ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Exforge 5 mg/80 mg film-coated tablets Exforge 5 mg/160 mg film-coated tablets Exforge 10 mg/160 mg film-coated tablets

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Exforge 5 mg/80 mg film-coated tablets

Each film-coated tablet contains 5 mg of amlodipine (as amlodipine besylate) and 80 mg of valsartan.

Exforge 5 mg/160 mg film-coated tablets

Each film-coated tablet contains 5 mg of amlodipine (as amlodipine besylate) and 160 mg of valsartan.

Exforge 10 mg/160 mg film-coated tablets

Each film-coated tablet contains 10 mg of amlodipine (as amlodipine besylate) and 160 mg of valsartan.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Film-coated tablet

Exforge 5 mg/80 mg film-coated tablets

Dark yellow, round film-coated tablet with bevelled edges, imprinted with "NVR" on one side and "NV" on the other side. Approximate size: diameter 8.20 mm.

Exforge 5 mg/160 mg film-coated tablets

Dark yellow, oval film-coated tablet, imprinted with "NVR" on one side and "ECE" on the other side. Approximate size: 14.2 mm (length) x 5.7 mm (width).

Exforge 10 mg/160 mg film-coated tablets

Light yellow, oval film-coated tablet, imprinted with "NVR" on one side and "UIC" on the other side. Approximate size: 14.2 mm (length) x 5.7 mm (width).

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Treatment of essential hypertension.

Exforge is indicated in adults whose blood pressure is not adequately controlled on amlodipine or valsartan monotherapy.

4.2 Posology and method of administration

Posology

The recommended dose of Exforge is one tablet per day.

Exforge 5 mg/80 mg may be administered in patients whose blood pressure is not adequately controlled with amlodipine 5 mg or valsartan 80 mg alone.

Exforge 5 mg/160 mg may be administered in patients whose blood pressure is not adequately controlled with amlodipine 5 mg or valsartan 160 mg alone.

Exforge 10 mg/160 mg may be administered in patients whose blood pressure is not adequately controlled with amlodipine 10 mg or valsartan 160 mg alone or with Exforge 5 mg/160 mg.

Exforge can be used with or without food.

Individual dose titration with the components (i.e. amlodipine and valsartan) is recommended before changing to the fixed dose combination. When clinically appropriate, direct change from monotherapy to the fixed-dose combination may be considered.

For convenience, patients receiving valsartan and amlodipine from separate tablets/capsules may be switched to Exforge containing the same component doses.

Renal impairment

There are no available clinical data in severely renally impaired patients. No dosage adjustment is required for patients with mild to moderate renal impairment. Monitoring of potassium levels and creatinine is advised in moderate renal impairment.

Hepatic impairment

Exforge is contraindicated in patients with severe hepatic impairment (see section 4.3).

Caution should be exercised when administering Exforge to patients with hepatic impairment or biliary obstructive disorders (see section 4.4). In patients with mild to moderate hepatic impairment without cholestasis, the maximum recommended dose is 80 mg valsartan. Amlodipine dosage recommendations have not been established in patients with mild to moderate hepatic impairment. When switching eligible hypertensive patients (see section 4.1) with hepatic impairment to amlodipine or Exforge, the lowest available dose of amlodipine monotherapy or of the amlodipine component, respectively, should be used.

Elderly (age 65 years or over)

In elderly patients, caution is required when increasing the dosage. When switching eligible elderly hypertensive patients (see section 4.1) to amlodipine or Exforge, the lowest available dose of amlodipine monotherapy or of the amlodipine component, respectively, should be used.

Paediatric population

The safety and efficacy of Exforge in children aged below 18 years have not been established. No data are available.

Method of administration

Oral use.

It is recommended to take Exforge with some water.

4.3 Contraindications

- Hypersensitivity to the active substances, to dihydropyridine derivatives, or to any of the excipients listed in section 6.1.
- Severe hepatic impairment, biliary cirrhosis or cholestasis.
- Concomitant use of Exforge with aliskiren-containing products in patients with diabetes mellitus or renal impairment (GFR <60 ml/min/1.73 m²) (see sections 4.5 and 5.1).
- Second and third trimesters of pregnancy (see sections 4.4 and 4.6).
- Severe hypotension.
- Shock (including cardiogenic shock).
- Obstruction of the outflow tract of the left ventricle (e.g. hypertrophic obstructive cardiomyopathy and high grade aortic stenosis).
- Haemodynamically unstable heart failure after acute myocardial infarction.

4.4 Special warnings and precautions for use

The safety and efficacy of amlodipine in hypertensive crisis have not been established.

Pregnancy

Angiotensin II Receptor Antagonists (AIIRAs) should not be initiated during pregnancy. Unless continued AIIRA therapy is considered essential, patients planning pregnancy should be changed to alternative antihypertensive treatments which have an established safety profile for use in pregnancy. When pregnancy is diagnosed, treatment with AIIRAs should be stopped immediately, and, if appropriate, alternative therapy should be started (see sections 4.3 and 4.6).

Sodium- and/or volume-depleted patients

Excessive hypotension was seen in 0.4% of patients with uncomplicated hypertension treated with Exforge in placebo-controlled studies. In patients with an activated renin-angiotensin system (such as volume- and/or salt-depleted patients receiving high doses of diuretics) who are receiving angiotensin receptor blockers, symptomatic hypotension may occur. Correction of this condition prior to administration of Exforge or close medical supervision at the start of treatment is recommended.

If hypotension occurs with Exforge, the patient should be placed in the supine position and, if necessary, given an intravenous infusion of normal saline. Treatment can be continued once blood pressure has been stabilised.

Hyperkalaemia

Concomitant use with potassium supplements, potassium-sparing diuretics, salt substitutes containing potassium, or other medicinal products that may increase potassium levels (heparin, etc.) should be undertaken with caution and with frequent monitoring of potassium levels.

Renal artery stenosis

Exforge should be used with caution to treat hypertension in patients with unilateral or bilateral renal artery stenosis or stenosis to a solitary kidney since blood urea and serum creatinine may increase in such patients.

Kidney transplantation

To date there is no experience of the safe use of Exforge in patients who have had a recent kidney transplantation.

Hepatic impairment

Valsartan is mostly eliminated unchanged via the bile. The half life of amlodipine is prolonged and AUC values are higher in patients with impaired liver function; dosage recommendations have not been established. Particular caution should be exercised when administering Exforge to patients with mild to moderate hepatic impairment or biliary obstructive disorders.

In patients with mild to moderate hepatic impairment without cholestasis, the maximum recommended dose is 80 mg valsartan.

Renal impairment

No dosage adjustment of Exforge is required for patients with mild to moderate renal impairment (GFR >30 ml/min/1.73 m²). Monitoring of potassium levels and creatinine is advised in moderate renal impairment.

Primary hyperaldosteronism

Patients with primary hyperaldosteronism should not be treated with the angiotensin II antagonist valsartan as their renin-angiotensin system is affected by the primary disease.

Angioedema

Angioedema, including swelling of the larynx and glottis, causing airway obstruction and/or swelling of the face, lips, pharynx and/or tongue, has been reported in patients treated with valsartan. Some of these patients previously experienced angioedema with other medicinal products, including ACE inhibitors. Exforge should be discontinued immediately in patients who develop angioedema and should not be re-administered.

Heart failure/post-myocardial infarction

As a consequence of the inhibition of the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors and angiotensin receptor antagonists has been associated with oliguria and/or progressive azotaemia and (rarely) with acute renal failure and/or death. Similar outcomes have been reported with valsartan. Evaluation of patients with heart failure or post-myocardial infarction should always include assessment of renal function.

In a long-term, placebo-controlled study (PRAISE-2) of amlodipine in patients with NYHA (New York Heart Association Classification) III and IV heart failure of non-ischaemic aetiology, amlodipine was associated with increased reports of pulmonary oedema despite no significant difference in the incidence of worsening heart failure as compared to placebo.

Calcium channel blockers, including amlodipine, should be used with caution in patients with congestive heart failure, as they may increase the risk of future cardiovascular events and mortality.

Aortic and mitral valve stenosis

As with all other vasodilators, special caution is indicated in patients suffering from mitral stenosis or significant aortic stenosis that is not high grade.

Dual blockade of the renin-angiotensin-aldosterone system (RAAS)

There is evidence that the concomitant use of ACE inhibitors, ARBs or aliskiren increases the risk of hypotension, hyperkalaemia and decreased renal function (including acute renal failure). Dual blockade of RAAS through the combined use of ACE inhibitors, ARBs or aliskiren is therefore not recommended (see sections 4.5 and 5.1).

If dual blockade therapy is considered absolutely necessary, this should only occur under specialist supervision and subject to frequent close monitoring of renal function, electrolytes and blood pressure. ACE inhibitors and ARBs should not be used concomitantly in patients with diabetic nephropathy.

Exforge has not been studied in any patient population other than hypertension.

4.5 Interaction with other medicinal products and other forms of interaction

Interactions common to the combination

No drug-drug interaction studies have been performed with Exforge and other medicinal products.

To be taken into account with concomitant use

Other antihypertensive agents

Commonly used antihypertensive agents (e.g. alpha blockers, diuretics) and other medicinal products which may cause hypotensive adverse effects (e.g. tricyclic antidepressants, alpha blockers for treatment of benign prostate hyperplasia) may increase the antihypertensive effect of the combination.

Interactions linked to amlodipine

Concomitant use not recommended

Grapefruit or grapefruit juice

Administration of amlodipine with grapefruit or grapefruit juice is not recommended as bioavailability may be increased in some patients, resulting in increased blood pressure lowering effects.

Caution required with concomitant use

CYP3A4 inhibitors

Concomitant use of amlodipine with strong or moderate CYP3A4 inhibitors (protease inhibitors, azole antifungals, macrolides like erythromycin or clarithromycin, verapamil or diltiazem) may give rise to significant increase in amlodipine exposure. The clinical translation of these pharmacokinetic variations may be more pronounced in the elderly. Clinical monitoring and dose adjustment may thus be required.

