### For the use of only a registered medical practitioner or hospital or laboratory

बेसल्लौग

signals were observed in this trial

Preclinical Safety Data

CLINICAL PARTICULARS

Therapeutic Indications

BASALOG® contains insulin glargine, an insulin analogue, and has a prolonged duration of action

BASALOG® should be administered once daily at any time but at the same time each day

insulin is required.

Posology and Method of Administration

Posoloav

reduced insulin metabolis

in patients below 2 years of age

Method of administration BASALOG<sup>®</sup> is administered subcutaneously.

Instructions to be given to the patien

Wash hands with soap and wate

Pull the needle out of the vial.

10. Check you have the right dose. Inject the insulin into the subcutaneous tissu

Contraindication

nfect the rubber stopper with an alcohol swab.

Hypersensitivity to the active substance or to any of the excipients. Special Warnings and Precautions for Use

- in whom glycaemic control is markedly improved,

- who are elderly, - after transfer from animal insulin to human insulin,

- in whom hypoglycaemia develops gradually,

in whom an autonomic neuropathy is present,

with a long history of diabetes,

Turn the vial and syringe upside down. Draw the correct dose of insulin into the syringe.

Draw air into the syringe, in the same amount as the volume of insulin to be injected

Inject the air into the vial, push the needle through the rubber stopper and press the plunger

Make sure that there is no air left in the syringe: point the needle upwards and push the air out.

Before injecting this insulin,

Paediatric population:

signs of adrenergic counter-regulation. Generally, the greater and more rapid the decline in blood glucose, the more marked is the phenomenon of counter-regulation and its symptoms.

Immune system disorders: Immediate-type allergic reactions to insulin are rare. Such reactions to insulin (including insulin glargine) or the excipients may, for example, be associated with generalised skin reactions, angio-eedema, bronchospasm, hypotension and shock, and may be life-threating. Insulin administration may cause insulin antibudies to form. In funcial studies, antibudies that cross-react with human insulin and insulin glargine were observed with the same frequency in both NPH-insulin and insulin glargine treatment groups. In are cases, the presence of such insulin antibudies may necessitate adjustment of the insulin does in order to correct a tendency to hyper-or

Fee disoders: A marked change in glycaemic control may cause temporary visual impairment, due to temporary alteration in the turgidity and refractive index of the lens. Long-term improved glycaemic control decreases the risk of progression of diabetic retinopath; However, intersfication of insulin therapy with abrupt improvement in glycaemic control may be associated with theruporary oversening of diabetic retinopath; in patients with proliferative retinopathy, particularly if not treated with photocoagulation, severe hypoglycaemic episodes may result in transient anamosis.

Skin and subcutaneous tissue disorders: As with any insulin therapy, lipodystrophy may occur at the injection site and delay local insulin absorption. Continuous rotation of the injection site within the given injection area may help to reduce or prevent these reactions.

General disorders and administration site conditions: Injection site reactions include redness, pain, itching, hives, swelling, or inflammation Most minor reactions to insulins at the injection site usually resolve in a few days to a few weeks. Rarely, insulin may cause sodium retentior and edema patricularly if previously poor metabolic control is improved by intensified insulin therapy.

Pacifiatic <u>coordiation:</u> in general, the safety profile for children and adolescents (<18 years of age) is similar to the safety profile for adults. The adverse reaction reports received from post marketing surveillance included relatively more frequent injection site reactions (injection site pain, injection site reaction) and situ meations (rath, unicana) in children and adolescents (<18 years of age) than in adults.

Medication errors have been reported in which other insulins, particulary short acting insulins have been accidentally administered instead

Management: Mild episodes of hypoglycaemia can usually be treated with oral carbohydrates. Adjustments in dose of the medicinal product, meal patterns, or physical activity may be needed.

