ANNEX I

SUMMARY OF PRODUCT CHARACTERISTICS

▼This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. See section 4.8 for how to report adverse reactions.

1. NAME OF THE MEDICINAL PRODUCT

Zegalogue 0.6 mg solution for injection in pre-filled syringe

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each pre-filled syringe contains 0.6 mg dasiglucagon (as hydrochloride) in 0.6 mL.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Solution for injection (injection)
Clear, colorless solution, pH 6.5 and osmolality of 330-490 mOsm/kg.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Zegalogue is indicated for the treatment of severe hypoglycaemia in adults, adolescents, and children aged 6 years and over with diabetes mellitus.

4.2 Posology and method of administration

Posology

Adults, adolescents and children aged 6 years and over
The recommended dose is 0.6 mg administered by a subcutaneous injection.

If there has been no response after 15 minutes, an additional dose of Zegalogue from a new pre-filled syringe may be administered.

Special populations

Elderly
Zegalogue can be used in elderly patients. No dose adjustment is required.
Efficacy and safety data are very limited in patients aged 65 years and absent in patients aged 75 and above.

Renal impairment
Zegalogue can be used in patients with renal impairment. No dose adjustment is required.

Hepatic impairment
Zegalogue can be used in patients with hepatic impairment. No dose adjustment is required.

Paediatric population (< 6 years)
The safety and efficacy of Zegalogue in children aged less than 6 years have not yet been established. No data are available.

Method of administration

Subcutaneous use.

Zegalogue is to be injected in the lower abdomen, buttocks, thigh, or outer upper arm.

Patients and their caregivers should be instructed on the signs and symptoms of severe hypoglycaemia. As severe hypoglycaemia requires the help of others to recover, the patient should be instructed to inform those around them about Zegalogue and its package leaflet. Zegalogue should be administered as soon as possible when severe hypoglycaemia is recognised.

Patients and caregivers should be instructed on how to correctly use Zegalogue and to read the package leaflet. The following instructions should be emphasised:

Instructions for use, pre-filled syringe:

1. When administering Zegalogue pre-filled syringe, insert the needle into the skin and press the plunger fully down until the syringe is empty.
2. After the injection is given, if the person is unconscious, turn the person on their side to prevent choking.
3. After giving the dose, the caregiver should call for medical help right away.
4. If there has been no response after 15 minutes, an additional dose of Zegalogue from a new pre-filled syringe may be administered while waiting for emergency assistance.
5. When the patient has responded to treatment, give oral carbohydrate to restore liver glycogen and prevent relapse of hypoglycaemia.

Each pre-filled syringe contains a single dose of dasiglucagon and cannot be reused.

For further information before administration see section 6.6.

4.3 Contraindications

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

Phaeocromocytoma (see section 4.4).

4.4 Special warnings and precautions for use

Glycogen stores and hypoglycaemia

Dasiglucagon is effective in treating hypoglycaemia only if sufficient liver glycogen is present. To prevent relapse of the hypoglycaemia, oral carbohydrates should be given to restore liver glycogen, when the patient has responded to treatment. Patients in states of starvation, with adrenal insufficiency, chronic alcohol abuse or chronic hypoglycaemia may not have adequate levels of hepatic glycogen for dasiglucagon administration to be effective. Patients with these conditions should be treated with glucose.

Phaeocromocytoma

Glucagon stimulates the release of catecholamines. In the presence of phaeocromocytoma, glucagon products can cause the tumour to release large amounts of catecholamines, which will cause an acute hypertensive reaction. Zegalogue is contraindicated in patients with phaeochromocytoma (see section 4.3).

Insulinoma

In patients with insulinoma, administration of glucagon medicinal products may produce an initial increase in blood glucose. However, dasiglucagon administration may directly or indirectly (through an initial rise in blood glucose) stimulate exaggerated insulin release from an insulinoma and cause hypoglycaemia. A patient developing symptoms of hypoglycaemia after a dose of dasiglucagon should be given glucose orally or intravenously.

Excipients

This medicinal product contains less than 1 mmol sodium (23 mg) per dose (0.6 mL), that is to say essentially 'sodium-free'.

Latex

In latex-sensitive individuals the medicinal product may cause severe allergic reactions.

4.5 Interaction with other medicinal products and other forms of interaction

Dasiglucagon does not inhibit CYP enzymes and drug transporters in vitro at clinically relevant concentrations.

Insulin

Reacts antagonistically towards dasiglucagon.

Indometacin

When used with indometacin, dasiglucagon may lose its ability to raise blood glucose or may even produce hypoglycaemia.

Warfarin

Dasiglucagon may increase the anticoagulant effect of warfarin.

Beta-blockers

Patients taking beta-blockers might be expected to have a greater increase in both pulse and blood pressure when taking dasiglucagon, an increase of which will be transient because of the short half-life of dasiglucagon. The increase in blood pressure and pulse rate may require therapy in patients with coronary artery disease.

4.6 Fertility, pregnancy and lactation

Pregnancy

There are no data from the use of dasiglucagon, a glucagon analogue, in pregnant women. The use of glucagon has been reported in pregnant women with diabetes and no harmful effects are known with respect to the course of pregnancy and the health of the unborn and the neonate.

Studies in animals with dasiglucagon have shown reproductive toxicity (see section 5.3). Untreated hypoglycaemia in pregnancy can cause complications and may be fatal.

The use of Zegalogue during pregnancy should be considered only if the expected benefit justifies the potential risk to the foetus.

Breast-feeding

Dasiglucagon is cleared from the bloodstream very quickly and thus the amount excreted in the milk of nursing mothers following treatment of severe hypoglycaemic reactions is expected to be extremely small. As dasiglucagon is degraded in the digestive tract and cannot be absorbed in its intact form, it will not exert any metabolic effect in the child. Zegalogue can be used during breast-feeding.