CYP3A4 inducers (anticonvulsant agents [e.g. carbamazepine, phenobarbital, phenytoin, fosphenytoin, primidone], rifampicin, Hypericum perforatum)

Upon co-administration of known inducers of the CYP3A4, the plasma concentration of amlodipine may vary. Therefore, blood pressure should be monitored and dose regulation considered both during and after concomitant medication particularly with strong CYP3A4 inducers (e.g. rifampicin, hypericum perforatum).

Simvastatin

Co-administration of multiple doses of 10 mg amlodipine with 80 mg simvastatin resulted in a 77% increase in exposure to simvastatin compared to simvastatin alone. It is recommended to limit the dose of simvastatin to 20 mg daily in patients on amlodipine.

Dantrolene (infusion)

In animals, lethal ventricular fibrillation and cardiovascular collapse are observed in association with hyperkalaemia after administration of verapamil and intravenous dantrolene. Due to risk of hyperkalaemia, it is recommended that the co-administration of calcium channel blockers such as amlodipine be avoided in patients susceptible to malignant hyperthermia and in the management of malignant hyperthermia.

Tacrolimus

There is a risk of increased tacrolimus blood levels when co-administered with amlodipine. In order to avoid toxicity of tacrolimus, administration of amlodipine in a patient treated with tacrolimus requires monitoring of tacrolimus blood levels and dose adjustment of tacrolimus when appropriate.

To be taken into account with concomitant use

Others

In clinical interaction studies, amlodipine did not affect the pharmacokinetics of atorvastatin, digoxin, warfarin or ciclosporin.

Interactions linked to valsartan

Concomitant use not recommended

Lithium

Reversible increases in serum lithium concentrations and toxicity have been reported during concomitant administration of lithium with angiotensin converting enzyme inhibitors or angiotensin II receptor antagonists, including valsartan. Therefore, careful monitoring of serum lithium levels is recommended during concomitant use. If a diurectic is also used, the risk of lithium toxicity may presumably be increased further with Exforge.

Potassium-sparing diuretics, potassium supplements, salt substitutes containing potassium and other substances that may increase potassium levels

If a medicinal product that affects potassium levels is to be prescribed in combination with valsartan, monitoring of potassium plasma levels is advised.

Caution required with concomitant use

Non-steroidal anti-inflammatory medicines (NSAIDs), including selective COX-2 inhibitors, acetylsalicylic acid (>3 g/day), and non-selective NSAIDs

When angiotensin II antagonists are administered simultaneously with NSAIDs attenuation of the antihypertensive effect may occur. Furthermore, concomitant use of angiotensin II antagonists and NSAIDs may lead to an increased risk of worsening of renal function and an increase in serum potassium. Therefore, monitoring of renal function at the beginning of the treatment is recommended, as well as adequate hydration of the patient.

Inhibitors of the uptake transporter (rifampicin, ciclosporin) or efflux transporter (ritonavir) The results of an *in vitro* study with human liver tissue indicate that valsartan is a substrate of the hepatic uptake transporter OATP1B1 and of the hepatic efflux transporter MRP2. Co-administration of inhibitors of the uptake transporter (rifampicin, ciclosporin) or efflux transporter (ritonavir) may increase the systemic exposure to valsartan.

Dual blockade of the RAAS with ARBs, ACE inhibitors or aliskiren

Clinical trial data have shown that dual blockade of the RAAS through the combined use of ACE inhibitors, ARBs or aliskiren is associated with a higher frequency of adverse events such as hypotension, hyperkalaemia and decreased renal function (including acute renal failure) compared to the use of a single RAAS-acting agent (see sections 4.3, 4.4 and 5.1).

Others

In monotherapy with valsartan, no interactions of clinical significance have been found with the following substances: cimetidine, warfarin, furosemide, digoxin, atenolol, indometacin, hydrochlorothiazide, amlodipine, glibenclamide.

4.6 Fertility, pregnancy and lactation

Pregnancy

Amlodipine

The safety of amlodipine in human pregnancy has not been established. In animal studies, reproductive toxicity was observed at high doses (see section 5.3). Use in pregnancy is only recommended when there is no safer alternative and when the disease itself carries greater risk for the mother and foetus.

Valsartan

The use of Angiotensin II Receptor Antagonists (AIIRAs) is not recommended during the first trimester of pregnancy (see section 4.4). The use of AIIRAs is contraindicated during the second and third trimesters of pregnancy (see sections 4.3 and 4.4).

Epidemiological evidence regarding the risk of teratogenicity following exposure to ACE inhibitors during the first trimester of pregnancy has not been conclusive; however a small increase in risk cannot be excluded. Whilst there is no controlled epidemiological data on the risk with Angiotensin II Receptor Antagonists (AIIRAs), similar risks may exist for this class of drugs. Unless continued AIIRA therapy is considered essential, patients planning pregnancy should be changed to alternative antihypertensive treatments which have an established safety profile for use in pregnancy. When pregnancy is diagnosed, treatment with AIIRAs should be stopped immediately, and, if appropriate, alternative therapy should be started.

Exposure to AIIRA therapy during the second and third trimesters is known to induce human foetotoxicity (decreased renal function, oligohydramnios, skull ossification retardation) and neonatal toxicity (renal failure, hypotension, hyperkalaemia) (see section 5.3).

Should exposure to AIIRAs have occurred from the second trimester of pregnancy, ultrasound check of renal function and skull is recommended.

Infants whose mothers have taken AIIRAs should be closely observed for hypotension (see sections 4.3 and 4.4).

Breast-feeding

Amlodipine is excreted in human milk. The proportion of the maternal dose received by the infant has been estimated with an interquartile range of 3–7%, with a maximum of 15%. The effect of amlodipine on infants is unknown. No information is available regarding the use of Exforge during breast-feeding, therefore Exforge is not recommended and alternative treatments with better established safety profiles during breast-feeding are preferable, especially while nursing a newborn or preterm infant.

Fertility

There are no clinical studies on fertility with Exforge.

Valsartan

Valsartan had no adverse effects on the reproductive performance of male or female rats at oral doses up to 200 mg/kg/day. This dose is 6 times the maximum recommended human dose on a mg/m² basis (calculations assume an oral dose of 320 mg/day and a 60-kg patient).

<u>Amlodipine</u>

Reversible biochemical changes in the head of spermatozoa have been reported in some patients treated by calcium channel blockers. Clinical data are insufficient regarding the potential effect of amlodipine on fertility. In one rat study, adverse effects were found on male fertility (see section 5.3).

4.7 Effects on ability to drive and use machines

Patients taking Exforge and driving vehicles or using machines should take into account that dizziness or weariness may occasionally occur.

Amlodipine can have mild or moderate influence on the ability to drive and use machines. If patients taking amlodipine suffer from dizziness, headache, fatigue or nausea the ability to react may be impaired.

4.8 Undesirable effects

Summary of the safety profile

The safety of Exforge has been evaluated in five controlled clinical studies with 5,175 patients, 2,613 of whom received valsartan in combination with amlodipine. The following adverse reactions were found to be the most frequently occurring or the most significant or severe: nasopharyngitis, influenza, hypersensitivity, headache, syncope, orthostatic hypotension, oedema, pitting oedema, facial oedema, oedema peripheral, fatigue, flushing, asthenia and hot flush.

Tabulated list of adverse reactions

Adverse reactions have been ranked under headings of frequency using the following convention: very common ($\geq 1/10$); common ($\geq 1/100$) to <1/10); uncommon ($\geq 1/100$); rare ($\geq 1/1000$); rare ($\geq 1/1000$); very rare (<1/1000); not known (cannot be estimated from the available data).

MedDRA	Adverse reactions		Frequency	
System organ		Exforge	Amlodipine	Valsartan
class				
Infections and	Nasopharyngitis	Common		
infestations	Influenza	Common		
Blood and	Haemoglobin and			Not known
lymphatic system	haematocrit decreased			
disorders	Leukopenia		Very rare	
	Neutropenia		-	Not known
	Thrombocytopenia,		Very rare	Not known
	sometimes with purpura			
Immune system	Hypersensitivity	Rare	Very rare	Not known
disorders				
Metabolism and	Hyperglycaemia		Very rare	
nutrition	Hyponatraemia	Uncommon		
disorders				

Psychiatric	Depression		Uncommon	
disorders	•			
	Insomnia/sleep disorders	Rare	Uncommon	
	Mood swings		Uncommon	
	Confusion		Rare	
Nervous system	Coordination abnormal	Uncommon		
disorders	Dizziness	Uncommon	Common	
	Dizziness postural	Uncommon		
	Dysgeusia		Uncommon	
	Extrapyramidal syndrome		Not known	
	Headache	Common	Common	
	Hypertonia		Very rare	
	Paraesthesia	Uncommon	Uncommon	
	Peripheral neuropathy,		Very rare	
	neuropathy		J	
	Somnolence	Uncommon	Common	
	Syncope		Uncommon	
	Tremor		Uncommon	
	Hypoesthesia		Uncommon	
Eye disorders	Visual disturbance	Rare	Uncommon	
	Visual impairment	Uncommon	Uncommon	
Ear and labyrinth	Tinnitus	Rare	Uncommon	
disorders	Vertigo	Uncommon		Uncommon
Cardiac disorders	Palpitations	Uncommon	Common	
	Syncope	Rare		
	Tachycardia	Uncommon		
	Arrhythmias (including		Very rare	
	bradycardia, ventricular		-	
	tachycardia, and atrial			
	fibrillation)			
	Myocardial infarction		Very rare	
Vascular	Flushing		Common	
disorders	Hypotension	Rare	Uncommon	
	Orthostatic hypotension	Uncommon		
	Vasculitis		Very rare	Not known
Respiratory,	Cough	Uncommon	Very rare	Uncommon
thoracic and	Dyspnoea		Uncommon	
mediastinal	Pharyngolaryngeal pain	Uncommon		
disorders	Rhinitis		Uncommon	
Gastrointestinal	Abdominal discomfort,	Uncommon	Common	Uncommon
disorders	abdominal pain upper			
	Change of bowel habit		Uncommon	
	Constipation	Uncommon		
	Diarrhoea	Uncommon	Uncommon	
	Dry mouth	Uncommon	Uncommon	
	Dyspepsia		Uncommon	
	Gastritis		Very rare	
	Gingival hyperplasia		Very rare	
	Nausea	Uncommon	Common	
	Pancreatitis		Very rare	
	Vomiting		Uncommon	

