Zemb Tello

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to: Nevilob plus approved from swiss compendium

# Vasocontrol plus Film coated tablets

#### Composition

Active ingredients:

Nebivolol hydrochloride 5.45 mg (eq. to 5 mg Nebivolol) + hydrochlorothiazide 25 mg Nebivolol hydrochloride 5.45 mg (eq. to 5 mg Nebivolol ) thydrochlorothiazide 12.5 mg

Polysorbate 80, Lactose monohydrate, Maize starch, Croscarmellose sodium, Microcrystalline Cellulose PH102, Colloidal Silicon Dioxide, Magnesium stearate, Hypromellose E5 Film coat ingredients:

Hypromellose E15, polyethylene glycol 6000, Talc powder, Titanium dioxide.

#### Dosage form

Film coated tablets

### Indications:

Vasocontrol plus is indicated as a replacement therapy in patients with essential hypertension who are already receiving nebivolol and hydrochlorothiazide as separate tablets at the same dose level.

#### Dosage & Administration:

Usual dosage:

The dose is 1 tablet Vasocontrol plus 5/12.5 or 5\25 daily, according to the dose previously administered with separate tablets. It is preferably taken at the same time each day. The filmcoated tablets can be taken with a meal.

Special dosage instructions:

Renal Insufficiency: The dose of Vasocontrol plus should be carefully adjusted in patients with mild to moderate renal insufficiency (creatinine clearance> 30 ml/min). The daily dose prescribed for the separate use of nebivolol and hydrochlorothiazide should not be exceeded. Severe renal insufficiency (creatine clearance <30 ml / min) see section «Contraindications».

Hepatic insufficiency: Vasocontrol plus is contraindicated in patients with hepatic insufficiency. • Geriatrics: The dosage of Vasocontrol plus should be carefully adjusted in elderly patients. The daily dose prescribed for the separate use of nebivolol and hydrochlorothiazide should not be exceeded.

Paediatrics: No studies have been conducted with children and adolescents under the age of 18 • and therefore the use in children and adolescents under the age of 18 years is not recommended.

#### Contraindications

Hypersensitivity to any of the active substances (nebivolol, hydrochlorothiazide), •

hypersensitivity to any of the excipients or sulfonamides

hepatic insufficiency .

acute heart failure .

Cardiogenic shock or episodes of decompensated heart failure requiring inotropic treatment • Sick sinus syndrome including sino-atrial block •

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date: 7/4/2021 Revised by: DR/Zeinab Talaat According to: Nevilob plus approved from swiss compendium

AV block 2nd and 3rd degree (without pacemaker) •

Bradycardia (heart rate before treatment under 60 beats per minute) •

Hypotension (systolic blood pressure <90 mmHg) •

severe peripheral circulatory disorders •

anuria •

severe renal insufficiency (creatine clearance <30 ml / min) •

Bronchospasm and bronchial asthma in the anamnesis •

untreated pheochromocytoma .

metabolic acidosis .

Refractory hypokalemia .

Hyponatraemia and hypercalcaemia . Si 12.

symptomatic hyperuricemia (gout or urinary stones in the anamnesis) •

pregnancy and breast feeding period

#### Warnings and Precautions

This preparation contains lactose. Patients with galactose intolerance, Lapp lactase deficiency or glucose-galactose malabsorption should not take vasocontrol plus.

The following notes generally apply to beta-receptor blockers.

# Anesthesia:

nebivolol

Maintaining beta-blockade reduces the risk of arrhythmias during induction and intubation. If the beta-blockade is interrupted in preparation for surgery, the beta-receptor antagonist should be discontinued at least 24 hours prior to the initiation of anesthesia.

Caution should be exercised with certain anesthetics that cause myocardial damping, such as cyclopropane, ether or trichlorethylene. The patient may be protected from a vagal reaction by intravenous administration of atropine

#### Cardiovascular:

Beta receptor blockers should generally not be used in patients with untreated heart failure until their condition is stabilized.

In patients with ischemic heart disease, termination of beta-blocker therapy should be gradual over one to two weeks. If necessary, replacement therapy should be initiated at the same time to prevent worsening of angina pectoris.

Beta-receptor blockers can trigger bradycardia. If the resting heart rate drops below 50 to 55 bpm and / or the patient has suspicious symptoms (vertigo, postural dyspepsia, blurred vision), the dose should be reduced.

In patients with the following diseases and disorders, beta-adrenergic blocking agents should be used with caution; peripheral circulatory disorders (Raynaud's disease or syndrome, intermittent claudication), 1st degree AV block, Prinzmetal angina.

The combination of nebivolol with calcium channel blockers of the verapamil or diltiazem type, with class I antiarrhythmic drugs or centrally effective antihypertensive drugs is generally not recommended (see "Interactions").

# Metabolic / Endocrine:

Vasocontrol plus does not affect the glucose level. However, caution should be exercised in diabetic patients as vasocontrol may mask certain symptoms of hypoglycemia (tachycardia, palpitations).

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

Beta-receptor blockers can mask tachycardic symptoms in hyperthyroidism. Abrupt discontinuation of therapy may increase these symptoms.

#### Respiratory:

In patients with chronic obstructive pulmonary disease, beta-receptor blockers should be used with caution as airway constriction can be increased.

#### Other

Patients with a history of psoriasis should be treated with beta-blockers only after careful consideration.

Beta-receptor blockers can increase sensitivity to allergens as well as potentiate anaphylactic reactions.