Fertility

Based on animal data, dasiglucagon had no effect on male or female fertility (see section 5.3).

4.7 Effects on ability to drive and use machines

Zegalogue has no or neglible influence on the ability to drive and use machines.

The patient's ability to concentrate and react may be impaired as a result of hypoglycaemia which may persist for a brief period after receiving treatment. This may present a risk in situations where these abilities are especially important, such as driving or using machines.

4.8 Undesirable effects

Summary of the safety profile

The most frequently reported adverse reactions are nausea (62.2%), vomiting (31.6%) and headache (9.6%).

Tabulated list of adverse reactions

Adverse reactions associated with dasiglucagon obtained from clinical studies are tabulated below. Adverse reactions associated with dasiglucagon are listed by system organ class and frequency. Frequency categories are defined as: very common (≥ 1/10); common (≥ 1/100 to < 1/10); uncommon (≥ 1/1 000 to < 1/100); rare (≥ 1/10 000 to < 1/1 000); very rare (< 1/10 000); not known (cannot be estimated from the available data).

Table 1Tabulated list of adverse reactions associated with dasiglucagon

System organ class	**Very common (≥ 1/10)**	**Common (≥ 1/100 to < 1/10)**	**Uncommon (≥ 1/1 000 to < 1/100)**
Nervous system disorders		Headache Dizziness	Presyncope
Cardiac disorders			Palpitations Bradycardia
Vascular disorders			Hypotension Hypertension Hot flush
Gastrointestinal disorders	Nausea Vomiting	Diarrhoea	Abdominal pain upper
Skin and subcutaneous tissue disorders			Hyperhidrosis
General disorders and administration site conditions		Injection site erythema	Injection site pruritus Injection site pain Injection site oedema Fatigue

Description of selected adverse reactions

Hypersensitivity reactions, including anaphylactic reactions have been observed with injectable glucagon and reported as ‘very rare’ (less than 1 case per 10 000 patients) and are known medicinal class effects of glucagon.

Paediatric population

Safety results in a limited paediatric population of 20 patients aged 7-17 years old, in a placebo-controlled trial were consistent with the safety profile in adults, except for nausea (65%) and vomiting (50%), which were less frequent in adults.

Reporting of suspected adverse reactions

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

4.9 Overdose

If overdose occurs, the patient may experience nausea, vomiting, inhibition of gastro-intestinal tract motility, increase in blood pressure and pulse rate. In case of suspected overdosing, serum potassium may decrease and should be monitored and corrected if needed. If the patient develops a dramatic increase in blood pressure, use of non-selective α-adrenergic blockade has been shown to be effective in lowering blood pressure for the short time that control would be needed.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Pancreatic hormones, glycogenolytic hormones, ATC code: H04AA02.

Mechanism of action

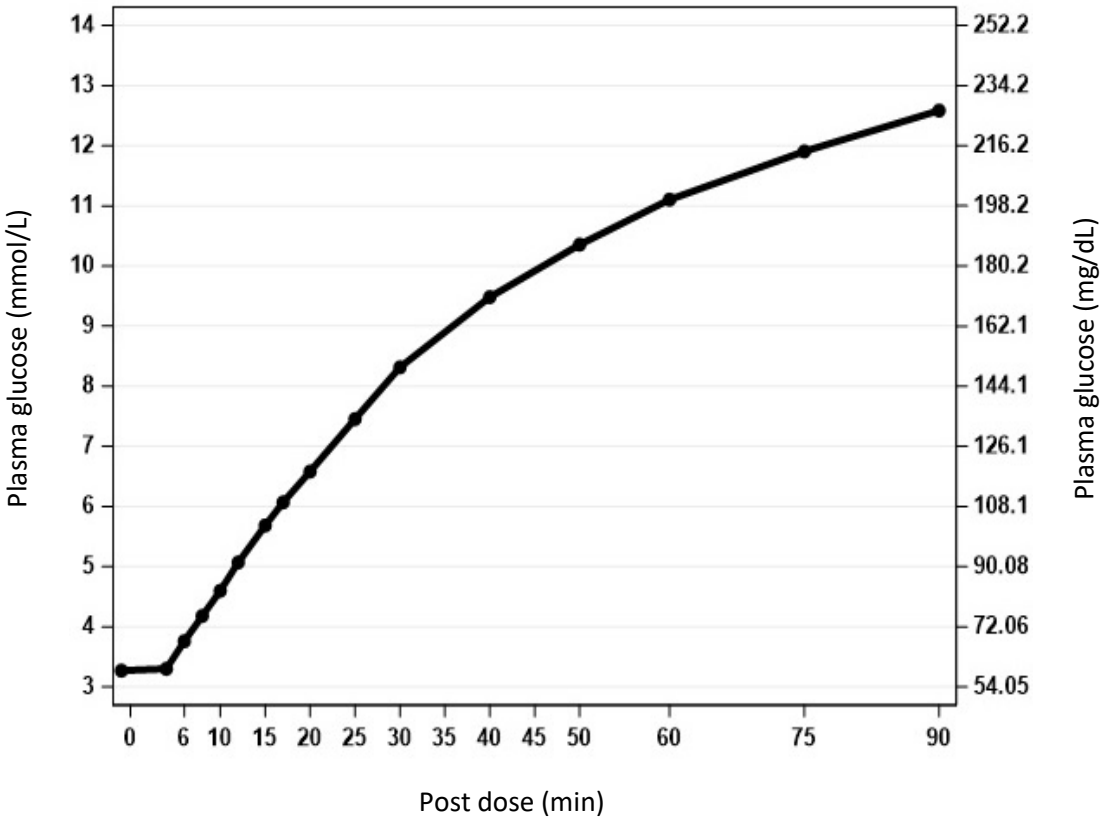
Dasiglucagon is a glucagon receptor agonist analogue, which increases blood glucose concentration by activating hepatic glucagon receptors, thereby stimulating glycogen breakdown and release of glucose from the liver. Hepatic stores of glycogen are necessary for dasiglucagon to produce an antihypoglycaemic effect (see section 4.4).

