Summary of Product Characteristics for Pharmaceutical Products

1. Name Of The Medicinal Product

ATENGOOD 50 AM (Amlodipine 5 mg Atenolol 50 mg Tablets)

2. Qualitative And Quantitative Composition

Each Tablet contains:
Amlodipine besylate USP
Eq. to Amlodipine 5mg
Atenolol USP 50mg
For the full list of excipients, see section 6.1.

3. Pharmaceutical Form

Tablet for Oral Administration

4. Clinical Particulars

4.1 Therapeutic indications

ATENGOOD 50 AM is a significant synergism exists between atenolol and amlodipine in lowering and stabilizing blood pressure in SHR-SP. Combination therapy may be an optimal strategy for the prevention of stroke in hypertension.

4.2 Posology and method of administration

For angina (chest pain):

- Adults— **ATENGOOD 50 AM** once a day. Your doctor may adjust your dose as needed. However, the dose is usually not more than Atenolol 100 mg per day & Amlodipine 10 mg per day (not more than 2 tablets a day).
- Children—Use and dose must be determined by your doctor.

For high blood pressure:

- Adults—At first, **ATENGOOD 50 AM** once a day. Your doctor may adjust your dose as needed. However, the dose is usually not more than Atenolol 100 mg per day & Amlodipine 10 mg per day (not more than 2 tablets a day).
- Children—Use and dose must be determined by your doctor.
- Children younger than 6 years of age—Use and dose must be determined by your doctor.

For acute heart attack:

- Adults—At first, **ATENGOOD 50 AM** one tablet 10 minutes after the last intravenous (IV) dose followed by another **ATENGOOD 50 AM** 12 hours later. Then, **ATENGOOD 50 AM** 2 times a day for another 6 to 9 days or until discharge from the hospital.
- Children—Use and dose must be determined by your doctor.

Missed doses
If a dose is missed, and it is 12 hours or more until the next dose, the dose should be taken as soon as the patient remembers. The next dose should be taken at the usual time. If a dose is missed, and it is less than 12 hours until

the next dose, the dose should be skipped and the next dose should be taken at the usual time. A double dose should not be taken to compensate for a forgotten dose.

AMLODIPINE

Hepatic Impairment

Hypertension

Initially, amlodipine 2.5 mg once daily (as initial or add-on therapy). Titrate slowly. Amlodipine/perindopril fixed combination not recommended in patients with hepatic impairment; insufficient data to support dosage recommendations.

Preparations containing amlodipine in fixed combination with olmesartan (with or without hydrochlorothiazide), telmisartan, or valsartan (with or without hydrochlorothiazide) exceed recommended initial dosage of amlodipine (2.5 mg daily) for patients with hepatic insufficiency. Angina

Initially, amlodipine 5 mg daily. Renal Impairment

Amlodipine dosage modification generally not necessary.

Amlodipine/benazepril fixed combination not recommended in patients with Clcr ≤30 mL/minute.

Amlodipine/olmesartan/hydrochlorothiazide fixed combination not recommended in patients with Clcr ≤30 mL/minute; loop diuretic generally preferred over hydrochlorothiazide.

Amlodipine/perindopril fixed combination not recommended in patients with Clcr <60 mL/minute; insufficient data to support dosage recommendations.

Safety and efficacy of preparations containing amlodipine in fixed combination with valsartan (with or without hydrochlorothiazide) in patients with Clcr <30 mL/minute not established.

Manufacturers recommend slow titration of amlodipine/telmisartan dosage in patients with severe renal impairment.

Geriatric Patients

Hypertension

Consider reduced initial amlodipine dosage. Some manufacturers recommend initial dosage of 2.5 mg once daily for geriatric patients; others recommend this reduced dosage for geriatric patients ≥75 years of age.

