ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

# 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen Fiasp 100 units/mL Penfill solution for injection in cartridge Fiasp 100 units/mL solution for injection in vial Fiasp 100 units/mL PumpCart solution for injection in cartridge

# 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

1 mL of the solution contains 100 units of insulin aspart\* (equivalent to 3.5 mg).

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

Each pre-filled pen contains 300 units of insulin aspart in 3 mL solution.

Fiasp 100 units/mL Penfill solution for injection in cartridge

Each cartridge contains 300 units of insulin aspart in 3 mL solution.

Fiasp 100 units/mL solution for injection in vial

Each vial contains 1,000 units of insulin aspart in 10 mL solution.

Fiasp 100 units/mL PumpCart solution for injection in cartridge

Each cartridge contains 160 units of insulin aspart in 1.6 mL solution.

\*Insulin aspart is produced in Saccharomyces cerevisiae by recombinant DNA technology.

For the full list of excipients, see section 6.1.

# 3. PHARMACEUTICAL FORM

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

Solution for injection (FlexTouch).

Fiasp 100 units/mL Penfill solution for injection in cartridge

Solution for injection (Penfill).

Fiasp 100 units/mL solution for injection in vial

Solution for injection.

Fiasp 100 units/mL PumpCart solution for injection in cartridge

Solution for injection (PumpCart).

Clear, colourless, aqueous solution.

# 4. CLINICAL PARTICULARS

#### 4.1 Therapeutic indications

Treatment of diabetes mellitus in adults, adolescents and children aged 1 year and above.

# 4.2 Posology and method of administration

# Posology

Fiasp is a mealtime insulin for subcutaneous administration up to 2 minutes before the start of the meal, with the option to administer up to 20 minutes after starting the meal (see section 5.1).

Dosing with Fiasp is individual and determined in accordance with the needs of the patient. Fiasp given by subcutaneous injection should be used in combination with intermediate-acting or long-acting insulin given at least once a day. In a basal-bolus treatment regimen approximately 50% of this requirement may be provided by Fiasp and the remaining by intermediate-acting or long-acting insulin.

The individual total daily insulin requirement in adults, adolescents and children may vary and is usually between 0.5 and 1 unit/kg/day.

Blood glucose monitoring and insulin dose adjustment are recommended to achieve optimal glycaemic control.

Adjustment of dose may be necessary if patients undertake increased physical activity, change their usual diet or during concomitant illness. Blood glucose levels should be monitored adequately under these conditions.

The duration of action will vary according to the dose, injection site, blood flow, temperature and level of physical activity.

Patients on basal-bolus treatment who forget a mealtime dose are advised to monitor their blood glucose level to decide if an insulin dose is needed. Patients should resume their usual dosing schedule at the next meal.

The potency of insulin analogues, including Fiasp, is expressed in units. One (1) unit of Fiasp corresponds to 1 international unit of human insulin or 1 unit of other fast-acting insulin analogues.

The early onset of action must be considered when prescribing Fiasp (see section 5.1).

# Initiation

# Patients with type 1 diabetes mellitus

The recommended starting dose in insulin naïve patients with type 1 diabetes is approximately 50% of the total daily insulin dose and should be divided between the meals based on the size and composition of the meals. The remainder of the total daily insulin dose should be administered as intermediate-acting or long-acting insulin. As a general rule, 0.2 to 0.4 units of insulin per kilogram of body weight can be used to calculate the initial total daily insulin dose in insulin naïve patients with type 1 diabetes.

#### Patients with type 2 diabetes mellitus

Suggested initial dose is 4 units at one or more meals. Number of injections and subsequent titration will depend on the individual glycaemic target and the size and composition of the meals.

Dose adjustment may be considered daily based on self-measured plasma glucose (SMPG) on the previous day(s) according to Table 1.

- Pre-breakfast dose should be adjusted according to the pre-lunch SMPG the previous day
- Pre-lunch dose should be adjusted according to the pre-dinner SMPG the previous day
- Pre-dinner dose should be adjusted according to the bedtime SMPG the previous day

#### Table 1 Dose adjustment

SMPG (s	ee above)	Dose adjustment
mmol/L	mg/dL	Unit
<4	<71	-1
4-6	71–108	No adjustment
>6	>108	+1

#### Special populations

#### *Elderly patients* ( $\geq 65$ years old)

The safety and efficacy of Fiasp have been established in elderly patients aged 65 to 75 years. Close glucose monitoring is recommended and the insulin dose should be adjusted on an individual basis (see section 5.1 and 5.2). The therapeutic experience in patients  $\geq$  75 years of age is limited.

#### <u>Renal impairment</u>

Renal impairment may reduce the patient's insulin requirements. In patients with renal impairment, glucose monitoring should be intensified and the dose adjusted on an individual basis (see section 5.2).

#### Hepatic impairment

Hepatic impairment may reduce the patient's insulin requirements. In patients with hepatic impairment, glucose monitoring should be intensified and the dose adjusted on an individual basis (see section 5.2).

#### Paediatric population

Fiasp can be used in adolescents and children from the age of 1 year (see section 5.1). There is no clinical experience with the use of Fiasp in children below the age of 2 years. Fiasp is recommended to be administered prior to the meal (0-2 minutes), with the flexibility to administer up to 20 minutes after starting the meal in situations, when there is uncertainty about the meal intake.

#### Transfer from other insulin medicinal products

Close glucose monitoring is recommended during the transfer from other mealtime insulins and in the initial weeks thereafter. Converting from another mealtime insulin can be done on a unit-to-unit basis. Transferring a patient from another type, brand or manufacturer of insulin to Fiasp must be done under strict medical supervision and may result in the need for a change in dose.

Doses and timing of concurrent intermediate-acting or long-acting insulin medicinal products or other concomitant antidiabetic treatment may need to be adjusted.

#### Method of administration

#### Subcutaneous injection

Fiasp is recommended to be administered subcutaneously by injection in the abdominal wall or the upper arm (see section 5.2). Injection sites should always be rotated within the same region in order to reduce the risk of lipodystrophy and cutaneous amyloidosis (see sections 4.4 and 4.8).

# Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

The pre-filled pen (FlexTouch) delivers 1–80 units in steps of 1 unit. FlexTouch is accompanied by a package leaflet with detailed instructions for use to be followed. For instructions on administration, see "Instructions for Use" at the end of the package leaflet.

The pre-filled pen is only suitable for subcutaneous injections. If administration by syringe or intravenous injection is necessary, a vial should be used. If administration by infusion pump is necessary, a vial or a PumpCart cartridge should be used.

*Fiasp 100 units/mL Penfill solution for injection in cartridge* Administration with a reusable insulin pen If administration by syringe or intravenous injection is necessary, a vial should be used. If administration by infusion pump is necessary, a vial or a PumpCart cartridge should be used (see section 6.6).

# Fiasp 100 units/mL solution for injection in vial

Administration with a syringe

The vial is to be used with insulin syringes with the corresponding unit scale (units-100 or 100 units/mL).

# Continuous subcutaneous insulin infusion (CSII)

Fiasp solution for injection in vial can be used for CSII in pumps suitable for insulin infusion and will cover both the bolus insulin requirement (approximately 50%) and basal insulin. It can be administered in accordance with the instructions provided by the pump manufacturer, preferably in the abdomen. When used with an insulin infusion pump, it should not be diluted or mixed with any other insulin medicinal products.

Patients using CSII should be instructed in the use of the pump and use the correct reservoir and tubing for pump (see section 6.6). The infusion set (tubing and cannula) should be changed in accordance with the instructions in the product information supplied with the infusion set.

Patients administering Fiasp by CSII must be trained to administer insulin by injection and have alternate insulin therapy available in case of pump failure.

# Fiasp 100 units/mL PumpCart solution for injection in cartridge

# Administration via CSII

The cartridge (PumpCart) is only for use with an insulin infusion pump system designed to be used with this cartridge (see section 6.6).

Fiasp will cover both the bolus insulin requirement (approximately 50%) and basal insulin. It can be administered in accordance with the instructions provided by the pump manufacturer, preferably in the abdomen. Infusion site should be rotated within the same region to reduce the risk of lipodystrophy. Patients using CSII should be instructed in the use of the pump and use the correct tubing for pump (see section 6.6). The infusion set (tubing and cannula) should be changed in accordance with the instructions in the product information supplied with the infusion set.

Patients administering Fiasp by CSII must be trained to administer insulin by injection and have alternate insulin therapy available in case of pump failure.

The cartridge (PumpCart) is only suitable for CSII in pump systems suitable for insulin infusion. If administration by syringe or intravenous injection is necessary, a vial should be used.

# Intravenous use

Fiasp 100 units/mL solution for injection in vial

If necessary, Fiasp can be administered intravenously by health care professionals.

For intravenous use, it should be used at concentrations from 0.5 unit/mL to 1 unit/mL insulin aspart in infusion systems – using polypropylene infusion bags.

Fiasp must not be mixed with any other insulin or any other medicinal product except those mentioned in section 6.6. For instructions on dilution of the medicinal product before administration, see section 6.6

Monitoring of blood glucose is necessary during insulin infusion. Care should be taken to ensure that the insulin is injected into the infusion bag and not simply the entry port.

# 4.3 Contraindications

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

# 4.4 Special warnings and precautions for use

# **Traceability**

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

# Hypoglycaemia

Omission of a meal or unplanned, strenuous physical exercise may lead to hypoglycaemia.

Hypoglycaemia may occur if the insulin dose is too high in relation to the insulin requirement (see sections 4.8 and 4.9).

Patients, whose blood glucose control is greatly improved, e.g. by intensified insulin therapy, may experience a change in their usual warning symptoms of hypoglycaemia and should be advised accordingly. Usual warning symptoms may disappear in patients with long-standing diabetes.

The timing of hypoglycaemia usually reflects the time-action profile of the administered insulin formulation. Hypoglycaemia may occur earlier after an injection/infusion when compared to other mealtime insulins due to the earlier onset of action of Fiasp (see section 5.1).

Since Fiasp should be administered up to 2 minutes before the start of the meal with the option to administer up to 20 minutes after starting the meal, the time to onset of action must be taken into account when prescribing to patients with concomitant diseases or treatment where a delayed absorption of food might be expected.

# Paediatric population

Close monitoring of blood glucose levels is recommended if administering this medicinal product after the start of the last meal of the day, in order to avoid nocturnal hypoglycaemia.

#### Hyperglycaemia and diabetic ketoacidosis

The use of inadequate doses or discontinuation of treatment, especially in patients requiring insulin, may lead to hyperglycaemia and diabetic ketoacidosis; conditions which are potentially lethal.

#### Continuous subcutaneous insulin infusion (CSII)

Pump or infusion set malfunctions can lead to a fast onset of hyperglycaemia and ketosis. Prompt identification and correction of the cause of hyperglycaemia or ketosis is necessary. Interim therapy with subcutaneous injection may be required.

# Misuse of PumpCart

The cartridge (PumpCart) is only for use with an insulin infusion pump system designed to be used with this cartridge. It must not be used with other devices not designed for the cartridge, as this may result in incorrect insulin dosing and subsequent hyper- or hypoglycaemia (see section 6.6).

#### Skin and subcutaneous tissue disorders

Patients must be instructed to perform continuous rotation of the injection site to reduce the risk of developing lipodystrophy and cutaneous amyloidosis. There is a potential risk of delayed insulin absorption and worsened glycaemic control following insulin injections at sites with these reactions. A sudden change in the injection site to an unaffected area has been reported to result in hypoglycaemia. Blood glucose monitoring is recommended after the change in the injection site from an affected to an unaffected area, and dose adjustment of antidiabetic medicinal products may be considered.

Transfer from other insulin medicinal products

Transferring a patient to another type or brand of insulin should be done under strict medical supervision. Changes in strength, brand (manufacturer), type, origin (animal, human insulin or human insulin analogue) and/or method of manufacture (recombinant DNA versus animal source insulin) may result in the need for a change in dose. Patients transferred to Fiasp from another type of insulin may require a change in dose from that used with their usual insulin medicinal products.

# Concomitant illness

Concomitant illness, especially infections and feverish conditions, usually increases the patient's insulin requirements. Concomitant diseases in the kidney, liver or affecting the adrenal, pituitary or thyroid gland may require changes in the insulin dose.

#### Combination of pioglitazone and insulin medicinal products

Cases of congestive heart failure have been reported when pioglitazone were used in combination with insulin, especially in patients with risk factors for development of congestive heart failure. This should be kept in mind if treatment with the combination of Pioglitazone and insulin medicinal products is considered. If the combination is used, patients should be observed for signs and symptoms of congestive heart failure, weight gain and oedema. Pioglitazone should be discontinued if any deterioration in cardiac symptoms occurs.

# Insulin initiation and glucose control intensification

Intensification or rapid improvement in glucose control has been associated with a transitory, reversible ophthalmologic refraction disorder, worsening of diabetic retinopathy, acute painful peripheral neuropathy and peripheral oedema. However, long-term glycaemic control decreases the risk of diabetic retinopathy and neuropathy.

#### Insulin antibodies

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.

# Avoidance of accidental mix-ups/medication errors

Patients must be instructed to always check the insulin label before each injection to avoid accidental mix-ups between this medicinal product and other insulin medicinal products.

Patients must visually verify the units of the dose prior to administering. Therefore, the requirement for patients to self-administer is that they can read the dose scale. Patients, who are blind or have poor vision, must be instructed to always get assistance from another person who has good vision and is trained in administration of insulins.

#### Travelling between time zones

Before travelling between different time zones, the patient should seek the doctor's advice.

#### **Excipients**

This medicinal product contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

# 4.5 Interaction with other medicinal products and other forms of interaction

A number of medicinal products are known to interact with the glucose metabolism.

The following substances may reduce insulin requirement: Oral antidiabetics, monoamine oxidase inhibitors (MAOIs), beta-blockers, angiotensin converting enzyme (ACE) inhibitors, salicylates, anabolic steroids, sulphonamides and GLP-1 receptor agonist.

The following substances may increase insulin requirement: Oral contraceptives, thiazides, glucocorticoids, thyroid hormones, sympathomimetics, growth hormone and danazol.

Beta-blocking agents may mask the symptoms of hypoglycaemia.

Octreotide/lanreotide may either increase or decrease the insulin requirement.

Alcohol may intensify or reduce the hypoglycaemic effect of insulin.

# 4.6 Fertility, pregnancy and lactation

#### Pregnancy

Fiasp can be used in pregnancy.

Data from two randomised controlled clinical trials conducted with insulin aspart (322 + 27 exposed pregnancies) do not indicate any adverse effect of insulin aspart on pregnancy or on the health of the foetus/new born when compared to soluble human insulin.

Intensified blood glucose control and monitoring of pregnant women with diabetes (type 1 diabetes, type 2 diabetes or gestational diabetes) are recommended throughout pregnancy and when contemplating pregnancy. Insulin requirements usually fall in the first trimester and increase subsequently during the second and third trimesters. After delivery, insulin requirements normally return rapidly to pre-pregnancy values.

#### Breast-feeding

There are no restrictions on treatment with Fiasp during breast-feeding. Insulin treatment of the breast-feeding mother presents no risk to the baby. However, the dose may need to be adjusted.

#### Fertility

Animal reproduction studies have not revealed any differences between insulin aspart and human insulin regarding fertility.

#### 4.7 Effects on ability to drive and use machines

The patient's ability to concentrate and react may be impaired as a result of hypoglycaemia. This may constitute a risk in situations where these abilities are of special importance (e.g., driving a car or using machines).

Patients should be advised to take precautions to avoid hypoglycaemia while driving. This is particularly important in those who have reduced or absent awareness of the warning signs of hypoglycaemia or have frequent episodes of hypoglycaemia. The advisability of driving should be considered in these circumstances.

# 4.8 Undesirable effects

#### Summary of safety profile

The most frequently reported adverse reaction during treatment is hypoglycaemia (see section 'Description of selected adverse reactions' below).

#### Tabulated list of adverse reactions

Adverse reactions listed below (Table 2) are based on data from 6 completed therapeutic confirmatory trials in adults. Frequency categories are defined according to the following convention: Very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to < 1/10); uncommon ( $\geq 1/1,000$  to < 1/100); rare ( $\geq 1/10,000$  to < 1/10,000); very rare (< 1/10,000) and not known (cannot be estimated from the available data).

MedDRA system organ	Very common	Common	Uncommon	Not known
class				
Immune system			Hypersensitivity	Anaphylactic
disorders				reactions
Metabolism and	Hypoglycaemia			
nutrition disorders				
Skin and subcutaneous		Allergic skin	Lipodystrophy	Cutaneous
tissue disorders		manifestations		amyloidosis†
General disorders and		Injection/infus		
administration site		ion site		
conditions		reactions		

Table 2 Adverse reactions from clinical trials

<sup>†</sup> ADR from postmarketing sources.

#### Description of selected adverse reactions

#### Allergic reactions

Allergic skin manifestations reported with Fiasp (1.8% vs. 1.5% for comparator) include eczema, rash, rash pruritic, urticaria and dermatitis.

With Fiasp generalised hypersensitivity reactions (manifested by generalised skin rash and facial oedema) was reported uncommonly (0.2% vs. 0.3% for comparator).

#### Hypoglycaemia

Hypoglycaemia may occur if the insulin dose is too high in relation to the insulin requirement. Severe hypoglycaemia may lead to unconsciousness and/or convulsions and may result in temporary or permanent impairment of brain function or even death. The symptoms of hypoglycaemia usually occur suddenly. They may include cold sweats, cool pale skin, fatigue, nervousness or tremor, anxiousness, unusual tiredness or weakness, confusion, difficulty in concentration, drowsiness, excessive hunger, vision changes, headache, nausea and palpitation (see sections 4.4 and 5.1). Hypoglycaemia may occur earlier after an injection/infusion of Fiasp compared to other mealtime insulins due to the earlier onset of action.