Hepatobiliary	Liver function test abnormal,		Very rare*	Not known
disorders including blood bilirubin			very rare	1 tot known
disorders	increase			
	Hepatitis		Very rare	
	Intrahepatic cholestasis,		Very rare	
	jaundice		, cry rare	
Skin and	Alopecia		Uncommon	
subcutaneous	Angioedema		Very rare	Not known
tissue disorders	Dermatitis bullous			Not known
	Erythema	Uncommon		
	Erythema multiforme		Very rare	
	Exanthema	Rare	Uncommon	
	Hyperhidrosis	Rare	Uncommon	
	Photosensitivity reaction		Uncommon	
	Pruritus	Rare	Uncommon	Not known
	Purpura		Uncommon	
	Rash	Uncommon	Uncommon	Not known
	Skin discolouration		Uncommon	
	Urticaria and other forms of		Very rare	
	rash		, cry rare	
	Exfoliative dermatitis		Very rare	
	Stevens-Johnson syndrome		Very rare	
	Quincke oedema		Very rare	
	Toxic Epidermal Necrolysis		Not known	
Musculoskeletal	Arthralgia	Uncommon	Uncommon	
and connective	Back pain	Uncommon	Uncommon	
tissue disorders	Joint swelling	Uncommon		
	Muscle spasm	Rare	Uncommon	
	Myalgia		Uncommon	Not known
	Ankle swelling		Common	
	Sensation of heaviness	Rare		
Renal and	Blood creatinine increased			Not known
urinary disorders	Micturition disorder		Uncommon	
difficity disorders	Nocturia		Uncommon	
	Pollakiuria	Rare	Uncommon	
	Polyuria	Rare		
	Renal failure and			Not known
	impairment			1 tot known
Reproductive	Impotence		Uncommon	
system and	Erectile dysfunction	Rare		
breast disorders	Gynaecomastia		Uncommon	
General disorders	Asthenia	Common	Uncommon	
and	Discomfort, malaise		Uncommon	
administration	Fatigue Fatigue	Common	Common	Uncommon
site conditions	Facial oedema	Common		
	Flushing, hot flush	Common		
	Non cardiac chest pain		Uncommon	
	Oedema	Common	Common	
	Oedema peripheral Pain	Common		
		 Common	Uncommon	
	Pitting oedema	Common		

Investigations	Blood potassium increased	 	Not known
Weight increase		 Uncommon	
	Weight decrease	 Uncommon	

Mostly consistent with cholestasis

Additional information on the combination

Peripheral oedema, a recognised side effect of amlodipine, was generally observed at a lower incidence in patients who received the amlodipine/valsartan combination than in those who received amlodipine alone. In double-blind, controlled clinical trials, the incidence of peripheral oedema by dose was as follows:

% of patients who experienced peripheral oedema		Valsartan (mg)				
		0	40	80	160	320
	0	3.0	5.5	2.4	1.6	0.9
Amlodipine (mg)	2.5	8.0	2.3	5.4	2.4	3.9
	5	3.1	4.8	2.3	2.1	2.4
	10	10.3	NA	NA	9.0	9.5

The mean incidence of peripheral oedema evenly weighted across all doses was 5.1% with the amlodipine/valsartan combination.

Additional information on the individual components

Adverse reactions previously reported with one of the individual components (amlodipine or valsartan) may be potential adverse reactions with Exforge as well, even if not observed in clinical trials or during the post-marketing period.

Aml		

Ζ	<i>imiouipine</i>	
	Common	Somnolence, dizziness, palpitations, abdominal pain, nausea, ankle swelling.
	Uncommon	Insomnia, mood changes (including anxiety), depression, tremor, dysgeusia, syncope, hypoesthesia, visual disturbance (including diplopia), tinnitus,
		hypotension, dyspnoea, rhinitis, vomiting, dyspepsia, alopecia, purpura, skin
		discolouration, hyperhidrosis, pruritus, exanthema, myalgia, muscle cramps, pain,
		micturition disorder, increased urinary frequency, impotence, gynaecomastia,
		chest pain, malaise, weight increase, weight decrease.
	Rare	Confusion.
	Very rare	Leukocytopenia, thrombocytopenia, allergic reactions, hyperglycaemia,
	•	

hypertonia, peripheral neuropathy, myocardial infarction, arrhythmia (including bradycardia, ventricular tachycardia and atrial fibrillation), vasculitis, pancreatitis, gastritis, gingival hyperplasia, hepatitis, jaundice, hepatic enzymes increased*, angioedema, erythema multiforme, urticaria, exfoliative dermatitis, Stevens-

Johnson syndrome, Quincke oedema, photosensitivity.

Toxic Epidermal Necrolysis Not known

Exceptional cases of extrapyramidal syndrome have been reported.

^{*} mostly consistent with cholestasis

Valsartan

Not known

Decrease in haemoglobin, decrease in haematocrit, neutropenia, thrombocytopenia, increase of serum potassium, elevation of liver function values including increase of serum bilirubin, renal failure and impairment, elevation of serum creatinine, angioedema, myalgia, vasculitis, hypersensitivity including serum sickness.

Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in Appendix V.

4.9 Overdose

Symptoms

There is no experience of overdose with Exforge. The major symptom of overdose with valsartan is possibly pronounced hypotension with dizziness. Overdose with amlodipine may result in excessive peripheral vasodilation and, possibly, reflex tachycardia. Marked and potentially prolonged systemic hypotension, including shock with fatal outcome, have been reported with amlodipine.

Non-cardiogenic pulmonary oedema has rarely been reported as a consequence of amlodipine overdose that may manifest with a delayed onset (24-48 hours post-ingestion) and require ventilatory support. Early resuscitative measures (including fluid overload) to maintain perfusion and cardiac output may be precipitating factors.

Treatment

If ingestion is recent, induction of vomiting or gastric lavage may be considered. Administration of activated charcoal to healthy volunteers immediately or up to two hours after ingestion of amlodipine has been shown to significantly decrease amlodipine absorption. Clinically significant hypotension due to Exforge overdose calls for active cardiovascular support, including frequent monitoring of cardiac and respiratory function, elevation of extremities, and attention to circulating fluid volume and urine output. A vasoconstrictor may be helpful in restoring vascular tone and blood pressure, provided that there is no contraindication to its use. Intravenous calcium gluconate may be beneficial in reversing the effects of calcium channel blockade.

Both valsartan and amlodipine are unlikely to be removed by haemodialysis.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Agents acting on the renin-angiotensin system; angiotensin II antagonists, combinations; angiotensin II antagonists and calcium channel blockers, ATC code: C09DB01

Exforge combines two antihypertensive compounds with complementary mechanisms to control blood pressure in patients with essential hypertension: amlodipine belongs to the calcium antagonist class and valsartan to the angiotensin II antagonist class of medicines. The combination of these substances has an additive antihypertensive effect, reducing blood pressure to a greater degree than either component alone.

Amlodipine/Valsartan

The combination of amlodipine and valsartan produces dose-related additive reduction in blood pressure across its therapeutic dose range. The antihypertensive effect of a single dose of the combination persisted for 24 hours.

Placebo-controlled trials

Over 1,400 hypertensive patients received Exforge once daily in two placebo-controlled trials. Adults with mild to moderate uncomplicated essential hypertension (mean sitting diastolic blood pressure ≥95 and <110 mmHg) were enrolled. Patients with high cardiovascular risks − heart failure, type I and poorly controlled type II diabetes and history of myocardial infarction or stroke within one year − were excluded.

Active-controlled trials in patients who were non-responders to monotherapy

A multicentre, randomised, double-blind, active-controlled, parallel-group trial showed normalisation of blood pressure (trough sitting diastolic blood pressure <90 mmHg at the end of the trial) in patients not adequately controlled on valsartan 160 mg in 75% of patients treated with amlodipine/valsartan 10 mg/160 mg and 62% of patients treated with amlodipine/valsartan 5 mg/160 mg, compared to 53% of patients remaining on valsartan 160 mg. The addition of amlodipine 10 mg and 5 mg produced an additional reduction in systolic/diastolic blood pressure of 6.0/4.8 mmHg and 3.9/2.9 mmHg, respectively, compared to patients who remained on valsartan 160 mg only.

A multicentre, randomised, double-blind, active-controlled, parallel-group trial showed normalisation of blood pressure (trough sitting diastolic blood pressure <90 mmHg at the end of the trial) in patients not adequately controlled on amlodipine 10 mg in 78% of patients treated with amlodipine/valsartan 10 mg/160 mg, compared to 67% of patients remaining on amlodipine 10 mg. The addition of valsartan 160 mg produced an additional reduction in systolic/diastolic blood pressure of 2.9/2.1 mmHg compared to patients who remained on amlodipine 10 mg only.

Exforge was also studied in an active-controlled study of 130 hypertensive patients with mean sitting diastolic blood pressure \geq 110 mmHg and <120 mmHg. In this study (baseline blood pressure 171/113 mmHg), an Exforge regimen of 5 mg/160 mg titrated to 10 mg/160 mg reduced sitting blood pressure by 36/29 mmHg as compared to 32/28 mmHg with a regimen of lisinopril/hydrochlorothiazide 10 mg/12.5 mg titrated to 20 mg/12.5 mg.

In two long-term follow-up studies the effect of Exforge was maintained for over one year. Abrupt withdrawal of Exforge has not been associated with a rapid increase in blood pressure.