Preparations containing amlodipine in fixed combination with olmesartan (with or without hydrochlorothiazide), telmisartan, or valsartan (with or without hydrochlorothiazide) exceed recommended initial dosage of amlodipine (2.5 mg daily) for geriatric patients.

Amlodipine/perindopril fixed combination not recommended; insufficient data available to support geriatric dosage recommendations.

Angina

Initially, amlodipine 5 mg daily. Heart Failure

Manufacturers make no specific dosage recommendations; however, amlodipine exposure in patients with moderate to severe heart failure similar to that in geriatric patients and those with hepatic impairment.

Amlodipine/perindopril fixed combination not recommended in patients with heart failure; insufficient data to support dosage recommendations.

ATENOLOL

Hepatic Impairment

Minimal hepatic metabolism; no dosage adjustment recommended. Renal Impairment

Hypertension

Oral

Modify dose and/or frequency of administration in response to the degree of renal impairment. Initial dosage of 25 mg daily may be necessary. Measure BP just prior to the dose to ensure persistence of adequate BP reduction. Patients with Clcr 15–35 mL/minute per 1.73 m2: Maximum 50 daily.

Patients with Clcr<15 mL/minute per 1.73 m2: Maximum 25 mg daily or 50 mg every other day. Hemodialysis patients: May administer 25 or 50 mg after each dialysis. Marked reductions in BP may occur; give under careful supervision.

Geriatric

Patients

Hypertension

Modification of dosage may be necessary because of age-related decreases in renal function. Initially, 25 mg daily may be necessary. Measure BP just prior to a dose to ensure persistence of adequate BP reduction. Bronchospastic Disease Initially, 50 mg daily and use lowest possible dosage. If dosage must be increased, consider administering in 2 divided doses daily to decrease peak blood levels. A β2-adrenergic agonist bronchodilator should be available. (See Bronchospastic Disease under Cautions.)

4.3 Contraindications

Known hypersensitivity to Amlodipine & Atenolol.

4.4 Special warnings and precautions for use

It is very important that your doctor check your progress at regular visits to make sure this medicine is working properly. Blood tests may be needed to check for unwanted effects.

Hypotension

Possible symptomatic hypotension, particularly in patients with severe aortic stenosis. Acute hypotension unlikely because of gradual onset of action.

Increased Angina and/or Acute MI

Possible worsening of angina or acute MI, particularly in patients with severe obstructive CAD, upon initiation or dosage increase of amlodipine.

Use of Fixed Combinations

When amlodipine is used in fixed combination with other drugs (e.g., other antihypertensive agents, atorvastatin), consider cautions, precautions, contraindications, and interactions associated with the concomitant agent(s). Consider cautionary information applicable to specific populations (e.g., pregnant or nursing women, individuals with hepatic or renal impairment, geriatric patients) for each drug in the fixed combination.

Heart Failure

Although some calcium-channel blockers have been shown to worsen clinical status of patients with heart failure, no evidence of worsening heart failure and no adverse effects on overall survival or cardiac morbidity observed in controlled studies of amlodipine in patients with heart failure.
Using this medicine while you are pregnant can harm your unborn baby. Use an effective form of birth control to keep from getting pregnant. If you think you have become pregnant while using the medicine, tell your doctor right away.
Atenolol may cause heart failure in some patients. Check with your doctor right away if you are having chest pain or discomfort, dilated neck veins, extreme fatigue, irregular breathing or heartbeat, swelling of the face, fingers, feet, or lower legs, trouble breathing, or weight gain.
Do not suddenly stop taking this medicine without first checking with your doctor. Your doctor may want you to gradually reduce the amount you are taking before stopping it completely. Some conditions may become worse when the medicine is stopped suddenly, which can be dangerous.
Make sure any doctor or dentist who treats you knows that you are using this medicine. Do not stop taking this medicine before surgery without your doctor's approval.
This medicine may cause changes in blood sugar levels. Also, this medicine may cover up the symptoms of low blood sugar (including fast heartbeat) and increase the risk for serious or prolonged hypoglycemia (low blood sugar). Check with your doctor if you notice a change in your normal symptoms or a change in the results of your blood or urine sugar tests. Call your doctor right away if you have anxiety, blurred vision, chills, cold sweats, coma, confusion, cool, pale skin, depression, dizziness, fast heartbeat, headache, increased hunger, nausea, nervousness, nightmares, seizures, shakiness, slurred speech, or unusual tiredness or weakness.
This medicine may cause some people to become less alert than they are normally. If this side effect occurs, do not drive, use machines, or do anything else that could be dangerous if you are not alert while taking atenolol.