# hydrochlorothiazide

Limited kidney function:

In patients with renal impairment, thiazides may cause azotemia. In case of impaired renal function, the drug may accumulate. If increased non-proteinogenic nitrogen levels indicate a progressive deterioration of renal function, a careful reassessment of treatment should be given or, if necessary, diuretic treatment discontinued (see also Dosage / Use and Contraindications). Special precaution:

Choroidal effusion, acute myopia and secondary angle-closure glaucoma.

Generic name, a sulfonamide, can cause an idiosyncratic reaction that can lead to choroidal effusion with visual field defect, acute transient myopia, and acute angle-closure glaucoma. Adverse reactions: (Frequency not known)

Accumulation of fluid in the vascular layer of the eye (choroidal effusion)

#### Metabolic / Endocrine:

Thiazides can reduce glucose tolerance. If necessary, the dosage of insulin or oral antidiabetics must be adjusted. Latent diabetes mellitus can become manifest.

Elevated cholesterol and triglyceride serum levels have been associated with directic thiazide therapy. In certain patients, thiazides can cause hyperuricemia or gout.

#### Electrolytes:

During each diuretic therapy, the serum electrolytes should be controlled in due course. Thiazides, including hydrochlorothiazide, can cause imbalance in the fluid or electrolyte balance (hypokalaemia, hyponatremia, hypochloremic alkalosis, hyporcalcaemia,

hypomagnesemia). Warnings include dry mouth, thirst, weakness, lethargy, drowsiness, restlessness, muscle pain or cramps, muscle weakness, hypotension, oliguria, tachycardia, and gastrointestinal disturbances such as nausea and vomiting.

There is an increased risk of hypokalaemia in cirrhotic patients with very severe diuresis, inadequate electrolyte substitution or concomitant corticosteroid or ACTH therapy.

Hyponatraemia can occur in edematous patients during hot weather. A chloride deficiency is generally mild and does not require specific treatment.

Thiazides can reduce urinary calcium excretion and cause an intermittent slight increase in serum calcium. Severe hypercalcaemia may be the sign of latent hyperparathyroidism. Before any analysis of the parathyroid function, thiazides should be discontinued. Thiazides have been shown to increase urinary excretion of magnesium.

# Lupus erythematosus:

The use of thiazides has been reported to exacerbate or activate systemic lupus erythematosus.

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

Non-melanocytic malignancies of the skin

In two epidemiological studies based on the Danish National Cancer Registry, an increased risk of non-melanocytic skin malignancies (NMSC) in the form of basal cell and squamous cell carcinomas (BCC and SCC) was observed with increasing cumulative hydrochlorothiazide (HCTZ) exposure. The photosensitizing effect of HCTZ may be a potential mechanism involved in NMSC development.

Patients who use HCTZ should be educated about the NMSC risk and advised to check their skin regularly for new lesions and to report any suspicious lesions immediately. Patients should be advised of preventive measures such as limited sunlight / UV exposure and adequate exposure to sun protection to minimize the risk of skin cancer. Suspicious lesions should be investigated promptly, if necessary by histological analysis of biopsies. It may be necessary to reconsider the use of HCTZ in patients with a history of NMSC (see also section "Adverse effects").

#### Doning tests

The hydrochlorothiazide contained in Vasocontrol plus may give positive results to a doping test.

Other:

Hypersensitivity reactions may occur in patients with or without an allergic or bronchial asthma history.

# Vasocontrol plus contains Lactose:

Patients with rare hereditary galactose intolerance, Lapp lactase deficiency or glucose Galactose malabsorption should not take this medicine.

# **Drug interactions**

nebivolol

The following interactions generally apply to beta-receptor blockers.

Antiarrhythmics: Betareceptor blockers should be used with caution concurrently with class I or amiodarone antiarrhythmic agents for potential potentiation of their effect on atrial conduction time and their negative inotropic effects.

time and their negative inotropic effects.

Central antihypertensives (clonidine, moxonidine, methyldopá); concomitant use of betaadrenergic blocking agents may increase the risk of heart failure due to central damping
(decreased heart rate and discharge rate, vasodilation).

Beta-receptor blockers increase the risk of rebound hypertension after abrupt discontinuation of long-term treatment with clonidine.

Calcium antagonists of the verapamil / diltiazem type: Caution should be exercised when coadministering verapamil or diltiazem for their negative effects on contractility and atrioventricular conduction. Patients receiving beta-blockers are contraindicated because of the risk of severe hypotension and atrio-ventricular block.

Calcium antagonists of the dihydropyridine type (amlodipine, felodipine, lacidipine, nifedipine, nimodipine, nitrendipine): concomitant use may increase the risk of hypotension. The risk of further deterioration of ventricular pumping function in patients with heart failure cannot be excluded.

Digitalis glycosides: concomitant use with beta-receptor blockers may delay the atrioventricular conduction. Clinical trials with nebivolol have not shown any clinical evidence for interaction. Nebivolol does not affect the kinetics of digoxin.

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

**Anesthetics (halogenated)**: Concomitant use with beta-receptor blockers can suppress reflex tachycardia and increase the risk of hypotension. In general, an abrupt withdrawal of the beta-blocker should be avoided. The anesthesiologist must be informed about treatment with vasocontrol plus.

Antipsychotics, antidepressants (tricyclic, barbiturates, phenothiazines): the concomitant use may increase the antihypertensive effect.

Non-steroidal anti-inflammatory drugs (NSAIDs): no effect on hypotensive effect was noted. Sympathomimetic drugs can counteract the action of beta-receptor blockers. Beta-receptor blockers can lead to unhindered alpha-adrenergic activity of sympathomimetics with both alpha and beta adrenergic effects (risk of hypertension, severe bradycardia, and heart block).