Pharmacodynamic effects

Gender and injection site had no clinically meaningful effect on the pharmacodynamics of dasiglucagon.

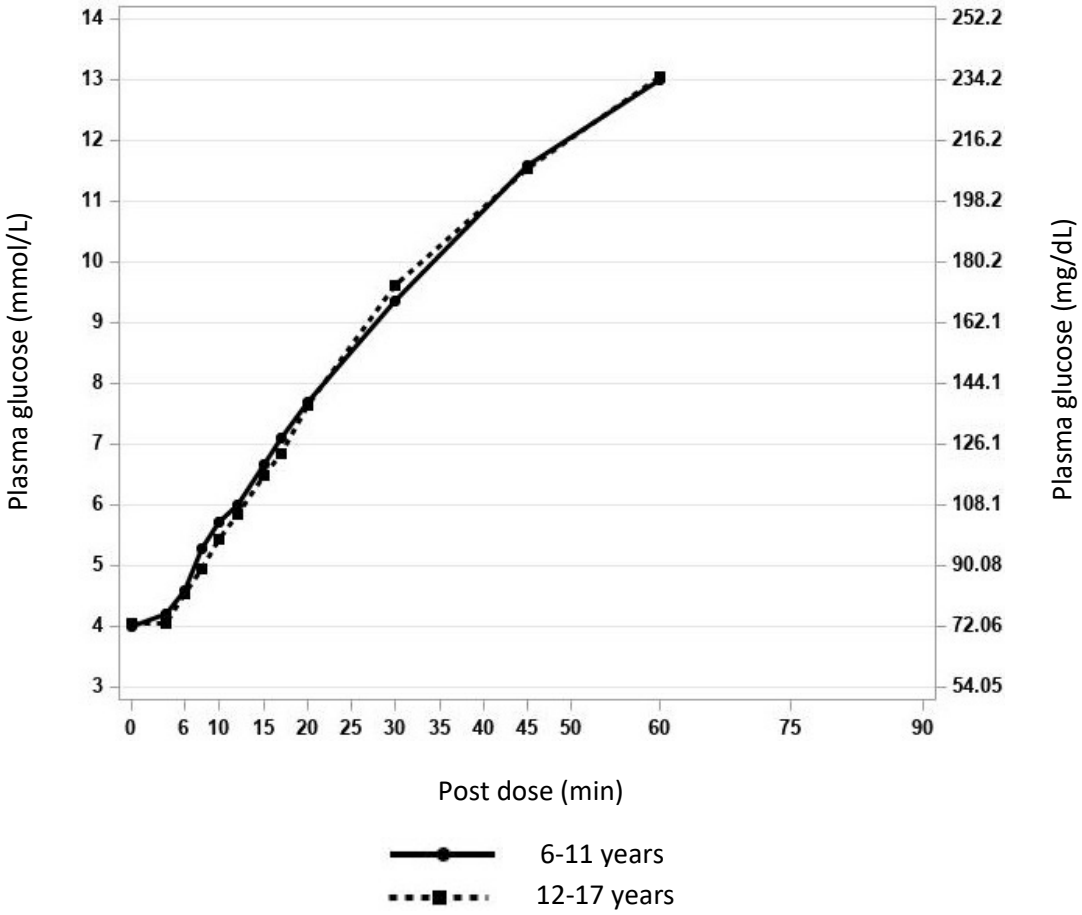
After administration of dasiglucagon in adult patients with type 1 diabetes (Trial 16137), the time course of glucose is shown, with a mean glucose increase from baseline to 90 minutes of 9.3 mmol/L (168 mg/dL) (Figure 1).

Figure 1 **Mean plasma glucose over time in adults with type 1 diabetes administered 0.6 mg dasiglucagon in Trial 16137**



In paediatric patients (7 to 17 years) with type 1 diabetes (Trial 17086), the time course of glucose is shown for children and adolescents, with a mean glucose increase at 60 minutes after administration of dasiglucagon of 9.0 mmol/L (162 mg/dL) (Figure 2).

Figure 2 **Mean plasma glucose over time in paediatric patients with type 1 diabetes administered 0.6 mg dasiglucagon in Trial 17086**



Immunogenicity
Anti-drug antibodies (ADA) were uncommonly detected. No evidence of ADA impact on pharmacokinetics, efficacy or safety was observed, however, data are still limited.

Clinical efficacy and safety

Three randomised, double-blind, placebo-controlled, multicenter trials were conducted in patients with type 1 diabetes. Two trials (Trial 16137 and Trial 17145) were conducted in adult patients, and one trial (Trial 17086) was conducted in paediatric patients aged 6 to 17 years. In all 3 trials, patients were randomised to dasiglucagon 0.6 mg, placebo, or (in Trials 16137 and 17086) glucagon for injection 1.0 mg. Dasiglucagon and the comparators were administered as single subcutaneous injections following a controlled induction of hypoglycaemia using intravenous administration of insulin. During this procedure, a plasma glucose concentration of < 60 mg/dL was targeted in Trials 16137 and 17145, whereas the target was < 80 mg/dL in Trial 17086. The primary efficacy endpoint for all 3 trials was time to plasma glucose recovery (treatment success), defined as an increase in blood glucose of ≥ 20 mg/dL from time of administration, without additional intervention within 45 minutes. The primary hypothesis test was superiority of dasiglucagon versus placebo. There was no formal hypothesis test of dasiglucagon versus glucagon for injection.