Age, gender, race or body mass index (\geq 30 kg/m², <30 kg/m²) did not influence the response to Exforge.

Exforge has not been studied in any patient population other than hypertension. Valsartan has been studied in patients with post myocardial infarction and heart failure. Amlodipine has been studied in patients with chronic stable angina, vasospastic angina and angiographically documented coronary artery disease.

<u>Amlodipine</u>

The amlodipine component of Exforge inhibits the transmembrane entry of calcium ions into cardiac and vascular smooth muscle. The mechanism of the antihypertensive action of amlodipine is due to a direct relaxant effect on vascular smooth muscle, causing reductions in peripheral vascular resistance and in blood pressure. Experimental data suggest that amlodipine binds to both dihydropyridine and non-dihydropyridine binding sites. The contractile processes of cardiac muscle and vascular smooth muscle are dependent upon the movement of extracellular calcium ions into these cells through specific ion channels.

Following administration of therapeutic doses to patients with hypertension, amlodipine produces vasodilation, resulting in a reduction of supine and standing blood pressures. These decreases in blood pressure are not accompanied by a significant change in heart rate or plasma catecholamine levels with chronic dosing.

Plasma concentrations correlate with effect in both young and elderly patients.

In hypertensive patients with normal renal function, therapeutic doses of amlodipine resulted in a decrease in renal vascular resistance and an increase in glomerular filtration rate and effective renal plasma flow, without change in filtration fraction or proteinuria.

As with other calcium channel blockers, haemodynamic measurements of cardiac function at rest and during exercise (or pacing) in patients with normal ventricular function treated with amlodipine have generally demonstrated a small increase in cardiac index without significant influence on dP/dt or on left ventricular end diastolic pressure or volume. In haemodynamic studies, amlodipine has not been associated with a negative inotropic effect when administered in the therapeutic dose range to intact animals and humans, even when co-administered with beta blockers to humans.

Amlodipine does not change sinoatrial nodal function or atrioventricular conduction in intact animals or humans. In clinical studies in which amlodipine was administered in combination with beta blockers to patients with either hypertension or angina, no adverse effects on electrocardiographic parameters were observed.

Use in patients with hypertension

A randomised double-blind morbidity-mortality study called the Antihypertensive and Lipid-Lowering treatment to prevent Heart Attack Trial (ALLHAT) was performed to compare newer therapies: amlodipine 2.5-10 mg/day (calcium channel blocker) or lisinopril 10-40 mg/day (ACE-inhibitor) as first-line therapies to that of the thiazide-diuretic, chlorthalidone 12.5-25 mg/day in mild to moderate hypertension.

A total of 33,357 hypertensive patients aged 55 or older were randomised and followed for a mean of 4.9 years. The patients had at least one additional coronary heart disease risk factor, including: previous myocardial infarction or stroke (>6 months prior to enrollment) or documentation of other atherosclerotic cardiovascular disease (overall 51.5%), type 2 diabetes (36.1%), high density lipoprotein - cholesterol <35 mg/dl or <0.906 mmol/l (11.6%), left ventricular hypertrophy diagnosed by electrocardiogram or echocardiography (20.9%), current cigarette smoking (21.9%).

The primary endpoint was a composite of fatal coronary heart disease or non-fatal myocardial infarction. There was no significant difference in the primary endpoint between amlodipine-based therapy and chlorthalidone-based therapy: risk ratio (RR) 0.98 95% CI (0.90-1.07) p=0.65. Among secondary endpoints, the incidence of heart failure (component of a composite combined cardiovascular endpoint) was significantly higher in the amlodipine group as compared to the chlorthalidone group (10.2% versus 7.7%, RR 1.38, 95% CI [1.25-1.52] p<0.001). However, there was no significant difference in all-cause mortality between amlodipine-based therapy and chlorthalidone-based therapy RR 0.96 95% CI [0.89-1.02] p=0.20.

Valsartan

Valsartan is an orally active, potent and specific angiotensin II receptor antagonist. It acts selectively on the receptor subtype AT_1 , which is responsible for the known actions of angiotensin II. The increased plasma levels of angiotensin II following AT_1 receptor blockade with valsartan may stimulate the unblocked receptor subtype AT_2 , which appears to counterbalance the effect of the AT_1 receptor. Valsartan does not exhibit any partial agonist activity at the AT_1 receptor and has much (about 20,000-fold) greater affinity for the AT_1 receptor than for the AT_2 receptor.

Valsartan does not inhibit ACE, also known as kininase II, which converts angiotensin I to angiotensin II and degrades bradykinin. Since there is no effect on ACE and no potentiation of bradykinin or

substance P, angiotensin II antagonists are unlikely to be associated with coughing. In clinical trials where valsartan was compared with an ACE inhibitor, the incidence of dry cough was significantly (p <0.05) lower in patients treated with valsartan than in those treated with an ACE inhibitor (2.6% versus 7.9%, respectively). In a clinical trial of patients with a history of dry cough during ACE inhibitor therapy, 19.5% of trial subjects receiving valsartan and 19.0% of those receiving a thiazide diuretic experienced coughing, compared to 68.5% of those treated with an ACE inhibitor (p <0.05). Valsartan does not bind to or block other hormone receptors or ion channels known to be important in cardiovascular regulation.

Administration of valsartan to patients with hypertension results in a drop in blood pressure without affecting pulse rate.

In most patients, after administration of a single oral dose, onset of antihypertensive activity occurs within 2 hours, and the peak drop in blood pressure is achieved within 4–6 hours. The antihypertensive effect persists over 24 hours after administration. During repeated administration, the maximum reduction in blood pressure with any dose is generally attained within 2–4 weeks and is sustained during long-term therapy. Abrupt withdrawal of valsartan has not been associated with rebound hypertension or other adverse clinical events.

Other: dual blockade of the renin-angiotensin-aldosterone system (RAAS)

Two large randomised, controlled trials (ONTARGET [ONgoing Telmisartan Alone and in combination with Ramipril Global Endpoint Trial] and VA NEPHRON-D [The Veterans Affairs Nephropathy in Diabetes]) have examined the use of the combination of an ACE inhibitor with an ARB.

ONTARGET was a study conducted in patients with a history of cardiovascular or cerebrovascular disease, or type 2 diabetes mellitus accompanied by evidence of end-organ damage. VA NEPHRON-D was a study in patients with type 2 diabetes mellitus and diabetic nephropathy.

These studies have shown no significant beneficial effect on renal and/or cardiovascular outcomes and mortality, while an increased risk of hyperkalaemia, acute kidney injury and/or hypotension as compared to monotherapy was observed. Given their similar pharmacodynamic properties, these results are also relevant for other ACE inhibitors and ARBs.

ACE inhibitors and ARBs should therefore not be used concomitantly in patients with diabetic nephropathy (see section 4.4).

ALTITUDE (Aliskiren Trial in Type 2 Diabetes Using Cardiovascular and Renal Disease Endpoints) was a study designed to test the benefit of adding aliskiren to a standard therapy of an ACE inhibitor or an ARB in patients with type 2 diabetes mellitus and chronic kidney disease, cardiovascular disease, or both. The study was terminated early because of an increased risk of adverse outcomes. Cardiovascular death and stroke were both numerically more frequent in the aliskiren group than in the placebo group and adverse events and serious adverse events of interest (hyperkalaemia, hypotension and renal dysfunction) were more frequently reported in the aliskiren group than in the placebo group.

5.2 Pharmacokinetic properties

Linearity

Amlodipine and valsartan exhibit linear pharmacokinetics.

Amlodipine/Valsartan

Following oral administration of Exforge, peak plasma concentrations of valsartan and amlodipine are reached in 3 and 6–8 hours, respectively. The rate and extent of absorption of Exforge are equivalent to the bioavailability of valsartan and amlodipine when administered as individual tablets.

Amlodipine

Absorption: After oral administration of therapeutic doses of amlodipine alone, peak plasma concentrations of amlodipine are reached in 6–12 hours. Absolute bioavailability has been calculated as between 64% and 80%. Amlodipine bioavailability is unaffected by food ingestion.

Distribution: Volume of distribution is approximately 21 l/kg. *In vitro* studies with amlodipine have shown that approximately 97.5% of circulating drug is bound to plasma proteins.

Biotransformation: Amlodipine is extensively (approximately 90%) metabolised in the liver to inactive metabolites.

Elimination: Amlodipine elimination from plasma is biphasic, with a terminal elimination half-life of approximately 30 to 50 hours. Steady-state plasma levels are reached after continuous administration for 7–8 days. Ten per cent of original amlodipine and 60% of amlodipine metabolites are excreted in urine.

Valsartan

Absorption: Following oral administration of valsartan alone, peak plasma concentrations of valsartan are reached in 2–4 hours. Mean absolute bioavailability is 23%. Food decreases exposure (as measured by AUC) to valsartan by about 40% and peak plasma concentration (C_{max}) by about 50%, although from about 8 h post dosing plasma valsartan concentrations are similar for the fed and fasted groups. This reduction in AUC is not, however, accompanied by a clinically significant reduction in the therapeutic effect, and valsartan can therefore be given either with or without food.

Distribution: The steady-state volume of distribution of valsartan after intravenous administration is about 17 litres, indicating that valsartan does not distribute into tissues extensively. Valsartan is highly bound to serum proteins (94–97%), mainly serum albumin.

Biotransformation: Valsartan is not transformed to a high extent as only about 20% of dose is recovered as metabolites. A hydroxy metabolite has been identified in plasma at low concentrations (less than 10% of the valsartan AUC). This metabolite is pharmacologically inactive.

Elimination: Valsartan shows multiexponential decay kinetics ($t_{1/2\alpha}$ <1 h and $t_{1/2\beta}$ about 9 h). Valsartan is primarily eliminated in faeces (about 83% of dose) and urine (about 13% of dose), mainly as unchanged drug. Following intravenous administration, plasma clearance of valsartan is about 2 l/h and its renal clearance is 0.62 l/h (about 30% of total clearance). The half-life of valsartan is 6 hours.