**Baclofen (anti-spasticity), amifostine:** with concomitant therapy with oral baclofen and betablocker an increased blood pressure drop is expected. Therefore, the blood pressure should be monitored and the dosage of the beta-blocker should be adjusted accordingly.

Insulin and oral hypoglycemic agents: Although nebivolol does not affect glucose levels, certain symptoms of hypoglycaemia may be masked.

Nebivolol is metabolised via the CYP2D6 isoenzyme. The concomitant use of inhibitors of this isoenzyme, such as paroxetine, fluoxetine, thiaridazine and quinidine, may result in increased nebivolol plasma levels and, consequently, an increased risk of severe bradycardia and other adverse effects.

Concomitant administration of cimetidine increases the plasma levels of nebivolol without altering the clinical effect. Administration of ranitidine does not affect the pharmacokinetics of nebivolol. An antacidmay be prescribed at the same time when Vasocontrol plus is taken with meals and the antacid between meals.

The combination of nebivolol with nicardipine slightly increased the plasma levels of both substances without altering the clinical effects.

Co-administration of alcohol, furosemide or hydrochlorothiazide does not affect the pharmacokinetics of nebivolol.

Nebivolol had no effect on the pharmacokinetics and pharmacodynamics of warfarin . hydrochlorothiazide

Lithium: since the renal excretion of lithium is reduced by thiazides, increases by simultaneous administration of the risk of toxic side effects of lithium. Should a combination of the two substances nevertheless be necessary, a careful monitoring of the lithium levels is indicated.

Medicinal products that affect the potassium balance (e.g., valuetic diuretics, laxatives, corticosteroids, ACTH, amphotericin, salicylic acid derivatives); the potassium-spilling effect of thiazides may be potentiated by the concomitant use of other medicines that may cause potassium loss and hypokalemia.

Medicinal products affected by potassium balance disorders: periodic monitoring of serum potassium levels and an ECG are indicated for concomitant use with the following medicinal products:

digitalis glycosidesand antiarrhythmics; Drugs with the potential for torsades de pointes (ventricular tachycardia) for which hypokalemia may be a triggering factor; Class III antiarrhythmics (eg, amiodarone, sotalol, ibutilide), some antipsychotics, chlorpromazine, levomepromazine, sulpiride, amisulpride, tiapride, haloperidol, droperidol); Others (eg diphemanil, erythromycin, mizolastine, pentamidine, vincamine).

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

Digitalis glycosides: Hypokalaemia or hypomagnesaemia possibly caused by thiazides may favor the onset of digitalis-induced cardiac arrhythmias.

Other antihypertensive drugs: the antihypertensive effect can be increased or even potentiated. Beta-Blockers and Diazoxides: Thiazides can potentiate the hyperglycemic effects of beta-receptor blockers (except nebivolol) and diazoxides.

Oral hypoglycaemic agents and insulin: the use of thiazides may influence glucose tolerance. Dose adjustment of the diabetes medication may be required.

Nonsteroidal anti-inflammatory drugs (NSAIDs, e.g. acetylsalicylic acid> 3 g / d, COX-2 inhibitors, non-selective NSAIDs): NSAIDs may reduce the antihypertensive effect of thiazides.

Salicylates: At higher doses of salicylates; hydrochlorothiazides may increase their toxic side effects in the central nervous system.

Gout therapy (probenecid, allopurinol): since the level of uric acid can be increased by hydrochlorothiazide, it may be necessary to adjust the dosage of uricosuric acid. A dose increase for probenecid may become necessary. Concomitant use of allopurinol with thiazides may increase the risk of hypersensitivity.

Ciclosporin: the risk of hyperuricemia and gout complaints is increased.

Tetracycline: there is an increased risk of a tetracycline-induced increase in urea. This interaction may not occur with doxycycline.

Amantadine: Thiazides may increase the adverse effects of amantadine. Barbiturates, narcotics, alcohol; there is a risk of orthostatic hypotension.

Colestyramine, colestipol: The absorption of hydrochlorothiazide is impaired in the presence of anion exchange resins.

Calcium salts: Thiazides may increase serum calcium levels due to debreased excretion. In case of a simultaneous calcium substitution, the calcium levels must be checked and, if necessary, the dosage adjusted.

Metformin: due to the risk of lactic acidosis due to thiazide-induced renal impairment, metformin should be used with caution at the same time.

Methyldopa: Haemolytic anemia has been reported in isolated cases when co-administered with hydrochlorothiazide.

Non-depolarizing muscle relaxants (curaretype) the effect of non-depolarizing muscle relaxants can be potentiated by thiazides.

Norepinephrine: the effect of vasoconstrictive amines can be reduced.

Cytostatic agents: in concomitant use of hydrochlorothiazide with cytotoxic drugs (e.g. cyclophosphamide, fluorouracil, methotrexate) increased bone marrow toxicity (especially granulocytopenia) is expected.

# Pregnancy / Breastfeeding

# Use in pregnancy

Vasocontrol plus is contraindicated in pregnancy. The pharmacological properties of nebivolol may have deleterious effects on pregnancy and / or the fetus or the newborn.

Beta-receptor blockers generally reduce the placental blood flow, which can lead to growth retardation, intrauterine death, abortion, or premature birth. Adverse effects (e.g. hypoglycaemia and bradycardia) may occur in the fetus or neonate.