Trial 16137 randomised a total of 170 patients 2:1:1 to dasiglucagon, placebo, and glucagon for injection. The mean age of the patients was 39.1 years (96% were < 65 years), and the mean duration of diabetes was 20.0 years; 63% were male; 92% were White. The mean baseline plasma glucose was 58.8 mg/dL. The median time to plasma glucose recovery was statistically significantly shorter for dasiglucagon (10 minutes) versus placebo (40 minutes) (Table 2). The median time to plasma glucose

recovery was numerically similar between dasiglucagon (10 minutes) and glucagon for injection (12 minutes).

Trial 17145 randomised a total of 45 patients 3:1 to dasiglucagon and placebo. The mean age of the patients was 41.0 years (95% were < 65 years), and the mean duration of diabetes was 22.5 years; 57% were male; 93% were White. The mean baseline plasma glucose was 55.0 mg/dL. The median time to plasma glucose recovery was statistically significantly shorter for dasiglucagon (10 minutes) versus placebo (35 minutes) (Table 2).

Table 2 Plasma glucose recovery in adult patients

	Trial 16137		**Trial 17145**	
	Dasiglucagon N=82	**Placebo N=43**	**Dasiglucagon N=34**	**Placebo N=10**
Median time to recovery [95% CI[a]]	10 min [10; 10][b]	40 min [30; 40]	10 min [8; 12][b]	35 min [20; -)
N is the number of patients who were randomized and treated [a]log-log confidence interval [b]P < 0.001 versus placebo (log-rank test stratified by injection sites)				

Paediatric population

Trial 17086 randomised a total of 42 patients 2:1:1 to dasiglucagon, placebo, and glucagon for injection. Patients were stratified by age (6-11 years and 12-17 years). The mean age of the patients was 12.5 years (range 7 to 17 years), and the mean duration of diabetes was 5.9 years; 56% were male; 95% were White. The mean baseline plasma glucose was 72.0 mg/dL. The median time to plasma glucose recovery was statistically significantly shorter for dasiglucagon (10 minutes) versus placebo (30 minutes) (Table 3). The median time to plasma glucose recovery was numerically similar between dasiglucagon (10 minutes) and glucagon for injection (10 minutes).

Table 3 Plasma glucose recovery in paediatric patients

	Trial 17086	
	Dasiglucagon N=20	**Placebo N=11**
Median time to recovery [95% CI[a]]	10 min [8; 12][b]	30 min [20; -)
N is the number of patients who were randomized and treated. [a]log-log confidence interval [b]P < 0.001 versus placebo (log-rank test stratified by injection site and age group)		

The European Medicines Agency has deferred the obligation to submit the results of studies with Zegalogue in one or more subsets of the paediatric population in the treatment of severe hypoglycaemia (see section 4.2 for information on paediatric use).

5.2 Pharmacokinetic properties

Absorption

Dasiglucagon absorption following subcutaneous injection of 0.6 mg in adults resulted in a mean peak plasma concentration of 1 510 pmol/L at around 35 minutes.

Distribution

The mean apparent volume of distribution was 47 L to 57 L following subcutaneous administration.

Biotransformation

Metabolism data indicated that dasiglucagon is cleared like native glucagon through proteolytic degradation pathways in blood, liver, and kidney.

Elimination

The half-life of dasiglucagon was approximately 30 minutes.

Hepatic impairment

No formal studies have been performed to evaluate hepatic impairment.

Paediatric population

Data from one trial (Trial 17086) conducted in paediatric patients aged 7 to 17 years with type 1 diabetes showed that after administration of dasiglucagon, the mean peak plasma concentration of 1 160 pmol/L occurred at around 21 minutes.

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, carcinogenic potential.

Reproductive and developmental toxicity

In rats administered subcutaneously daily with dasiglucagon for 12 days, maternal toxicity, in terms of decreased body weight gain, lower fetal body weight, and delayed bone ossification, was observed at ≥ 10 mg/kg/day (≥ 475 times the human dose based on the Area Under the Curve (AUC)).

In rabbits administered subcutaneously daily with dasiglucagon for 14 days, lower fetal body weight and delayed bone ossification were observed at 1 mg/kg/day (100 times the human dose based on AUC), a dose that also induced maternal toxicity in terms of decreased body weight gain. At ≥ 0.3 mg/kg/day (≥ 20 times the human dose based on AUC), dasiglucagon caused fetal skeletal and visceral malformations with no maternal toxicity observed.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Trometamol
Sodium chloride
Water for injections
Hydrochloric acid (for pH adjustment)
Sodium hydroxide (for pH adjustment)

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years when stored in a refrigerator (2°C - 8°C).

During the shelf life, the medicinal product may be kept at a temperature under 25°C for a single period no longer than 1 year, and not exceeding the original expiry date (EXP). Once the product has been

stored outside the refrigerator, the product must not be returned to the refrigerator. Upon removing the medicinal product from the refrigerator, the new expiry date must be written on the protective case label and the medicinal product should be used or discarded by the new expiry date. The original expiry date should be crossed out.

For special precautions for storage, see section 6.4.

6.4 Special precautions for storage

Store in a refrigerator (2°C - 8°C).
Do not freeze.
Store in the original protective case in order to protect from light.

For additional storage conditions at a temperature under 25°C, see section 6.3.