#### Skin and subcutaneous tissue disorders

Lipodystrophy (including lipohypertrophy, lipoatrophy) and cutaneous amyloidosis may occur at the injection site and delay local insulin absorption. Lipodystrophy was reported at the injection/infusion site in patients treated with Fiasp (0.5% vs. 0.2% in comparator). Continuous rotation of the injection site within the given injection area may help to reduce or prevent these reactions (see section 4.4).

#### Injection/infusion site reactions

Injection site reactions (including rash, redness, inflammation, pain and bruising) were reported in patients treated with Fiasp (1.3% vs. 1.0% in comparator). In patients using CSII (N=261): Infusion site reactions (including redness, inflammation, irritation, pain, bruising and itching) were reported in patients treated with Fiasp (10.0% vs. 8.3% in comparator). These reactions are usually mild and transitory and they normally disappear during continued treatment.

#### Paediatric population

Safety and efficacy have been investigated in a therapeutic confirmatory trial in children with type 1 diabetes aged 2 to less than 18 years. In the trial, 519 patients were treated with Fiasp. Overall the frequency, type and severity of adverse reactions in the paediatric population do not indicate differences to the experience in the adult population. Lipodystrophy (including lipohypertrophy, lipoatrophy) at the injection site was reported more often in this trial with paediatric patients compared to trials in adults (see above). In the paediatric population lipodystrophy was reported with a frequency of 2.1% for Fiasp vs. 1.6% for NovoRapid.

# Other special populations

Based on results from clinical trials with insulin aspart in general, the frequency, type and severity of adverse reactions observed in elderly patients and in patients with renal or hepatic impairment do not indicate any differences to the broader experience in the general population. The safety profile in very elderly patients ( $\geq$  75 years) or patients with moderate to severe renal impairment or hepatic impairment is limited. Fiasp has been administered to elderly patients for the investigation of pharmacokinetic properties (see section 5.2).

# 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 <u>Appendix V</u>.

# 4.9 Overdose

A specific overdose for insulin cannot be defined, however, hypoglycaemia may develop over sequential stages if a patient is dosed with more insulin than required:

- Mild hypoglycaemic episodes can be treated by oral administration of glucose or other products containing sugar. It is therefore recommended that the diabetic patient always carries glucose-containing products.
- Severe hypoglycaemic episodes, where the patient is not able to treat him/herself, can be treated with glucagon (0.5 to 1 mg) given intramuscularly or subcutaneously by a trained person, or with glucose given intravenously by a healthcare professional. Glucose must be given intravenously if the patient does not respond to glucagon within 10 to 15 minutes. Upon regaining consciousness, administration of oral carbohydrate is recommended for the patient in order to prevent a relapse.

# 5. PHARMACOLOGICAL PROPERTIES

# 5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Drugs used in diabetes, insulins and analogues for injection, fast-acting ATC code: A10AB05.

#### Mechanism of action

Fiasp is a fast-acting insulin aspart formulation.

The primary activity of Fiasp is the regulation of glucose metabolism. Insulins, including insulin aspart, the active substance in Fiasp, exert their specific action through binding to insulin receptors. Receptor-bound insulin lowers blood glucose by facilitating cellular uptake of glucose into skeletal muscle and adipose tissue and by inhibiting the output of glucose from the liver. Insulin inhibits lipolysis in the adipocyte, inhibits proteolysis and enhances protein synthesis.

#### Pharmacodynamic effects

Fiasp is a mealtime insulin aspart formulation in which the addition of nicotinamide (vitamin  $B_3$ ) results in a faster initial absorption of insulin compared to NovoRapid.

The onset of action was 5 minutes earlier and time to maximum glucose infusion rate was 11 minutes earlier with Fiasp than with NovoRapid. The maximum glucose-lowering effect of Fiasp occurred between 1 and 3 hours after injection. The glucose-lowering effect during the first 30 minutes (AUC<sub>GIR. 0-30 min</sub>) was 51 mg/kg with Fiasp and 29 mg/kg with NovoRapid (Fiasp/NovoRapid ratio: 1.74 [1.47;2.10]<sub>95% CI</sub>). The total glucose-lowering effect and maximum (GIR<sub>max</sub>) glucose-lowering effect were comparable between Fiasp and NovoRapid. Total and maximum glucose-lowering effect of Fiasp increase linearly with increasing dose within the therapeutic dose range.

Fiasp has an earlier onset of action compared to NovoRapid (see section 5.2), leading to a subsequent increased early glucose-lowering effect. This must be considered when prescribing Fiasp.

The duration of action was shorter for Fiasp compared to that of NovoRapid and lasted for 3–5 hours.

The day-to-day variability within-patients in glucose-lowering effect was low for Fiasp both for early (AUC<sub>GIR. 0-1h</sub>, CV~26%), total (AUC<sub>GIR. 0-12h</sub>, CV~18%) and maximum glucose-lowering effect (GIR<sub>max</sub>, CV~19%).

# Clinical efficacy and safety

Fiasp has been studied in 2 068 adult patients with type 1 diabetes (1 143 patients) and type 2 diabetes (925 patients) in 3 randomised efficacy and safety trials (18-26 weeks of treatment). Furthermore, Fiasp has been studied in 777 paediatric subjects with type 1 diabetes in a randomised efficacy and safety trial (26 weeks of treatment). No children below the age of 2 years were randomised in the trial.

#### Patients with type 1 diabetes mellitus

The treatment effect of Fiasp in achieving glycaemic control was assessed when administered at mealtime or postmeal. Fiasp administered at mealtime was non-inferior to NovoRapid in reducing  $HbA_{1c}$ , and the improvement in  $HbA_{1c}$  was statistically significant in favour of Fiasp. Fiasp administered postmeal achieved similar HbA<sub>1c</sub> reduction as NovoRapid dosed at mealtime (Table 3).

	Fiasp mealtime + insulin detemir	Fiasp postmeal + insulin detemir	NovoRapid mealtime + insulin detemir
N	381	382	380
HbA <sub>1c</sub> (%)			
Baseline $\rightarrow$ End of trial	$7.6 \rightarrow 7.3$	$7.6 \rightarrow 7.5$	$7.6 \rightarrow 7.4$
Adjusted change from baseline	-0.32	-0.13	-0.17
Estimated treatment difference	-0.15 [-0.23;-0.07] <sup>CE</sup>	0.04 [-0.04;0.12] <sup>D</sup>	
HbA <sub>1c</sub> (mmol/mol)			
Baseline $\rightarrow$ End of trial	$59.7 \rightarrow 56.4$	59.9 → 58.6	59.3 → 57.6
Adjusted change from baseline	-3.46	-1.37	-1.84
Estimated treatment difference	-1.62 [-2.50;-0.73] <sup>CE</sup>	0.47[-0.41;1.36] <sup>D</sup>	
2-hour postmeal glucose			
increment (mmol/L) <sup>A</sup>			
Baseline $\rightarrow$ End of trial	6.1 → 5.9	$6.1 \rightarrow 6.7$	$6.2 \rightarrow 6.6$
Adjusted change from baseline	-0.29	0.67	0.38
Estimated treatment difference	-0.67 [-1.29;-0.04] <sup>CE</sup>	0.30 [-0.34;0.93] <sup>D</sup>	
1-hour postmeal glucose			
increment (mmol/L) <sup>A</sup>			

#### Table 3 Results from 26 week basal-bolus clinical trial in patients with type 1 diabetes

increment (mmol/L)

Baseline $\rightarrow$ End of trial	5.4 → 4.7	5.4 → 6.6	5.7 → 5.9
Adjusted change from baseline	-0.84	1.27	0.34
Estimated treatment difference	-1.18[-1.65;-0.71] <sup>CE</sup>	0.93[0.46;1.40] <sup>D</sup>	
Bodyweight (kg)			
Baseline $\rightarrow$ End of trial	$78.6 \rightarrow 79.2$	80.5 → 81.2	$80.2 \rightarrow 80.7$
Adjusted change from baseline	0.67	0.70	0.55
Estimated treatment difference	0.12 [-0.30;0.55] <sup>C</sup>	0.16 [-0.27;0.58] <sup>D</sup>	
Observed rate of severe or BG confirmed hypoglycaemia <sup>B</sup> per patient year of exposure (percentage of patients)			
	59.0 (92.7)	54.4 (95.0)	58.7 (97.4)
Estimated rate ratio	1.01 [0.88;1.15] <sup>C</sup>	0.92 [0.81;1.06] <sup>D</sup>	

Baseline, end of trial values are based on the mean of the observed last available values. The 95% confidence interval is stated in '[]'

A Meal test

<sup>B</sup> Severe hypoglycaemia (episode requiring assistance of another person) or blood glucose (BG) confirmed hypoglycaemia defined as episodes confirmed by plasma glucose < 3.1 mmol/L irrespective of symptoms

<sup>c</sup> The difference is for Fiasp mealtime – NovoRapid mealtime

<sup>D</sup> The difference is for Fiasp postmeal – NovoRapid mealtime

<sup>E</sup> Statistically significant in favour of Fiasp mealtime

33.3% of patients treated with mealtime Fiasp reached a target HbA<sub>1c</sub> of < 7% compared to 23.3% of patients treated with postmeal Fiasp and 28.2% of patients treated with mealtime NovoRapid. The estimated odds of achieving HbA<sub>1c</sub> < 7% were statistically significantly greater with mealtime Fiasp than with mealtime NovoRapid (odds ratio: 1.47 [1.02; 2.13]<sub>95% CI</sub>). No statistical significant difference was shown between postmeal Fiasp and mealtime NovoRapid.

Fiasp administered at mealtime provided significantly lower 1-hour and 2-hour postmeal glucose increment compared to NovoRapid administrated at mealtime. Fiasp administered postmeal resulted in higher 1-hour postmeal glucose increment and comparable 2-hour postmeal glucose increment to NovoRapid dosed at mealtime (Table 3).

Median total bolus insulin dose at trial end was similar for mealtime Fiasp, postmeal Fiasp and mealtime NovoRapid (change from baseline to end of trial: mealtime Fiasp:  $0.33 \rightarrow 0.39$  units/kg/day; postmeal Fiasp:  $0.35 \rightarrow 0.39$  units/kg/day; and mealtime NovoRapid:  $0.36 \rightarrow 0.38$  units/kg/day). Changes in median total basal insulin dose from baseline to end of trial were comparable for mealtime Fiasp ( $0.41 \rightarrow 0.39$  units/kg/day), postmeal Fiasp ( $0.43 \rightarrow 0.42$  units/kg/day) and mealtime NovoRapid ( $0.43 \rightarrow 0.43$  units/kg/day).

#### Patients with type 2 diabetes mellitus

The reduction in HbA<sub>1c</sub> from baseline to end of trial was confirmed to be non-inferior to that obtained with NovoRapid (Table 4).

#### Table 4 Results from 26 week basal-bolus clinical trial in patients with type 2 diabetes

	-	• -
	Fiasp + insulin glargine	NovoRapid + insulin glargine
N	345	344
HbA <sub>1c</sub> (%)		
Baseline $\rightarrow$ End of trial	$8.0 \rightarrow 6.6$	7.9 → 6.6
Adjusted change from baseline	-1.38	-1.36
Estimated treatment difference	-0.02[-0.	15;0.10]
HbA <sub>1c</sub> (mmol/mol)		

Baseline $\rightarrow$ End of trial	63.5 → 49.0	62.7 →48.6
Adjusted change from baseline	-15.10	-14.86
Estimated treatment difference	-0.24 [-1	.60;1.11]
2-hour postmeal glucose increment		
(mmol/L) <sup>A</sup>		
Baseline → End of trial	$7.6 \rightarrow 4.6$	7.3 → 4.9
Adjusted change from baseline	-3.24	-2.87
Estimated treatment difference	-0.36 [-0	.81;0.08]
1-hour postmeal glucose increment		
(mmol/L) <sup>A</sup>		
Baseline $\rightarrow$ End of trial	$6.0 \rightarrow 4.1$	$5.9 \rightarrow 4.6$
Adjusted change from baseline	-2.14	-1.55
Estimated treatment difference	-0.59 [-1.0	09;-0.09] <sup>C</sup>
Bodyweight (kg)		
Baseline $\rightarrow$ End of trial	$89.0 \rightarrow 91.6$	88.3 → 90.8
Adjusted change from baseline	2.68	2.67
Estimated treatment difference	0.00 [-0.60;0.61]	
Observed rate of severe or BG		
confirmed hypoglycaemia <sup>B</sup> per		
patient year of exposure		
(percentage of patients)	17.9 (76.8)	16.6 (73.3)
Estimated rate ratio	1.09 [0.5	88;1.36]

Baseline, end of trial values are based on the mean of the observed last available values. The 95% confidence interval is stated in '[]'

<sup>A</sup> Meal test

<sup>B</sup> Severe hypoglycaemia (episode requiring assistance of another person) or blood glucose (BG) confirmed hypoglycaemia defined as episodes confirmed by plasma glucose < 3.1 mmol/L irrespective of symptoms

<sup>C</sup> Statistically significant in favour of Fiasp

Postmeal dosing has not been investigated in patients with type 2 diabetes.

74.8% of patients treated with Fiasp reached a target HbA<sub>1c</sub> of < 7% compared to 75.9% of patients treated with NovoRapid. There was no statistical significant difference between Fiasp and NovoRapid in the estimated odds of achieving HbA<sub>1c</sub> < 7%.

Median total bolus insulin dose at trial end was similar for Fiasp and NovoRapid (change from baseline to end of trial: Fiasp:  $0.21 \rightarrow 0.49$  units/kg/day and NovoRapid:  $0.21 \rightarrow 0.51$  units/kg/day). Changes in median total basal insulin dose from baseline to end of trial were comparable for Fiasp  $(0.56 \rightarrow 0.53 \text{ units/kg/day})$  and NovoRapid  $(0.52 \rightarrow 0.48 \text{ units/kg/day})$ .

#### Elderly

In the three controlled clinical trials, 192 of 1,219 (16%) Fiasp treated patients with type 1 diabetes or type 2 diabetes were  $\geq$  65 years of age and 24 of 1,219 (2%) were  $\geq$  75 years of age. No overall differences in safety or effectiveness were observed between elderly patients and younger patients.

#### Continuous subcutaneous insulin infusion (CSII)

A 6-week, randomised (2:1), double-blind, parallel-group, active controlled trial evaluated compatibility of Fiasp and NovoRapid administered via CSII system in adult patients with type 1 diabetes. There were no microscopically confirmed episodes of infusion set occlusions in either the Fiasp (N=25) or NovoRapid (N=12) groups. There were two patients from the Fiasp group who each reported two treatment-emergent infusion site reactions.

In a 2-week cross-over trial, Fiasp showed a greater postmeal glucose-lowering effect after a standardised meal test with regard to 1-hour and 2-hour postmeal glucose response (treatment difference: -0.50 mmol/L [-1.07; 0.07]<sub>95% CI</sub> and -0.99 mmol/L [-1.95; -0.03]<sub>95% CI</sub>), respectively compared to NovoRapid in a CSII setting.

# Paediatric population

The efficacy and safety of Fiasp have been studied in a 1:1:1 randomised active controlled clinical trial in children and adolescents with type 1 diabetes, aged 1 to 18 years, for a period of 26 weeks (N=777). In this trial the efficacy and safety of Fiasp administered at mealtime (0–2 minutes before meal) or postmeal (20 minutes after meal start) and NovoRapid administered at mealtime, both used in combination with insulin degludec, were compared.

Patients in the Fiasp mealtime arm included 16 children aged 2–5 years, 100 children aged 6–11 years and 144 adolescents aged 12–17 years. Patients in the Fiasp postmeal arm included 16 children aged 2–5 years, 100 children aged 6–11 years and 143 adolescents aged 12–17 years.

Fiasp administered at mealtime showed superior glycaemic control compared to NovoRapid mealtime with regards to change in HbA<sub>1c</sub> (ETD: -0.17% [-0.30; -0.03]<sub>95% CI</sub>). Fiasp administered postmeal showed non-inferior glycaemic control compared to NovoRapid mealtime (ETD: 0.13% [-0.01; 0.26]<sub>95% CI</sub>).

Fiasp mealtime showed a statistically significant improvement in 1– hour postmeal glucose increment mean over all three main meals compared to NovoRapid (measured by SMPG). For Fiasp postmeal this comparison favoured NovoRapid mealtime.

No overall increased risk of severe or blood glucose confirmed hypoglycaemia was observed compared to NovoRapid.

The observed effects and the safety profiles were comparable between all age groups.

# 5.2 Pharmacokinetic properties

# Absorption

Fiasp is a mealtime insulin aspart formulation in which the addition of nicotinamide (vitamin  $B_3$ ) results in a faster initial absorption of insulin. Insulin appeared in the circulation approximately 4 minutes after administration (Figure 1). The onset of appearance was twice as fast (corresponding to 5 minutes earlier), time to 50% maximum concentration was 9 minutes shorter with Fiasp compared to NovoRapid with four times as much insulin available during first 15 minutes and with twice as much insulin available during the first 30 minutes.



Time (min)

#### Figure 1 Mean insulin profile in patients with type 1 diabetes after subcutaneous injection.

The total insulin exposure was comparable between Fiasp and NovoRapid. The mean  $C_{max}$  for a dose of 0.2 units/kg body weight is 298 pmol/L and comparable to NovoRapid.