More severe episodes with coma, seizure, or neurologic impairment may be treated with intramuscular/subcutaneous glucagon or concentrated intravenous glucose. Sustained carbohydrate intake and observation may be necessary because hypoglycaemia may recur

BASALOG® must not be mixed with other medicinal products. It is important to ensure that swinges do not contain traces of any other

During use: Do not refrigerate. BASALOG<sup>e</sup> vials that are in use can be kept at room temperature below 30°C (86°F) up to 28 days

BASALOG® must not be mixed with any other insulin or diluted. Mixing or diluting can change its time/action profile and mixing can cause

Inspect the vial before use. It must only be used if the solution is clear, colourless, with no visible solid particles. Since BASALOG® is a

In case of any product related complaints or adverse events related to Biocon products, Call Toll Free No.: **1800-102-9465** OR visit our website www.biocon.com and fill voluntary reporting form available under 'Report Adverse EventySide Effects and Product Complaints' and send the duly, filled form to us at **drugsafety@biocon.com**. For general queries regarding diabetes and its management, Call Toll Free No: **1800-425-7667**.

Note: Unless otherwise stated, material contained herein related to studies, tests, treatment and applications are taken from publicly

~ 100

6. Push plunger down

http://www.aceuropa.eu/docs/en\_GB/document\_library/EPAR\_\_\_Product\_Information/human/000284/WC500036082.pdf 2. https://www.acessdata.dda.gov/drugaafda\_docs/label/2015/021081s063lib.pdf 3. https://www.aceinforms.org.uk/eme/PL18417.latest.pdf

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5. Push needle

into bottle

() TOWN

A

RULES

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11. Dispose syringe safely

Check your town rules

Insulin Glargine Injection (rDNA) 100 U/mL is packed in 5mL clear tubular (USP Type I) glass vials closed with bromobutyl rubber stoppers

Symptoms: Insulin overdose may lead to severe and sometimes long-term and life-threatening hypoglycaemia.

Glycerol, Metacresol, Zinc chloride, Hydrochloric acid, Sodium hydroxide, Water for injection

Do not store BASALOG® in or too near the freezer section or cooling element.

Keep the vials in the outer carton in order to protect from light.

Special Precautions for Disposal and Other Handling

nypoglycaemia

of insulin glargine

List of Excipients

Incompatibilities

Please refer to carton/label

Storage and Precautions Before use: Store in a refrigerator (2°C - 8°C).

keep out of reach of children

Protect from excessive heat and sunlight

Nature and Contents of Container

Available in 3 mL/5 mL/10 mL vials

Biocon Biologics India Limited

Leaflet Revised December 2019

4. Pull plunger down

to appropriate

number of units as advised by the physician

10. Pull needle out

Registered trademar

Shelf Life

Do not freeze

Pack sizes:

Marketed by

References

Ā

3. Wipe top of bottle

9. Pinch up skin

Push needle into skin

Push plunger in

after apparent clinical recover

PHARMACEUTICAL PARTICULARS

Overdose

Clinical study safety data are not available for children under 2 years

uffering from a psychiatric illnes

improved insulin sensitivity (e.g., by removal of stress factors).

concomitant treatment with certain other medicinal products BASALOG<sup>®</sup> contains metacresol, which may cause allergic reaction

nged physical activity.

A number of substances affect glucose metabolism and may require dose adjustment of insulin glargine.

Fluid retention and heart failure with concomitant use of PPAR-gamma agonists

The use of BASALOG® may be considered during pregnancy, if necessary.

Fertility: Animal studies do not indicate direct harmful effects with respect to fertility.

Side effects reported very common (>1/10) Metabolism and nutrition disorders: Hypoglycaemia

General disorders and administration site conditions: injection site reactions

Side effects reported rare (>1/10,000 to <1/1,000) Immune system disorders: Allergic reactions

Side effects reported very rare (<1/10.000)

Nervous system disorders: Dysgeusia

4.50°

Eve disorders: visual impairment, retinopathy General disorders and administration site conditions: Oedema

Musculoskeletal and connective tissue disorders: Myaloja

Drawing and

N

1. Get Supplies

7. Pull plunger down

to appropriate

number of units as

advised by the

physician

**Self-Injecting Insulin** 

Side effects reported common (≥1/100 to <1/10) Skin and subcutaneous tissue disorders: lipohypertrophy

Side effects reported uncommon (>1/1,000 to <1/100) Skin and subcutaneous tissue disorders: lipoatrophy

Substances that may enhance the blood-olucose-lowering effect and increase susceptibility to hypoglycaemia

oral antidiabetic medicinal products, angiotensin converting enzyme (ACE) inhibitors, disopyramide, fibrates fluoxetine, monoamine oxidase (MAO) inhibitors, pentoxifylline, propoxyphene, salicylates and sulfonamide antibiotics.