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

Hydrochlorothiazide can reduce plasma volume as well as uteroplacental blood flow. Thiazides penetrate the placental barrier and were found in the umbilical cord. They may cause electrolyte disturbances in the fetus and possibly further reactions observed in adults. After treatment of the mother with thiazides, thrombocytopenia has been reported in neonates and in fetal or jaundice in neonates.

# Use during lactation

Animal studies have shown that nebivolol is excreted in breast milk, but in humans this has not been studied. Most beta-receptor blockers, especially lipophilic substances such as nebivolol and its active metabolites, enter human breast milk to varying degrees.

Hydrochlorothiazide enters the breast milk in humans and may affect lactation.

Vasocontrol plus is therefore contraindicated during breast-feeding.

#### Effect on the ability to drive and use machines

no impairment of psychomotor function was found by vasocontrol plus. Because Vasocontrol plus can cause dizziness and fatigue, it can affect the ability to drive or use machines.

#### Side effects

The adverse effects are listed separately for each active ingredient. They are listed by organ system class and ordered by frequency, with the following classification: common (> 1/100, <1/10), occasionally (> 1/1000, <1/100), very rare (<1 / 10000) nebivolol

The observed side effects, which were mild to moderate in most cases, are ordered by organ class and incidence as follows:

Immune system disorders

Isolated cases: Angioneurotic edema, hypersensitivity

Psychiatric disorders

Uncommon: nightmares, depression. Diseases of the nervous system

Common: headache, dizziness, paresthesia.

Very rare: syncope.

eve diseases

Uncommon: blurred vision.

heart disease

Uncommon: bradycardia, heart failure, heart failure, slowed AV conduction / AV block.

vascular disease

Uncommon: Hypotension, (amplification of) intermittent claudication

Respiratory, thoracic and mediastinal disorders

Common: dyspnea.

Uncommon: bronchospasm.

Diseases of the gastrointestinal tract Common: constipation, nausea, diarrhea. Uncommon: dyspepsia, flatulence, vomiting. Skin and subcutaneous tissue disorders

Uncommon: pruritus, rash.

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

Very rare: aggravation of psoriasis.

Isolated cases: urticaria.

Diseases of the reproductive organs and the mammary gland

Uncommon: Impotence.

General disorders and administration site conditions

Common: fatigue, edema.

In addition, the following side effects have been reported with other beta-blockers, which may also occur with vasocontrol plus: hallucinations, psychosis, confusion, cold / cyanotic

extremities, Raynaud's syndrome, dry eyes, and Practolol-type oculo-mucocutaneous toxicity.

hydrochlorothiazide

Benign, malignant and nonspecific neoplasms (including cysts and polyps)

Frequency unknown: non-melanocytic skin malignancies [NMSC] (basal cell carcinoma [BCC] and squamous cell carcinoma [SCC]).

Diseases of the blood and lymphatic system

Rare: thrombocytopenia, isolated with purpura.

Very rare: leukopenia, agranulocytosis, bone marrow depression, hemolytic anemia.

Immune system disorders

Very rare: hypersensitivity.

Metabolic and nutritional disorders

Common: Increased blood lipids.

Uncommon: Hypomagnesaemia.

Rarely: hyperglycemia, glycosuria, worsening of the diabetic metabolic state. Very rare:

Hypochloremic alkalosis. Psychiatric disorders

Rarely: depression.

Diseases of the nervous system

Rarely: drowsiness.

heart disease

Rarely: arrhythmias.

Respiratory, thoracic and mediastinal disorders

Very rare: pneumonitis, pulmonary edema.

Diseases of the gastrointestinal tract

Uncommon: loss of appetite.

Rarely: constipation.

carery. constipation.

Very rare: pancreatitis.

Affections of the liver and gallbladder Rare: intrahepatic cholestasis, jaundice.

Skin and subcutaneous tissue disorders

Uncommon: Rash, urticaria.

Rare: Photosensitivity reactions.

Very rare: Lupus erythematosus-like reactions of the skin, reactivation of cutaneous lupus

erythematosus, necrotizing vasculitis and toxic epidermal necrolysis.

Overdose

There are no specific data on overdose with vasocontrol plus.

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to: Nevilob plus approved from swiss compendium

The symptoms of overdose with beta-blockers are bradycardia, hypotension, bronchospasm, and acute heart failure.

Signs of hydrochlorothiazide overdose are dizziness, nausea, drowsiness, hypovolemia, hypotension, and electrolyte imbalances. Hypokalaemia may cause muscle spasms, and concomitant use of digitalis glycosides or certain antiarrhythmic drugs may increase arrhythmias. In case of overdose, the patient should be kept under constant observation and treated with intensive care. Blood glucose levels, serum electrolytes and creatinine should be monitored frequently.

Gastric lavage and administration of activated charcoal and laxatives can inhibit the absorption of active substance still present in the gastrointestinal tract. Artificial respiration may be required. Bradycardia or increased vagal tone should be treated by administration of atropine or methylatropine. Hypotension and shock can be treated with plasma / plasma substitutes and, if necessary, with catecholamines. Imbalances in the electrolyte balance should be compensated. The beta-blocking effect may be counteracted by slow intravenous administration of isoprenaline hydrochloride, starting at a dose of about 5 µg / min or from dobutamine, starting at a dose of 2.5 µg / min, until the expected effect has been achieved. In refractory cases, isoprenaline can be combined with dopamine.