Special populations

Paediatric population (age below 18 years)

No pharmacokinetic data are available in the paediatric population.

Elderly (age 65 years or over)

Time to peak plasma amlodipine concentrations is similar in young and elderly patients. In elderly patients, amlodipine clearance tends to decline, causing increases in the area under the curve (AUC) and elimination half-life. Mean systemic AUC of valsartan is higher by 70% in the elderly than in the young, therefore caution is required when increasing the dosage.

Renal impairment

The pharmacokinetics of amlodipine are not significantly influenced by renal impairment. As expected for a compound where renal clearance accounts for only 30% of total plasma clearance, no correlation was seen between renal function and systemic exposure to valsartan.

Hepatic impairment

Very limited clinical data are available regarding amlodipine administration in patients with hepatic impairment. Patients with hepatic impairment have decreased clearance of amlodipine with resulting increase of approximately 40–60% in AUC. On average, in patients with mild to moderate chronic liver disease exposure (measured by AUC values) to valsartan is twice that found in healthy volunteers (matched by age, sex and weight). Caution should be exercised in patients with liver disease (see section 4.2).

5.3 Preclinical safety data

Amlodipine/Valsartan

Adverse reactions observed in animal studies with possible clinical relevance were as follows: Histopathological signs of inflammation of the glandular stomach was seen in male rats at an exposure of about 1.9 (valsartan) and 2.6 (amlodipine) times the clinical doses of 160 mg valsartan and 10 mg amlodipine. At higher exposures, there were ulceration and erosion of the stomach mucosa in both females and males. Similar changes were also seen in the valsartan alone group (exposure 8.5–11.0 times the clinical dose of 160 mg valsartan).

An increased incidence and severity of renal tubular basophilia/hyalinisation, dilation and casts, as well as interstitial lymphocyte inflammation and arteriolar medial hypertrophy were found at an exposure of 8–13 (valsartan) and 7–8 (amlodipine) times the clinical doses of 160 mg valsartan and 10 mg amlodipine. Similar changes were found in the valsartan alone group (exposure 8.5–11.0 times the clinical dose of 160 mg valsartan).

In an embryo-foetal development study in the rat, increased incidences of dilated ureters, malformed sternebrae, and unossified forepaw phalanges were noticed at exposures of about 12 (valsartan) and 10 (amlodipine) times the clinical doses of 160 mg valsartan and 10 mg amlodipine. Dilated ureters were also found in the valsartan alone group (exposure 12 times the clinical dose of 160 mg valsartan). There were only modest signs of maternal toxicity (moderate reduction of body weight) in this study. The no-observed-effect-level for developmental effects was observed at 3- (valsartan) and 4- (amlodipine) fold the clinical exposure (based on AUC).

For the single compounds there was no evidence of mutagenicity, clastogenicity or carcinogenicity.

Amlodipine

Reproductive toxicology

Reproductive studies in rats and mice have shown delayed date of delivery, prolonged duration of labour and decreased pup survival at dosages approximately 50 times greater than the maximum recommended dosage for humans based on mg/kg.

Impairment of fertility

There was no effect on the fertility of rats treated with amlodipine (males for 64 days and females 14 days prior to mating) at doses up to 10 mg/kg/day (8 times* the maximum recommended human dose of 10 mg on a mg/m² basis). In another rat study in which male rats were treated with amlodipine besilate for 30 days at a dose comparable with the human dose based on mg/kg, decreased plasma follicle-stimulating hormone and testosterone were found as well as decreases in sperm density and in the number of mature spermatids and Sertoli cells.

Carcinogenesis, mutagenesis

Rats and mice treated with amlodipine in the diet for two years, at concentrations calculated to provide daily dosage levels of 0.5, 1.25, and 2.5 mg/kg/day showed no evidence of carcinogenicity. The highest dose (for mice, similar to, and for rats twice* the maximum recommended clinical dose of 10 mg on a mg/m² basis) was close to the maximum tolerated dose for mice but not for rats.

Mutagenicity studies revealed no drug related effects at either the gene or chromosome levels.

* Based on patient weight of 50 kg

Valsartan

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential, toxicity to reproduction and development.

In rats, maternally toxic doses (600 mg/kg/day) during the last days of gestation and lactation led to lower survival, lower weight gain and delayed development (pinna detachment and ear-canal opening) in the offspring (see section 4.6). These doses in rats (600 mg/kg/day) are approximately 18 times the maximum recommended human dose on a mg/m² basis (calculations assume an oral dose of 320 mg/day and a 60-kg patient).

In non-clinical safety studies, high doses of valsartan (200 to 600 mg/kg body weight) caused in rats a reduction of red blood cell parameters (erythrocytes, haemoglobin, haematocrit) and evidence of changes in renal haemodynamics (slightly raised blood urea nitrogen, and renal tubular hyperplasia and basophilia in males). These doses in rats (200 and 600 mg/kg/day) are approximately 6 and 18 times the maximum recommended human dose on a mg/m² basis (calculations assume an oral dose of 320 mg/day and a 60-kg patient).

In marmosets at comparable doses, the changes were similar though more severe, particularly in the kidney where the changes developed to a nephropathy including raised blood urea nitrogen and creatinine.

Hypertrophy of the renal juxtaglomerular cells was also seen in both species. All changes were considered to be caused by the pharmacological action of valsartan which produces prolonged hypotension, particularly in marmosets. For therapeutic doses of valsartan in humans, the hypertrophy of the renal juxtaglomerular cells does not seem to have any relevance.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Exforge 5 mg/80 mg film-coated tablets

Tablet core

Cellulose microcrystalline Crospovidone (type A) Silica, colloidal anhydrous Magnesium stearate

Coating

Hypromellose, substitution type 2910 (3 mPa.s) Titanium dioxide (E171) Iron oxide, yellow (E172) Macrogol 4000 Talc

Exforge 5 mg/160 mg film-coated tablets

Tablet core

Cellulose microcrystalline Crospovidone (type A) Silica, colloidal anhydrous Magnesium stearate

Coating

Hypromellose, substitution type 2910 (3 mPa.s) Titanium dioxide (E171) Iron oxide, yellow (E172) Macrogol 4000 Talc

Exforge 10 mg/160 mg film-coated tablets

Tablet core

Cellulose microcrystalline Crospovidone (type A) Silica, colloidal anhydrous Magnesium stearate

Coating

Hypromellose, substitution type 2910 (3 mPa.s) Titanium dioxide (E171) Iron oxide, yellow (E172) Iron oxide, red (E172) Macrogol 4000 Talc

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years.

6.4 Special precautions for storage

Do not store above 30°C.

Store in the original package in order to protect from moisture.

6.5 Nature and contents of container

PVC/PVDC blisters. One blister contains 7, 10 or 14 film-coated tablets.

Pack sizes: 7, 14, 28, 30, 56, 90, 98 or 280 film-coated tablets and multipacks containing 280 (4x70 or 20x14) film-coated tablets.

PVC/PVDC perforated unit dose blisters. One blister contains 7, 10 or 14 film-coated tablets. Pack sizes: 56, 98 or 280 film-coated tablets.

Not all pack sizes may be marketed.

6.6 Special precautions for disposal and other handling

No special requirements.

7. MARKETING AUTHORISATION HOLDER

Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

8. MARKETING AUTHORISATION NUMBER(S)

Exforge 5 mg/80 mg film-coated tablets

EU/1/06/370/001

EU/1/06/370/002

EU/1/06/370/003

EU/1/06/370/004

EU/1/06/370/005

EU/1/06/370/006

EU/1/06/370/007

EU/1/06/370/008

EU/1/06/370/025

EU/1/06/370/026

EU/1/06/370/027

EU/1/06/370/034

EU/1/06/370/037

Exforge 5 mg/160 mg film-coated tablets

EU/1/06/370/009

EU/1/06/370/010

EU/1/06/370/011

EU/1/06/370/012

EU/1/06/370/013

EU/1/06/370/014

EU/1/06/370/015

EU/1/06/370/016

EU/1/06/370/028 EU/1/06/370/029

EU/1/06/370/030

EU/1/06/370/035

EU/1/06/370/038

Exforge 10 mg/160 mg film-coated tablets

EU/1/06/370/017

EU/1/06/370/018

EU/1/06/370/019

EU/1/06/370/020

EU/1/06/370/021

EU/1/06/370/022

EU/1/06/370/023

EU/1/06/370/024

EU/1/06/370/031

EU/1/06/370/032

EU/1/06/370/033

EU/1/06/370/036

EU/1/06/370/039

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 17 January 2007 Date of latest renewal: 22 November 2011

10. DATE OF REVISION OF THE TEXT

Detailed information on this medicinal product is available on the website of the European Medicines Agency http://www.ema.europa.eu

ANNEX II

- A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer(s) responsible for batch release

Novartis Farma S.p.A. Via Provinciale Schito 131 80058 Torre Annunziata (NA) Italy

Novartis Farmacéutica S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona Spain

Novartis Pharma GmbH Roonstraße 25 D-90429 Nuremberg Germany

Novartis Pharma GmbH Sophie-Germain-Strasse 10 90443 Nuremberg Germany

The printed package leaflet of the medicinal product must state the name and address of the manufacturer responsible for the release of the concerned batch.

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Medicinal product subject to medical prescription.

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

• Periodic safety update reports (PSURs)

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND EFFECTIVE USE OF THE MEDICINAL PRODUCT

Not applicable.

ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

CARTON OF UNIT PACK

1. NAME OF THE MEDICINAL PRODUCT

Exforge 5 mg/80 mg film-coated tablets amlodipine/valsartan

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 5 mg amlodipine (as amlodipine besylate) and 80 mg valsartan.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

Film-coated tablet

7 film-coated tablets

14 film-coated tablets

28 film-coated tablets

30 film-coated tablets

56 film-coated tablets 90 film-coated tablets

98 film-coated tablets

280 film-coated tablets

56x1 film-coated tablet (unit dose)

98x1 film-coated tablet (unit dose)

280x1 film-coated tablet (unit dose)

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Oral use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Do not store above 30°C.