Substances that may reduce the blood glucose-lowering effect include corticostenois, danazal, dazarode, diaurosi, glucagon, ionizadi, destrogens and progestogens, phenothiazine e dentatives, somattorgin, sympathorimente medicinal products (e.g. epinephrine (adrenaline), salbutamot, terbutaline), thyroid hormones, atypical antipsychotic medicinal products (e.g. clozapine and danazapine) and protesse inhibitors.

- change in the injection area.

missed meals alcohol consumption

Drug Interactions

Pregnancy and Lactation

Undesirable Effects

Animal data do not indicate reproductive toxicity.

unaccustomed, increased or prol

intercurrent illness (e.g. vomiting, diarrhoea). - inadequate food intake.

Itment with certain other medicinal products (see section Drug Interactions).

Such situations may result in severe hypoglycaemia (and possibly loss of consciousness) prior to the patient's awareness of hypoglycaemia The prolonged effect of subcutaneous insulin glargine may delay recovery from hypoglycaemia. If normal or decreased values for glycater haemoolobin are noted, the oossibilito of recurrent, unrecognised (sepscial) norumal) existeds of hypoglycaemia may be considered.

Adherence of the patient to the dose and dietary regimen, correct insulin administration and awareness of hypoglycaemia symptoms are essential to reduce the risk of hypoglycaemia. Factors increasing the susceptibility to hypoglycaemia require particularly close monitoring and may necessitate dose adjustment. These include:

Intercurrent illness: Intercurrent illness requires interaction field metabolic monitoring. In many cases urine tests for ketones are indicated, and often it is necessary to adjust the insulin dose. The insulin requirement is often increased. Patients with type 1 diabetes must continue to consume at least a small annount of catobhydrates on a regular basis; even if they are able to eat only little or no food, or are vomiting etc. and they must never omit insulin enguires.

Beta-blockers, clonidine, lithium salts or alcohol may either potentiate or weaken the blood-glucose-lowering effect of insulin. Pentamidine may cause hypoglycaemia, which may sometimes be followed by hyperglycaemia.

In addition, under the influence of sympatholytic medicinal products such as beta-blockers, clonidine, guanethidine and reserpine, the signs of adrenergic counter-regulation may be reduced or absent.

Thiazolidinediones (TZDs), which are peroxisome proliferator-activated ecoptor (PPAR)-gamma agonist including pioglitazone, can cause dose-related fluid retention, particularly when used in combination with insulin. Fluid retention may lead to or exacreba theat failure. Patients treated with insulin, including Baslog Befi, and PPAR gamma agonis should be observed for signs and symptoms of heart failure. If heart failure develops, i should be managed according to current standards of care, and discontinuation or dose reduction of PPAR-gamma agonis trust be considered.

Pregnancy: On Laccation Pregnancy and Laccation Pregnancy and Laccation Pregnancy Consult of the second second

It is essential for patients with pre-existing or gestational diabetes to maintain good metabolic control throughout pregnancy. Insulir requirements may decrease during the first trimester and generally increase during the second and third trimesters. Immediately after delivery, insulin mequirements decline rapidy (increased rick of hypodycamia). Carellul monitoring of glucose control is essential.

Breastfeeding: It is unknown whether insulin glargine is excreted in human milk. No metabolic effects of ingested insulin glargine on the breastfed newborr/infant are anticipated since insulin glargine as a peptide is digested into amino acids in the human gastrointestinal tract. Breastfeeding women may require adjustments in insulin dose and diet.

Effects on Ability to Drive and Use Machines The patient's ability to concentrate and resch may be impaired as a result of hypoglycaemia or hyperglycemia or, as a result of visual impairment. This may constitute ark in situations where these abilities are of special importance (e.g. driving a car or operating machines).