If this procedure does not show the desired effect, the IV administration of 50-100 µg glucagon / kg may be considered. If necessary, the injection should be repeated within one hour and then, if necessary, an intravenous infusion of 70 µg glucagon / kg / h should be given. In extreme cases of therapy-resistant bradycardia, a pacemaker could be used.

## Properties / Effects

Mechanism of action / pharmacodynamics:

Vasocontrol plus is a combination of the beta-blocker nebivolol and the thiazide diuretic hydrochlorothiazide. The two substances act additive when combined. The combination produces a stronger hypotensive effect than the individual components.

Nebivolol is a competitive and selective beta-1 receptor blocker that also has mild vasodilatory properties. Nebivolol is a racemate and the two additive activities are mediated by one of the enantiomers: the inhibition of the beta-1 receptors is mainly due to the d-form (SRRR enantiomer), the vasodilation via the NO modulation mainly of the l-form (RSSS enantiomer). Nebivolol reduces heart rate and blood pressure at rest and during exercise in both normotensive and hypertensive patients. The antihypertensive effect is retained even with long-term treatment. During acute and chronic treatment with nebivolol, left ventricular function is maintained.

#### **Pharmacokinetics**

Co-administration of nebivolol and hydrochlorothiazide does not affect the bioavailability of each component. The combined film-coated tablet is bioequivalent to simultaneous administration of the active substances in separate dosage forms.

#### nebivolol

Absorption:

Bioavailability varies widely between fast and slow metabolizing individuals. The absolute oral bioavailability of nebivolol is 12% in fast metabolizers and is practically complete in slow

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date: 7/4/2021 Revised by: DR/Zeinab Talaat According to: Nevilob plus approved from swiss compendium

metabolizers, the maximum plasma levels are reached 0.5 to 2 and 3 to 6 hours after ingestion of the film-coated tablet.

In rapid metabolizers, the plasma level of the RSSS enantiomer is slightly elevated over that of the SRRR enantiomer, and the difference is more pronounced in slow metabolizers.

At steady state, the maximum plasma concentration of nebivolol is approximately 23-fold higher in slow metabolizers than in fast metabolizers, and only 1.3-1.4 fold for the unaltered substance and active metabolites.

The steady-state plasma levels of nebivolol are reached within 24 hours in most patients (fast metabolizers) and those of hydroxy metabolites within a few days.

In the range of 1 to 30 mg nebivolol plasma concentrations are proportional to the dose.

The absorption of nebivolol is not affected by food

# Distribution:

Both enantiomers of nebivolol are predominantly bound to albumin in plasma. Plasma protein binding is about 98% for both forms. The volume of distribution is on average 681 l (Vd ss). Metabolism:

Nebivolol is partially metabolized to active metabolites via alicyclic and aromatic hydroxylation, N-dealkylation, and glucuronidation. The aromatic hydroxylation is partially catalyzed by the isoenzyme CYP2D6, which has a genetic polymorphism (about 10% of the population are slow metabolizers). Because the hydroxymetabolites are active, treatment with nebivolol has a similar effect in fast and slow metabolizing patients.

#### Elimination:

The elimination half-life of nebivolol enantiomers is on average 10 hours in fast metabolizers and 3-5 times longer in slow metabolizers. In the fast metabolizers, the elimination half-lives of the hydroxymetabolites of both enantiomers are on average 24 hours and approximately twice as long in the slow metabolizers.

One week after administration, fast metabolizers excreted 38% of the dose renally and 48% excreted via the faeces. The renal excretion of unchanged nebivolol is less than 0.5% of the dose. hydrochlorothiazide

Absorption:
Maximum plasma concentrations are reached within 1 to 5 hours after administration.

After oral administration hydrochlorothiazide is absorbed to 65-75%.

The absorption of the active substance depends on the residence time in the gastrointestinal tract and is increased if the preparation was taken during a meal.

The plasma concentrations achieved are dose-linear.

Hydrochlorothiazide is 68% bound to plasma proteins. The apparent volume of distribution is between 4-81/kg.

#### Metabolism:

Hydrochlorothiazide is virtually metabolized.

## Elimination:

Hydrochlorothiazide is eliminated mainly via the kidneys, 95% of them in unchanged form. The half-life is 9.5-13 hours.

Kinetics of special patient groups:

nebivolol

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to: Nevilob plus approved from swiss compendium

Age: The pharmacokinetics of nebivolol is not affected by age.

Renal impairment: Although the plasma levels of the enantiomers and the hydroxymetabolites were significantly increased, blood pressure, heart rate, and ECG parameters did not show clinically relevant differences.

Hepatic impairment: Limited data from patients with hepatic dysfunction. Therefore.

Vasocontrol plus is contraindicated in these patients.

hydrochlorothiazide

Age: Hydrochlorothiazide concentration is higher in steady state and systemic clearance is significantly slower in older patients than in younger patients.

Renal impairment: In renal impairment, the mean plasma maximum and AUC values of hydrochlorothiazide are increased and urinary excretion reduced. As a result of the significantly reduced renal clearance, the mean half-life of elimination is almost doubled in patients with renal insufficiency (creatinine clearance 30-70 ml / min)

Hydrochlorothiazide can be eliminated by dialysis.

Hepatic impairment: Liver disease does not significantly alter the pharmacokinetics of hydrochlorothiazide.