6.5 Nature and contents of container

Zegalogue 0.6 mg solution for injection in pre-filled syringe

Glass (type I) pre-filled syringe with staked stainless steel needle, rigid needle shield/grey needle cover, rubber plunger (bromobutyl) and red plunger rod (polypropylene). Each pre-filled syringe contains 0.6 mL of solution for injection and is individually packaged in a protective case.

Pack sizes of 1 or 2 single-dose pre-filled syringes.

Not all pack sizes or presentations may be marketed.

6.6 Special precautions for disposal and other handling

Instructions for use

This is a ready to use medicinal product for single-use only.
The single-dose pre-filled syringe contains only one dose.
The instructions for using the medicinal product in the package leaflet must be followed carefully.
If the solution is discoloured or contains particulate matter, the product should not be used.

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 Alle 1
DK-2880 Bagsvaerd
Denmark

8. MARKETING AUTHORISATION NUMBERS

EU/1/24/1829/003
EU/1/24/1829/004

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 24 July 2024

10. DATE OF REVISION OF THE TEXT

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

ANNEX II

A. MANUFACTURER(S) RESPONSIBLE FOR BATCH RELEASE

B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION

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

A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer responsible for batch release

Novo Nordisk A/S
Novo Alle 1
DK-2880 Bagsvaerd
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.

The marketing authorisation holder (MAH) shall submit the first PSUR for this product within 6 months following authorisation.

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.

- **Additional risk minimisation measures**

Prior to launch of Zegalogue (dasiglucagon), for the treatment of severe hypoglycaemia in adults, adolescents, and children aged 6 years and over with diabetes mellitus, in each EU Member State, the Marketing Authorisation Holder (MAH) must agree on the content and format of the educational materials, including communication media, distribution modalities, and any other aspects of the programme, with National Competent Authority.

The educational materials are aimed at providing guidance on how to minimise the important potential risk in the RMP of drug administration error leading to loss of drug benefit.
The MAH shall ensure that in each Member State where Zegalogue is marketed, all healthcare professionals and patients/caregivers who are expected to prescribe, supply, or use the medicinal product have access to the following:

- Administration leaflet
- Instructional video

The **administration leaflet** should contain the following key elements:

- Patients should receive the administration leaflet from their healthcare professionals upon initial prescription of Zegalogue and after training.
- Patients and family members or caregivers should be informed on how to recognize the signs and symptoms of severe hypoglycaemia and the risks of prolonged hypoglycaemia. Early symptoms of hypoglycaemia should be described.
- The importance not to test the single-dose pre-filled syringe in advance, not to remove the single-dose pre-filled syringe from the protective case in advance (the single-dose pre-filled syringe should be all the time kept in the protective case) and to ensure that the patient understands that each single-dose pre-filled syringe can only be used once.
- The importance to call for emergency medical help or a healthcare provider right away after Zegalogue is injected. Even if the subcutaneous injection of Zegalogue helps the person to wake up, it should be advised to still call for emergency medical help right away.
- If the patient does not respond within 15 minutes, an additional dose of Zegalogue from a new pre-filled syringe may be administered while waiting for emergency assistance.
- After the injection is given, the unconscious person should be rolled on to their side to prevent choking.
- The importance of correct storage of the medicinal product should be emphasized.
- The Package Leaflet (PL) and Instruction for use at the end of PL should be referenced for more detailed information regarding administration and handling of Zegalogue.
- Patients can use the administration leaflet to teach those around them how to correctly handle and administer Zegalogue.
- The administration leaflet should contain a URL and QR code to a website where patients can access the instructional video.

The **instructional video** should contain the following key elements:

- To reinforce the correct handling and administration, step-by-step instructions on the appropriate use of Zegalogue should be provided.
- The instructional video should be concise, focused and suitable for the use without delay in emergency situation to immediately help the patient.
- The importance to call for emergency medical help or a healthcare provider right away after Zegalogue is injected. Even if the injection of Zegalogue helps the person to wake up, it should be advised to still call for emergency medical help right away.
- If the patient does not respond within 15 minutes, an additional dose of Zegalogue from a new pre-filled syringe may be administered while waiting for emergency assistance.
- After the injection is given, the unconscious person should be rolled on to their side to prevent choking.

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGING

OUTER CARTON – PRE-FILLED SYRINGE

1. NAME OF THE MEDICINAL PRODUCT

Zegalogue 0.6 mg solution for injection in pre-filled syringe
dasiglucagon

2. STATEMENT OF ACTIVE SUBSTANCE

Each pre-filled syringe contains 0.6 mg dasiglucagon (as hydrochloride) in 0.6 mL

3. LIST OF EXCIPIENTS

Excipients: sodium chloride, trometamol, hydrochloric acid, sodium hydroxide, water for injections.
See leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

Solution for injection

1 pre-filled syringe
2 pre-filled syringes

5. METHOD AND ROUTE OF ADMINISTRATION

Single use.
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 WARNING, IF NECESSARY

8. EXPIRY DATE

EXP

9. SPECIAL STORAGE CONDITIONS

Store in a refrigerator or under 25°C according to storage information in the package leaflet. Do not freeze. Store in the original protective case 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

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S
Novo Alle 1
DK-2880 Bagsvaerd
Denmark

12. MARKETING AUTHORISATION NUMBERS

EU/1/24/1829/003 1 single-dose pre-filled syringe
EU/1/24/1829/004 2 single-dose pre-filled syringes

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

Zegalogue

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

PROTECTIVE CASE – PRE-FILLED SYRINGE

1. NAME OF THE MEDICINAL PRODUCT

Zegalogue 0.6 mg solution for injection in pre-filled syringe
dasiglucagon

2. STATEMENT OF ACTIVE SUBSTANCE

Each pre-filled syringe contains 0.6 mg dasiglucagon (as hydrochloride) in 0.6 mL

3. LIST OF EXCIPIENTS

Excipients: sodium chloride, trometamol, hydrochloric acid, sodium hydroxide, water for injections.
See leaflet for further information.