Do not take other medicines unless they have been discussed with your doctor. This includes prescription or nonprescription (over-the-counter [OTC]) medicines for appetite control, asthma, colds, cough, hay fever, or sinus problems, since they may increase your blood pressure.

4.5 Interaction with other medicinal products and other forms of interaction

The following information addresses potential interactions with amlodipine. When amlodipine is used in fixed combination with other drugs, consider interactions associated with the concomitant agent(s).
Drugs Affecting Hepatic Microsomal Enzymes
Moderate or potent CYP3A inhibitors: Increased amlodipine exposure. Amlodipine dosage reduction may be necessary. Monitor patients for symptoms of hypotension or edema.
CYP3A inducers: Data lacking; closely monitor BP.

Drug or Food	**Interaction**	**Comments**
Alcohol	No change in alcohol exposure	

Antacids (e.g., aluminum hydroxide and magnesium hydroxide)	No change in amlodipine exposure	
Antifungals, azole (e.g., itraconazole)	Possible increased amlodipine exposure	Amlodipine dosage reduction may be necessary; monitor patients for hypotension and edema
Cimetidine	No effects on amlodipine exposure	
Digoxin	No effects on digoxin exposure No change in plasma protein binding of digoxin	
Diltiazem	Increased amlodipine exposure	Amlodipine dosage reduction may be necessary; monitor patients for hypotension and edema
HMG-CoA reductase inhibitors (statins)	Atorvastatin: No effects on atorvastatin exposure Simvastatin: Increased simvastatin exposure	Simvastatin: Limit simvastatin dosage to ≤20 mg daily
Grapefruit juice	Altered amlodipine bioavailability possible but no evidence of altered	
	pharmacodynamics; no change in amlodipine exposure in another study	
Immunosuppressants (cyclosporine, tacrolimus)	Cyclosporine: Increased cyclosporine trough concentrations Tacrolimus: Increased tacrolimus exposure, possibly irrespective of CYP3A5 genotype	Frequently monitor blood concentrations of the immunosuppressant; adjust the immunosuppressant dosage as necessary
Indomethacin	No change in plasma protein binding of indomethacin	

Macrolides (clarithromycin, erythromycin)	Clarithromycin: Possible increased amlodipine exposure Erythromycin: No substantial change in amlodipine exposure	Clarithromycin: Amlodipine dosage reduction may be necessary; monitor patients for hypotension and edema
Phenytoin	No change in plasma protein binding of phenytoin	
Sildenafil	Pharmacokinetic interaction unlikely; additional reduction of BP possible	Monitor patients for hypotension
Warfarin	No change in PT No change in plasma protein binding of warfarin	

Although certain medicines should not be used together at all, in other cases two different medicines may be used together even if an interaction might occur. In these cases, your doctor may want to change the dose, or other precautions may be necessary. When you are taking this medicine, it is especially important that your healthcare professional know if you are taking any of the medicines listed below. The following interactions have been selected on the basis of their potential significance and are not necessarily all-inclusive.

Using this medicine with any of the following medicines is usually not recommended, but may be required in some cases. If both medicines are prescribed together, your doctor may change the dose or how often you use one or both of the medicines.