Total exposure and maximum insulin concentration increases proportionally with increasing subcutaneous dose of Fiasp within the therapeutic dose range.

The absolute bioavailability of insulin aspart after subcutaneous administration of Fiasp in the abdomen, deltoid and thigh was approximately 80%.

After administration of Fiasp, the fast onset of appearance is maintained regardless of injection site. Time to maximum concentration and total insulin aspart exposure were all comparable between the abdomen, upper arm and the thigh. Early insulin exposure and maximum concentration were comparable for the abdomen and upper arm regions, but lower for the thigh.

#### Continuous subcutaneous insulin infusion (CSII)

The onset of exposure in a CSII setting (time to reach maximum concentration) was 26 minutes shorter with Fiasp compared to NovoRapid resulting in approximately three times as much insulin available during the first 30 minutes (Figure 2).



Figure 2 Mean insulin profiles in patients with type 1 diabetes in a CSII setting (0–5 hours) corrected for basal insulin infusion

#### **Distribution**

Insulin aspart has a low binding affinity to plasma proteins (< 10%), similar to that seen with regular human insulin.

Volume of distribution ( $V_d$ ) after intravenous administration was 0.22 L/kg (e.g., 15.4 L for a 70 kg subject) corresponding to the extracellular fluid volume in the body.

#### **Biotransformation**

Degradation of insulin aspart is similar to that of human insulin; all metabolites formed are inactive.

# **Elimination**

Half-life after subcutaneous administration of Fiasp is 57 minutes and comparable to NovoRapid.

Following intravenous administration of Fiasp, clearance was rapid (1 L/h/kg) and the elimination half-life was 10 minutes.

#### Special populations

#### Elderly

In elderly patients with type 1 diabetes Fiasp showed, an earlier onset of exposure and a higher early insulin exposure whilst maintaining a similar total exposure and maximum concentration compared to NovoRapid.

Total insulin aspart exposure and maximum concentration following administration of Fiasp was 30% higher in elderly subjects compared to younger adult subjects.

# Gender

The effect of gender on the pharmacokinetics of Fiasp was examined in an across-trial analysis of the pharmacokinetic trials. Fiasp showed a comparable earlier onset of exposure and a higher early insulin exposure whilst maintaining a similar total exposure and maximum concentration compared to NovoRapid for both females and male patients with type 1 diabetes.

The early and maximum insulin exposure of Fiasp was comparable for female and male patients with type 1 diabetes. However, total insulin exposure was larger in female compared to male patients with type 1 diabetes.

#### Obesity

The initial absorption rate was slower with increasing BMI while the total exposure was similar across different BMI levels. Compared to NovoRapid, the influence of BMI on the absorption was less pronounced for Fiasp leading to relatively higher initial exposure.

#### Race and ethnicity

The effect of race and ethnicity (Blacks vs. Whites and Hispanics vs. non-Hispanics) on the total insulin exposure of Fiasp was based on results from a population pharmacokinetic analysis in patients with type 1 diabetes. For Fiasp no difference in exposure was found between the racial and ethnic groups investigated.

#### Hepatic impairment

A single dose pharmacokinetic study of insulin aspart was performed with NovoRapid in 24 subjects with hepatic function ranging from normal to severely impaired. In subjects with hepatic impairment, absorption rate was decreased and more variable.

#### Renal impairment

A single dose pharmacokinetic study of insulin aspart was performed with NovoRapid in 18 subjects with renal function ranging from normal to severely impaired. No apparent effect of creatinine clearance values on AUC,  $C_{max}$ , CL/F and  $T_{max}$  of insulin aspart was found. Data were limited in patients with moderate and severe renal impairment. Patients with renal failure necessitating dialysis treatment were not investigated.

#### Paediatric population

In children (6–11 years) and adolescents (12–18 years) Fiasp showed, an earlier onset of exposure and a higher early insulin exposure whilst maintaining a similar total exposure and maximum concentration compared to NovoRapid.

Onset and early insulin exposure of Fiasp was similar in children and adolescents to that in adults. Total exposure of Fiasp was lower in children and adolescents compared to adults when dosed with 0.2 units/kg body weight, while the maximum serum insulin aspart concentration was similar between age groups.

# 5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity and toxicity to reproduction after exposure to insulin aspart. In *in vitro* tests, including binding to insulin and IGF-1 receptor sites and effects on cell growth, insulin aspart behaved in a manner that closely resembled human insulin. Studies also demonstrate that the dissociation of binding to the insulin receptor of insulin aspart is equivalent to human insulin.

# 6. PHARMACEUTICAL PARTICULARS

# 6.1 List of excipients

Phenol
Metacresol
Glycerol
Zinc acetate
Disodium phosphate dihydrate
Arginine hydrochloride
Nicotinamide (vitamin B <sub>3</sub> )
Hydrochloric acid (for pH adjustment)
Sodium hydroxide (for pH adjustment)
Water for injections

# 6.2 Incompatibilities

The medicinal product must not be diluted or mixed with any other medicinal products except infusion fluids as described in section 6.6.

# 6.3 Shelf life

30 months.

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

After first opening or carried as a spare, the medicinal product may be stored for a maximum of 4 weeks. Do not store above 30°C. Can be stored in the refrigerator ( $2^{\circ}C-8^{\circ}C$ ). Do not freeze. Keep the cap on the pen in order to protect from light.

# Fiasp 100 units/mL Penfill solution for injection in cartridge

After first opening or carried as a spare, the medicinal product may be stored for a maximum of 4 weeks. Do not store above 30°C. Do not refrigerate. Do not freeze. If cartridge is carried as a spare and unused, the cartridge should be kept in the outer carton in order to protect from light.

# Fiasp 100 units/mL solution for injection in vial

After first opening, the medicinal product may be stored for a maximum of 4 weeks (including time in a pump reservoir, see section 6.6). Do not store above  $30^{\circ}$ C. Can be stored in the refrigerator (2°C-8°C). Do not freeze. Keep the vial in outer carton in order to protect from light.

# Fiasp 100 units/mL PumpCart solution for injection in cartridge

After first opening or carried as a spare, the medicinal product may be stored for a maximum of 2 weeks below 30°C. Thereafter it can be used for up to 7 days below 37°C in an insulin infusion pump system designed to be used with this cartridge (see section 6.6). Do not refrigerate. Do not freeze. If cartridge is carried as a spare and unused, the cartridge should be kept in the outer carton in order to protect from light.

# 6.4 Special precautions for storage

#### Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

Store in a refrigerator ( $2^{\circ}C-8^{\circ}C$ ). Do not freeze. Keep away from the freezing element. Keep the cap on the pen in order to protect from light.

# Fiasp 100 units/mL Penfill solution for injection in cartridge

Store in a refrigerator  $(2^{\circ}C-8^{\circ}C)$ . Do not freeze. Keep away from the freezing element. Keep the cartridge in the outer carton in order to protect from light.

# Fiasp 100 units/mL solution for injection in vial

Store in a refrigerator ( $2^{\circ}C-8^{\circ}C$ ). Do not freeze. Keep away from the freezing element. Keep the vial in the outer carton in order to protect from light.

#### Fiasp 100 units/mL PumpCart solution for injection in cartridge

Store in a refrigerator ( $2^{\circ}C-8^{\circ}C$ ). Do not freeze. Keep away from the freezing element. Keep the cartridge in the outer carton in order to protect from light.

For storage conditions after first opening of the medicinal product or carried as a spare, see section 6.3.

#### 6.5 Nature and contents of container

#### Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

Cartridge (type 1 glass) with a plunger (halobutyl) and a stopper (halobutyl/polyisoprene) contained in a multidose disposable pre-filled pen made of polypropylene, polyoxymethylene, polycarbonate and acrylonitrile butadiene styrene.

Each pre-filled pen contains 3 mL of solution.

Pack sizes of 1 (with and without needles) pre-filled pen, 5 (without needles) pre-filled pens and multipack containing 10 (2 packs of 5) (without needles) pre-filled pens.

#### Fiasp 100 units/mL Penfill solution for injection in cartridge

Cartridge (type 1 glass), with a plunger (halobutyl) and a stopper (halobutyl/polyisoprene) in a carton. Each cartridge contains 3 mL of solution. Pack sizes of 5 and 10 cartridges.

#### Fiasp 100 units/mL solution for injection in vial

Vial (type 1 glass) closed with a halobutyl/polyisoprene rubber disc and a protective plastic cap in order to obtain a tamper-proof container in a carton. Each vial contains 10 mL of solution. Pack sizes of 1 vial, 5 vials and a multipack containing 5 (5 packs of 1) vials.

18

# Fiasp 100 units/mL PumpCart solution for injection in cartridge

Cartridge (type 1 glass), with a plunger (halobutyl) and a rubber closure (halobutyl/polyisoprene) in a carton.

Each cartridge contains 1.6 mL of solution.

Pack sizes of 5 cartridges and a multipack containing 25 (5 packs of 5) cartridges.

# 6.6 Special precautions for disposal and other handling

Fiasp must not be used if the solution does not appear clear and colourless.

Fiasp which has been frozen must not be used.

# Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen

The pre-filled pen (FlexTouch) is designed to be used with injection needles developed according to the pen needle ISO standard of a length between 4 mm to 8 mm and a gauge between 30G and 32G for subcutaneous injection only.

Needles and pre-filled pens must not be shared. The cartridge must not be refilled. The patient should discard the needle after each injection.

# Fiasp 100 units/mL Penfill solution for injection in cartridge

The cartridge (Penfill) is designed to be used with Novo Nordisk reusable insulin pens and injection needles developed according to the pen needle ISO standard of a length between 4 mm to 8 mm and a gauge between 30G and 32G for subcutaneous injection only. Needles and cartridges must not be shared. The cartridge must not be refilled.

The patient should discard the needle after each injection.

#### Fiasp 100 units/mL solution for injection in vial

Needles and syringes must not be shared. The patient should discard the needle after each injection.

# Administration via CSII

When Fiasp is drawn from a vial, it can be used in an infusion pump (CSII) for a maximum of 6 days, as described in section 4.2 and in the package leaflet. Tubings in which the inner surface materials are made of polyethylene or polyolefin have been evaluated and found compatible with pump use.

#### Intravenous use

Fiasp has been shown to be stable at room temperature for 24 hours in the infusion fluids such as sodium chloride 9 mg/mL (0.9%) solution for injection or 5% glucose solution for injection. For intravenous use, it should be used at concentrations from 0.5 unit/mL to 1 unit/mL insulin aspart in infusion systems – using polypropylene infusion bags.

#### Fiasp 100 units/mL PumpCart solution for injection in cartridge

The cartridge must not be shared or refilled.

The cartridge (PumpCart) is only for use with the following insulin infusion pump systems: the Accu-Chek Insight and YpsoPump insulin pumps. Tubings in which the inner surface materials are made of polyethylene or polyolefin have been evaluated and found compatible with pump use.

#### **Disposal**

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

# 7. MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

# 8. MARKETING AUTHORISATION NUMBERS

EU/1/16/1160/001 EU/1/16/1160/002 EU/1/16/1160/003 EU/1/16/1160/004 EU/1/16/1160/005 EU/1/16/1160/007 EU/1/16/1160/008 EU/1/16/1160/010 EU/1/16/1160/011 EU/1/16/1160/012 EU/1/16/1160/013

#### 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 09 January 2017 Date of latest renewal:

# 10. DATE OF REVISION OF THE TEXT

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

#### ANNEX II

- A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER 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 OF THE BIOLOGICAL ACTIVE SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer of the biological active substance

Novo Nordisk A/S Hallas Alle 4400 Kalundborg Denmark

Name and address of the manufacturer responsible for batch release

Novo Nordisk A/S Novo Alle 1 2880 Bagsværd Denmark

# **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

• Risk management plan (RMP)

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING

# **OUTER CARTON (Pre-filled pen (FlexTouch))**

# 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen insulin aspart

# 2. STATEMENT OF ACTIVE SUBSTANCE

Each pre-filled pen contains 300 units of insulin aspart in 3 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

# 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin B<sub>3</sub>), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

# 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 x 3 mL 1 x 3 mL + 7 NovoFine Plus needles 1 x 3 mL + 7 NovoFine needles 1 x 3 mL + 7 NovoTwist needles 5 x 3 mL

# 5. METHOD AND ROUTES OF ADMINISTRATION

Needles are not included Read the package leaflet before use Subcutaneous 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution Single patient use only Designed to be used with injection needles of a length between 4 mm to 8 mm and a gauge between 30G and 32G

# 8. EXPIRY DATE

# EXP

During use: Use within 4 weeks

# 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Can be stored in the refrigerator. Store below 30°C. Do not freeze. Keep the cap on the pen in order to protect from light

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

Discard the needle after each injection

# 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

# 12. MARKETING AUTHORISATION NUMBER

EU/1/16/1160/001 1 pen of 3 mL EU/1/16/1160/002 1 pen of 3 mL and 7 NovoFine Plus needles EU/1/16/1160/003 1 pen of 3 mL and 7 NovoFine needles EU/1/16/1160/004 1 pen of 3 mL and 7 NovoTwist needles EU/1/16/1160/005 5 pens of 3 mL

# **13. BATCH NUMBER**

Batch

# 14. GENERAL CLASSIFICATION FOR SUPPLY

# 15. INSTRUCTIONS ON USE

# 16. INFORMATION IN BRAILLE

Fiasp

# **17. UNIQUE IDENTIFIER – 2D BARCODE**

# 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

NN

# MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

PEN LABEL (Pre-filled pen (FlexTouch))

# 1. NAME OF THE MEDICINAL PRODUCT AND ROUTES OF ADMINISTRATION

Fiasp 100 units/mL FlexTouch solution for injection insulin aspart SC

# 2. METHOD OF ADMINISTRATION

Subcutaneous use

3. EXPIRY DATE

EXP

# 4. BATCH NUMBER

Batch

# 5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

3 mL

# 6. OTHER

Novo Nordisk A/S

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING

# OUTER CARTON FOR MULTIPACK (Pre-filled pen (FlexTouch) - with blue box)

# 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen insulin aspart

# 2. STATEMENT OF ACTIVE SUBSTANCE

Each pre-filled pen contains 300 units of insulin aspart in 3 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

# 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

# 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

Multipack: 10 (2 packs of 5 x 3 mL) pre-filled pens

# 5. METHOD AND ROUTES OF ADMINISTRATION

Needles are not included Read the package leaflet before use Subcutaneous 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution Single patient use only

Designed to be used with injection needles of a length between 4 mm to 8 mm and a gauge between 30G and 32G

# 8. EXPIRY DATE

EXP

# 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Can be stored in the refrigerator. Store below 30°C. Do not freeze. Keep the cap on the pen in order to protect from light

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

Discard the needle after each injection

# 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

# 12. MARKETING AUTHORISATION NUMBER

EU/1/16/1160/006 10 pens of 3 mL

# **13. BATCH NUMBER**

Batch

# 14. GENERAL CLASSIFICATION FOR SUPPLY

# 15. INSTRUCTIONS ON USE

# 16. INFORMATION IN BRAILLE

Fiasp

# **17. UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included

# 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

# PARTICULARS TO APPEAR ON THE INNER PACKAGING

# CARTON FOR MULTIPACK (Pre-filled pen (FlexTouch) – without blue box)

# 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen insulin aspart

# 2. STATEMENT OF ACTIVE SUBSTANCE

Each pre-filled pen contains 300 units of insulin aspart in 3 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

# 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin B<sub>3</sub>), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

# 4. PHARMACEUTICAL FORM AND CONTENTS

#### Solution for injection

5 x 3 mL. Component of a multipack, cannot be sold separately

# 5. METHOD AND ROUTES OF ADMINISTRATION

Needles are not included Read the package leaflet before use Subcutaneous 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution

Single patient use only

Designed to be used with injection needles of a length between 4 mm and 8 mm and a gauge between 30G and 32G  $\,$ 

# 8. EXPIRY DATE

EXP

# 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Can be stored in the refrigerator. Store below 30°C. Do not freeze. Keep the cap on the pen in order to protect from light

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

Discard the needle after each injection

# 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

# 12. MARKETING AUTHORISATION NUMBER(S)

EU/1/16/1160/006 10 pens of 3 mL

# **13. BATCH NUMBER**

Batch

# 14. GENERAL CLASSIFICATION FOR SUPPLY

# 15. INSTRUCTIONS ON USE

# 16. INFORMATION IN BRAILLE

Fiasp

# **17. UNIQUE IDENTIFIER – 2D BARCODE**

# 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

# PARTICULARS TO APPEAR ON THE OUTER PACKAGING

# OUTER CARTON (Cartridge (Penfill))

# 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL Penfill solution for injection in cartridge insulin aspart

# 2. STATEMENT OF ACTIVE SUBSTANCE

Each cartridge contains 300 units of insulin aspart in 3 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

# 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

# 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

5 x 3 mL 10 x 3 mL

# 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous use Designed to be used with Novo Nordisk reusable pens

# 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution Single patient use only

#### 8. EXPIRY DATE

EXP During use: Use within 4 weeks

# 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Do not refrigerate. Store below 30°C. Do not freeze. Keep the cartridge in the outer carton in order to protect from light

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

Discard the needle after each injection

# 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

# 12. MARKETING AUTHORISATION NUMBERS

EU/1/16/1160/010 5 cartridges of 3 mL EU/1/16/1160/011 10 cartridges of 3 mL

# **13. BATCH NUMBER**

Batch

# 14. GENERAL CLASSIFICATION FOR SUPPLY

# 15. INSTRUCTIONS ON USE

# 16. INFORMATION IN BRAILLE

Fiasp

# **17. UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included

# 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN
## MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

## LABEL (Cartridge (Penfill))

## 1. NAME OF THE MEDICINAL PRODUCT AND ROUTES OF ADMINISTRATION

Fiasp 100 units/mL Penfill solution for injection insulin aspart SC

## 2. METHOD OF ADMINISTRATION

Subcutaneous use

3. EXPIRY DATE

EXP

#### 4. BATCH NUMBER

Batch

## 5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

3 mL

## 6. OTHER

Novo Nordisk A/S

## PARTICULARS TO APPEAR ON THE OUTER PACKAGING

## **OUTER CARTON (VIAL)**

#### 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL solution for injection in vial insulin aspart

#### 2. STATEMENT OF ACTIVE SUBSTANCE

Each vial contains 1,000 units of insulin aspart in 10 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

#### 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

## 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 x 10 mL 5 x 10 mL

## 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous or intravenous 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, IF NECESSARY

Use only clear, colourless solution

#### 8. EXPIRY DATE

EXP

During use: Use within 4 weeks (including time in a pump reservoir)

## 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Can be stored in the refrigerator. Store below 30°C. Do not freeze. Keep the vial in the outer carton in order to protect from light.