4. PHARMACEUTICAL FORM AND CONTENTS

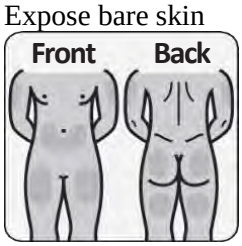
Solution for injection

1 pre-filled syringe

5. METHOD AND ROUTE OF ADMINISTRATION

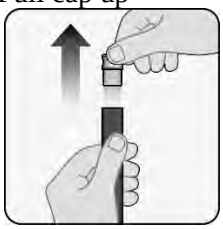
Single use.
Read the package leaflet before use.
Subcutaneous use.

Choose site
Expose bare skin



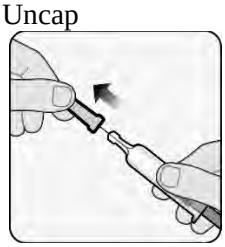
Upper arms, lower abdomen, front or back thighs, buttocks.

Pull cap up



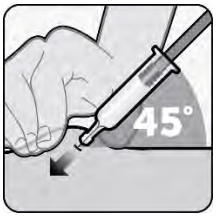
Hold case upright. Pull cap to open. Remove syinge.

Uncap



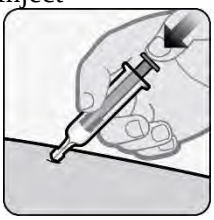
Pull needle cover off. Do not touch or bend needle.

Pinch and insert



Pinch the skin. Insert entire needle into skin at a 45° angle.

Inject



Press plunger down to inject.

Remove

Remove needle from injection site. Do not recap syringe.

After injection:

- Roll person onto side
- Call medical assistance

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

8. EXPIRY DATE

EXP

See EXP for expiry date at 2°C to 8°C.
Or
Write new EXP for storage under 25°C (max 1 year):_____
Cross out former expiry date.

9. SPECIAL STORAGE CONDITIONS

Store in a refrigerator or under 25°C according to storage information in the package leaflet. Do not freeze. Store in the original protective case 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

Dispose in a sharps container

11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Novo Nordisk A/S
Novo Alle 1
DK-2880 Bagsvaerd
Denmark

12. MARKETING AUTHORISATION NUMBER

EU/1/24/1829/003 1 single-dose pre-filled syringe

13. BATCH NUMBER

Lot

14. GENERAL CLASSIFICATION FOR SUPPLY

15. INSTRUCTIONS ON USE

16. INFORMATION IN BRAILLE

17. UNIQUE IDENTIFIER – 2D BARCODE

18. UNIQUE IDENTIFIER - HUMAN READABLE DATA

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

LABEL – PRE-FILLED SYRINGE

1. NAME OF THE MEDICINAL PRODUCT AND ROUTE OF ADMINISTRATION

Zegalogue 0.6 mg injection
dasiglucagon
Subcutaneous use

2. METHOD OF ADMINISTRATION

Single use

3. EXPIRY DATE

EXP

4. BATCH NUMBER

Lot

5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT

0.6 mL

6. OTHER

Novo Nordisk A/S

B. PACKAGE LEAFLET

Package leaflet: Information for the patient

Zegalogue 0.6 mg solution for injection in pre-filled syringe
dasiglucagon

▼This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

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 Zegalogue is and what it is used for

What Zegalogue is
Zegalogue contains the active substance dasiglucagon. This belongs to a group of medicines called ‘glycogenolytic hormones’.

Zegalogue is used in adults and children aged 6 years or older with diabetes mellitus to treat very low blood sugar (severe hypoglycaemia).

The body uses glucagon, a natural hormone produced by the pancreas, to help release sugar into the blood stream so the body can use it. In people with diabetes, the body sometimes does not release enough glucagon when blood sugar levels decrease and this may lead to hypoglycaemia. The active substance in Zegalogue, dasiglucagon, works in a similar way to glucagon. It helps to convert a form of sugar stored in the liver (called glycogen) into the simple sugar molecules (called glucose) the body can use for energy. Glucose is then released into the blood stream, which makes the blood sugar level rise and reduces the effects of low blood sugar.

Information on hypoglycaemia
Early symptoms of low blood sugar (hypoglycaemia) include:
- sweating
- drowsiness
- dizziness
- sleep disturbances
- palpitation
- anxiety
- tremor
- blurred vision
- hunger

- headache
- slurred speech
- depressed mood
- tingling in the hands, feet, lips, or tongue
- irritability
- light-headedness
- abnormal behaviour
- inability to concentrate
- unsteady movement
- personality changes.

And if not treated, the patient may progress to very low blood sugar (severe hypoglycaemia) which can include:
- confusion
- seizures
- unconsciousness
- death.

2. What you need to know before you are given Zegalogue

Important information
Always have Zegalogue with or near you. A delay in treatment may be harmful to you.

Show your family members, friends or people you work with where you keep this medicine. Also explain to them when and how to use it. It is important they know how to use Zegalogue before you need it.

Do not use Zegalogue if
- you are allergic to dasiglucagon or any of the other ingredients of this medicine (listed in section 6).
- you have phaeochromocytoma (a tumour in your adrenal gland which causes it to make too much adrenaline).

Warnings and precautions
Talk to your doctor, pharmacist or nurse before using Zegalogue.