- Albuterol
- Ceritinib
- Clonidine
- Crizotinib
- Darunavir
- Diltiazem
- Dronedarone
- Fenoldopam
- Fexinidazole
- Fingolimod
- Formoterol
- Indacaterol
- Iohexol
- Lacosamide

- Levalbuterol
- Olodaterol
- Ponesimod
- Rivastigmine
- Salmeterol
- Siponimod
- Terbutaline
- Verapamil
- Vilanterol

Using this medicine with any of the following medicines may cause an increased risk of certain side effects, but using both drugs may be the best treatment for you. If both medicines are prescribed together, your doctor may change the dose or how often you use one or both of the medicines.

- Acarbose
- Aceclofenac
- Acemetacin
- Acetyldigoxin
- Albiglutide
- Alfuzosin
- Alogliptin
- Amtolmetin Guacil
- Aspirin
- Bromfenac
- BufexamacBunazosin
- Canagliflozin
- Celecoxib
- Chlorpropamide
- Choline Salicylate
- Clonixin
- Dapagliflozin
- Deslanoside
- Dexibuprofen
- Dexketoprofen
- Diclofenac
- Diflunisal
- Digitoxin
- Digoxin
- Dipyrone
- Disopyramide

- Doxazosin
- Droxicam
- Dulaglutide
- Empagliflozin
- Ertugliflozin
- Etodolac
- Etofenamate
- Etoricoxib
- Exenatide
- Felbinac
- Fenoprofen
- Fepradinol
- Feprazone
- Floctafenine
- Flufenamic Acid
- Flurbiprofen
- Glimepiride
- Glipizide
- Glyburide
- Ibuprofen
- Indomethacin
- Insulin Aspart, Recombinant
- Insulin Degludec
- Insulin Detemir
- Insulin Glargine, Recombinant
- Insulin Glulisine
- Insulin Human Inhaled
- Insulin Human Isophane (NPH)
- Insulin Human Regular
- Insulin Lispro, Recombinant
- Ketoprofen
- Ketorolac
- Linagliptin
- Liraglutide
- Lixisenatide
- Lornoxicam
- Loxoprofen
- Lumiracoxib

- Meclofenamate
- Mefenamic Acid
- Meloxicam
- Metformin
- Metildigoxin
- Miglitol
- Morniflumate
- Moxisylyte
- Nabumetone
- Naproxen
- Nateglinide
- Nepafenac
- Niflumic Acid
- Nimesulide
- Nimesulide Beta Cyclodextrin
- Oxaprozin
- Oxyphenbutazone
- Parecoxib
- Phenoxybenzamine
- Phentolamine
- Phenylbutazone
- Piketoprofen
- Pioglitazone
- Piroxicam
- Pramlintide
- Pranoprofen
- Prazosin
- Proglumetacin
- Propyphenazone
- Proquazone
- Quinidine
- Repaglinide
- Rofecoxib
- Rosiglitazone
- Salicylic Acid
- Salsalate
- Saxagliptin
- Sitagliptin

- Sodium Salicylate
- St John's Wort
- Sulindac
- Tamsulosin
- Tenoxicam
- Terazosin
- Tiaprofenic Acid
- Tolazamide
- Tolbutamide
- Tolfenamic Acid
- Tolmetin
- Trimazosin
- Urapidil
- Valdecoxib

- VildagliptinOther Interactions

  Certain medicines should not be used at or around the time of eating food or eating certain types of food since interactions may occur. Using alcohol or tobacco with certain medicines may also cause interactions to occur. Discuss with your healthcare professional the use of your medicine with food, alcohol, or tobacco.

4.6 Fertility, pregnancy and lactation

Pregnancy

Using this medicine while you are pregnant can harm your unborn baby. Use an effective form of birth control to keep from getting pregnant. If you think you have become pregnant while using the medicine, tell your doctor right away.

Lactation

Not known whether amlodipine is distributed into milk; manufacturer recommends discontinuance of nursing if amlodipine is used.