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

Discard the needle after each injection

#### 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

## 12. MARKETING AUTHORISATION NUMBERS

EU/1/16/1160/007 1 vial of 10 mL EU/1/16/1160/008 5 vials of 10 mL

#### **13. BATCH NUMBER**

Batch

## 14. GENERAL CLASSIFICATION FOR SUPPLY

## 15. INSTRUCTIONS ON USE

#### **16. INFORMATION IN BRAILLE**

Fiasp

## **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 SMALL IMMEDIATE PACKAGING UNITS

## LABEL (VIAL)

## 1. NAME OF THE MEDICINAL PRODUCT AND ROUTES OF ADMINISTRATION

Fiasp 100 units/mL solution for injection insulin aspart SC, IV

## 2. METHOD OF ADMINISTRATION

Subcutaneous use, intravenous use

3. EXPIRY DATE

EXP

#### 4. BATCH NUMBER

Batch

## 5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

10 mL

## 6. OTHER

Novo Nordisk A/S

## PARTICULARS TO APPEAR ON THE OUTER PACKAGING

## **OUTER WRAPPER LABEL ON MULTIPACKS (VIAL – with blue box)**

## 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL solution for injection in vial insulin aspart

#### 2. STATEMENT OF ACTIVE SUBSTANCE

Each vial contains 1,000 units of insulin aspart in 10 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

#### 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

## 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

Multipack: 5 (5 packs of 1 x 10 mL) vials

## 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous or intravenous 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, IF NECESSARY

Use only clear, colourless solution

#### 8. EXPIRY DATE

#### EXP

During use: Use within 4 weeks (including time in a pump reservoir)

#### 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Can be stored in the refrigerator. Store below 30°C. Do not freeze. Keep the vial in the outer carton in order to protect from light.

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

Discard the needle after each injection

#### 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

## 12. MARKETING AUTHORISATION NUMBER

EU/1/16/1160/009 5 vials of 10 mL

## **13. BATCH NUMBER**

Batch

## 14. GENERAL CLASSIFICATION FOR SUPPLY

## **15. INSTRUCTIONS ON USE**

## 16. INFORMATION IN BRAILLE

Fiasp

## **17. UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included

## **18. UNIQUE IDENTIFIER - HUMAN READABLE DATA**

PC

SN

NN

## PARTICULARS TO APPEAR ON THE INNER PACKAGING

## CARTON FOR MULTIPACK (VIAL - without blue box)

## 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL solution for injection in vial insulin aspart

#### 2. STATEMENT OF ACTIVE SUBSTANCE

Each vial contains 1,000 units of insulin aspart in 10 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

#### 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

## 4. PHARMACEUTICAL FORM AND CONTENTS

#### Solution for injection

1 x 10 mL.

Component of a multipack, cannot be sold separately

## 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous or intravenous 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, IF NECESSARY

Use only clear, colourless solution

#### 8. EXPIRY DATE

EXP

During use: Use within 4 weeks (including time in a pump reservoir)

## 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator. Do not freeze

During use: Can be stored in the refrigerator. Store below 30°C. Do not freeze. Keep the vial in the outer carton in order to protect from light.

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

Discard the needle after each injection

#### 11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

#### 12. MARKETING AUTHORISATION NUMBER

EU/1/16/1160/009 5 vials of 10 mL

#### **13. BATCH NUMBER**

Batch

#### 14. GENERAL CLASSIFICATION FOR SUPPLY

#### 15. INSTRUCTIONS ON USE

#### 16. INFORMATION IN BRAILLE

Fiasp

## **17. UNIQUE IDENTIFIER – 2D BARCODE**

## **18. UNIQUE IDENTIFIER - HUMAN READABLE DATA**

## PARTICULARS TO APPEAR ON THE OUTER PACKAGING

## **OUTER CARTON (Cartridge (PumpCart))**

## 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL PumpCart solution for injection in cartridge insulin aspart

#### 2. STATEMENT OF ACTIVE SUBSTANCE

Each cartridge contains 160 units of insulin aspart in 1.6 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

#### 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

## 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

5 x 1.6 mL

## 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution Single patient use only Only for use in pumps designed for PumpCart

## 8. EXPIRY DATE

EXP During use in pump: Use within 7 days

## 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator Carried as a spare: Can be kept for up to two weeks below 30°C During use: Do not refrigerate. Store below 37°C Do not freeze Keep the cartridge away from light

#### 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

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

## 12. MARKETING AUTHORISATION NUMBERS

EU/1/16/1160/012 5 cartridges of 1.6 mL

#### **13. BATCH NUMBER**

Batch

## 14. GENERAL CLASSIFICATION FOR SUPPLY

## **15. INSTRUCTIONS ON USE**

## 16. INFORMATION IN BRAILLE

Fiasp

#### **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 SMALL IMMEDIATE PACKAGING UNITS

LABEL (Cartridge (PumpCart))

## 1. NAME OF THE MEDICINAL PRODUCT AND ROUTES OF ADMINISTRATION

Fiasp 100 units/mL PumpCart solution for injection insulin aspart SC

## 2. METHOD OF ADMINISTRATION

Subcutaneous use

3. EXPIRY DATE

EXP

## 4. BATCH NUMBER

Batch

## 5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

1.6 mL

## 6. OTHER

Novo Nordisk A/S

## PARTICULARS TO APPEAR ON THE OUTER PACKAGING

## OUTER WRAPPER LABEL ON MULTIPACK (Cartridge (PumpCart) - with blue box)

## 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL PumpCart solution for injection in cartridge insulin aspart

#### 2. STATEMENT OF ACTIVE SUBSTANCE

Each cartridge contains 160 units of insulin aspart in 1.6 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

#### 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

## 4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection PumpCart

Multipack: 25 (5 packs of 5)

## 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution Single patient use only Only for use in pumps designed for PumpCart

#### 8. EXPIRY DATE

EXP During use in pump: Use within 7 days

## 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator Carried as a spare: Can be kept for up to two weeks below 30°C During use: Do not refrigerate. Store below 37°C Do not freeze Keep the cartridge away from light

## 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

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

## 12. MARKETING AUTHORISATION NUMBER

EU/1/16/1160/013 25 (5 packs of 5) cartridges

## **13. BATCH NUMBER**

Batch

## 14. GENERAL CLASSIFICATION FOR SUPPLY

## 15. INSTRUCTIONS ON USE

## 16. INFORMATION IN BRAILLE

Fiasp

## **17. UNIQUE IDENTIFIER – 2D BARCODE**

2D barcode carrying the unique identifier included

## 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

PC

SN

NN

## PARTICULARS TO APPEAR ON THE OUTER PACKAGING

## INNER CARTON FOR MULTIPACK (Cartridge (PumpCart) – without blue box)

## 1. NAME OF THE MEDICINAL PRODUCT

Fiasp 100 units/mL PumpCart solution for injection in cartridge insulin aspart

#### 2. STATEMENT OF ACTIVE SUBSTANCE

Each cartridge contains 160 units of insulin aspart in 1.6 mL solution 1 mL solution contains 100 units of insulin aspart (equivalent to 3.5 mg)

#### 3. LIST OF EXCIPIENTS

phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin  $B_3$ ), hydrochloric acid/sodium hydroxide (for pH adjustment) and water for injections. See leaflet for further information.

## 4. PHARMACEUTICAL FORM AND CONTENTS

#### Solution for injection

5 x 1.6 mL. Component of a multipack, cannot be sold separately

## 5. METHOD AND ROUTES OF ADMINISTRATION

Read the package leaflet before use Subcutaneous 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 WARNINGS, IF NECESSARY

Use only clear, colourless solution Single patient use only Only for use in pumps designed for PumpCart

## 8. EXPIRY DATE

EXP During use in pump: Use within 7 days

## 9. SPECIAL STORAGE CONDITIONS

Before opening: Store in a refrigerator Carried as a spare: Can be kept for up to two weeks below 30°C During use: Do not refrigerate. Store below 37°C Do not freeze Keep the cartridge away from light

#### 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

Novo Nordisk A/S Novo Allé DK-2880 Bagsværd Denmark

#### 12. MARKETING AUTHORISATION NUMBER

EU/1/16/1160/013 25 (5 packs of 5) cartridges

#### **13. BATCH NUMBER**

Batch

## 14. GENERAL CLASSIFICATION FOR SUPPLY

## **15. INSTRUCTIONS ON USE**

## 16. INFORMATION IN BRAILLE

Fiasp

## **17. UNIQUE IDENTIFIER – 2D BARCODE**

#### 18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

**B. PACKAGE LEAFLET** 

## Package leaflet: Information for the patient

## Fiasp 100 units/mL FlexTouch solution for injection in pre-filled pen insulin aspart

# Read all of this leaflet carefully before you start using 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, pharmacist or nurse.
- 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, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet

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

## 1. What Fiasp is and what it is used for

Fiasp is a mealtime insulin with a fast-acting blood sugar lowering effect. Fiasp is a solution for injection containing insulin aspart and is used to treat diabetes mellitus in adults, adolescents and children aged 1 year and above. Diabetes is a disease where your body does not produce enough insulin to control the level of blood sugar. Treatment with Fiasp helps to prevent complications from your diabetes.

Fiasp should be injected up to 2 minutes before the start of the meal, with an option to inject up to 20 minutes after starting the meal.

This medicine has its maximum effect between 1 and 3 hours after the injection and the effect lasts for 3 to 5 hours.

This medicine should normally be used in combination with intermediate-acting or long-acting insulin preparations.

#### 2. What you need to know before you use Fiasp

#### Do not use Fiasp

• if you are allergic to insulin aspart, or any of the other ingredients of this medicine (listed in section 6).

#### Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Fiasp. Be especially aware of the following:

- Low blood sugar (hypoglycaemia) If your blood sugar is too low, follow the guidance for low blood sugar in section 4 'Possible side effects'. Fiasp starts to lower blood sugar faster compared to other mealtime insulins. If hypoglycaemia occurs, you may experience it earlier after an injection with Fiasp.
- High blood sugar (hyperglycaemia) If your blood sugar is too high, follow the guidance for high blood sugar in section 4 'Possible side effects'.
- Switching from other insulin medicinal products Your doctor may need to advise you on your insulin dose.
- If your insulin treatment is being combined with pioglitazone (oral antidiabetic medicine used to treat type 2 diabetes) Tell your doctor as soon as possible if you get signs of heart failure such

as unusual shortness of breath or rapid increase in weight or localised swelling caused by fluid retention (oedema).

- Eye disorder Fast improvements in blood sugar control may lead to a temporary worsening of diabetic eye disorder such as diabetic retinopathy.
- Pain due to nerve damage If your blood sugar level improves very fast, you may get nerve related pain, this is usually temporary.
- Swelling around your joints When you first start using your medicine, your body may keep more water than it should. This causes swelling around your ankles and other joints. This is usually only short-lasting.
- Ensuring you use the right type of insulin always check the insulin label before each injection to avoid accidental mix-ups between insulin products.
- Insulin treatment can cause the body to produce antibodies to insulin (substance that act against insulin). However, only very rarely, this will require a change to your insulin dose.

If you have poor eyesight, please see section 3 'How to use Fiasp'.

Some conditions and activities can affect how much insulin you need. Talk to your doctor:

- if you have trouble with your kidneys or liver, or with your adrenal, pituitary or thyroid glands.
- if you exercise more than usual or if you want to change your usual diet, as this may affect your blood sugar level.
- if you are ill, carry on taking your insulin and talk to your doctor.
- If you are going abroad, travelling over time zones may affect your insulin needs and the timing of your injections.

When using Fiasp it is strongly recommended that the name and batch number of each package is recorded in order to maintain a record of the batches used.

## Skin changes at the injection site

The injection site should be rotated to help prevent changes to the fatty tissue under the skin, such as skin thickening, skin shrinking or lumps under the skin. The insulin may not work very well if you inject into a lumpy, shrunken or thickened area (see section 3 'How to use Fiasp'). Tell your doctor if you notice any skin changes at the injection site. Tell your doctor if you are currently injecting into these affected areas before you start injecting in a different area. Your doctor may tell you to check your blood sugar more closely, and to adjust your insulin or your other antidiabetic medications dose.

## Children and adolescents

This medicine is not recommended for use in children below the age of 1 year.

## Other medicines and Fiasp

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. Some medicines affect your blood sugar level - this may mean your insulin dose has to change.

Listed below are the most common medicines which may affect your insulin treatment.

Your blood sugar level may fall (hypoglycaemia) if you take:

- other medicines for diabetes (oral and injectable)
- sulphonamide antibiotics, (used to treat infections)
- anabolic steroids (such as testosterone)
- beta-blockers (used to treat high blood pressure or angina)
- salicylates (used to relieve pain and lower fever)
- monoamine oxidase inhibitors (MAOI) (used to treat depression)
- angiotensin converting enzyme (ACE) inhibitors (for some heart problems or high blood pressure)

Your blood sugar level may rise (hyperglycaemia) if you take:

• danazol (medicine acting on ovulation)

- oral contraceptives (birth control pills)
- thyroid hormones (for thyroid problems)
- growth hormone (for growth hormone deficiency)
- glucocorticoids (such as 'cortisone' for inflammation)
- sympathomimetics (such as epinephrine (adrenaline), salbutamol or terbutaline for asthma)
- thiazides (for high blood pressure or if your body is keeping too much water (water retention))

<u>Octreotide and lanreotide</u> - used to treat a rare condition involving too much growth hormone (acromegaly). They may increase or decrease your blood sugar level.

If any of the above applies to you (or you are not sure), talk to your doctor or pharmacist.

#### **Fiasp with alcohol**

If you drink alcohol, your need for insulin may change as your blood sugar level may either rise or fall. You should therefore monitor your blood sugar level more often than usual.

#### **Pregnancy and breast-feeding**

If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine. This medicine can be used during pregnancy; however your insulin dose may need to be changed during pregnancy and after delivery. The amount of insulin you need usually falls during the first 3 months of pregnancy and increases for the remaining 6 months. Careful control of your diabetes is needed in pregnancy. Avoiding low blood sugar (hypoglycaemia) is particularly important for the health of your baby. After you have had your baby your insulin requirements will likely return to how much you needed before your pregnancy.

There are no restrictions on treatment with Fiasp during breast-feeding.

#### Driving and using machines

Having low blood sugar can affect your ability to drive or use any tools or machines. If your blood sugar is low, your ability to concentrate or react might be affected. This could be dangerous to yourself or others. Ask your doctor whether you can drive if:

- you often get low blood sugar
- you find it hard to recognise low blood sugar.

#### Important information about some of the ingredients of Fiasp

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

#### 3. How to use Fiasp

Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

If you are blind or have poor eyesight and cannot read the dose counter on the pen, do not use this pen without help. Get help from a person with good eyesight who is trained to use the FlexTouch pre-filled pen.

The pre-filled pen can provide a dose of 1-80 units in one injection in steps of 1 unit.

#### When to use Fiasp

Fiasp is a mealtime insulin.

Adults: Fiasp should be injected right before (0-2 minutes) the start of the meal, with an option to inject up to 20 minutes after starting the meal.

Children: Fiasp should be injected right before (0-2 minutes) the start of the meal, with the possibility to inject up to 20 minutes after starting the meal in situations, when there is uncertainty about how the child will eat. Ask your doctor for advice on these situations.

This medicine has its maximum effect between 1 and 3 hours after the injection and the effect lasts for 3 to 5 hours.

#### **Fiasp dose**

Dose for type 1 and type 2 diabetes

Your doctor will decide together with you:

- how much Fiasp you will need at each meal
- when to check your blood sugar level and if you need a higher or lower dose.

If you want to change your usual diet, check with your doctor, pharmacist or nurse first as a change in diet may alter your need for insulin.

When using other medicines, ask your doctor if your treatment needs to be adjusted.

#### Dose adjustment for type 2 diabetes

The daily dose should be based on your blood sugar level at mealtimes and bedtime from the previous day.

- Before breakfast dose should be adjusted according to the blood sugar level before lunch the previous day.
- Before lunch dose should be adjusted according to the blood sugar level before dinner the previous day.
- Before dinner dose should be adjusted according to the bedtime blood sugar level the previous day.