Patients should be advised to take precautions to avoid hypoglycaemia whilst driving. It should be considered whether it is advisable to drive or operate machines in these circumstances.

Hypoglycaemia, in general the most frequent adverse reaction of insulin therapy, may occur if the insulin dose is too high in relation to the insulin requirement.

Metabolism and nutrition disorders: Severe hypoglycaemic attacks, especially if recurrent, may lead to neurological damage. Prolonged o severe hypoglycaemic episodes may be life-threatening. In many patients, the signs and symptoms of neuroglycopenia are preceded by

db

2. Wash hands

6

8. Pick injection site

Wipe with

Alcohol Swah

The following related adverse reactions from clinical investigations are listed below by system organ class and in order of decre

Patients with diabetes should be advised to inform their health care professional if they are pregnant or are contemplating pregnancy.

certain uncompensated endocrine disorders. (e.g. in hypothyroidism and in anterior pituitary or adrenocortical insufficiency).

100

IU/ml

1 Vial of 3 mL / 5 mL / 10 mL

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.

For the treatment of adults, adolescents and children of 2 years of above with diabetes mellitus, where treatment with

The **BASALOG**<sup>®</sup> dose regimen (dose and timing) should be individually adjusted. In patients with type 2 diabetes mellitus, **BASALOG**<sup>®</sup> can also be given together with orally active antidiabetic medicinal products.

Elderly population (>65 years old): In the elderly, progressive deterioration of renal function may lead to a steady decrease in insulin

Hepatic impairment: In patients with hepatic impairment, insulin requirements may be diminished due to capacity for gluconeogenesis and

The safety profile for patients < 18 years of age is similar to the safety profile for patients > 18 years. No clinical study safety data are available

Due to limited experience on the efficacy and safety of insulin glargine in children below the age of 2 years, **BASALOG**<sup>®</sup> should only be used in this age group under careful medical supervision.

Initiation of BASALOG<sup>®</sup> therapy: The recommended starting dose of BASALOG<sup>®</sup> in patients with type 1 diabetes should be approximately one-third of the total daily insulin requirements. Short-acting, pre-meal insulin should be used to satisfy the remainder of the daily insulin

Based on published information the recommended starting dose on an average is 10 IU once daily and subsequently adjusted according to the patient's need to a total daily dose ranging from 2 to 100 IU, however doses needs to be individualized by the prescriber for a particular

Iranston from other insulins to BASALOG<sup>4</sup>. When changing from a treatment regimen with an intermediate or long-acting insulin to a regimen with BASALOG<sup>4</sup>, a change of the dose of the basal insulin may be required and the concomtant antidabetic treatment may need to be adjusted to be and timing of additional regularit insulins or fast-string insulin analysis or the dose of total antidabetic treatment may need weeks of treatment. During the first weeks the reduction should, at latest partially, be compensated by an increase in meatine insulin, after this period the regimen should be adjusted individually. As with other insulin analogues, patients with high insulin to pass because of transformed main insulin may penetrine an improved insulin response with BASALOG<sup>4</sup>. Close metabolic monitoring is recommended further adjustment in done regimen may become necessary. Dore adjustment may also be required, for example, if the patient's weight or section special variant period results and Present ensures and the recurstances arise that increase susceptibility to hypo or hyperglycaemia (see section Special Warnings and Precautions for Use).

BASALOG<sup>®</sup> should not be administered intravenously. The prolonged duration of action of BASALOG<sup>®</sup> is dependent on its injection into subcutaneous tissue. Intravenous administration of the usual subcutaneous dose could result in severe hypoglycaemia.

There are no clinically relevant differences in serum insulin or glucose levels after abdominal, detoid or thigh administration of BASALOG<sup>\*</sup>. The prolonged duration of a totin of BASALOG<sup>\*</sup> is dependent on injection into subcutaneous space. As with all insulins, injection sites within an injection area (abdomer, high, or detoid) must be rotated from one nijection to the next.