Paediatric Use

Safety and efficacy of amlodipine in children <6 years of age not established. Efficacy of amlodipine 2.5–5 mg daily for treatment of hypertension established in pediatric patients 6–17 years of age.

Appropriate studies have not been performed on the relationship of age to the effects of atenolol in the pediatric population. Safety and efficacy have not been established.

4.7 Effects on ability to drive and use machines

This medicine may cause some people to become less alert than they are normally. If this side effect occurs, do not drive, use machines, or do anything else that could be dangerous if you are not alert while taking atenolol.

4.8 Undesirable effects

Check with your doctor right away if you are having chest pain or discomfort, fast or irregular heartbeat, anxiety, blurred vision, chills, cold sweats, coma, confusion, cool, pale skin, depression, dizziness, fast heartbeat, headache, increased hunger, nervousness, nausea or vomiting, pain or discomfort in the arms, jaw, back, or neck, trouble breathing, or sweating, nightmares, seizures, shakiness, slurred speech, or unusual tiredness or weakness.

Reporting of suspected adverse reactions

Healthcare professionals are requested to report any suspected adverse reactions via pharmacy and poisons board, Pharmacovigilance Electronic Reporting System (PvERS) https://pv.pharmacyboardkenya.org

4.9 Overdose

Get emergency help immediately if any of the following symptoms of overdose occur:

Symptoms of overdose

- Anxiety
- Rapid heart beat
- coma
- cool, pale skin
- depression
- dilated neck veins
- extreme fatigue
- headache

- increased hungerirregular breathing
- nervousness
- nightmares
- seizures
- shakiness
- slurred speech
- redness or warmth in your arms or legs, or fainting.
- unusual drowsiness, dullness, tiredness, weakness, or feeling of sluggishness

Some side effects may occur that usually do not need medical attention. These side effects may go away during treatment as your body adjusts to the medicine. Also, your health care professional may be able to tell you about ways to prevent or reduce some of these side effects. Check with your health care professional if any of the following side effects continue or are bothersome or if you have any questions about them:

More common

- Discouragement
- feeling sad or empty
- irritability
- lack of appetite
- loss of interest or pleasure
- trouble concentrating
- trouble sleeping

Less common

- Diarrhoea
- dream activity
- feeling of constant movement of self or surroundings
- sensation of spinning
- sleepiness

Incidence not determined

- Decreased interest in sexual intercourse
- dry mouth
- inability to have or keep an erection
- loss in sexual ability, desire, drive, or performance
- loss of hair, temporary
- pain of penis on erection

Other side effects not listed may also occur in some patients. If you notice any other effects, check with your healthcare professional.
Call your doctor for medical advice about side effects.

5. Pharmacological properties

5.1 Pharmacodynamic properties

Amlodipine Pharmacotherapeutic group: Calcium Channel Blockers, ATC code: C08CA01
Atenolol Pharmacotherapeutic group: Beta blocking agents, selective, ATC code:C07AB03

AMLODIPINE
Amlodipine, like other calcium entry blockers, inhibits the 'slow' channel influx of calcium into cardiac and vascular tissue. Its main site of action is the peripheral vasculature, although it also produces vasodilation in coronary vascular beds. Indeed, in patients with essential hypertension, intra-arterial infusions of amlodipine markedly increase forearm blood flow and reduce forearm vascular resistance, effects indicative of a peripheral arterial vasodilatory action. *In vitro*, amlodipine has been shown to inhibit potassium-induced contractions in human coronary artery preparations and, in several animal models, has dramatically increased coronary blood flow and reduced coronary vascular resistance. In humans, amlodipine has no significant effects on the sinoatrial or atrioventricular node
In patients with mild to moderate essential hypertension amlodipine has a sustained and gradual onset of antihypertensive effect. Medium term once-daily dosage regimens of 2.5 to 10mg produce reductions in mean systolic and diastolic blood pressures of about 10 to 18% in most studies. Moreover, in these patients amlodipine increases renal blood flow and glomerular filtration rate, and reduces renovascular resistance; plasma renin activity and aldosterone and cate-cholamine levels are not significantly affected. In addition, urine volume and urinary sodium excretion are unchanged, factors which suggest that amlodipine has no long term effect on sodium homeostasis
In animal models and *in vitro* studies using human cardiac tissue, high concentrations of amlodipine, which exceed clinically effective concentration ranges, have a weak negative inotropic effect. However, after short term administration to patients with coronary artery disease no significant cardiodepression occurs