Store in the original package in order to protect from moisture.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/06/370/001	7 film-coated tablets
EU/1/06/370/002	14 film-coated tablets
EU/1/06/370/003	28 film-coated tablets
EU/1/06/370/004	30 film-coated tablets
EU/1/06/370/005	56 film-coated tablets
EU/1/06/370/006	90 film-coated tablets
EU/1/06/370/007	98 film-coated tablets
EU/1/06/370/008	280 film-coated tablets
EU/1/06/370/025	56x1 film-coated tablet (unit dose)
EU/1/06/370/026	98x1 film-coated tablet (unit dose)
EU/1/06/370/027	280x1 film-coated tablet (unit dose)

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

Exforge 5 mg/80 mg 17. UNIQUE IDENTIFIER – 2D BARCODE 2D barcode carrying the unique identifier included. 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA PC SN NN

16.

INFORMATION IN BRAILLE

PARTICULARS TO APPEAR ON THE OUTER PACKAGING INTERMEDIATE CARTON OF MULTIPACK (WITHOUT BLUE BOX) 1. NAME OF THE MEDICINAL PRODUCT Exforge 5 mg/80 mg film-coated tablets amlodipine/valsartan STATEMENT OF ACTIVE SUBSTANCE(S) 2. Each tablet contains 5 mg amlodipine (as amlodipine besylate) and 80 mg valsartan. **3.** LIST OF EXCIPIENTS 4. PHARMACEUTICAL FORM AND CONTENTS Film-coated tablet 70 film-coated tablets. Component of a multipack. Not to be sold separately. 14 film-coated tablets. Component of a multipack. Not to be sold separately. 5. METHOD AND ROUTE(S) OF ADMINISTRATION Read the package leaflet before use. Oral use. 6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN Keep out of the sight and reach of children. 7. OTHER SPECIAL WARNING(S), IF NECESSARY 8. **EXPIRY DATE EXP**

Do not store above 30°C. Store in the original packa

9.

Store in the original package in order to protect from moisture.

SPECIAL STORAGE CONDITIONS

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE				
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER				
Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland				
12. MARKETING AUTHORISATION NUMBER(S)				
EU/1/06/370/034 280 film-coated tablets (4x70) EU/1/06/370/037 280 film-coated tablets (20x14)				
13. BATCH NUMBER				
Lot				
14. GENERAL CLASSIFICATION FOR SUPPLY				
Medicinal product subject to medical prescription.				
15. INSTRUCTIONS ON USE				
16. INFORMATION IN BRAILLE				
Exforge 5 mg/80 mg				

17.

UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON OF MULTIPACK (WITH BLUE BOX)

1. NAME OF THE MEDICINAL PRODUCT

Exforge 5 mg/80 mg film-coated tablets amlodipine/valsartan

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 5 mg amlodipine (as amlodipine besylate) and 80 mg valsartan.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

Film-coated tablet

Multipack: 280 (4 packs of 70) film-coated tablets Multipack: 280 (20 packs of 14) film-coated tablets

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Oral use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Do not store above 30°C.

Store in the original package in order to protect from moisture.

10.	SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS
	OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF
	APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/06/370/034 280 film-coated tablets (4x70) EU/1/06/370/037 280 film-coated tablets (20x14)

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Exforge 5 mg/80 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

NN

MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS		
BLISTERS		
1. NAME OF THE MEDICINAL PRODUCT		
Exforge 5 mg/80 mg film-coated tablets amlodipine/valsartan		
2. NAME OF THE MARKETING AUTHORISATION HOLDER		
Novartis Europharm Limited		
3. EXPIRY DATE		
EXP		
4. BATCH NUMBER		
Lot		
5. OTHER		

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

CARTON OF UNIT PACK

1. NAME OF THE MEDICINAL PRODUCT

Exforge 5 mg/160 mg film-coated tablets amlodipine/valsartan

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 5 mg amlodipine (as amlodipine besylate) and 160 mg valsartan.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

Film-coated tablet

7 film-coated tablets

14 film-coated tablets

28 film-coated tablets

30 film-coated tablets

56 film-coated tablets

90 film-coated tablets

98 film-coated tablets

280 film-coated tablets

56x1 film-coated tablet (unit dose)

98x1 film-coated tablet (unit dose)

280x1 film-coated tablet (unit dose)

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Oral use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Do not store above 30°C.

Store in the original package in order to protect from moisture.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/06/370/009	7 film-coated tablets
EU/1/06/370/010	14 film-coated tablets
EU/1/06/370/011	28 film-coated tablets
EU/1/06/370/012	30 film-coated tablets
EU/1/06/370/013	56 film-coated tablets
EU/1/06/370/014	90 film-coated tablets
EU/1/06/370/015	98 film-coated tablets
EU/1/06/370/016	280 film-coated tablets
EU/1/06/370/028	56x1 film-coated tablet (unit dose)
EU/1/06/370/029	98x1 film-coated tablet (unit dose)
EU/1/06/370/030	280x1 film-coated tablet (unit dose)

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

Exforge 5 mg/160 mg 17. UNIQUE IDENTIFIER – 2D BARCODE 2D barcode carrying the unique identifier included. 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA PC SN

16.

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INFORMATION IN BRAILLE

PARTICULARS TO APPEAR ON THE OUTER PACKAGING INTERMEDIATE CARTON OF MULTIPACK (WITHOUT BLUE BOX) 1. NAME OF THE MEDICINAL PRODUCT Exforge 5 mg/160 mg film-coated tablets amlodipine/valsartan STATEMENT OF ACTIVE SUBSTANCE(S) 2. Each tablet contains 5 mg amlodipine (as amlodipine besylate) and 160 mg valsartan. **3.** LIST OF EXCIPIENTS 4. PHARMACEUTICAL FORM AND CONTENTS Film-coated tablet 70 film-coated tablets. Component of a multipack. Not to be sold separately. 14 film-coated tablets. Component of a multipack. Not to be sold separately. 5. METHOD AND ROUTE(S) OF ADMINISTRATION Read the package leaflet before use. Oral use. 6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN Keep out of the sight and reach of children. 7. OTHER SPECIAL WARNING(S), IF NECESSARY 8. **EXPIRY DATE EXP** 9. SPECIAL STORAGE CONDITIONS

38

Do not store above 30°C.

Store in the original package in order to protect from moisture.

10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE		
11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER		
Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland		
12. MARKETING AUTHORISATION NUMBER(S)		
EU/1/06/370/035 280 film-coated tablets (4x70) EU/1/06/370/038 280 film-coated tablets (20x14)		
13. BATCH NUMBER		
Lot		
14. GENERAL CLASSIFICATION FOR SUPPLY		
Medicinal product subject to medical prescription.		
15. INSTRUCTIONS ON USE		
16. INFORMATION IN BRAILLE		
Exforge 5 mg/160 mg		

UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON OF MULTIPACK (WITH BLUE BOX)

1. NAME OF THE MEDICINAL PRODUCT

Exforge 5 mg/160 mg film-coated tablets amlodipine/valsartan

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 5 mg amlodipine (as amlodipine besylate) and 160 mg valsartan.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

Film-coated tablet

Multipack: 280 (4 packs of 70) film-coated tablets Multipack: 280 (20 packs of 14) film-coated tablets

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Oral use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Do not store above 30°C.

Store in the original package in order to protect from moisture.

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	OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF
	APPROPRIATE

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

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12. MARKETING AUTHORISATION NUMBER(S)

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13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Exforge 5 mg/160 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

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MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS				
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1. NAME OF THE MEDICINAL PRODUCT				
Exforge 5 mg/160 mg film-coated tablets				
amlodipine/valsartan				
2. NAME OF THE MARKETING AUTHORISATION HOLDER				
Novartis Europharm Limited				
3. EXPIRY DATE				
EXP				
A DATE OF THE STATE OF THE STAT				
4. BATCH NUMBER				
Lot				
5. OTHER				

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

CARTON OF UNIT PACK

1. NAME OF THE MEDICINAL PRODUCT

Exforge 10 mg/160 mg film-coated tablets amlodipine/valsartan

2. STATEMENT OF ACTIVE SUBSTANCE(S)

Each tablet contains 10 mg amlodipine (as amlodipine besylate) and 160 mg valsartan.

3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

Film-coated tablet

7 film-coated tablets

14 film-coated tablets

28 film-coated tablets

30 film-coated tablets

56 film-coated tablets

90 film-coated tablets

98 film-coated tablets

280 film-coated tablets

56x1 film-coated tablet (unit dose)

98x1 film-coated tablet (unit dose)

280x1 film-coated tablet (unit dose)

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Oral use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Do not store above 30°C.

Store in the original package in order to protect from moisture.

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Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

12. MARKETING AUTHORISATION NUMBER(S)

EU/1/06/370/017	7 film-coated tablets
EU/1/06/370/018	14 film-coated tablets
EU/1/06/370/019	28 film-coated tablets
EU/1/06/370/020	30 film-coated tablets
EU/1/06/370/021	56 film-coated tablets
EU/1/06/370/022	90 film-coated tablets
EU/1/06/370/023	98 film-coated tablets
EU/1/06/370/024	280 film-coated tablets
EU/1/06/370/031	56x1 film-coated tablet (unit dose)
EU/1/06/370/032	98x1 film-coated tablet (unit dose)
EU/1/06/370/033	280x1 film-coated tablet (unit dose)

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

Medicinal product subject to medical prescription.

15. INSTRUCTIONS ON USE

Exforge 10 mg/160 mg 17. UNIQUE IDENTIFIER – 2D BARCODE 2D barcode carrying the unique identifier included. 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA PC SN

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Store in the original package in order to protect from moisture.

SPECIAL STORAGE CONDITIONS

9.