In published clinical studies, there was no relevant difference in insulin glargine absorption after abdominal, deltoid, or thigh subcutaneous administration. As for all insulins, the rate of absorption, and consequently the onset and duration of action, may be affected by exercise and other variables

BASALOG® must not be mixed with any other insulin or diluted. Mixing or diluting can change its time/action profile and mixing can cause

Look at the vial and the insulin. The insulin should be clear and colourless. Do not roll or shake the vial. Shaking right before the dose is drawn into the syringe may cause bubbles or foam.

All insulin products, including insulin glaggine (reference product), cause a shift in potassium from the extracellular to intracellular space, possibly leading to hypokalemia. Untreated hypokalemia may cause respiratory paralysis, ventricular arrhythmia, and death. Monitor potassium levels in patients at risk for hypokalemia if indicated (e.g., patients using potassium-lowering medications spatients to serving potassium concentrations).

BASALOG® is not the insulin of choice for the treatment of diabetic ketoacidosis. Instead, regular insulin administered intravenously is

In case of insufficient glucose control or a tendency to hyper-or hypoglycaemic episodes, the patient's adherence to the prescribed treatment regimen injection sites and proper injection technique and all other relevant factors must be reviewed before dose adjustment is

Transferring a patient to another type or brand of insulin should be done under strict medical supervision. Changes in strength, brand (manufacturer), type (regular, NPH, lente, long-acting, etc.), origin (animal, human, human insulin analogue) and/or method of manufacture may result in the need for a change in dose.

Insulin administration may cause insulin antibodies to form. In rare cases, the presence of such insulin antibodies may necessitate adjustment of the insulin dose in order to correct a tendency to hyper- or hypoglycaemia. (See section Undesirable Effects).

Hypoglycaemia: The time of occurrence of hypoglycaemia depends on the action profile of the insulins used and, may therefore change when the treatment regimen is changed. Due to more sustained basal insulin supply with BASALOG<sup>®</sup>, less nocturnal but early morning hypoglycaemia can be expected.

Particular caution should be exercised, and intensified blood glucose monitoring is advisable in patients in whom hypopylasmic peloades might be of particular clinical releance, such as in patients with significant stences or the coronary articles or of the blood vessels supplying the brain (risk of cardiac or cerebral complications of hypoglycaemia) as well as in patients with proliferative retinoparty, particularly informative tradet with photocogulation (risk of transient manurus following hypoglycaemia).

Patients should be aware of circumstances where warning symptoms of hypoglycaemia are diminished. The warning symptoms of hypoglycaemia may be changed, be less pronounced or be absent in certain risk groups. These include patients:

Renal impairment: In patients with renal impairment, insulin requirements may be diminished due to reduced insulin metabolism.

# SBiocon

# Însulin Glargine Injection

## BASALOG®

### BASALOG®

ulin Glargine (rDNA) 100 IU/mL solution for injection in a vial

COMPOSITION

Each mL contain Insulin Glargine (rDNA) 100 IU/mL

### m-Cresol 2.7 mg (as preservative Excipients....q.s.

PHARMACEUTICAL FORM

Solution for injection in a via Clear colourless solution.

### PHARMACOLOGICAL PROPERTIES

Pharmacodynamic Prop

Pharmacotherapeutic group: Drugs used in diabetes. Insulins and analogues for injection, long-acting. ATC code: A10AE04 Mechanism of Action

Insulin glargine is a human insulin analogue designed to have a low solubility at neutral pH. It is completely soluble at the acidic pH of the nsulin glargine injection solution (pH 4). After imjection into the subcutaneous tissue, the acidic solution is nauvalized to the finition-precipitates from which routing assume at a terms of the subcutaneous tissue, the acidic solution is nauvalized to the solution of the subcutaneous terms of the subcutaneous tissue, the acidic solution is nauvalized to the subcutaneous tissue, the acidic solution is nauvalized to the subcutaneous tissue. nsuin gargine injection solution (pH4). Atter injection into the subcutaneous tissue, the acidic solution is neutralised leading to formation for inco-precipitates from which small amounts of insuin glargine are continuously released, providing a smooth, peakless, predictable concentration/time profile with a prolonged duration of action. Insulin receptor binding: Insulin glargine is very similar to human insulin with respect to insulin receptor binding kinetiss. It can therefore, be considered to mediate the same type of effect via the insulin receptor

The primary activity of insulin, including insulin glargine, is regulation of glucose metabolism. Insulin and its analogues lower blood glucose evels by stimulating perpheral glucose update, especially by skeletal muscle and fat, and by inhibiting hepatic glucose production. Insulin inhibiti gloyisis in the adjocycie, inhibits proteolysis and enhances proteins rynthesis.