As well as markedly reducing peripheral vascular resistance, and therefore afterload, amlodipine increases cardiac output and reduces stroke work. In addition to its ability to reduce afterload, amlodipine increases myocardial oxygen supply, reduces demand and improves exercise capacity in patients with symptomatic myocardial ischaemia

Animal studies have demonstrated a cardioprotective effect for amlodipine — in both *in vivo* and *in vitro* models of ischaemia-reperfusion; reductions in tissue calcium content and increases in shortening fraction have been noted after reperfusion

Amlodipine has demonstrated several other actions which warrant further study. These include antiatherosclerotic, antithrombotic and antihypertrophic actions. Indeed, amlodipine inhibits *in vitro* collagen synthesis in aortic strips from spontaneously hypertensive rats (SHRs), which may indicate antiatherosclerotic potential. It also stimulates LDL receptor binding in human fibroblasts *in vitro*, an effect which, if produced *in vivo*, may retard atherogenesis through intracellular accumulation of LDL and a reduced accumulation of cholesterol in arterial walls. With reference to an antithrombotic action, amlodipine has been shown to reduce platelet aggregation in patients with essential hypertension and, in terms of antihypertrophic effects, regression of myocardial hypertrophy has been noted in SHRs

ATENOLOL

Atenolol is a beta blocker, that is, an antagonist of the β-adrenergic receptors. It is specifically a selective antagonist of the β1-adrenergic receptor with no intrinsic sympathomimetic activity (i.e., partial agonist activity) or membrane-stabilizing activity. However, the preferential action atenolol is not absolute, and at high doses it can also block β2-adrenergic receptors.

Beta-blocking effects of atenolol include reduction in resting and exercise heart rate and cardiac output, reduction of systolic and diastolic blood pressure at rest and withexercise, inhibition tachycardia induced by isoproterenol (a non-selective β-adrenergic receptor agonist), and reduction of reflex orthostatic tachycardia. The beta-blocking effects of atenolol, as measured by reduction of exercise-related tachycardia, are apparent within 1 hour and are maximal within 2 to 4 hours following a single oral dose. The pharmacodynamic effects of atenolol, including beta-blocking and antihypertensive effects, last for at least 24 hours following oral doses of 50 or 100 mg. With intravenous administration, maximal reduction in exercise-related tachycardia occurs within 5 minutes and following a single 10 mg dose has dissipated within 12 hours. The duration of action of atenolol is dose-related and is correlated with circulating levels of atenolol.

Clinical efficacy and safety

The objective of this study was to determine in four different hypertensive animal models the necessity of adding the calcium channel blocker amlodipine to therapy with the ß-blocker atenolol to modulate end-organ damage. Spontaneously hypertensive rats, DOCA-salt hypertensive rats, two-kidney, one-clip renovascular hypertensive rats and Lyon genetically hypertensive rats were used to study this objective. These animal models have

different sensitivities to atenolol and amlodipine. The dosages of therapy employed were 10 mg/kg atenolol alone, 1 mg/kg amlodipine, 10 mg atenolol + 1 mg/kg amlodipine and 5 mg/kg atenolol+0.5 mg/kg amlodipine. BP was continuously recorded in all animals. After determination of baroreflex sensitivity, rats were sacrificed for end-organ damage evaluation. The combination of amlodipine and atenolol had a synergistic inhibitory effect on blood pressure and blood pressure variability, and end-organ damage as compared with monotherapy with atenolol or amlodipine in all animal models. Baroreflex sensitivity also improved with the combination therapy more than with monotherapy. In conclusion, atenolol and amlodipine combination exerts a superior effect on blood pressure, blood pressure variability, baroreflex sensitivity and end-organ damage. The superior effect of the combination was observed in all four models of hypertension.