Table 1 Dose adjustment		
Mealtime or bedtime blood sugar		Dose adjustment
mmol/L	mg/dL	
less than 4	less than 71	Reduce dose by 1 unit
4-6	71–108	No dose adjustment
more than 6	more than 108	Increase dose by 1 unit

#### Use in elderly patients (65 years or older)

This medicine can be used in elderly patients. Talk to your doctor about changes in your dose.

#### If you have kidney or liver problems

If you have kidney or liver problems you may need to check your blood sugar level more often. Talk to your doctor about changes in your dose.

#### **Injecting Fiasp**

This medicine is only suitable for injection under the skin (subcutaneous injection).

Before you use Fiasp for the first time, your doctor or nurse will show you how to use the pre-filled pen. Speak to your doctor if you need to inject your insulin by another method.

#### Where to inject

- The best places to inject are the front of your waist (abdomen) or upper arms.
- Do not inject into a vein or muscle.
- Change the place within the area where you inject each day to reduce the risk of developing changes under the skin (see section 4).

#### Do not use Fiasp

- if the pen is damaged or if it has not been stored correctly (see section 5 'How to store Fiasp').
- if the insulin does not appear clear (e.g., cloudy) and colourless.

Detailed instructions on how to use your FlexTouch pen are provided on the other side of this leaflet.

#### If you use more Fiasp than you should

If you use too much insulin your blood sugar may get too low (hypoglycaemia), see advice in section 4 under 'Low blood sugar'.

#### If you forget to use Fiasp

If you forget to use your insulin your blood sugar may get too high (hyperglycaemia). See section 4 under 'High blood sugar'.

#### Three simple steps that may help to avoid low or high blood sugar are:

- Always keep a spare pen in case you lose your pen or it gets damaged.
- Always carry something to show you have diabetes.
- Always carry products containing sugar with you. See section 4 under 'What to do if you get low blood sugar'.

#### If you stop using Fiasp

Do not stop using your insulin without talking to your doctor. If you stop using your insulin this could lead to a very high blood sugar level (severe hyperglycaemia) and ketoacidosis (a condition with too much acid in the blood which is potentially life-threatening). See symptoms and advice in section 4 under 'High blood sugar'.

#### 4. Possible side effects

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

Low blood sugar (hypoglycaemia) is very common with insulin treatment (may affect more than 1 in 10 people). It can be very serious. If your blood sugar level falls too much you may become unconscious. Serious hypoglycaemia may cause brain damage and may be life-threatening. If you have symptoms of low blood sugar, take actions **immediately** to increase your blood sugar level. See advice in 'Low blood sugar' below.

**If you have a serious allergic reaction** (including an anaphylactic shock) to insulin or any of the ingredients in Fiasp (how often this occurs is not known), stop using this medicine and contact emergency medical service straight away.

Signs of a serious allergic reaction may include:

- local reactions (e.g., rash, redness and itching) spread to other parts of your body
- you suddenly feel unwell with sweating
- you start being sick (vomiting)
- you experience difficulty in breathing
- you experience rapid heartbeat or feeling dizzy.

Allergic reactions such as generalised skin rash and facial swelling may occur. These are uncommon and may affect up to 1 in 100 people. See a doctor if the symptoms worsen or you see no improvement in a few weeks.

**Skin changes at the injection site:** If you inject insulin at the same place, the fatty tissue may shrink (lipoatrophy) or thicken (lipohypertrophy) (these are uncommon and may affect up to 1 in 100 people). Lumps under the skin may also be caused by build-up of a protein called amyloid (cutaneous amyloidosis; how often this occurs is not known). The insulin may not work very well if you inject into a lumpy, shrunken or thickened area. Change the injection site with each injection to help prevent these skin changes.

#### Other side effects include:

## **Common** (may affect up to 1 in 10 people)

<u>Reaction at administration site:</u> Local reactions at the place you inject yourself may occur. The signs may include: rash, redness, inflammation, bruising, irritation, pain and itching. The reactions usually disappear after a few days.

<u>Skin reactions:</u> Signs of allergy on the skin such as eczema, rash, itching, hives and dermatitis may occur.

#### General effects from insulin treatment including Fiasp

• Low blood sugar (hypoglycaemia) (very common)

#### Low blood sugar may happen if you:

Drink alcohol; use too much insulin; exercise more than usual; eat too little or miss a meal.

## Warning signs of low blood sugar – these may come on suddenly:

Headache; slurred speech; fast heartbeat; cold sweat; cool pale skin, feeling sick; feeling very hungry; tremor or feeling nervous or worried; feeling unusually tired, weak and sleepy; feeling confused; difficulty in concentrating; short-lasting changes in your sight.

#### What to do if you get low blood sugar

- If you are conscious, treat your low blood sugar immediately with 15–20 g of fast-acting carbohydrate: eat glucose tablets or another high sugar snack, like fruit juice, sweets or biscuits (always carry glucose tablets or a high sugar snack, just in case).
- It is recommended that you retest your blood glucose levels after 15–20 minutes and re-treat if your blood glucose levels are still less than 4 mmol/L.
- Wait until the signs of low blood sugar have gone or when your blood sugar level has settled. Then carry on with your insulin treatment as usual.

#### What others need to do if you pass out

Tell everyone you spend time with that you have diabetes. Tell them what could happen if your blood sugar gets too low, including the risk of passing out.

Let them know that if you pass out, they must:

- turn you on your side to avoid choking
- get medical help straight away
- **not** give you any food or drink because you may choke.

You may recover more quickly from passing out with an injection of glucagon. This can only be given by someone who knows how to use it.

- If you are given glucagon you will need sugar or a sugary snack as soon as you come round.
- If you do not respond to a glucagon injection, you will have to be treated in a hospital.

If severe low blood sugar is not treated over time, it can cause brain damage. This can be short or long-lasting. It may even cause death.

#### Talk to your doctor if:

- your blood sugar got so low that you passed out
- you have been given an injection of glucagon
- you have had too low blood sugar a few times recently.

This is because the dosing or timing of your insulin injections, food or exercise may need to be changed.

## • High blood sugar (hyperglycaemia)

#### High blood sugar may happen if you:

Eat more or exercise less than usual; drink alcohol; get an infection or a fever; have not used enough insulin; keep using less insulin than you need; forget to use your insulin or stop using insulin.

#### Warning signs of high blood sugar - these normally appear gradually:

Flushed skin; dry skin; feeling sleepy or tired; dry mouth; fruity (acetone) breath; urinating more often; feeling thirsty; losing your appetite; feeling or being sick (nausea or vomiting). These may be signs of a very serious condition called ketoacidosis. This is a build-up of acid in the blood because the body is breaking down fat instead of sugar. If not treated, this could lead to diabetic coma and eventually death.

## What to do if you get high blood sugar

- Test your blood sugar level.
- Give a correction dose of insulin if you have been taught how to do this.
- Test your urine for ketones.
- If you have ketones, seek medical help straight away.

#### **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. 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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Fiasp

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 label and carton, after 'EXP'. The expiry date refers to the last day of that month.

#### Before first use

Store in a refrigerator ( $2^{\circ}C-8^{\circ}C$ ). Do not freeze. Keep away from the freezing element. Keep the cap on the pen in order to protect from light.

#### After first opening or if carried as a spare

You can carry your pre-filled pen (FlexTouch) with you and keep it at room temperature (not above  $30^{\circ}$ C) or in a refrigerator ( $2^{\circ}$ C $-8^{\circ}$ C) for up to 4 weeks. Always keep the cap on the pen when you are not using it in order to protect from light.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## 6. Contents of the pack and other information

#### What Fiasp contains

- The active substance is insulin aspart. 1 mL solution contains 100 units of insulin aspart. Each pre-filled pen contains 300 units of insulin aspart in 3 mL solution.
- The other ingredients are phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin B<sub>3</sub>), hydrochloric acid (for pH adjustment), sodium hydroxide (for pH adjustment) (see end of section 2 under 'Important information about some of the ingredients of Fiasp') and water for injections.

#### What Fiasp looks like and contents of the pack

Fiasp is presented as a clear, colourless and aqueous solution for injection in pre-filled pen.

Pack sizes of 1, 5 or a multipack with 2 x 5 pre-filled pens of 3 mL. Not all pack sizes may be marketed.

#### Marketing Authorisation Holder and Manufacturer

Novo Nordisk A/S, Novo Allé,

#### DK-2880 Bagsværd, Denmark

#### This leaflet was last revised in

#### Other sources of information

Detailed information on this medicine is available on the European Medicines Agency website: <u>http://www.ema.europa.eu</u>.

#### Instructions on how to use Fiasp FlexTouch

**Please read these instructions carefully** before using your FlexTouch pre-filled pen. If you do not follow the instructions carefully, you may get too little or too much insulin, which can lead to high or low blood sugar level.

**Do not use the pen without proper training** from your doctor or nurse. Start by checking your pen to **make sure that it contains Fiasp 100 units/mL**, then look at the illustrations below to get to know the different parts of your pen and needle.

If you are blind or have poor eyesight and cannot read the dose counter on the pen, do not use this pen without help. Get help from a person with good eyesight who is trained to use the FlexTouch pre-filled pen.

Your pen is a pre-filled dial-a-dose insulin pen containing 300 units of insulin. You can select a **maximum of 80 units per dose, in steps of 1 unit.** Your pen is designed to be used with single-use, disposable injection needles of a length between 4 mm and 8 mm and a gauge between 30G and 32G. Needles are not included in the pack.

## **A** Important information

Pay special attention to these notes as they are important for correct use of the pen.

## Fiasp pre-filled pen and needle (example) (FlexTouch)



#### 1 Prepare your pen with a new needle

- **Check the name and strength on the label** of your pen, to make sure that it contains Fiasp 100 units/mL. This is especially important if you take more than one type of insulin. If you take a wrong type of insulin, your blood sugar level may get too high or too low.
- Pull off the pen cap.



• Check that the insulin in your pen is clear and colourless. Look through the insulin window. If the insulin looks cloudy, do not use the pen.



• **Take a new needle** and tear off the paper tab.



Make sure to attach the needle correctly.

- Push the needle **straight** onto the pen.
- Turn until it is on **tight.**



The needle is covered by two caps. You must remove both caps. If you forget to remove both caps, you will not inject any insulin.

• **Pull off the outer needle cap and keep it for later.** You will need it after the injection, to safely remove the needle from the pen.



• **Pull off the inner needle cap and throw it away.** If you try to put it back on, you may accidentally prick or injure yourself with the needle.

A drop of insulin may appear at the needle tip. This is normal, but you must still check the insulin flow.

Do not attach a new needle to your pen until you are ready for your injection.



#### Always use a new needle for each injection.

This reduces the risk of contamination, infection, leakage of insulin, blocked needles and inaccurate dosing.

**A** Never use a bent or damaged needle.

#### 2 Check the insulin flow

- Always check the insulin flow before you start. This helps you to ensure that you get your full insulin dose.
- Turn the dose selector to **select 2 units. Make sure the dose counter shows 2.**



Hold the pen with the needle pointing up. **Tap the top of the pen gently** a few times to let any air bubbles rise to the top.



•

• **Press and hold in the dose button** until the dose counter returns to 0. The 0 must line up with the dose pointer. A drop of insulin should appear at the needle tip.



A small air bubble may remain at the needle tip, but it will not be injected.

If no drop appears, repeat steps 2A to 2C up to 6 times. If there is still no drop, change the needle and repeat steps 2A to 2C once more.

If a drop of insulin still does not appear, dispose of the pen and use a new one.

Always make sure that a drop appears at the needle tip before you inject. This makes sure that the insulin is flowing properly.

If no drop appears, no insulin will be injected, even though the dose counter may move. This may indicate a blocked or damaged needle.

Always check the flow before you inject. If you do not check the flow, you may get too little insulin or no insulin at all. This may lead to high blood sugar level.

#### **3 Select your dose**

- Make sure the dose counter shows 0 before you start. The 0 must line up with the dose pointer.
- Turn the dose selector to select the dose you need, as directed by your doctor or nurse.

If you select a wrong dose, you can turn the dose selector forwards or backwards to the correct dose.

The pen can dial up to a maximum of 80 units.



The dose selector changes the number of units. Only the dose counter and dose pointer will show how many units you select per dose.

You can select up to 80 units per dose. When your pen contains less than 80 units, the dose counter stops at the number of units left.

## Always use the dose counter and the dose pointer to see how many units you have selected before injecting the insulin.

Do **not** count the pen clicks to set the dose. If you select and inject the wrong dose, your blood sugar level may get too high or too low.

Do not use the insulin scale, it only shows approximately how much insulin is left in your pen. The dose selector clicks differently when turned forwards, backwards or past the number of units left.

#### 4 Inject your dose

• **Insert the needle into your skin** as your doctor or nurse has shown you.

#### • Make sure you can see the dose counter.

Do not touch the dose counter with your fingers. This could interrupt the injection.



- **Press and hold down the dose button. Watch as the dose counter returns to 0.** The 0 must line up with the dose pointer. You may then hear or feel a click.
- Continue pressing the dose button while keeping the needle in your skin.



- Count slowly to 6 while keeping the dose button pressed.
- If the needle is removed earlier, you may see a stream of insulin coming from the needle tip. If so, the full dose will not be delivered, and you should increase the frequency of checking your blood sugar level.



Remove the needle from your skin. You can then release the dose button

If blood appears at the injection site, press lightly on the skin for a few minutes to stop the bleeding. Do not rub the area.



You may see a drop of insulin at the needle tip after injecting. This is normal and does not affect your dose.

- - Always watch the dose counter to know how many units you inject. Hold the dose button down until the dose counter shows 0. If the dose counter does not return to 0, the full dose has not been delivered, which may lead to high blood sugar level.

#### How to identify a blocked or damaged needle?

- If 0 does not appear in the dose counter after continuously pressing the dose button, you may have used a blocked or damaged needle.
- In this case you have **not** received **any** medicine even though the dose counter has moved from the original dose that you have set.

#### How to handle a blocked needle?

Remove the needle as described in section 5 and repeat all steps starting with section 1: Prepare your pen with a new needle. Make sure you select the full dose you need.

#### Never touch the dose counter when you inject.

This can interrupt the injection.

#### **5** After your injection

#### Always dispose of the needle after each injection

This reduces the risk of contamination, infection, leakage of insulin, blocked needles and inaccurate dosing. If the needle is blocked, you will **not** inject any insulin.

• **Lead the needle tip into the outer needle cap** on a flat surface without touching the needle or the outer cap.



• Once the needle is covered, **carefully push the outer needle cap completely on.** 

• **Unscrew the needle** and dispose of it as instructed by your doctor, nurse, pharmacist or local authorities.



• **Put the pen cap on** your pen after each use to protect the insulin from light.



When the pen is empty, throw it away **without** a needle on as instructed by your doctor, nurse, pharmacist or local authorities.



Never try to put the inner needle cap back on the needle. You may prick or injure yourself with the needle.

Always remove the needle from your pen after each injection and store your pen without the needle attached. This reduces the risk of contamination, infection, leakage of insulin, blocked needles and inaccurate dosing.

#### 6 How much insulin is left?

• The insulin scale shows you approximately how much insulin is left in your pen.



 To see precisely how much insulin is left, use the dose counter: Turn the dose selector until the dose counter stops.
If it shows 80, at least 80 units are left in your pen.
If it shows less than 80, the number shown is the number of units left in your pen.



- Turn the dose selector back until the dose counter shows 0.
- If you need more insulin than the units left in your pen, you can split your dose between two pens.

## Be very careful to calculate correctly if splitting your dose. If in doubt, take the full dose with a new pen. If you split the dose wrong, you will inject too little or too much insulin, which can lead to high or low blood sugar levels.

## Further important information

- Always keep your pen with you.
- Always carry an extra pen and new needles with you, in case of loss or damage.

- Always keep your pen and needles **out of sight and reach of others**, especially children.
- Never share your pen or your needles with other people. It might lead to cross-infection.
- **Never share** your pen with other people. Your medicine might be harmful to them.
- Caregivers must **be very careful when handling used needles** to reduce the risk of needle injury and cross-infection.

#### Caring for your pen

- Treat your pen with care. Rough handling or misuse may cause inaccurate dosing, which can lead to high or low blood sugar levels.
- **Do not leave the pen in a car** or other place where it can get too hot or too cold.
- Do not expose your pen to dust, dirt or liquid.
- **Do not wash, soak or lubricate your pen.** If necessary, clean it with mild detergent on a moistened cloth.
- **Do not drop your pen** or knock it against hard surfaces. If you drop it or suspect a problem, attach a new needle and check the insulin flow before you inject.
- **Do not try to refill your pen.** Once empty, it must be disposed of.
- **Do not try to repair your pen** or pull it apart.

## Package leaflet: Information for the patient

## Fiasp 100 units/mL Penfill solution for injection in cartridge insulin aspart

## Read all of this leaflet carefully before you start using 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, pharmacist or nurse.
- 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, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### What is in this leaflet

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

## 1. What Fiasp is and what it is used for

Fiasp is a mealtime insulin with a fast-acting blood sugar lowering effect. Fiasp is a solution for injection containing insulin aspart and is used to treat diabetes mellitus in adults, adolescents and children aged 1 year and above. Diabetes is a disease where your body does not produce enough insulin to control the level of blood sugar. Treatment with Fiasp helps to prevent complications from your diabetes.

Fiasp should be injected up to 2 minutes before the start of the meal, with an option to inject up to 20 minutes after starting the meal.

This medicine has its maximum effect between 1 and 3 hours after the injection and the effect lasts for 3 to 5 hours.

This medicine should normally be used in combination with intermediate-acting or long-acting insulin preparations.