In clinical pharmacology studies, intravenous insulin glargine and human insulin have been shown to be equipotent when given at the same doses. As with all insulins, the time course of action of insulin glargine may be affected by physical activity and other variables.

In euglycemic clamp studies in healthy subjects or in patients with type1 diabetes, the onset of action of subcutaneous insulin glargine was slower than NPH human insulin. The effect profile of insulin glargine was relatively constant with no pronounced peak and the duration of ts effect was prolonged compared to NPH human insulin.

The longer duration of action (up to 24 hours) of insulin glargine is directly related to its slower rate of absorption and supports once daily subcutaneous administration. The time course of action of insulins, including insulin glargine, may vary between individuals and/or within the same individual.

In a clinical study, symptoms of hypoglycaemia or counter-regulatory hormone responses were similar after intravenous insulin glargine and human insulin both in healthy volunteers and patients with type 1 diabetes.

In an another 5 year NPH-controlled study (NPH given bid) in 1024 type 2 diabetic patients in which progression of retinopathy by 3 of steps on the Early Treatment Diabetic Retinopathy Study (ETDRS) scale was investigated by fundus photography. No significant dift was seen in the progression of diabetic retinopathy which in skull algaine was compared to NPH insulin.

A 24-week parallel group study was conducted in 125 children with type 1 diabetes mellitus aged 1 to 6 years (61 children from 2 to 5 in the insulin glargine group and 64 children from 1 to 6 in the NPH insulin group), comparing insulin glargine given once daily in the morning to NPH insulin group once or twice daily as basal insulin. Both groups received bolus insulin before meals.

Comparison of the two treatment regimens in terms of hypoghcemia was the primary objective of the study. The composite primary outcome consisted of continuous glucose monitoring excursions below 70mg/dL (3 3mM), confirmed by fingerstick blood glucose (FSBG) measurements, 70mg/dL; and episodes of symptomatic hypoghcemia.

The primary aim of demonstrating non-inferiority of insulin glargine to NPH in this composite outcome did not meet the non-inferiority margin. However, the rate of symptomatic hypodyternia events is the most commonly used and clinically relevant component of the composite outcome. Rates of symptomatic hypodyternia events is the most commonly used and clinically relevant component of the per patient year, vs 33.0 for NPH and overnight (2.38 episodes per patient year, vs 3.65 for NPH). Glycohaemoglobin and glucose variabilities vere comparable in took the treatment groups. NO few safely signals were observed in this that.

In a randomised, controlled clinical study, paediatic patients (age range 6 to 15 years) with type 1 diabetes (n=349) were treated for 28 weeks with a basi-botus insulin regimen where regular human insulin was used before each meal. Insulin glargine was administered once dialy at bedime and NRH human insulin was administed once on twice daily. Similar effects on glycohemolycibin and the incidence of symptomatic hypoglycemia were observed in both treatment groups, however fasting plasma glucose decreased more from baseline in the insulin glargine group han in the NHP group. There was less severe hypoglycamian in the insulin glargine group a well. One hundred forty three of the patients treated with insulin glargine in this study continued treatment with insulin glargine in an unconcolled estension study with imman duration of follow-up of 2 years. No nies actievel signal space end uning this sectuded treatment with insulin glargine in an unconcolled estension study with imman duration of follow-up of 2 years. No nies actievel y signals were see nduring this sectuded treatment with insulin glargine in an unconcolled estension study with imman duration of follow-up of 2 years. No nies actievely signals were seen durang this sectuded treatment with insuling largine in an unconcolled estension study with imman duration of follow-up of 2 years. No nies actievely signals were seen durang this secture and the insuling largine in an unconcolled estimation.