5.2 Pharmacokinetic properties

Absorption: Amlodipine: Plasma levels peak 6-12 hr after oral admin; absolute bioavailability is estimated to be 64-90%. Atenolol: Absorption is rapid and consistent but incomplete; about 50% of an oral dose is absorbed in the GI tract; plasma levels peak 2-4 hr after oral admin. **Distribution:** Amlodipine: 93% bound to plasma proteins. Atenolol: 6-16% bound to plasma proteins.
Metabolism: Amlodipine: About 90% converted to inactive metabolites hepatically. Atenolol: Little or no hepatic metabolism.
Excretion: Amlodipine: 10% of parent compound and 60% of the metabolites are removed in the urine; elimination from the plasma is biphasic with terminal half-life of about 30-50 hr. Atenolol: 50% of the oral dose is removed unchanged in the faeces; absorbed drug is removed mainly via renal elimination; half-life is about 6-7 hr.

5.3 Preclinical safety data

The objective of this study was to determine in four different hypertensive animal models the necessity of adding the calcium channel blocker amlodipine to therapy with the ß-blocker atenolol to modulate end-organ damage. Spontaneously hypertensive rats, DOCA-salt hypertensive rats, two-kidney, one-clip renovascular hypertensive rats and Lyon genetically hypertensive rats were used to study this objective. These animal models have differentsensitivities to atenolol and amlodipine. The dosages of therapy employed were 10 mg/kg atenolol alone, 1 mg/kg amlodipine, 10 mg atenolol + 1 mg/kg amlodipine and 5 mg/kg atenolol+0.5 mg/kg amlodipine. BP was continuously recorded in all animals. After determination of baroreflex sensitivity, rats were sacrificed for end-organ damage evaluation. The combination of amlodipine and atenolol had a synergistic inhibitory effect on blood pressure and blood pressure variability, and end-organ damage as compared with monotherapy with atenolol or amlodipine in all animal models. Baroreflex sensitivity also improved with the combination therapy more than with monotherapy. In conclusion, atenolol and amlodipine combination exerts a superior effect on blood pressure, blood pressure variability, baroreflex sensitivity and end-organ damage. The superior effect of the combination was observed in all four models of hypertension.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Sr. No.	Ingredient	Specification
1	Lactose	BP
2	Microcrystalline Cellulose	BP
3	Maize starch	BP
4	Sodium benzoate	BP
5	Povidone K-30	BP
6	Cross povidone	BP
7	Talcum	BP
8	Magnesium stearate	BP
9	Colloidal Anhydrous Silica	BP
10	Isopropyl alcohol	IH

6.2 Incompatibilities
Not applicable.

6.3 Shelf life
36 Months

6.4 Special precautions for storage
Store at a temperature not exceeding 30^0C. Protect from light and moisture.

6.5 Nature and contents of container
10 tablets are packed in ALU-ALU blister, such 3 blisters are packed in one mono carton with insert.

6.6 Special precautions for disposal
No special requirements

7. Marketing Authorisation Holder
ZAIN PHARMA LIMITED
Plot No: 209/13741, Colchester Park,
Go-Down No.1, 2, 3, Off Mombasa Road, Behind Nice And Lovely House,
P.O. Box: 100167-00101, Nairobi, Kenya

8. Marketing Authorization Number
H2026/CTD11881/25354

9. Date of first authorization/renewal of the authorization
2026 June 12

10. Date of revision of the text
2026 June 12