#### 2. What you need to know before you use Fiasp

#### Do not use Fiasp

• if you are allergic to insulin aspart, or any of the other ingredients of this medicine (listed in section 6).

#### Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Fiasp. Be especially aware of the following:

- Low blood sugar (hypoglycaemia) If your blood sugar is too low, follow the guidance for low blood sugar in section 4 'Possible side effects'. Fiasp starts to lower blood sugar faster compared to other mealtime insulins. If hypoglycaemia occurs, you may experience it earlier after an injection with Fiasp.
- High blood sugar (hyperglycaemia) If your blood sugar is too high, follow the guidance for high blood sugar in section 4 'Possible side effects'.
- Switching from other insulin medicinal products Your doctor may need to advise you on your insulin dose
- If your insulin treatment is being combined with pioglitazone (oral antidiabetic medicine used to treat type 2 diabetes) Tell your doctor as soon as possible if you get signs of heart failure such

as unusual shortness of breath or rapid increase in weight or localised swelling caused by fluid retention (oedema).

- Eye disorder Fast improvements in blood sugar control may lead to a temporary worsening of diabetic eye disorder such as diabetic retinopathy.
- Pain due to nerve damage If your blood sugar level improves very fast, you may get nerve related pain, this is usually temporary.
- Swelling around your joints When you first start using your medicine, your body may keep more water than it should. This causes swelling around your ankles and other joints. This is usually only short-lasting.
- Ensuring you use the right type of insulin always check the insulin label before each injection to avoid accidental mix-ups between insulin products.
- Insulin treatment can cause the body to produce antibodies to insulin (substance that act against insulin). However, only very rarely, this will require a change to your insulin dose.

If you have poor eyesight, please see section 3 'How to use Fiasp'.

Some conditions and activities can affect how much insulin you need. Talk to your doctor:

- if you have trouble with your kidneys or liver, or with your adrenal, pituitary or thyroid glands.
- if you exercise more than usual or if you want to change your usual diet, as this may affect your blood sugar level.
- if you are ill, carry on taking your insulin and talk to your doctor.
- If you are going abroad, travelling over time zones may affect your insulin needs and the timing of your injections.

When using Fiasp it is strongly recommended that the name and batch number of each package is recorded in order to maintain a record of the batches used.

## Skin changes at the injection site

The injection site should be rotated to help prevent changes to the fatty tissue under the skin, such as skin thickening, skin shrinking or lumps under the skin. The insulin may not work very well if you inject into a lumpy, shrunken or thickened area (see section 3 'How to use Fiasp'). Tell your doctor if you notice any skin changes at the injection site. Tell your doctor if you are currently injecting into these affected areas before you start injecting in a different area. Your doctor may tell you to check your blood sugar more closely, and to adjust your insulin or your other antidiabetic medications dose.

## Children and adolescents

This medicine is not recommended for use in children below the age of 1 year.

## Other medicines and Fiasp

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. Some medicines affect your blood sugar level - this may mean your insulin dose has to change.

Listed below are the most common medicines which may affect your insulin treatment.

Your blood sugar level may fall (hypoglycaemia) if you take:

- other medicines for diabetes (oral and injectable)
- sulphonamides antibiotics (used to treat infections)
- anabolic steroids (such as testosterone)
- beta-blockers (used to treat high blood pressure or angina)
- salicylates (used to relieve pain and lower fever)
- monoamine oxidase inhibitors (MAOI) (used to treat depression)
- angiotensin converting enzyme (ACE) inhibitors (for some heart problems or high blood pressure)

Your blood sugar level may rise (hyperglycaemia) if you take:

• danazol (medicine acting on ovulation)

- oral contraceptives (birth control pills)
- thyroid hormones (for thyroid problems)
- growth hormone (for growth hormone deficiency)
- glucocorticoids (such as 'cortisone' for inflammation)
- sympathomimetics (such as epinephrine (adrenaline), salbutamol or terbutaline for asthma)
- thiazides (for high blood pressure or if your body is keeping too much water (water retention)).

<u>Octreotide and lanreotide</u> - used to treat a rare condition involving too much growth hormone (acromegaly). They may increase or decrease your blood sugar level.

If any of the above applies to you (or you are not sure), talk to your doctor or pharmacist.

#### **Fiasp with alcohol**

If you drink alcohol, your need for insulin may change as your blood sugar level may either rise or fall. You should therefore monitor your blood sugar level more often than usual.

#### **Pregnancy and breast-feeding**

If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine. This medicine can be used during pregnancy; however your insulin dose may need to be changed during pregnancy and after delivery. The amount of insulin you need usually falls during the first 3 months of pregnancy and increases for the remaining 6 months. Careful control of your diabetes is needed in pregnancy. Avoiding low blood sugar (hypoglycaemia) is particularly important for the health of your baby. After you have had your baby your insulin requirements will likely return to how much you needed before your pregnancy.

There are no restrictions on treatment with Fiasp during breast-feeding.

#### Driving and using machines

Having low blood sugar can affect your ability to drive or use any tools or machines. If your blood sugar is low, your ability to concentrate or react might be affected. This could be dangerous to yourself or others. Ask your doctor whether you can drive if:

- you often get low blood sugar
- you find it hard to recognise low blood sugar.

#### Important information about some of the ingredients of Fiasp

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

#### 3. How to use Fiasp

Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

If you are blind or have poor eyesight and cannot read the dose counter on the pen, do not use this insulin medicinal product without any help. Get help from a person with good eyesight who is trained to use the pen.

#### When to use Fiasp

Fiasp is a mealtime insulin.

Adults: Fiasp should be injected right before (0-2 minutes) the start of the meal, with an option to inject up to 20 minutes after starting the meal.

Children: Fiasp should be injected right before (0-2 minutes) the start of the meal, with the possibility to inject up to 20 minutes after starting the meal in situations, when there is uncertainty about how the child will eat. Ask your doctor for advice on these situations.
This medicine has its maximum effect between 1 and 3 hours after the injection and the effect lasts for 3 to 5 hours.

### Fiasp dose

Dose for type 1 and type 2 diabetes

Your doctor will decide together with you:

- how much Fiasp you will need at each meal
- when to check your blood sugar level and if you need a higher or lower dose.

If you want to change your usual diet, check with your doctor, pharmacist or nurse first as a change in diet may alter your need for insulin.

When using other medicines, ask your doctor if your treatment needs to be adjusted.

#### Dose adjustment for type 2 diabetes

The daily dose should be based on your blood sugar level at mealtimes and bedtime from the previous day.

- Before breakfast dose should be adjusted according to the blood sugar level before lunch the previous day.
- Before lunch dose should be adjusted according to the blood sugar level before dinner the previous day.
- Before dinner dose should be adjusted according to the bedtime blood sugar level the previous day.

Table 1 Dose adjustment			
Mealtime or bedtime blood sugar		Dose adjustment	
mmol/L	mg/dL		
less than 4	less than 71	Reduce dose by 1 unit	
4–6	71–108	No dose adjustment	
more than 6	more than 108	Increase dose by 1 unit	

#### Use in elderly patients (65 years or older)

This medicine can be used in elderly patients. Talk to your doctor about changes in your dose.

#### If you have kidney or liver problems

If you have kidney or liver problems you may need to check your blood sugar level more often. Talk to your doctor about changes in your dose.

#### **Injecting Fiasp**

This medicine is only suitable for injection under the skin (subcutaneous injection) from a Novo Nordisk reusable insulin pen.

Before you use Fiasp for the first time, your doctor or nurse will show you how to use it. Speak to your doctor if you need to inject your insulin by another method.

#### Where to inject

- The best places to inject are the front of your waist (abdomen) or upper arms.
- Do not inject into a vein or muscle.
- Change the place within the area where you inject each day to reduce the risk of developing changes under the skin (see section 4).

#### Do not use Fiasp

- if the cartridge or the reusable pen you are using is damaged. Take it back to your supplier. See your reusable pen manual for further instructions.
- if the cartridge has not been stored correctly (see section 5 'How to store Fiasp').
- if the insulin does not appear clear (e.g., cloudy) and colourless.

#### How to inject Fiasp

- Read the manual that comes with your reusable pen.
- Check the name and strength on the label of the cartridge (Penfill) to make sure it is Fiasp.
- Always use a new needle for each injection to prevent contamination.
- Needles must not be shared.

### If you use more Fiasp than you should

If you use too much insulin your blood sugar may get too low (hypoglycaemia), see advice in section 4 under 'Low blood sugar'.

#### If you forget to use Fiasp

If you forget to use your insulin your blood sugar may get too high (hyperglycaemia). See section 4 under 'High blood sugar'.

### Three simple steps that may to help avoid low or high blood sugar are:

- Always keep spare cartridges of Fiasp.
- Always carry something to show you have diabetes.
- Always carry products containing sugar with you. See section 4 under 'What to do if you get low blood sugar'.

### If you stop using Fiasp

Do not stop using your insulin without talking to your doctor. If you stop using your insulin this could lead to a very high blood sugar level (severe hyperglycaemia) and ketoacidosis (a condition with too much acid in the blood which is potentially life-threatening). See symptoms and advice in section 4 under 'High blood sugar'.

### 4. Possible side effects

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

Low blood sugar (hypoglycaemia) is very common with insulin treatment (may affect more than 1 in 10 people). It can be very serious. If your blood sugar level falls too much you may become unconscious. Serious hypoglycaemia may cause brain damage and may be life-threatening. If you have symptoms of low blood sugar, take actions **immediately** to increase your blood sugar level. See advice in 'Low blood sugar' below.

**If you have a serious allergic reaction** (including an anaphylactic shock) to insulin or any of the ingredients in Fiasp (how often this occurs is not known), stop using this medicine and contact emergency medical service straight away.

Signs of a serious allergic reaction may include:

- local reactions (e.g., rash, redness and itching) spread to other parts of your body
- you suddenly feel unwell with sweating
- you start being sick (vomiting)
- you experience difficulty in breathing
- you experience rapid heartbeat or feeling dizzy.

Allergic reactions such as generalised skin rash and facial swelling may occur. These are uncommon and may affect up to 1 in 100 people. See a doctor if the symptoms worsen or you see no improvement in a few weeks.

**Skin changes at the injection site:** If you inject insulin at the same place, the fatty tissue may shrink (lipoatrophy) or thicken (lipohypertrophy) (these are uncommon and may affect up to 1 in 100 people). Lumps under the skin may also be caused by build-up of a protein called amyloid (cutaneous amyloidosis; how often this occurs is not known). The insulin may not work very well if you inject into a lumpy, shrunken or thickened area. Change the injection site with each injection to help prevent these skin changes.

## Other side effects include:

## **Common** (may affect up to 1 in 10 people)

<u>Reaction at administration site:</u> Local reactions at the place you inject yourself may occur. The signs may include: rash, redness, inflammation, bruising, irritation, pain and itching. The reactions usually disappear after a few days.

Skin reactions: Signs of allergy on the skin such as eczema, rash, itching, hives and dermatitis may occur.

## General effects from insulin treatment including Fiasp

• Low blood sugar (hypoglycaemia) (very common)

## Low blood sugar may happen if you:

Drink alcohol; use too much insulin; exercise more than usual; eat too little or miss a meal.

## Warning signs of low blood sugar – these may come on suddenly:

Headache; slurred speech; fast heartbeat; cold sweat; cool pale skin; feeling sick; feeling very hungry; tremor or feeling nervous or worried; feeling unusually tired, weak and sleepy; feeling confused; difficulty in concentrating; short-lasting changes in your sight.

## What to do if you get low blood sugar

- If you are conscious, treat your low blood sugar immediately with 15–20 g of fast-acting carbohydrate: eat glucose tablets or another high sugar snack, like fruit juice, sweets or biscuits (always carry glucose tablets or a high sugar snack, just in case).
- It is recommended that you retest your blood glucose levels after 15–20 minutes and re-treat if your blood glucose levels are still less than 4 mmol/L.
- Wait until the signs of low blood sugar have gone or when your blood sugar level has settled. Then carry on with your insulin treatment as usual.

## What others need to do if you pass out

Tell everyone you spend time with that you have diabetes. Tell them what could happen if your blood sugar gets too low, including the risk of passing out.

Let them know that if you pass out, they must:

- turn you on your side to avoid choking
- get medical help straight away
- **not** give you any food or drink because you may choke.

You may recover more quickly from passing out with an injection of glucagon. This can only be given by someone who knows how to use it.

- If you are given glucagon you will need sugar or a sugary snack as soon as you come round.
- If you do not respond to a glucagon injection, you will have to be treated in a hospital.

If severe low blood sugar is not treated over time, it can cause brain damage. This can be short or long-lasting. It may even cause death.

## Talk to your doctor if:

- your blood sugar got so low that you passed out
- you have been given an injection of glucagon
- you have had too low blood sugar a few times recently.

This is because the dosing or timing of your insulin injections, food or exercise may need to be changed.

## • High blood sugar (hyperglycaemia)

High blood sugar may happen if you:

Eat more or exercise less than usual; drink alcohol; get an infection or a fever; have not used enough insulin; keep using less insulin than you need; forget to use your insulin or stop using insulin.

### Warning signs of high blood sugar – these normally appear gradually:

Flushed skin; dry skin; feeling sleepy or tired; dry mouth; fruity (acetone) breath; urinating more often; feeling thirsty; losing your appetite; feeling or being sick (nausea or vomiting). These may be signs of a very serious condition called ketoacidosis. This is a build-up of acid in the blood because the body is breaking down fat instead of sugar. If not treated, this could lead to diabetic coma and eventually death.

### What to do if you get high blood sugar

- Test your blood sugar level.
- Give a correction dose of insulin if you have been taught how to do this.
- Test your urine for ketones.
- If you have ketones, seek medical help straight away.

#### **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. 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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

### 5. How to store Fiasp

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 label and carton, after 'EXP'. The expiry date refers to the last day of that month.

#### Before first use

Store in a refrigerator (2°C-8°C). Do not freeze. Keep away from the freezing element. Keep the cartridge in the carton in order to protect from light.

#### After first opening or if carried as a spare

Do not refrigerate. You can carry your cartridge (Penfill) with you and keep it at room temperature (not above 30°C) for up to 4 weeks. Always keep the cartridge in the carton in order to protect from light.

Throw away the needle after each injection.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## 6. Contents of the pack and other information

#### What Fiasp contains

- The active substance is insulin aspart. 1 mL solution contains 100 units of insulin aspart. Each cartridge contains 300 units of insulin aspart in 3 mL solution.
- The other ingredients are phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin B<sub>3</sub>), hydrochloric acid (for pH adjustment), sodium hydroxide (for pH adjustment) (see end of section 2 under 'Important information about some of the ingredients of Fiasp') and water for injections.

## What Fiasp looks like and contents of the pack

Fiasp is presented as a clear, colourless and aqueous solution for injection in cartridge.

Pack sizes of 5 and 10 cartridges of 3 mL. Not all pack sizes may be marketed.

### Marketing Authorisation Holder and Manufacturer

Novo Nordisk A/S, Novo Allé, DK-2880 Bagsværd, Denmark

## This leaflet was last revised in

## Other sources of information

Detailed information on this medicine is available on the European Medicines Agency website: <u>http://www.ema.europa.eu</u>.

## Package leaflet: Information for the patient

## Fiasp 100 units/mL solution for injection in vial insulin aspart

# Read all of this leaflet carefully before you start using 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, pharmacist or nurse.
- 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, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

### What is in this leaflet

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

## 1. What Fiasp is and what it is used for

Fiasp is a mealtime insulin with a fast-acting blood sugar lowering effect. Fiasp is a solution for injection containing insulin aspart and is used to treat diabetes mellitus in adults, adolescents and children aged 1 year and above. Diabetes is a disease where your body does not produce enough insulin to control the level of blood sugar. Treatment with Fiasp helps to prevent complications from your diabetes.

Fiasp should be injected up to 2 minutes before the start of the meal, with an option to inject up to 20 minutes after starting the meal.

This medicine has its maximum effect between 1 and 3 hours after the injection and the effect lasts for 3 to 5 hours.

This medicine should normally be used in combination with intermediate-acting or long-acting insulin preparations.

This medicine can also be used for continuous infusion in a pump system.

#### 2. What you need to know before you use Fiasp

#### Do not use Fiasp

• if you are allergic to insulin aspart, or any of the other ingredients of this medicine (listed in section 6).

#### Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Fiasp. Be especially aware of the following:

- Low blood sugar (hypoglycaemia) If your blood sugar is too low, follow the guidance for low blood sugar in section 4 'Possible side effects'. Fiasp starts to lower blood sugar faster compared to other mealtime insulins. If hypoglycaemia occurs, you may experience it earlier after an injection with Fiasp.
- High blood sugar (hyperglycaemia) If your blood sugar is too high, follow the guidance for high blood sugar in section 4 'Possible side effects'.
- Switching from other insulin medicinal products Your doctor may need to advise you on your insulin dose

- If your insulin treatment is being combined with pioglitazone (oral antidiabetic medicine used to treat type 2 diabetes) Tell your doctor as soon as possible if you get signs of heart failure such as unusual shortness of breath or rapid increase in weight or localised swelling caused by fluid retention (oedema).
- Eye disorder Fast improvements in blood sugar control may lead to a temporary worsening of diabetic eye disorder such as diabetic retinopathy.
- Pain due to nerve damage If your blood sugar level improves very fast, you may get nerve related pain, this is usually temporary.
- Swelling around your joints When you first start using your medicine, your body may keep more water than it should. This causes swelling around your ankles and other joints. This is usually only short-lasting.
- Ensuring you use the right type of insulin always check the insulin label before each injection to avoid accidental mix-ups between insulin products.
- Insulin treatment can cause the body to produce antibodies to insulin (substance that act against insulin). However, only very rarely, this will require a change to your insulin dose.

