO	NO	YES
56	2	2	158	52	20.8	1	2	2	2	1	152	90			84	1	2	2	YES	TELMISARTAN - 20mg	1	YES	247	39	369	265	0.9	21	1	YES	YES	YES	YES	YES
45	2	1	181	81	24.7	2	1	1	1	2	174	104			90	2	1	1	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	NO	236	39	369	280	0.5	35	1+	NO	NO	NO	NO	YES
56	2	1	163	67	25.2	2	1	1	2	2	192	100			96	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	148	37	247	259	0.7	38	0	YES	YES	NO	YES	NO
66	3	1	179	78	24.3	2	1	1	1	2	190	104			106	2	1	2	NO	AMLODIPINE+ATENOLOL (5mg/50mg)	2	YES	174	28	247	211	1.5	38	0	YES	YES	YES	YES	YES
56	2	1	163	65	24.4	2	1	1	2	2	196	108			100	2	1	2	NO	AMLODIPINE -2.5 mg	1	NO	147	37	225	209	0.4	33	1	NO	NO	NO	NO	YES
37	2	2	153	47	20	1	2	2	3	1	140	90			80	1	2	1	YES	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	97	27	248	189	0.8	37	1+	YES	YES	NO	NO	YES
55	2	1	178	74	23.3	2	1	1	2	2	160	98	0		88	2	1	1	YES	TELMISARTAN -80mg	1	YES	110	30	197	245	1.4	30	1+	YES	YES	YES	YES	YES
47	2	1	149	41	18.4	2	2	2	2	2	152	90			84	1	2	1	YES	TELMISARTAN - 20mg	1	YES	222	31	196	265	0.4	29	0	YES	NO	NO	YES	YES
59	2	1	173	77	25.7	2	1	1	2	2	178	104			88	2	2	2	NO	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	YES	231	48	229	256	1.5	38	1	YES	YES	YES	YES	YES
65	3	2	143	48	23.4	1	2	2	2	1	162	98			90	1	2	2	YES	TELMISARTAN - 20mg	1	NO	147	35	198	269	0.3	25	1	NO	NO	NO	NO	YES
44	2	1	158	57	22.8	1	2	2	3	2	166	92			92	2	1	2	YES	AMLODIPINE -5 mg	1	NO	163	38	150	268	0.4	24	0	YES	YES	NO	YES	YES
54	2	1	182	87	26.2	2	1	1	3	2	164	98			82	1	2	2	YES	TELMISARTAN - 80mg	1	YES	215	28	299	201	1.4	38	1	YES	YES	YES	NO	YES
32	2	1	163	60	22.5	2	1	1	2	2	152	88			80	1	2	1	YES	AMLODIPINE -2.5 mg	1	NO	118	36	284	265	0.5	10	0	YES	YES	YES	YES	YES
62	3	2	168	67	23.7	1	2	2	2	1	158	92			88	1	2	2	YES	TELMISARTAN - 20mg	1	YES	190	38	228	197	1.4	37	1+	YES	YES	NO	NO	YES
42	2	1	178	78	24.6	2	2	2	3	2	168	92	0		78	1	2	2	YES	TELMISARTAN -40mg	1	NO	152	32	241	293	1.4	34	1+	YES	NO	YES	YES	YES
58	2	1	173	71	23.7	2	2	2	3	2	152	92			96	1	2	1	YES	AMLODIPINE -5 mg	1	YES	173	30	217	225	1.4	34	0	YES	YES	YES	YES	YES
60	2	2	150	53	23.5	1	2	2	2	1	210	110			104	2	1	2	NO	TELMISARTAN + AMLODIPINE (80 mg/5 mg)	2	NO	136	33	225	279	0.8	29	1+	NO	NO	NO	NO	YES
70	4	1	170	75	23.5	1	2	2	2	2	168	98			86	2	1	1	1	AMLODIPINE -2.5 mg	1	1	240	27	199	245	1.2	29	0	YES	NO	NO	YES	YES
53	3	1	164	67	24.7	1	1	2	2	2	152	100			88	2	1	1	1	AMLODIPINE -5 mg	1	1	98	39	178	260	0.5	19	0	YES	YES	YES	YES	YES
37	2	2	173	72	21.4	2	2	2	3	2	140	90			82	1	2	1	1	PRAZOSIN (2.5 mg) twice a day to thrice a day + TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIAZIDE (40mg/5mg/12.5)	1	1	91	27	339	205	0.3	10	0	NO	NO	NO	NO	YES
70	4	2	155	52	23.1	2	2	2	2	1	144	92			80	1	2	1	1	TELMISARTAN - 20mg	1	2	250	29	274	256	1.4	29	1	YES	YES	NO	YES	YES
60	3	1	180	80	25.9	2	1	1	3	2	200	100			98	2	1	1	2	TELMISARTAN + AMLODIPINE +HYDROCHLOROTHIA	3	1	170	37	247	290	1.4	38	1+	YES	YES	YES	NO	YES

																				ZIDE (40mg/5mg/12.5)																	
43	2	1	153	48	26.3	1	2	2	2	1	152	92			86	1	2	1	1	TELMISARTAN - 20mg	1	1	98	39	198	278	0.8	37	0	YES	YES	YES	YES	YES
56	3	1	178	77	24.1	2	1	1	2	2	172	100			90	2	1	1	1	AMLODIPINE+ATENOLOL (5mg/50mg)	2	2	170	38	241	193	1.4	29	1+	YES	YES	NO	NO	YES
57	3	2	162	65	23	1	2	2	2	1	184	98			92	2	1	1	2	TELMISARTAN + AMLODIPINE (40 mg/5 mg)	2	1	108	26	441	228	0.8	37	1+	YES	NO	YES	YES	YES
64	3	1	168	71	25.4	2	2	2	2	2	166	98			100	2	1	1	1	AMLODIPINE+ATENOLOL (5mg/50mg)	2	2	147	28	216	201	1.4	29	1+	YES	YES	YES	YES	YES
53	3	1	173	80	24.9	1	1	2	3	2	152	92			82	1	2	1	1	AMLODIPINE -5 mg	1	1	170	35	241	180	1.5	38	1	NO	NO	NO	NO	YES