Pharmacokinetic Properties

Metabolism After subcutations of insulin glargine (reference product) in healthy subjects and dialatics patients, insuling insuline is rapidly After subcutations of the sets a chain with formation of thos active netabolities MI (21 AG)-size. 308-Thi-insulin) in plasms, the principal circulating compound is the metabolites MI. The exposure to MI increases with the administered does of insuling lagging (reference product). The pharmacohinetics can gharmacohinetics from a function of the administered does of insuling lagging (reference product). The pharmacohinetics can gharmacohinetic catable that correst the administered does of insuling lagging (reference product). The pharmacohinetics can gharmacohinetic catable their correst-administered does of insuling langing (reference product).

Age and gender: Information on the effect of age and gender on the pharmacokinetics of insulin glargine is unavailable. However, in large clinical trials, subgroup analysis based on age and gender did not indicate any difference in safety and efficacy in insulin glargine treated patients over the entire study population. The same holds true for NPH treated patients.

Smoking: In clinical trials subgroup analysis showed no difference in safety and efficacy of insulin glargine between the group of smokers and the total study population. The same is true for NPH insulin.

Obesity. In clinical trials subgroup analysis based on BMI showed no differences in safety and efficacy of Insulin glargine in the group of patients compared to the total study opoulation. The same is true for NPH insulin

Efficacy of Biocon's insulin glargine was assessed in a phase III study conducted by Biocon Limited to establish safety and non-inferiority (in comparison to reference product), with respect to decrease in HbA1C in patients with type 1 diabetes mellitus.

The results established non-inferiority of Biocon's insulin glargine compared to the reference product, with respect to change in HbA1c. The thanges in PFG, PPG and seven-point gluccex were comparable between the two study arms. The proportion of patients who achieved arget HbA1c-YbW was comparable between groups. When insulind obse was also comparable between the two arms. Compliance was good during the study, with average compliance >98% for both basal and pre-meal soluble insulin which was comparable for both study and the study.

Overall the two study treatments were comparable with respect to efficacy. A 24-week parallel group study was conducted in 125 children with type 1 diabetes mellitus aged 1 to 6 years (61 children from 2 to 5 in the insulin glargine group and 64 children from 1 to 6 in the NPH insulin group), comparing insulin glargine given once a divi with the morning to PHH insulin group once or twice dails a basal insulin. Both groups received bouts insulin before meals. Comparison of the two treatment regimens in terms of typosylvernia was the prime y objective of the study. The composite primary outcome consisted of continuous measurements - Chinaga and the prime of the study of the composite primary outcome consisted of continuous measurements - Chinaga and the prime of the study. The composite primary outcome consisted of continuous groups to the two treatment of the prime of the study. The composite primary outcome consisted of continuous primary outcome to the study of the study of the composite primary outcome consisted of the two treatment groups to the two treatment of the study. The composite primary outcome consisted of the study primary of the study of the s

Paediatric nonulation

Distributio

Distribution After subcutaneous injection of insulin glargine in healthy subjects and diabetic patients, the insulin serum concentrations indicated a slower and much more prolonged absorption and a lack of a peak in comparison to human NPH insulin. Concentrations were, thus, consistent with the time prolice of the pharmaccopytamics actively of insulin glargine. After subcutaneous injection of 0.31UKg insulin demonstrated; this is also reflected in the wide range of timax values (between 1, 5 and 22.5 hours compared to NPH L25 to 10.0 hours). When given intravenously, the concentration profiles and the apaperent elimination half-life of insulin glargine and human insulin were comparable. There were used to iffer the inter-individual valuability in pharmacchicite profile compared to human Linsulin glargine. Insulin glargine has less-intra and inter-individual valuability in pharmacchicite profile compared to human Linsulin glargine.

Metabolism

Elimination

Special Populations

Paediatric population

Clinical studies-efficacy results

Overall the two study treatments were comparable with respect to efficacy.