Some conditions and activities can affect how much insulin you need. Talk to your doctor:

- if you have trouble with your kidneys or liver, or with your adrenal, pituitary or thyroid glands.
- if you exercise more than usual or if you want to change your usual diet, as this may affect your blood sugar level.
- if you are ill, carry on taking your insulin and talk to your doctor.
- If you are going abroad, travelling over time zones may affect your insulin needs and the timing of your injections.

When using Fiasp it is strongly recommended that the name and batch number of each package is recorded in order to maintain a record of the batches used.

## Skin changes at the injection site

The injection site should be rotated to help prevent changes to the fatty tissue under the skin, such as skin thickening, skin shrinking or lumps under the skin. The insulin may not work very well if you inject into a lumpy, shrunken or thickened area (see section 3 'How to use Fiasp'). Tell your doctor if you notice any skin changes at the injection site. Tell your doctor if you are currently injecting into these affected areas before you start injecting in a different area. Your doctor may tell you to check your blood sugar more closely, and to adjust your insulin or your other antidiabetic medications dose.

## Children and adolescents

This medicine is not recommended for use in children below the age of 1 year.

## Other medicines and Fiasp

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. Some medicines affect your blood sugar level - this may mean your insulin dose has to change.

Listed below are the most common medicines which may affect your insulin treatment.

Your blood sugar level may fall (hypoglycaemia) if you take:

- other medicines for diabetes (oral and injectable)
- sulphonamides antibiotics (used to treat infections)
- anabolic steroids (such as testosterone)
- beta-blockers (used to treat high blood pressure or angina)
- salicylates (used to relieve pain and lower fever)
- monoamine oxidase inhibitors (MAOI) (used to treat depression)
- angiotensin converting enzyme (ACE) inhibitors (for some heart problems or high blood pressure)

Your blood sugar level may rise (hyperglycaemia) if you take:

• danazol (medicine acting on ovulation)

- oral contraceptives (birth control pills)
- thyroid hormones (for thyroid problems)
- growth hormone (for growth hormone deficiency)
- glucocorticoids (such as 'cortisone' for inflammation)
- sympathomimetics (such as epinephrine (adrenaline), salbutamol or terbutaline for asthma)
- thiazides (for high blood pressure or if your body is keeping too much water (water retention)).

<u>Octreotide and lanreotide</u> - used to treat a rare condition involving too much growth hormone (acromegaly). They may increase or decrease your blood sugar level.

If any of the above applies to you (or you are not sure), talk to your doctor or pharmacist.

#### **Fiasp with alcohol**

If you drink alcohol, your need for insulin may change as your blood sugar level may either rise or fall. You should therefore monitor your blood sugar level more often than usual.

#### **Pregnancy and breast-feeding**

If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine. This medicine can be used during pregnancy; however your insulin dose may need to be changed during pregnancy and after delivery. The amount of insulin you need usually falls during the first 3 months of pregnancy and increases for the remaining 6 months. Careful control of your diabetes is needed in pregnancy. Avoiding low blood sugar (hypoglycaemia) is particularly important for the health of your baby. After you have had your baby your insulin requirements will likely return to how much you needed before your pregnancy.

There are no restrictions on treatment with Fiasp during breast-feeding.

#### Driving and using machines

Having low blood sugar can affect your ability to drive or use any tools or machines. If your blood sugar is low, your ability to concentrate or react might be affected. This could be dangerous to yourself or others. Ask your doctor whether you can drive if:

- you often get low blood sugar
- you find it hard to recognise low blood sugar.

#### Important information about some of the ingredients of Fiasp

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

#### 3. How to use Fiasp

Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

#### When to use Fiasp

Fiasp is a mealtime insulin.

Adults: Fiasp should be injected right before (0-2 minutes) the start of the meal, with an option to inject up to 20 minutes after starting the meal.

Children: Fiasp should be injected right before (0-2 minutes) the start of the meal, with the possibility to inject up to 20 minutes after starting the meal in situations, when there is uncertainty about how the child will eat. Ask your doctor for advice on these situations.

This medicine has its maximum effect between 1 and 3 hours after the injection and the effect lasts for 3 to 5 hours.

#### **Fiasp dose**

## Dose for type 1 and type 2 diabetes

Your doctor will decide together with you:

- how much Fiasp you will need at each meal
- when to check your blood sugar level and if you need a higher or lower dose.

If you want to change your usual diet, check with your doctor, pharmacist or nurse first as a change in diet may alter your need for insulin.

When using other medicines, ask your doctor if your treatment needs to be adjusted.

#### Dose adjustment for type 2 diabetes

The daily dose should be based on your blood sugar level at mealtimes and bedtime from the previous day.

- Before breakfast dose should be adjusted according to the blood sugar level before lunch the previous day.
- Before lunch dose should be adjusted according to the blood sugar level before dinner the previous day.
- Before dinner dose should be adjusted according to the bedtime blood sugar level the previous day.

Table 1 Dose adjustment			
Mealtime or bedtime blood sugar		Dose adjustment	
mmol/L	mg/dL		
less than 4	less than 71	Reduce dose by 1 unit	
4-6	71–108	No dose adjustment	
more than 6	more than 108	Increase dose by 1 unit	

#### Use in elderly patients (65 years or older)

This medicine can be used in elderly patients. Talk to your doctor about changes in your dose.

#### If you have kidney or liver problems

If you have kidney or liver problems you may need to check your blood sugar level more often. Talk to your doctor about changes in your dose.

#### **Injecting Fiasp**

This medicine is for injection under the skin (subcutaneous injection) or for continuous infusion in pumps. Administration in a pump will require a comprehensive instruction by your healthcare professional.

#### Where to inject

- The best places to inject are the front of your waist (abdomen) or upper arms.
- Do not inject into a vein or muscle.
- Change the place within the area where you inject each day to reduce the risk of developing changes under the skin (see section 4).

#### Do not use Fiasp

- if the protective cap on the vial is loose or missing. The vial contains a protective plastic cap in order to obtain a tamper-proof container. If the vial is not in perfect condition when you get it, return the vial to your supplier.
- if the vial has not been stored correctly (see section 5 'How to store Fiasp').
- if the insulin does not appear clear (e.g., cloudy) and colourless.

#### How to inject Fiasp

Before you use Fiasp for the first time, your doctor or nurse will show you how to use it.

- 1 Check the name and strength on the label of the vial to make sure it is Fiasp.
- 2 Remove the protective cap from the vial.

- 3 Always use a new needle and syringe for each injection to prevent contamination. Needles and syringes must not be shared.
- 4 Draw into the syringe the same amount of air as the dose of insulin you are going to inject. Inject the air into the vial.
- 5 Turn the vial and syringe upside down and draw the correct insulin dose into the syringe. Pull the needle out of the vial. Push the air out of the syringe and check that the dose is correct.
- 6 Inject the insulin under the skin. Use the injection technique advised by your doctor or nurse.
- 7 Throw away the needle after each injection.

#### For use in an infusion pump system

Follow the instructions and recommendations from your doctor regarding the use of Fiasp in a pump. Before using Fiasp in the pump system, you must have received a comprehensive instruction in the use and information about any actions to be taken in case of illness, high or low blood sugar or failure of the pump system. If you use Fiasp from a vial in an infusion pump system it can be used for a maximum of 6 days.

### Filling the pump

- Fiasp should never be diluted or mixed with any other insulin.
- Before inserting the needle, use soap and water to clean your hands and the skin where the needle is inserted to avoid any infection at the infusion site.
- When you fill a new reservoir, do not leave large air bubbles in either the syringe or the tubing.
- Changing of the infusion set (tubing and needle) must be done according to the instructions in the product information supplied with the infusion set.

To get the benefit of insulin infusion and to detect possible malfunction of the insulin pump, it is recommended that you measure your blood sugar level regularly.

### What to do if the pump system fails

You should always have an alternative delivery method for your insulin available for injection under the skin (for example, a pen injector or syringes) in case the pump system fails.

#### If you use more Fiasp than you should

If you use too much insulin your blood sugar may get too low (hypoglycaemia), see advice in section 4 under 'Low blood sugar'.

#### If you forget to use Fiasp

If you forget to use your insulin your blood sugar may get too high (hyperglycaemia). See section 4 under 'High blood sugar'.

#### Three simple steps that may help to avoid low or high blood sugar are:

- Always keep spare syringes and a spare vial of Fiasp.
- Always carry something to show you have diabetes.
- Always carry products containing sugar with you. See section 4 under 'What to do if you get low blood sugar'.

## If you stop using Fiasp

Do not stop using your insulin without talking to your doctor. If you stop using your insulin this could lead to a very high blood sugar level (severe hyperglycaemia) and ketoacidosis (a condition with too much acid in the blood which is potentially life-threatening). See symptoms and advice in section 4 under 'High blood sugar'.

#### 4. **Possible side effects**

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

Low blood sugar (hypoglycaemia) is very common with insulin treatment (may affect more than 1 in 10 people). It can be very serious. If your blood sugar level falls too much you may become unconscious. Serious hypoglycaemia may cause brain damage and may be life-threatening. If you have symptoms of low blood sugar, take actions **immediately** to increase your blood sugar level. See advice in 'Low blood sugar' below.

**If you have a serious allergic reaction** (including an anaphylactic shock) to insulin or any of the ingredients in Fiasp (how often this occurs is not known), stop using this medicine and contact emergency medical service straight away.

Signs of a serious allergic reaction may include:

- local reactions (e.g., rash, redness and itching) spread to other parts of your body
- you suddenly feel unwell with sweating
- you start being sick (vomiting)
- you experience difficulty in breathing
- you experience rapid heartbeat or feeling dizzy.

Allergic reactions such as generalised skin rash and facial swelling may occur. These are uncommon and may affect up to 1 in 100 people. See a doctor if the symptoms worsen or you see no improvement in a few weeks.

**Skin changes at the injection site:** If you inject insulin at the same place, the fatty tissue may shrink (lipoatrophy) or thicken (lipohypertrophy) (these are uncommon and may affect up to 1 in 100 people). Lumps under the skin may also be caused by build-up of a protein called amyloid (cutaneous amyloidosis; how often this occurs is not known). The insulin may not work very well if you inject into a lumpy, shrunken or thickened area. Change the injection site with each injection to help prevent these skin changes.

#### Other side effects include:

#### **Common** (may affect up to 1 in 10 people)

<u>Reaction at administration site:</u> Local reactions at the place you inject yourself may occur. The signs may include: rash, redness, inflammation, bruising, irritation, pain and itching. The reactions usually disappear after a few days.

Skin reactions: Signs of allergy on the skin such as eczema, rash, itching, hives and dermatitis may occur.

## General effects from insulin treatment including Fiasp

#### • Low blood sugar (hypoglycaemia) (very common)

#### Low blood sugar may happen if you:

Drink alcohol; use too much insulin; exercise more than usual; eat too little or miss a meal.

#### Warning signs of low blood sugar – these may come on suddenly:

Headache; slurred speech; fast heartbeat; cold sweat; cool pale skin; feeling sick; feeling very hungry; tremor or feeling nervous or worried; feeling unusually tired, weak and sleepy; feeling confused; difficulty in concentrating; short-lasting changes in your sight.

#### What to do if you get low blood sugar

- If you are conscious, treat your low blood sugar immediately with 15–20 g of fast-acting carbohydrate: eat glucose tablets or another high sugar snack, like fruit juice, sweets or biscuits (always carry glucose tablets or a high sugar snack, just in case).
- It is recommended that you retest your blood glucose levels after 15–20 minutes and re-treat if your blood glucose levels are still less than 4 mmol/L.
- Wait until the signs of low blood sugar have gone or when your blood sugar level has settled. Then carry on with your insulin treatment as usual.

## What others need to do if you pass out

Tell everyone you spend time with that you have diabetes. Tell them what could happen if your blood sugar gets too low, including the risk of passing out.

Let them know that if you pass out, they must:

- turn you on your side to avoid choking
- get medical help straight away
- **not** give you any food or drink because you may choke.

You may recover more quickly from passing out with an injection of glucagon. This can only be given by someone who knows how to use it.

- If you are given glucagon you will need sugar or a sugary snack as soon as you come round.
- If you do not respond to a glucagon injection, you will have to be treated in a hospital.

If severe low blood sugar is not treated over time, it can cause brain damage. This can be short or long-lasting. It may even cause death.

### Talk to your doctor if:

- your blood sugar got so low that you passed out
- you have been given an injection of glucagon
- you have had too low blood sugar a few times recently.

This is because the dosing or timing of your insulin injections, food or exercise may need to be changed.

### • *High blood sugar (hyperglycaemia)* High blood sugar may happen if you:

Eat more or exercise less than usual; drink alcohol; get an infection or a fever; have not used enough insulin; keep using less insulin than you need; forget to use your insulin or stop using insulin.

### Warning signs of high blood sugar – these normally appear gradually:

Flushed skin; dry skin; feeling sleepy or tired; dry mouth; fruity (acetone) breath; urinating more often; feeling thirsty; losing your appetite; feeling or being sick (nausea or vomiting). These may be signs of a very serious condition called ketoacidosis. This is a build-up of acid in the blood because the body is breaking down fat instead of sugar. If not treated, this could lead to diabetic coma and eventually death.

## What to do if you get high blood sugar

- Test your blood sugar level.
- Give a correction dose of insulin if you have been taught how to do this.
- Test your urine for ketones.
- If you have ketones, seek medical help straight away.

#### **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. 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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

#### 5. How to store Fiasp

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 label and carton, after 'EXP'. The expiry date refers to the last day of that month.

#### Before first use

Store in a refrigerator (2°C-8°C). Do not freeze. Keep away from the freezing element. Keep the vial in the carton in order to protect from light.

#### After first opening or if carried as a spare

You can carry your vial with you and keep it at room temperature (not above  $30^{\circ}$ C) or in a refrigerator (2°C-8°C) for up to 4 weeks (including time in a pump reservoir). Always keep the vial in the carton in order to protect from light.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

### 6. Contents of the pack and other information

#### What Fiasp contains

- The active substance is insulin aspart. 1 mL solution contains 100 units of insulin aspart. Each vial contains 1,000 units of insulin aspart in 10 mL solution.
- The other ingredients are phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin B<sub>3</sub>), hydrochloric acid (for pH adjustment), sodium hydroxide (for pH adjustment) (see end of section 2 under 'Important information about some of the ingredients of Fiasp') and water for injections.

### What Fiasp looks like and contents of the pack

Fiasp is presented as a clear, colourless and aqueous solution for injection in a vial. Each vial contains 10 mL solution.

Pack sizes of 1, 5 or a multipack with 5 x (1 x 10 mL) vials. Not all pack sizes may be marketed.

### Marketing Authorisation Holder and Manufacturer

Novo Nordisk A/S, Novo Allé, DK-2880 Bagsværd, Denmark

#### This leaflet was last revised in

#### Other sources of information

Detailed information on this medicine is available on the European Medicines Agency website: <u>http://www.ema.europa.eu</u>.

## Package leaflet: Information for the patient

## Fiasp 100 units/mL PumpCart solution for injection in cartridge insulin aspart

# Read all of this leaflet carefully before you start using 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, pharmacist or nurse.
- 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, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

### What is in this leaflet

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

## 1. What Fiasp is and what it is used for

Fiasp is an insulin with a fast-acting blood sugar lowering effect. Fiasp is a solution for injection containing insulin aspart and is used to treat diabetes mellitus in adults, adolescents and children aged 1 year and above. Diabetes is a disease where your body does not produce enough insulin to control the level of blood sugar. Treatment with Fiasp helps to prevent complications from your diabetes.

#### About PumpCart

The PumpCart cartridge is used in an insulin pump designed to be used with this cartridge:

- It covers your total daily insulin needs both your all-day (basal) and mealtime (bolus) insulin needs.
- Before you use a PumpCart cartridge in the pump, your doctor or nurse must have given you detailed instructions.

#### All-day (basal) insulin needs:

When you use Fiasp in a pump, your insulin will be constantly delivered into your body.

- This covers your need for insulin throughout the day.
- Before you set or change the all-day (basal) rate, carefully read the pump manual (user guide).
- If you stop the pump, be aware that the insulin effect will gradually decline over 3 to 5 hours

#### Mealtime (bolus) insulin needs:

- Take your mealtime insulin up to 2 minutes before the start of the meal, with an option to administer up to 20 minutes after starting the meal (see section 3, How to use Fiasp).
- The maximum effect happens between 1 and 3 hours after the mealtime delivery.
- The effect lasts for 3 to 5 hours.

## 2. What you need to know before you use Fiasp

#### Do not use Fiasp<sup>®</sup>

• if you are allergic to insulin aspart, or any of the other ingredients of this medicine (listed in section 6).