Do not store above 30°C.

10.		AUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS TERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF		
11.	NAME AND AD	DRESS OF THE MARKETING AUTHORISATION HOLDER		
Vista Elm l Dubli	Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland			
12.	MARKETING A	UTHORISATION NUMBER(S)		
	/06/370/036 /06/370/039	280 film-coated tablets (4x70) 280 film-coated tablets (20x14)		
13.	BATCH NUMBE	ER .		
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14.	GENERAL CLA	SSIFICATION FOR SUPPLY		
Medicinal product subject to medical prescription.				
15.	INSTRUCTIONS	S ON USE		
16.	INFORMATION	IN BRAILLE		
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17.	UNIQUE IDENT	TIFIER – 2D BARCODE		

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

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OUTER CARTON OF MULTIPACK (WITH BLUE BOX)

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Exforge 10 mg/160 mg film-coated tablets amlodipine/valsartan

2. STATEMENT OF ACTIVE SUBSTANCE(S)

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3. LIST OF EXCIPIENTS

4. PHARMACEUTICAL FORM AND CONTENTS

Film-coated tablet

Multipack: 280 (4 packs of 70) film-coated tablets Multipack: 280 (20 packs of 14) film-coated tablets

5. METHOD AND ROUTE(S) OF ADMINISTRATION

Read the package leaflet before use.

Oral use.

6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN

Keep out of the sight and reach of children.

7. OTHER SPECIAL WARNING(S), IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Do not store above 30°C.

Store in the original package in order to protect from moisture.

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	OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF
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Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

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15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Exforge 10 mg/160 mg

17. UNIQUE IDENTIFIER – 2D BARCODE

2D barcode carrying the unique identifier included.

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

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MINIMUM PARTICULARS TO APPEAR ON BLISTERS OR STRIPS				
BLISTERS				
1. NAME OF THE MEDICINAL PRODUCT				
Exforge 10 mg/160 mg film-coated tablets amlodipine/valsartan				
2. NAME OF THE MARKETING AUTHORISATION HOLDER				
Novartis Europharm Limited				
3. EXPIRY DATE				
EXP				
4. BATCH NUMBER				
Lot				
5. OTHER				

B. PACKAGE LEAFLET

Package leaflet: Information for the user

Exforge 5 mg/80 mg film-coated tablets Exforge 5 mg/160 mg film-coated tablets Exforge 10 mg/160 mg film-coated tablets amlodipine/valsartan

Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

What is in this leaflet

- 1. What Exforge is and what it is used for
- 2. What you need to know before you take Exforge
- 3. How to take Exforge
- 4. Possible side effects
- 5. How to store Exforge
- 6. Contents of the pack and other information

1. What Exforge is and what it is used for

Exforge tablets contain two substances called amlodipine and valsartan. Both of these substances help to control high blood pressure.

- Amlodipine belongs to a group of substances called "calcium channel blockers". Amlodipine stops calcium from moving into the blood vessel wall which stops the blood vessels from tightening.
- Valsartan belongs to a group of substances called "angiotensin-II receptor antagonists".
 Angiotensin II is produced by the body and makes the blood vessels tighten, thus increasing the blood pressure. Valsartan works by blocking the effect of angiotensin II.

This means that both of these substances help to stop the blood vessels tightening. As a result, the blood vessels relax and blood pressure is lowered.

Exforge is used to treat high blood pressure in adults whose blood pressure is not controlled enough with either amlodipine or valsartan on its own.

2. What you need to know before you take Exforge

Do not take Exforge

- if you are allergic to amlodipine or to any other calcium channel blockers. This may involve itching, reddening of the skin or difficulty in breathing.
- if you are allergic to valsartan or any of the other ingredients of this medicine (listed in section 6). If you think you may be allergic, talk to your doctor before taking Exforge.
- if you have severe liver problems or bile problems such as biliary cirrhosis or cholestasis.
- if you are more than 3 months pregnant. (It is also better to avoid Exforge in early pregnancy, see Pregnancy section).
- if you have severe low blood pressure (hypotension).

- if you have narrowing of the aortic valve (aortic stenosis) or cardiogenic shock (a condition where your heart is unable to supply enough blood to the body).
- if you suffer from heart failure after a heart attack.
- if you have diabetes or impaired kidney function and you are treated with a blood pressure lowering medicine containing aliskiren.

If any of the above applies to you, do not take Exforge and talk to your doctor.

Warnings and precautions

Talk to your doctor before taking Exforge:

- if you have been sick (vomiting or diarrhoea).
- if you have liver or kidney problems.
- if you have had a kidney transplant or if you had been told that you have a narrowing of your kidney arteries.
- if you have a condition affecting the renal glands called "primary hyperaldosteronism".
- if you have had heart failure or have experienced a heart attack. Follow your doctor's instructions for the starting dose carefully. Your doctor may also check your kidney function.
- if your doctor has told you that you have a narrowing of the valves in your heart (called "aortic or mitral stenosis") or that the thickness of your heart muscle is abnormally increased (called "obstructive hypertrophic cardiomyopathy").
- if you have experienced swelling, particularly of the face and throat, while taking other medicines (including angiotensin converting enzyme inhibitors). If you get these symptoms, stop taking Exforge and contact your doctor straight away. You should never take Exforge again.
- if you are taking any of the following medicines used to treat high blood pressure:
 - an ACE inhibitor (for example enalapril, lisinopril, ramipril), in particular if you have diabetes-related kidney problems.
 - aliskiren.

Your doctor may check your kidney function, blood pressure, and the amount of electrolytes (e.g. potassium) in your blood at regular intervals.

See also information under the heading "Do not take Exforge".

If any of these apply to you, tell your doctor before taking Exforge.

Children and adolescents

The use of Exforge in children and adolescents is not recommended (aged below 18 years old).

Other medicines and Exforge

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. Your doctor may need to change your dose and/or to take other precautions. In some cases you may have to stop taking one of the medicines. This applies especially to the medicines listed below:

- ACE inhibitors or aliskiren (see also information under the headings "Do not take Exforge" and "Warnings and precautions");
- diuretics (a type of medicine also called "water tablets" which increases the amount of urine you produce);
- lithium (a medicine used to treat some types of depression);
- potassium-sparing diuretics, potassium supplements, salt substitutes containing potassium and other substances that may increase potassium levels;
- certain types of painkillers called non-steroidal anti-inflammatory medicines (NSAIDs) or selective cyclooxygenase-2 inhibitors (COX-2 inhibitors). Your doctor may also check your kidney function;
- anticonvulsant agents (e.g. carbamazepine, phenobarbital, phenytoin, fosphenytoin, primidone);
- St. John's wort;
- nitroglycerin and other nitrates, or other substances called "vasodilators";

- medicines used for HIV/AIDS (e.g. ritonavir, indinavir, nelfinavir);
- medicines used to treat fungal infections (e.g. ketoconazole, itraconazole);
- medicines used to treat bacterial infections (such as rifampicin, erythromycin, clarithromycin, telithromycin);
- verapamil, diltiazem (heart medicines);
- simvastatin (a medicine used to control high cholesterol levels);
- dantrolene (infusion for severe body temperature abnormalities);
- tacrolimus (used to control your body's immune response, enabling your body to accept the transplanted organ);
- medicines used to protect against transplant rejection (ciclosporin).

Exforge with food and drink

Grapefruit and grapefruit juice should not be consumed by people who are taking Exforge. This is because grapefruit and grapefruit juice can lead to an increase in the blood levels of the active substance amlodipine, which can cause an unpredictable increase in the blood pressure lowering effect of Exforge.

Pregnancy and breast-feeding

Pregnancy

You must tell your doctor if you think you are (or might become) pregnant. Your doctor will normally advise you to stop taking Exforge before you become pregnant or as soon as you know you are pregnant and will advise you to take another medicine instead of Exforge. Exforge is not recommended in early pregnancy (first 3 months), and must not be taken when more than 3 months pregnant, as it may cause serious harm to your baby if used after the third month of pregnancy.

Breast-feeding

Tell your doctor if you are breast-feeding or about to start breast-feeding. Amlodipine has been shown to pass into breast milk in small amounts. Exforge is not recommended for mothers who are breast-feeding, and your doctor may choose another treatment for you if you wish to breast-feed, especially if your baby is newborn, or was born prematurely.

Ask your doctor or pharmacist for advice before taking any medicine.

Driving and using machines

This medicine may make you feel dizzy. This can affect how well you can concentrate. So, if you are not sure how this medicine will affect you, do not drive, use machinery, or do other activities that you need to concentrate on.

3. How to take Exforge

Always take this medicine exactly as your doctor has told you. Check with your doctor if you are not sure. This will help you get the best results and lower the risk of side effects.

The usual dose of Exforge is one tablet per day.

- It is preferable to take your medicine at the same time each day.
- Swallow the tablets with a glass of water.
- You can take Exforge with or without food. Do not take Exforge with grapefruit or grapefruit juice.

Depending on how you respond to the treatment, your doctor may suggest a higher or lower dose.

Do not exceed the prescribed dose.

Exforge and older people (age 65 years or over)

Your doctor should exercise caution when increasing your dose.

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

If you take more Exforge than you should

If you have taken too many tablets of Exforge, or if someone else has taken your tablets, consult a doctor immediately. Excess fluid may accumulate in your lungs (pulmonary oedema) causing shortness of breath that may develop up to 24-48 hours after intake.

If you forget to take Exforge

If you forget to take this medicine, take it as soon as you remember. Then take your next dose at its usual time. However, if it is almost time for your next dose, skip the dose you missed. Do not take a double dose to make up for a forgotten tablet.

If you stop taking Exforge

Stopping your treatment with Exforge may cause your disease to get worse. Do not stop taking your medicine unless your doctor tells you to.

4. Possible side effects

Like all medicines, this medicine can cause side effects, although not everybody gets them.