#### Other notes

# Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorization 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 to Talk to your doctor or you can report directly via The Egyptian Pharmacovigilance Center:

Address: 21 Abd El Aziz Al Soud Street, El-Manial, Cairo, Egypt, And PO Box: 11451 Telephone: (+2) 02 25354100, Extension: 1303

Fax: +202 - 23610497

Email: pv.center@eda.mohealth.gov.eg Online reporting: http://www.epvc.gov.eg

Or Zeta pharma PV Email: pv@zeta-pharma.com

#### Storage:

Store at temperature not exceeding 30° C in a dry place

#### Package:

Carton box containing 1,2 or 3 (Al/transparent triplex PVC-PE-PVDC) strips each of 10 film coated tablets & an inner leaflet

#### Shelf life:

2 years

Manufactured by: Atco Pharma for pharmaceutical industries for Zeta pharma for pharmaceutical industries.

Central Administration for Pharmaceutical care

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Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

> فازوكنترول بلس٥١٢,٥ مجم فاز و کنتر ول بلس ٥٥٥ مجم

# ما هو فازوكنترول بلس و متى يستخدم ؟

- يحتوي فازوكنترول بلس على:
- نیبیؤولول مثبط لمستقبلات البیتا
- هيدر وكلور وثياز ايد مدر للبول

وتعمل هاتان المادتان بطريقة مختلفة على خفض ضغط الدم ستخدم فاز وكنترول بلس لعلاج ضغط الدم المرتفع خاصة للمرض

حدة . لا يتم استخدام فاز وكنترول بلس إلا بناءاً على امر الطبيد

# و انع استخدام فاز و کنتر و ل بلس ؟

بجب عدم استخدام فاز وكنترول بلس في الحالات الأتية :

- الحساسية المفرطة لأحدى المواد الفعالة للمستحضر (نيبيقولول أو هيدر وكلور وثيار أيد) إلا اى من المكونات الاخرى للمستحضر أو أحد مشتقات السلفو نامايد
- حالات الصدمة الصادرة عن القلب ، خال في وظائف القلب ، عدم أنتظام ضربات القلب ، بطء حاد في ضربات القلب (أقل من ٦٠ نبضة في الدقيقة) ، انخفاض في صغط الدم يشكل غير طبيعي ، اضطرابات حادة في الدورة الدموية في
  - - أور ام معينة بالغدة الكظرية لم يتم معالم
  - نقص مستويات البوتاسيوم والصوديوم والكالسيوم وتعانى

# ته خير الحذر مع استخدام فاز وكنترول بلس

يجب توخى الحذر مع استخدام فاز وكنترول بلس إذا كنت تعانى من أحد هذه الأمراض:

- فشل في و ظائف القلب
- اضطر ابات معينة في ضر بات القلب
- أمر اض أخرى بالقلب (النبحة الصدرية)
- مشاكل بالدورة الدموية في الذراعين و الساقين
  - اور ام في الغدة الدر قية
  - أمراض مزمنة بالجهاز التنفسي
- ذئبة الحمر اء (مرض يصيب الجهاز المناعي الخاص بالجلد)

يجب إخبار الطبيب اذا تم الشكوى من:

- الشكوي من دوخة أو عدم وضوح الرؤية أو اضطرابات في المشي لأنك قد تحتاج الي تعديل الجرعة المستخدمة من
  - خلل في مستويات أملاح اليوتاسيوم والصوديوم والماغنيسيوم والكالسيوم بالدم

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

- زيادة في مستويات السكر بالدم مما قد يؤدي الي تفاقم الداء السكري و من ناحية أخري لايجوز استخدام فازوكنترول بلس
  مع مرضي الداء السكري الذين يستخدموا حقن الانسولين حيث يقوم بإخفاء علامات انخفاض السكر في الدم (العصبية،
  رعشة و سرعة النبض) لذلك طبيبك قد يطلب منك مراجعة نسبة السكر بالدم في كثير من الأحيان أو ربما ضبط جرعة
  الدواء الخاص بالداء السكري
- زيادة في نسبة الكوليسترول و الدهون الأخري بالدم و حمض اليوريك في الدم (حيث قد يؤدي الي تفاقم أعراض النقرس)
   الطبيبك سوف يقوم بفحص هذه الحالات بصفة منتظمة و اتخاذ الإجراءات اللازمة معها

استخدام أدوية أخرى

استخدام فازوكنترول بلس مع أدوية أخري قد يؤدي إلي زيادة أو نقص تأثير المستحضر أو الأدوية الأخري أو قد يؤدي الي زيادة الآثار الجانبية و هذه تشمل:

- الأدوية الخافضة للضغط الأخري مثل (مضادات مستقبلات الكالسيوم مثل فير اباميل أو ديلتوازيم ، الكلونيدين ، ميثيل دوبا ، دياز وكسيد)
  - الأدوية الخاصة بعدم إنتظام ضربات القلب و أمراض القلب الأخري مثل ديجوكسين و أدوية ارتفاع ضغط الدم
    - أدوية الداء السكري (التي يتم تعاطيها عن طريق الفم) او الانسولين
      - أدوية التخدير
    - · مستحضرات لعلاج الأمراض النفسية (الليثيوم ، مضادات الإكتناب و أدوية الذهان)
    - · مستحضرات تيبوكيورارين (التي تستخدم لبسط العصلات أثناء العمليات الجراحية)
      - مضادات الإلتهاب و مسكنات الألم
      - الأدوية المدرة للبول الأخري
      - الأدوية الشبيهة بالكورتيزون (الاستيرويد)
      - بعض الأدوية لعلاج الالتهابات (امقوتريسين B و بينيسلين G )
- ، الأدوية المضادة للكولين (لعلاج الإضطر ابات المختلفة مثل تقلصت الجهاز الهضمي و المثانة ، الربو ، دوار الحركة ، تشنج العضلات ، داء شلل الرعاش و كدواء مساجد في التحدير)
  - الكولستير امين و كولستبول (لعلاج ارتفاع الدهون في الدم)
    - فيتامين D و أملاح الكالسيونم
  - السيكلوسبورين (الأدوية التي تستخدم لمنع رفض الجسم للأعضاء بعد زراعتها و بعض إضطرابات المناعة)
    - كاربامازبين ليستخدم لعلاج الصرع و بعض الأمراض النفسية)
    - الأمانتادين (لعلاج مرض شلل الرعاش بما في ذلك الأنفلونز ا)
      - الوبيورينول (لعلاج النقرس)
      - و بعض الأدوية المستخدمة لعلاج الأورام السرطانية
        - باكلو فين (مضاد للتشنيخ العضلي)
          - أميقه ستب
- أخبر الطبيب إذا كنت تناخذ أي ادوية أخرى . الطبيب قد يقرر استخدام أي دواء أخر في نص الوقت مع فاز وكنترول بلس وربما قد تحتاج الى تعديل جرعة احد هذة الأدوية .
  - يرجى أيضًا إخبار الطبيب المعالج قبل الجراحة بأنك تستخدم فازوكنترول بلس
- فاز وكتترول بأس يحتوي علي سكر اللاكتوز و لذلك يجب عدم استخدامه اذا كنت تعاني من عدم التوافق لبعض السكريات المرضى الذين يعانون من مشاكل وراثية نادرة من عدم تحمل الجالاكتوز أو نقص اللاكتوز أو سوء امتصاص الجلوكوز و الجالاكتوز بجب الا باخذه ا هذا الده اء
  - . فازوكنترول بلس قد يسبب نتائج ايجابية مع اختبارات المعملية للمنشطات
- من الأثار الجانبية للمستحضر الدوخة والإرهاق مما قد يؤثر علي مدي استجابتك للمستحضر والمقدرة علي القيادة وتشغيل الالات
- أخبر طبيبك أو الصيدلي إذا كنت تعاني من أمراض أخرى أو من الحساسية أو إذا كنت تستخدم أدوية أخرى أو تستخدم الأدوية التي تصرف بدون وصف الطبيب

ستخدام فازو كنترول بلس أثناء الحمل و الرضاعة الطبيعية

Central Administration for Pharmaceutical care

General Administration of Scientific Reference and Medical Inserts

Medical Inserts Administration

Approval Date:7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from swiss compendium

فلز وكنترول بلس لا يستخدم أثناء الحمل أو الرضاعة الطبيعية. لذلك يجب إخطار طبيبك ما إذا كنت حامل أو تخططي لتصبحي حامل أو تقومي بالرضاعة الطبيعية

كيفية استخدام فازوكنترول بلس أقراص

الجرعة المعتادة هي قرص واحد من فاز وكنتزول بلس ٢٥/٥ مجم و الطبيب هو الذي يحدد أيهما تستخدم . تستخدم الأقراص بانتظام في نفس الوقت من اليوم و فقا لتعليمات الطبيب

يتم ابتلاع الأقراص كاملة قبل أو أثناء أو بعد تناول الطعام مع قليل من الماء

إذا لم يتم التحكم بشكل كاف على ضغط الدم يستطيع الطبيب إضافة دواء آخر

استخدام فازوكنترول بلس أقراص أكثر من اللازم

إذا تم استخدام أقراص أكثر من مما تم وصفه يجبُ ابلاغ طبيبك أو الصيدلي. الأعراض الأكثر شيوعا من استخدام جرعة زاندة من فازوكنترول بلس هي بطء في معدل ضربات القلب انخفاض في ضغط الدم مع اغماء و مشاكل في التنفس مثل الربو و القصور الحاد في وظائف القلب

نسيان تناول فازوكنترول بلس

إذا لاحظت ذلك بوقت تصير يمكنك تعويض الجرعة المنسبة بسهولة أما إذا اكتشفت عدم تناول الجرعة قبل تناول الجرعة التالية بوقت قصير يجب تخطي هذه الجرعة و تتأول الجرعة التالية في موضوها. لا ينصح بتناول جرعة مضاعفة في أن واحد و يجب تجنب نسيان تناول أي جرعة من المستحصر

التوققت عن تناول فازوكنترول بلس

يجب سؤال طبيبك إذا كنت ترغب في التوقف عن استخدام فاز وكنترول بلس ويجب عدم زيادة الجرعة أو تقليلها عما هو مرصوف إذا كنت تعتقد أن تأثير الدواء ضعيف بحدًا أو راند عن الحد المطلوب يجب إبلاغ الطبيب أو الصيدلي فورا.

اخبر طبيبك:

إذا كان هناك تراكم للسوائل في الطبقة الوعائية للعين (الإنصباب المشيمي) قصر النظر الحاد ، أو (زيادة الضغط داخل العين) مما يؤدي إلى ألم في العين أو انخفاض حدة النصر التي قد تحدث في غضون ساعات قليلة إلى أسبوع بعد تناول الدواء. الآثار الجانبية المحتملة مع استخدام في وكنترول بلس

الإثار الجانبية المحتمل حدوثها مع نييتولول، هيدروكلوروثيازيد كل علي حدة يمكن حدوثها أيضا مع استخدام فازوكنترول ال.