Zegalogue may not work properly if:

- you have been fasting or have had low blood sugar levels for a long time.
- you have adrenal insufficiency (a rare disorder in which the adrenal glands do not produce enough of certain hormones such as cortisol and aldosterone).
- you have low blood sugar caused by drinking too much alcohol.
- you have insulinoma (a tumour in the pancreas that releases glucagon or insulin into your blood).

If any of these apply to you, talk to your doctor, pharmacist or nurse, before using Zegalogue.

After using Zegalogue, eat as soon as possible. This is to prevent low blood sugar happening again. Take a fast-acting source of sugar, such as fruit juice or a sugary drink.

Children
Zegalogue is not recommended for children under 6 years of age. This is because it has not been studied in this age group.

Other medicines and Zegalogue
Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

The following medicines may decrease the effectiveness of Zegalogue:
- Insulin – used to treat diabetes. Insulin has the opposite effect of glucagon on blood sugar.
- Indometacin – used to treat joint pain and stiffness.

Zegalogue may increase the risk of side effects of the following medicines:
- Warfarin – used to prevent blood clots. Zegalogue may increase the blood-thinning effect of warfarin.
- Beta-blockers – used to treat high blood pressure and uneven heartbeat. Zegalogue may increase your blood pressure and pulse. This will only last a short time.

If any of the above apply to you (or you are not sure), talk to your doctor or pharmacist before taking Zegalogue.

Pregnancy, breast-feeding and fertility
If you are pregnant, think you may be pregnant or are planning to have a baby, your doctor will consider the benefit and risk of using Zegalogue for you and your baby.

Zegalogue can be used during breast-feeding.

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

Driving and using tools and machines
Do not drive or use any tools or machines when your blood sugar levels are very low. After taking Zegalogue, wait until your blood sugar levels are back to normal and you no longer experience the effects of very low blood sugar.

Zegalogue contains sodium
Zegalogue contains less than 1 mmol sodium (23 mg) per dose, that is to say essentially ‘sodium-free’.

Latex
The container of this medicine contains latex rubber which may cause severe allergic reactions.

3. How to give Zegalogue

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

Explain how to use Zegalogue and show where you keep it to your family, friends, co-workers or care-giver. They will need to know how to give you this medicine without delay when you need it.

How Zegalogue is given
Zegalogue is given as an injection under the skin (sub-cutaneous injection) which contains a dose of 0.6 mg. If there has been no response after 15 minutes of giving the first injection, another injection of Zegalogue may be given.

After using Zegalogue, eat as soon as possible. This is to prevent your blood sugar levels from getting too low again. Take a fast-acting source of sugar, such as fruit juice or a sugary drink.

Detailed instructions on how to use Zegalogue are provided at the end of this leaflet.

If you are given more Zegalogue than you should
When you take too much Zegalogue you may feel sick (nausea) or be sick (vomit) for at short time. Specific treatment is not usually necessary.

4. Possible side effects

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

Very common (may affect more than 1 in 10 people)
- nausea (feeling sick)
- vomiting.

Common (may affect up to 1 in 10 people)
- headache
- feeling dizzy
- diarrhoea
- redness where the injection is given.

Uncommon (may affect up to 1 in 100 people)
- feeling faint
- palpitations (a forceful heartbeat that may be rapid or irregular)
- bradycardia (slow heart rate)
- hypotension (low blood pressure)
- hypertension (high blood pressure)
- hot flush (sudden feeling of warmth)
- upper abdominal (belly) pain
- hyperhidrosis (excessive sweating)
- discomfort, itchiness or swelling where the injection is given
- tiredness.

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 Appendix V. By reporting side effects, you can help provide more information on the safety of this medicine.

5. How to store Zegalogue

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

Do not use this medicine after the expiry date which is stated on the carton, protective case and pre-filled syringe label after 'EXP'. The expiry date refers to the last day of that month.

Store in a refrigerator (2°C to 8°C).
Do not freeze.
Store in the original protective case in order to protect from light.

Zegalogue can also be kept outside the refrigerator at a temperature under 25°C for a single period no longer than 1 year, and not exceeding the original expiry date (EXP). Do not return to refrigerator after the medicine has been stored outside the refrigerator. When taken out of the refrigerator, the new expiry date must be written on the protective case label and the medicine should be used or discarded by the new expiry date. The original expiry date should be crossed out.

Do not use this medicine if you notice the solution is discoloured or contains particulate matter.

Do not throw away any medicines via 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 Zegalogue contains

- The active substance is dasiglucagon (as hydrochloride). Each pre-filled syringe contains 0.6 mg dasiglucagon (as hydrochloride) in 0.6 mL.
- The other ingredients are trometamol, sodium chloride and water for injections. Hydrochloric acid and/or sodium hydroxide may be added to adjust pH (see also section 2, 'Zegalogue contains sodium').

What Zegalogue looks like and contents of the pack
Zegalogue is a clear, colourless solution for injection. It is produced in a ready-to-use, single-dose pre-filled syringe, containing 0.6 mg of dasiglucagon. It comes in packs of 1 or 2 single-dose pre-filled syringes. Each pre-filled syringe contains 0.6 mL of solution for injection and is individually packaged in a protective case.

Not all pack sizes may be marketed.

Marketing Authorisation Holder and Manufacturer
Novo Nordisk A/S
Novo Alle 1
DK-2880 Bagsvaerd
Denmark

This leaflet was last revised in

Other sources of information

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

INSTRUCTIONS FOR USE

Zegalogue 0.6 mg solution for injection in pre-filled syringe
dasiglucagon

Zegalogue is used to treat very low blood sugar (severe hypoglycaemia) where you need help from others. Zegalogue contains 1 dose of dasiglucagon in a pre-filled syringe and cannot be reused. Zegalogue is for single use only.