Some side effects can be serious and need immediate medical attention:

A few patients have experienced these serious side effects (may affect up to 1 in 1,000 people). If any of the following happen, tell your doctor straight away:

Allergic reaction with symptoms such as rash, itching, swelling of face or lips or tongue, difficulty breathing, low blood pressure (feeling of faintness, light-headedness).

Other possible side effects of Exforge:

Common (may affect up to 1 in 10 people): Influenza (flu); blocked nose, sore throat and discomfort when swallowing; headache; swelling of arms, hands, legs, ankles or feet; tiredness; asthenia (weakness); redness and warm feeling of the face and/or neck.

Uncommon (may affect up to 1 in 100 people): Dizziness; nausea and abdominal pain; dry mouth; drowsiness, tingling or numbness of the hands or feet; vertigo; fast heart beat including palpitations; dizziness on standing up; cough; diarrhoea; constipation; skin rash, redness of the skin; joint swelling, back pain; pain in joints.

Rare (may affect up to 1 in 1,000 people): Feeling anxious; ringing in the ears (tinnitus); fainting; passing more urine than normal or feeling more of an urge to pass urine; inability to get or maintain an erection; sensation of heaviness; low blood pressure with symptoms such as dizziness, lightheadedness; excessive sweating; skin rash all over your body; itching; muscle spasm.

If any of these affect you severely, tell your doctor.

Side effects reported with amlodipine or valsartan alone and either not observed with Exforge or observed with a higher frequency than with Exforge:

<u>Amlodipine</u>

Consult a doctor immediately if you experience any of the following very rare, severe side effects after taking this medicine:

- Sudden wheeziness, chest pain, shortness of breath or difficulty in breathing.
- Swelling of eyelids, face or lips.
- Swelling of the tongue and throat which causes great difficulty breathing.
- Severe skin reactions including intense skin rash, hives, reddening of the skin over your whole body, severe itching, blistering, peeling and swelling of the skin, inflammation of the mucous membranes (Stevens-Johnson Syndrome, toxic epidermal necrolysis) or other allergic reactions.
- Heart attack, abnormal heart beat.
- Inflamed pancreas, which may cause severe abdominal and back pain accompanied with feeling of being very unwell.

The following side effects have been reported. If any of these cause you problems or if they last for more than one week, you should contact your doctor.

Common (may affect up to 1 in 10 people): Dizziness, sleepiness; palpitations (awareness of your heart beat); flushing, ankle swelling (oedema); abdominal pain, feeling sick (nausea).

Uncommon (may affect up to 1 in 100 people): Mood changes, anxiety, depression, sleeplessness, trembling, taste abnormalities, fainting, loss of pain sensation; visual disturbances, visual impairment, ringing in the ears; low blood pressure; sneezing/runny nose caused by inflammation of the lining of the nose (rhinitis); indigestion, vomiting (being sick); hair loss, increased sweating, itchy skin, skin discolouration; disorder in passing urine, increased need to urinate at night, increased number of times of passing urine; inability to obtain an erection, discomfort or enlargement of the breasts in men, pain, feeling unwell, muscle pain, muscle cramps; weight increase or decrease.

Rare (may affect up to 1 in 1,000 people): Confusion.

Very rare (may affect up to 1 in 10,000 people): Decreased number of white blood cells, decrease in blood platelets which may result in unusual brusing or easy bleeding (red blood cell damage); excess sugar in blood (hyperglycaemia); swelling of the gums, abdominal bloating (gastritis); abnormal liver function, inflammation of the liver (hepatitis), yellowing of the skin (jaundice), liver enzyme increase which may have an effect on some medical tests; increased muscle tension; inflammation of blood vessels often with skin rash, sensitivity to light; disorders combining rigidity, tremor and/or movement disorders.

Valsartan

Not known (frequency cannot be estimated from the available data): Decrease in red blood cells, fever, sore throat or mouth sores due to infections; spontaneous bleeding or bruising; high level of potassium in the blood; abnormal liver test results; decreased renal functions and severely decreased renal functions; swelling mainly of the face and the throat; muscle pain; rash, purplish-red spots; fever; itching; allergic reaction; blistering skin (sign of a condition called dermatitis bullous).

If you experience any of these, tell your doctor straight away.

Reporting of side effects

If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the national reporting system listed in Appendix V. By reporting side effects you can help provide more information on the safety of this medicine.

5. How to store Exforge

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the carton and blister after EXP. The expiry date refers to the last day of that month.

Do not store above 30°C.

Store in the original package in order to protect from moisture.

Do not use any Exforge pack that is damaged or shows signs of tampering.

6. Contents of the pack and other information

What Exforge contains

Exforge 5 mg/80 mg film-coated tablets

The active substances of Exforge are amlodipine (as amlodipine besylate) and valsartan. Each tablet contains 5 mg amlodipine and 80 mg valsartan.

The other ingredients are cellulose microcrystalline; crospovidone (type A); silica, colloidal anhydrous; magnesium stearate; hypromellose (substitution type 2910 (3 mPa.s)); macrogol 4000; talc, titanium dioxide (E171); iron oxide, yellow (E172).

Exforge 5 mg/160 mg film-coated tablets

The active substances of Exforge are amlodipine (as amlodipine besylate) and valsartan. Each tablet contains 5 mg amlodipine and 160 mg valsartan.

The other ingredients are cellulose microcrystalline; crospovidone (type A); silica, colloidal anhydrous; magnesium stearate; hypromellose (substitution type 2910 (3 mPa.s)); macrogol 4000; talc, titanium dioxide (E171); iron oxide, yellow (E172).

Exforge 10 mg/160 mg film-coated tablets

The active substances of Exforge are amlodipine (as amlodipine besylate) and valsartan. Each tablet contains 10 mg amlodipine and 160 mg valsartan.

The other ingredients are cellulose microcrystalline; crospovidone (type A); silica, colloidal anhydrous; magnesium stearate; hypromellose (substitution type 2910 (3 mPa.s)); macrogol 4000; talc, titanium dioxide (E171); iron oxide, yellow (E172), iron oxide, red (E172).

What Exforge looks like and contents of the pack

Exforge 5 mg/80 mg tablets are round and dark yellow with "NVR" on one side and "NV" on the other side. Approximate size: diameter 8.20 mm.

Exforge 5 mg/160 mg tablets are oval and dark yellow "NVR" on one side and "ECE" on the other side. Approximate size: 14.2 mm (length) x 5.7 mm (width).

Exforge 10 mg/160 mg tablets are oval and light yellow with "NVR" on one side and "UIC" on the other side. Approximate size: 14.2 mm (length) x 5.7 mm (width).

Exforge is available in packs containing 7, 14, 28, 30, 56, 90, 98 or 280 tablets and in multipacks comprising 4 cartons, each containing 70 tablets, or 20 cartons, each containing 14 tablets. All packs are available with standard blisters; the 56, 98 and 280 tablet packs are additionally available with perforated unit dose blisters.

Not all pack sizes may be available in your country.

Marketing Authorisation Holder

Novartis Europharm Limited Vista Building Elm Park, Merrion Road Dublin 4 Ireland

Manufacturer

Novartis Farma S.p.A. Via Provinciale Schito 131 80058 Torre Annunziata (NA) Italy Novartis Farmacéutica S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona Spain

Novartis Pharma GmbH Roonstraße 25 D-90429 Nuremberg Germany

Novartis Pharma GmbH Sophie-Germain-Strasse 10 90443 Nuremberg Germany

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

België/Belgique/Belgien

Novartis Pharma N.V. Tél/Tel: +32 2 246 16 11

България

Novartis Bulgaria EOOD Тел.: +359 2 976 98 28

Česká republika

Novartis s.r.o.

Tel: +420 225 775 111

Danmark

Novartis Healthcare A/S Tlf: +45 39 16 84 00

Deutschland

Novartis Pharma GmbH Tel: +49 911 273 0

Eesti

SIA Novartis Baltics Eesti filiaal

Tel: +372 66 30 810

Ελλάδα

Novartis (Hellas) A.E.B.E. Tηλ: +30 210 281 17 12

España

Novartis Farmacéutica, S.A. Tel: +34 93 306 42 00

France

Novartis Pharma S.A.S. Tél: +33 1 55 47 66 00

Lietuva

SIA Novartis Baltics Lietuvos filialas

Tel: +370 5 269 16 50

Luxembourg/Luxemburg

Novartis Pharma N.V. Tél/Tel: +32 2 246 16 11

Magyarország

Novartis Hungária Kft. Tel.: +36 1 457 65 00

Malta

Novartis Pharma Services Inc.

Tel: +356 2122 2872

Nederland

Novartis Pharma B.V. Tel: +31 88 04 52 111

Norge

Novartis Norge AS Tlf: +47 23 05 20 00

Österreich

Novartis Pharma GmbH Tel: +43 1 86 6570

Polska

Novartis Poland Sp. z o.o. Tel.: +48 22 375 4888

Portugal

Novartis Farma - Produtos Farmacêuticos, S.A.

Tel: +351 21 000 8600

Hrvatska

Novartis Hrvatska d.o.o. Tel. +385 1 6274 220

Ireland

Novartis Ireland Limited Tel: +353 1 260 12 55

Ísland

Vistor hf.

Sími: +354 535 7000

Italia

Novartis Farma S.p.A. Tel: +39 02 96 54 1

Κύπρος

Novartis Pharma Services Inc. $T\eta\lambda$: +357 22 690 690

Latvija

SIA Novartis Baltics Tel: +371 67 887 070

România

Novartis Pharma Services Romania SRL

Tel: +40 21 31299 01

Slovenija

Novartis Pharma Services Inc.

Tel: +386 1 300 75 50

Slovenská republika

Novartis Slovakia s.r.o. Tel: +421 2 5542 5439

Suomi/Finland

Novartis Finland Oy

Puh/Tel: +358 (0)10 6133 200

Sverige

Novartis Sverige AB Tel: +46 8 732 32 00

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Other sources of information

Detailed information on this medicine is available on the European Medicines Agency web site: http://www.ema.europa.eu