نيبيڤولول

# آثار جانبية شانعة

صداع، دُوخة، إعياء، خدر أو وخذر أليدين أو القدةين، إسهال أو أمسك، غثيان، ضيق في التنفس، تورم باليدين و القدمين (بسبب تراكم السوائل في الأنسجة)

(بسبب تراسم السوائل في أثار حانبية غير شانعة

بطء ضريات القلب، خلل في وظائف القلب، انخفاض في ضغط الدم، فشل في وظائف القلب (او اصبحت أسوا)، حدوث أو زيادة في التشنجات بالساق أشاء المشيء عدم وضوح الروية، ضعف الإنتصاب، إكتناب، أحلام مفزعة، عسر الهضم، انتفاخ البطن، في، صعوبة بالتنفس بسبب إنقباض تشنجي بالقصية الهوائية، حكة و إحمر ار بالجلد آثار جانبية نادرة جدا

تشنجات، إعماء لفترة قصيرة، تورم في الشفتين و العينين أو اللمان، صعوبة في التنفس مع تدهور مفاجئ لحالات الصدفية هيدر وكلور وثبازيد

اثار جانبية غير معروف مدي شيوعها:

تراكم السوائل في الطبقة الو عائية للعين (الانصباب المشيمي) ، قصر النظر الحاد (انخفاض في الروية أو ألم في العين بسبب ارتفاع الضغط) ،أثناء العلاج

أثار جانبية غير شانعة

نقص الشهية، حكة جلدية، ارتيكاريا آثار جانبية نادرة

انخفاض في عدد الصفائح الدموية في الدم مما يؤدي إلى حدوث نزيف أو كدمات بسهولة

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Central Administration for Pharmaceutical care
  General Administration of Scientific Reference and Medical Inserts
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  Approval Date: 7/4/2021 Revised by: DR/Zeinab Talaat According to : Nevilob plus approved from
  swiss compendium
       ارتفاع نسبة السكر بالدم و البول ، اكتناب، دوخة، عدم انتظام ضربات القلب، إمساك، مشاكل في الكبد مع حدوث يرقان،
                   التهاب بالبنكرياس الذي قد يؤدي إلى أعراض مثل القئ ، فقدان الشهية، الغثيان ، إصفرار الجلد و العينين
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أثار جانبية حادة بالجلد مع ظهور تقرحات بالشفتين و العينين أو الفم و تقشير الجلد و الحمي (انحلال البشرة السمي) ، طفح ألام بالمفاصل و العضلات و أعراض حمي (أهراض أو تفاقم الذئبة الحمامية الجهازية) سرطان الجلد والشفتين (سرطان الجلد غير الميلانيني "الليض"). إذا تفاقم أي من هذه الأثار الجانبية أو إذا لأحظت أي أثار جانبية غير مدرجة في هذة النشرة ، يجب عليك إخبار طبيبك أو

الصيدلي. بالإضافة إلى ذلك ، يجب أن تخطر طبيك فور أباي تغييرات غير متوقعة في الجاد قد تلاحظها مع استخدام

الإبلاغ عن الآثار الجانبية

أعراض حساسية للضوء أثار جانبية نادرة جدا إنخفاض عدد كرات الدم البيضاء،

فرط الحساسية

إذا كنت تعانى من أي أثار جانبية يجب الإبارغ عنها إلى طبيبك أو الصيدلي، هذا يشمل أي أثار جانبية محتملة حتى لو لم تكن مدرجة في هذه النسرة . يمكنك أيضا الإبلاغ عن الأثار الجليلة مناشرة عن طريق البريد الألكتروني:

Egyptian Pharmaceutical Vigilance Center E-mail:pw.center@eda.mohealth.gov.eg Zeta Pharma for pharmaceutical industries

E-mail: PV@zeta-pharma.com

كيفية حفظ فاز و كنتر و ل كس

يحفظ فاز وكنترول بلس بعيدا عن بصر ومتناول الأطفال

وَحَفظ فَازُ وِكِنْتُرُول بُلِشٌ فَي تُرْجِةً حَرَاؤُةً لا تَنْعَدَي ٣٠ دَرَجَةً مَنُويَةً فَي مَكَان جَاف

ريب عثمُ استخدامُ قار وكنترول بلين بعد انتهاء تأريخ الصّلاحية المدون علي العلبة لمريد من المغلومات يجب موال طبيبك او الصيدلي

العبوة ومعلومات آخري

عبوة كرتون تحتوي علني ٢٠١ او ٣ شريط (الومنيوم\ بي في سي- بي إي - بي في دي سي شفاف) كل شريط به ١٠ اقر اص مغلفة ونشرة داخلية

كل قرص مغلف يحتوي على:

نيبيفولول هيدروكلوريد ٥,٤٥ مجم (يكافئ نيبيفولول ٥ مجم) و هيدروكلوروثيازيد ٢٥ مجم

نيبيفولول هيدروكلوريد ٥,٤٥ مجم (يكافئ نيبيفولول ٥ مجم) و هيدروكلوروثيازيد ٥,١١مجم مواد غير فعالة:

لاکتوز مونو هیدرات، میکروکریستالین سیلیلوز، کروسکارمیلوز صودیوم، کلویدال سیلیکون دی اوکسید، هیبرمیلوز ٥ ، نشا

ذرة، بولى سوربات ٨٠، ماجنيسيوم ستيارات

مكونات غلاف القرص:

هيبر ميلوز ١٥، بولي ايثيلين جليكول ٠٠٠٠، بودرة تلك، تيتانيوم دايوكسيد

مدة الصلاحية : سنتين

تصنيع: شركة أتكو فارما للصناعات الدوائية لصالح شركة زيتا فارما للصناعات الدوائية