Read the package leaflet and the instructions for use before severe hypoglycaemia happens.
Show your family and friends where you keep Zegalogue and explain how to use it by sharing these instructions, so they know how to use Zegalogue before an emergency happens.

Read before injecting Zegalogue

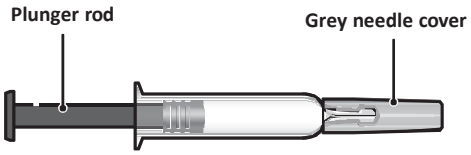
- Do not use Zegalogue if the:
  - expiry date has passed
  - grey needle cover is missing or
  - pre-filled syringe appears damaged
- When opening the protective case make sure to hold it up straight (with the grey cap on top) to avoid dropping Zegalogue.
- Do not remove the grey needle cover until you are ready to inject Zegalogue.
- It is normal to see air bubbles in the medicine. Do not try to remove air bubbles before injecting.

For questions or more information about Zegalogue, call your doctor.

Expiry date

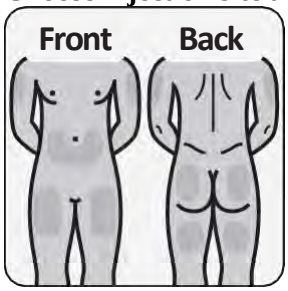
Do not use the syringe after the expiry date which is stated on the protective case after 'EXP'. The expiry date refers to the last day of that month.

Description of parts



Before injection

Choose injection site and expose bare skin

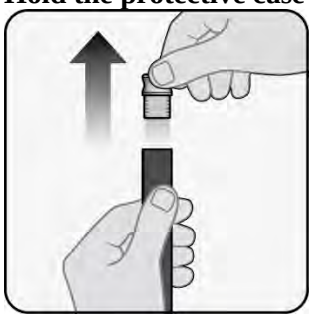


Injection sites include:

- Outer upper arms
- Lower abdomen (at least 5 cm from the belly button)
- Front or back of thighs
- Buttocks.

Roll back any clothing to expose bare skin. Do not inject through clothes.

Hold the protective case upright and remove grey cap



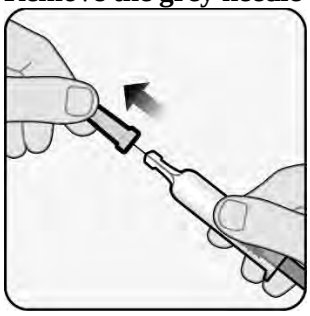
- Hold the protective case upright with the grey cap on top.
- Pull the grey cap up to open.

Carefully remove Zegalogue from the protective case without dropping it.

How to inject

Step 1

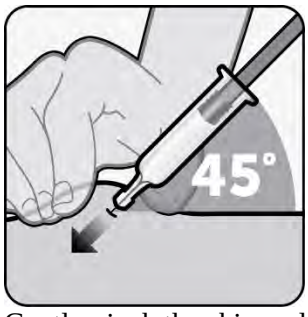
Remove the grey needle cover



Pull the grey needle cover straight off. Be careful not to touch or bend the needle.

Step 2

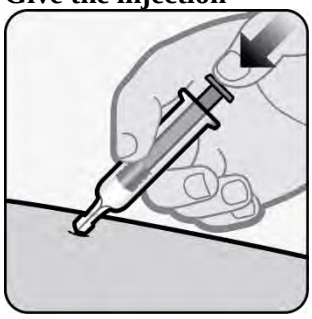
Pinch the skin and insert the needle



Gently pinch the skin and insert the entire needle into the skin at a 45° angle.

Step 3

Give the injection



After inserting the needle, release the pinched skin and slowly press the plunger rod all the way down until the syringe is empty and the plunger rod stops.

Step 4

Remove the needle

After the plunger rod stops and the injection is complete, carefully remove the needle from the injection site. Do not recap syringe.

After injection

- After you have given the injection, if the person is unconscious, roll them on to their side to prevent choking.
- Call for medical help right away after you have injected Zegalogue.
- If the person does not respond after 15 minutes, another dose from a new pre-filled syringe may be given, while waiting for emergency assistance
- Once the person is able to safely consume food or drink, give the person a fast-acting source of sugar, such as fruit juice or a sugary drink.

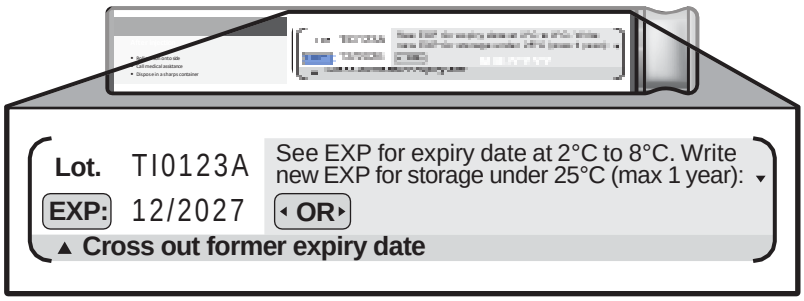
Other information

- Keep Zegalogue out of the sight and reach of children.
- Replace the used Zegalogue pre-filled syringe right away so you will have a new Zegalogue in case you need it.

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.

Instructions for storage under 25°C

If Zegalogue is removed from the refrigerator to be stored at a temperature under 25°C, write down the new 1-year expiry date on the label found on the protective case. The new expiry date must not exceed the original expiry date (EXP).



For example: If Zegalogue was removed from the refrigerator to be stored at a temperature under 25°C in January 2026, then write the new expiry date of January 2027 on the label and cross out the former expiry date.

Began storing at a temperature under 25°C

Expires in 1 year