#### Warnings and precautions

Talk to your doctor, pharmacist or nurse before using Fiasp. Be especially aware of the following:

- Low blood sugar (hypoglycaemia) If your blood sugar is too low, follow the guidance for low blood sugar in section 4 'Possible side effects'. Fiasp starts to lower blood sugar faster compared to other fast-acting insulins. If hypoglycaemia occurs, you may experience it earlier after an administration with Fiasp.
- High blood sugar (hyperglycaemia) If your blood sugar is too high, follow the guidance for high blood sugar in section 4 'Possible side effects'.
- Switching from other insulin medicinal products Your doctor may need to advise you on your insulin dose
- If your insulin treatment is being combined with pioglitazone (oral antidiabetic medicine used to treat type 2 diabetes) Tell your doctor as soon as possible if you get signs of heart failure such as unusual shortness of breath or rapid increase in weight or localised swelling caused by fluid retention (oedema).
- Eye disorder Fast improvements in blood sugar control may lead to a temporary worsening of diabetic eye disorder such as diabetic retinopathy.
- Pain due to nerve damage If your blood sugar level improves very fast, you may get nerve related pain, this is usually temporary.
- Swelling around your joints When you first start using your medicine, your body may keep more water than it should. This causes swelling around your ankles and other joints. This is usually only short-lasting.
- Ensuring you use the right type of insulin always check the insulin label before each injection to avoid accidental mix-ups between insulin products.
- Insulin treatment can cause the body to produce antibodies to insulin (substance that act against insulin). However, only very rarely, this will require a change to your insulin dose.

If you have poor eyesight, please see section 3 'How to use Fiasp'.

Some conditions and activities can affect how much insulin you need. Talk to your doctor:

- if you have trouble with your kidneys or liver, or with your adrenal, pituitary or thyroid glands.
- if you exercise more than usual or if you want to change your usual diet, as this may affect your blood sugar level.
- if you are ill, carry on taking your insulin and talk to your doctor.
- If you are going abroad, travelling over time zones may affect your insulin needs and the timing of your injections.

When using Fiasp it is strongly recommended that the name and batch number of each package is recorded in order to maintain a record of the batches used.

Fiasp PumpCart is only for use with the following insulin infusion pump systems: the Accu-Chek Insight and YpsoPump insulin pumps. It must not be used with other pumps, as this may give you a wrong dose of your insulin and can lead to high or low blood sugar.

#### Skin changes at the injection site

The injection site should be rotated to help prevent changes to the fatty tissue under the skin, such as skin thickening, skin shrinking or lumps under the skin. The insulin may not work very well if you inject into a lumpy, shrunken or thickened area (see section 3 'How to use Fiasp'). Tell your doctor if you notice any skin changes at the injection site. Tell your doctor if you are currently injecting into these affected areas before you start injecting in a different area. Your doctor may tell you to check your blood sugar more closely, and to adjust your insulin or your other antidiabetic medications dose.

#### Children and adolescents

This medicine is not recommended for use in children below the age of 1 year.

#### **Other medicines and Fiasp**

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines. Some medicines affect your blood sugar level – this may mean your insulin dose has to change.

Listed below are the most common medicines which may affect your insulin treatment.

Your blood sugar level may fall (hypoglycaemia) if you take:

- other medicines for diabetes (oral and injectable)
- sulphonamides antibiotics (used to treat infections)
- anabolic steroids (such as testosterone)
- beta-blockers (used to treat high blood pressure or angina)
- salicylates (used to relieve pain and lower fever
- monoamine oxidase inhibitors (MAOI) (used to treat depression)
- angiotensin converting enzyme (ACE) inhibitors (for some heart problems or high blood pressure)

Your blood sugar level may rise (hyperglycaemia) if you take:

- danazol (medicine acting on ovulation)
- oral contraceptives (birth control pills)
- thyroid hormones (for thyroid problems)
- growth hormone (for growth hormone deficiency)
- glucocorticoids (such as 'cortisone' for inflammation)
- sympathomimetics (such as epinephrine (adrenaline), salbutamol or terbutaline for asthma)
- thiazides (for high blood pressure or if your body is keeping too much water (water retention)).

<u>Octreotide and lanreotide</u> – used to treat a rare condition involving too much growth hormone (acromegaly). They may increase or decrease your blood sugar level.

If any of the above applies to you (or you are not sure), talk to your doctor or pharmacist.

#### Fiasp with alcohol

If you drink alcohol, your need for insulin may change as your blood sugar level may either rise or fall. You should therefore monitor your blood sugar level more often than usual.

## Pregnancy and breast-feeding

If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine. This medicine can be used during pregnancy; however your insulin dose may need to be changed during pregnancy and after delivery. The amount of insulin you need usually falls during the first 3 months of pregnancy and increases for the remaining 6 months. Careful control of your diabetes is needed in pregnancy. Avoiding low blood sugar (hypoglycaemia) is particularly important for the health of your baby. After you have had your baby your insulin requirements will likely return to how much you needed before your pregnancy.

There are no restrictions on treatment with Fiasp during breast-feeding.

## Driving and using machines

Having low blood sugar can affect your ability to drive or use any tools or machines. If your blood sugar is low, your ability to concentrate or react might be affected. This could be dangerous to yourself or others. Ask your doctor whether you can drive if:

- you often get low blood sugar
- you find it hard to recognise low blood sugar.

## Important information about some of the ingredients of Fiasp

This medicine contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially 'sodium-free'.

## 3. How to use Fiasp

If you are blind or have poor eyesight and cannot read the screen of the pump, do not use this pump without help. Get help from a person with good eyesight who is trained to use the pump.

## Dose and when to use Fiasp

Always use your insulin and adjust your all-day (basal) and mealtime (bolus) doses exactly as your doctor has told you. Check with your doctor, nurse or pharmacist if you are not sure.

• Adjust your mealtime (bolus) insulin based on your blood sugar measurement and food intake.

## Adults

Fiasp mealtime doses should be taken right before (0-2 minutes) the start of the meal, with an option to take up to 20 minutes after starting the meal.

### Children

Fiasp mealtime doses should be taken right before (0-2 minutes) the start of the meal, with the possibility to take up to 20 minutes after starting the meal in situations, when there is uncertainty about how the child will eat. Ask your doctor for advice on these situations.

If you want to change your usual diet, check with your doctor, pharmacist or nurse first as a change in diet may alter your need for insulin.

When using other medicines, ask your doctor if your treatment needs to be adjusted.

#### Use in elderly patients (65 years or older)

This medicine can be used in elderly patients. Talk to your doctor about changes in your dose.

### If you have kidney or liver problems

If you have kidney or liver problems you may need to check your blood sugar level more often. Talk to your doctor about changes in your dose.

## **Injecting Fiasp**

This medicine is only suitable for injection under the skin (subcutaneous). Only use a pump that is designed to be used with this cartridge.

- Before you use the PumpCart cartridge in the pump, your doctor or nurse must have given you detailed instructions.
- Speak to your doctor if you need to inject your insulin by another method.

#### Where to inject

- Normally you will inject your insulin in the front of your waist (abdomen). However, if your doctor recommends it, you may use your upper arm.
- Do not inject into a vein or muscle.
- When you change the infusion set (tubing and needle), be sure to change where you insert the needle. This may reduce the risk of developing changes under the skin (see section 4 'Possible side effects').

#### Do not use Fiasp

- if the cartridge or the device containing the cartridge you are using is dropped, damaged or crushed. Take it back to your supplier.
- if the cartridge has not been stored correctly (see section 5 'How to store Fiasp').
- if the insulin does not appear clear (e.g., cloudy) and colourless.

Detailed instructions on how to use your PumpCart are provided on the other side of this leaflet.

#### How to inject Fiasp

- Read and follow the pump manual (user guide) that comes with your insulin pump.
- Make sure to use an infusion set (tubing and needle) suitable for your insulin pump.

- Check the name and strength on the label of the cartridge (PumpCart) to make sure it is Fiasp.
- Infusion set (tubing and needle) and the PumpCart cartridge must not be shared.
- Changing of the infusion set (tubing and needle) must be done according to the instructions in the product information supplied with the infusion set.

#### What to do if the pump system fails

You should always have an alternative delivery method for your insulin available for injection under the skin (for example, a pen injector or syringes) in case the pump system fails.

### If you use more Fiasp than you should

If you use too much insulin your blood sugar may get too low (hypoglycaemia), see advice in section 4 under 'Low blood sugar'.

#### If you forget to use Fiasp

If you forget to use your insulin your blood sugar may get too high (hyperglycaemia). See section 4 under 'High blood sugar'.

#### Three simple steps that may help to avoid low or high blood sugar are:

- Always keep spare cartridges of Fiasp.
- Always carry something to show you have diabetes.
- Always carry products containing sugar with you. See section 4 under 'What to do if you get low blood sugar'.

### If you stop using Fiasp

Do not stop using your insulin without talking to your doctor. If you stop using your insulin this could lead to a very high blood sugar level (severe hyperglycaemia) and ketoacidosis (a condition with too much acid in the blood which is potentially life-threatening). See symptoms and advice in section 4 under 'High blood sugar'.

#### 4. **Possible side effects**

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

Low blood sugar (hypoglycaemia) is very common with insulin treatment (may affect more than 1 in 10 people). It can be very serious. If your blood sugar level falls too much you may become unconscious. Serious hypoglycaemia may cause brain damage and may be life-threatening. If you have symptoms of low blood sugar, take actions **immediately** to increase your blood sugar level. See advice in 'Low blood sugar' below.

**If you have a serious allergic reaction** (including an anaphylactic shock) to insulin or any of the ingredients in Fiasp (how often this occurs is not known), stop using this medicine and contact emergency medical service straight away.

Signs of a serious allergic reaction may include:

- local reactions (e.g., rash, redness and itching) spread to other parts of your body
- you suddenly feel unwell with sweating
- you start being sick (vomiting)
- you experience difficulty breathing
- you experience rapid heartbeat or feel dizzy.

Allergic reactions such as generalised skin rash and facial swelling may occur. These are uncommon and may affect up to 1 in 100 people. See a doctor if the symptoms worsen or you see no improvement in a few weeks.

**Skin changes at the injection site:** If you inject insulin at the same place, the fatty tissue may shrink (lipoatrophy) or thicken (lipohypertrophy) (these are uncommon and may affect up to 1 in 100

people). Lumps under the skin may also be caused by build-up of a protein called amyloid (cutaneous amyloidosis; how often this occurs is not known). The insulin may not work very well if you inject into a lumpy, shrunken or thickened area. Change the injection site with each injection to help prevent these skin changes.

## Other side effects include:

**Common** (may affect up to 1 in 10 people)

<u>Reaction at administration site:</u> Local reactions at the place you inject yourself may occur. The signs may include: rash, redness, inflammation, bruising, irritation, pain and itching. The reactions usually disappear after a few days.

Skin reactions: Signs of allergy on the skin such as eczema, rash, itching, hives and dermatitis may occur.

## General effects from insulin treatment including Fiasp

## • Low blood sugar (hypoglycaemia) (very common)

## Low blood sugar may happen if you:

Drink alcohol; use too much insulin; exercise more than usual; eat too little or miss a meal.

## Warning signs of low blood sugar – these may come on suddenly:

Headache; slurred speech; fast heartbeat; cold sweat; cool pale skin; feeling sick; feeling very hungry; tremor or feeling nervous or worried; feeling unusually tired, weak and sleepy; feeling confused; difficulty in concentrating; short-lasting changes in your sight.

## What to do if you get low blood sugar

- If you are conscious, treat your low blood sugar immediately with 15–20 g of fast-acting carbohydrate: eat glucose tablets or another high sugar snack, like fruit juice, sweets or biscuits (always carry glucose tablets or a high sugar snack, just in case) and adjust insulin delivery or stop your pump.
- It is recommended that you retest your blood glucose levels after 15–20 minutes and re-treat if your blood glucose levels are still less than 4 mmol/L.
- Wait until the signs of low blood sugar have gone or when your blood sugar level has settled. Then carry on with your insulin treatment as usual.

## What others need to do if you pass out

Tell everyone you spend time with that you have diabetes. Tell them what could happen if your blood sugar gets too low, including the risk of passing out.

Let them know that if you pass out, they must:

- turn you on your side to avoid choking
- get medical help straight away
- **not** give you any food or drink because you may choke.

You may recover more quickly from passing out with an injection of glucagon. This can only be given by someone who knows how to use it.

- If you are given glucagon you will need sugar or a sugary snack as soon as you come round.
- If you do not respond to a glucagon injection, you will have to be treated in a hospital.

If severe low blood sugar is not treated over time, it can cause brain damage. This can be short or long-lasting. It may even cause death.

## Talk to your doctor if:

- your blood sugar got so low that you passed out
- you have been given an injection of glucagon
- you have had too low blood sugar a few times recently.

This is because the dosing or timing of your insulin injections, food or exercise may need to be changed.

## • High blood sugar (hyperglycaemia)

## High blood sugar may happen if you:

Eat more or exercise less than usual; drink alcohol; get an infection or a fever; have not used enough insulin; keep using less insulin than you need; forget to use your insulin or stop using insulin.

## Warning signs of high blood sugar – these normally appear gradually:

Flushed skin; dry skin; feeling sleepy or tired; dry mouth; fruity (acetone) breath; urinating more often; feeling thirsty; losing your appetite; feeling or being sick (nausea or vomiting). These may be signs of a very serious condition called ketoacidosis. This is a build-up of acid in the blood because the body is breaking down fat instead of sugar. If not treated, this could lead to diabetic coma and eventually death.

## What to do if you get high blood sugar

- Test your blood sugar level.
- Give a correction dose of insulin if you have been taught how to do this.
- Test your urine for ketones.
- If you have ketones, seek medical help straight away.

## **Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. 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 <u>Appendix V</u>. By reporting side effects you can help provide more information on the safety of this medicine.

## 5. How to store Fiasp

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 label and carton, after 'EXP'. The expiry date refers to the last day of that month.

## Before first use

Store in a refrigerator (2°C-8°C). Do not freeze. Keep away from the freezing element. Keep the cartridge in the carton in order to protect from light.

## After first opening or if carried as a spare

- Do not refrigerate during use.
- You can keep your cartridge (PumpCart) at room temperature (not above 30°C) for up to 2 weeks.
- After that, it can be used for up to 7 days below 37°C in a pump designed to be used with this cartridge.
- Keep the PumpCart cartridge in the outer carton until use to protect it from damage. Always protect the cartridge from light during use.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## 6. Contents of the pack and other information

## What Fiasp contains

• The active substance is insulin aspart. 1 mL solution contains 100 units of insulin aspart. Each cartridge contains 160 units of insulin aspart in 1.6 mL solution.

• The other ingredients are phenol, metacresol, glycerol, zinc acetate, disodium phosphate dihydrate, arginine hydrochloride, nicotinamide (vitamin B<sub>3</sub>), hydrochloric acid (for pH adjustment), sodium hydroxide (for pH adjustment) (see end of section 2 under 'Important information about some of the ingredients of Fiasp') and water for injections.

### What Fiasp looks like and contents of the pack

Fiasp is presented as a clear, colourless and aqueous solution for injection in cartridge.

Pack sizes of 5 or a multipack with 25 (5 packs of 5) cartridges of 1.6 mL. Not all pack sizes may be marketed.

#### Marketing Authorisation Holder and Manufacturer

Novo Nordisk A/S, Novo Allé, DK-2880 Bagsværd, Denmark

#### This leaflet was last revised in

#### Other sources of information

Detailed information on this medicine is available on the European Medicines Agency website: <u>http://www.ema.europa.eu</u>.

## Instructions on how to use Fiasp PumpCart pre-filled cartridge.

## Only use Fiasp PumpCart with an insulin infusion pump system designed to be used with this cartridge, such as the Accu-Chek Insight and YpsoPump insulin pumps.

- Do not use with other devices not designed for the PumpCart cartridge.
- This is because it may result in incorrect insulin dosing and lead to high blood sugar (hyperglycaemia) or low blood sugar (hypoglycaemia).

Please read these instructions carefully before using your PumpCart cartridge.

Please also read the pump manual (user guide) that comes with your insulin pump.

- The PumpCart cartridge is ready for use directly in the pump.
- The PumpCart cartridge contains 1.6 mL insulin aspart solution, equivalent to 160 units.
- Never mix with any other medicinal products.
- Do not refill the PumpCart cartridge. Once empty, it must be disposed.
- Always make sure you have a spare PumpCart cartridge available.
- Do not use the PumpCart cartridge in an insulin pen, because this may result in incorrect dosing.
- Protect the PumpCart cartridge from excessive heat and light during storage and use.
- Keep the PumpCart cartridge out of reach of others, especially children.



#### 1. Before inserting a PumpCart cartridge into your pump

- Bring a PumpCart cartridge to room temperature.
- Take the PumpCart cartridge out of its carton and blister package.
- Check the label to make sure that it is a Fiasp PumpCart cartridge.
- Check the expiry date which is on the label and the carton.
- Always check that the PumpCart cartridge looks the way it should (picture A). **Do not use** it if any damage or leakage is seen or if the plunger has moved, making the bottom of the plunger visible above the white label band. This could be a result of leakage of insulin. In picture A the bottom of the plunger is hidden behind the white label band as it should be. If you suspect the PumpCart cartridge is damaged, take it back to your supplier.
- Check that the insulin in the PumpCart cartridge is clear and colourless. If the insulin looks cloudy, do not use the PumpCart cartridge. The cartridge may contain small bubbles.

## 2. Inserting a new Fiasp PumpCart cartridge in your pump

- Follow the instructions in the pump user manual to insert a new PumpCart cartridge in your pump.
- Insert a PumpCart cartridge in the cartridge compartment of the pump. The plunger goes in first.
- Connect the infusion set with the PumpCart cartridge by attaching the adapter onto your pump.
- Follow the instructions in the pump user manual to continue using your pump.

## 3. Removing an empty Fiasp PumpCart cartridge from your pump

- Follow the instructions in the pump user manual to remove an empty PumpCart cartridge from your pump.
- Remove the infusion set adapter from the empty PumpCart cartridge.
- Dispose of the empty PumpCart cartridge and the used infusion set as instructed by your doctor or nurse.
- Follow the steps described in section 1 and 2 to prepare and insert a new PumpCart cartridge into your pump.