

## HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use STRENSIQ safely and effectively. See full prescribing information for STRENSIQ.

STRENSIQ™ (asfotase alfa) injection, for subcutaneous use  
Initial U.S. Approval: Pending

### INDICATIONS AND USAGE

STRENSIQ™ is a tissue nonspecific alkaline phosphatase indicated for the treatment of patients with perinatal/infantile- and juvenile-onset hypophosphatasia (HPP). (1)

### DOSAGE AND ADMINISTRATION

#### Perinatal/Infantile-Onset HPP (2.1)

- Recommended dosage regimen is 2 mg/kg administered subcutaneously three times per week, or 1 mg/kg administered six times per week. Injection site reactions may limit the tolerability of the six times per week regimen.
- The dose may be increased to 3 mg/kg three times per week for insufficient efficacy.

#### Juvenile-Onset HPP (2.2)

- Recommended dosage regimen is 2 mg/kg administered subcutaneously three times per week, or 1 mg/kg administered six times per week. Injection site reactions may limit the tolerability of the six times per week regimen.

#### Preparation and Weight-Based Dosing (2.3):

- Caution:* Do not use the 80 mg/0.8 mL vial in pediatric patients weighing less than 40 kg because the systemic asfotase alfa exposure achieved with the 80 mg/0.8 mL vial (higher concentration) is lower than that achieved with the other strength vials (lower concentration). A lower exposure may not be adequate for this subgroup of patients.
- See full prescribing information for tables of weight-based dosing by treatment regimen.

#### Administration (2.4):

- For subcutaneous injection only.
- Rotate injection sites. Do not administer to areas that are reddened, inflamed or swollen.

### DOSAGE FORMS AND STRENGTHS

Injection: 18 mg/0.45 mL, 28 mg/0.7 mL, 40 mg/mL, or 80 mg/0.8 mL solution in single-use vials. (3)

### CONTRAINDICATIONS

None. (4)

### WARNINGS AND PRECAUTIONS

- Hypersensitivity Reactions:** Monitor and if a severe reaction occurs, discontinue treatment and initiate appropriate medical treatment. (5.1)
- Lipodystrophy:** Localized reactions were reported after several months of treatment; follow proper injection technique and rotate injection sites. (5.2)
- Ectopic Calcifications (eye and kidneys):** Monitor using ophthalmologic examinations and renal ultrasounds at baseline and periodically during treatment. (5.3)

### ADVERSE REACTIONS

Most common adverse reactions (≥ 10%) are injection site reactions, lipodystrophy, ectopic calcifications and hypersensitivity reactions. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact Alexion Pharmaceuticals, Inc. at 1-844-259-6783 or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling.

Revised: <<insert month/year>>

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5. Inspect the solution in the vial(s) for particulate matter and discoloration. STRENSIQ is supplied as a clear, slightly opalescent or opalescent, colorless to slightly yellow aqueous solution; few small translucent or white particles may be present. Discard any vials(s) not consistent with this appearance.
6. Assemble injection supplies. Administer STRENSIQ using sterile disposable 1 mL syringes and ½ inch injection needles, between 25 to 29 gauge are recommended. For doses greater than 1 mL, the injection volume should be split equally between two 1 mL syringes. Always use a new syringe and needle.
7. Remove vial cap, aseptically prepare the vial and insert the syringe into the vial to withdraw the prescribed dose for administration.
8. Remove any air bubbles in the syringe and verify the correct dose.

## **2.4 Administration**

STRENSIQ is for subcutaneous injection only.

1. Administer STRENSIQ within 1 hour upon removal of the vial(s) from refrigeration.
2. Rotate the injection from among the following sites to reduce the risk of lipodystrophy: abdominal area, thigh, or deltoid [*see Warnings and Precautions (5.2), Adverse Reactions (6.1)*].
3. Do NOT administer injections in areas that are reddened, inflamed, or swollen.
4. Inject STRENSIQ subcutaneously into the determined site and properly dispose of the needle.
5. STRENSIQ vials are single use only. Discard any unused product.

## **3 DOSAGE FORMS AND STRENGTHS**

STRENSIQ is supplied as a sterile, preservative-free, nonpyrogenic, clear, slightly opalescent or opalescent, colorless to slightly yellow aqueous solution; few small translucent or white particles may be present. The product is available as:

- Injection: 18 mg/0.45 mL, 28 mg/0.7 mL, 40 mg/mL, or 80 mg/0.8 mL solution in single-use vials

## **4 CONTRAINDICATIONS**

None.

## **5 WARNINGS AND PRECAUTIONS**

### **5.1 Hypersensitivity Reactions**

Hypersensitivity reactions have been reported in STRENSIQ-treated patients. In clinical trials, 1 out of 99 patients (1%) treated with STRENSIQ experienced signs and symptoms consistent with anaphylaxis, including difficulty breathing, nausea, periorbital edema, and dizziness. In this patient, the reaction occurred approximately 1 minute after STRENSIQ injection in the setting of 3.5 years of ongoing STRENSIQ treatment and resolved without medical treatment. The patient resumed STRENSIQ treatment and received pre-medication with diphenhydramine for an unspecified period and then subsequently continued treatment with STRENSIQ without pre-medication. Other hypersensitivity reactions have also been reported in STRENSIQ-treated patients, including vomiting, fever, headache, flushing, irritability, chills, skin erythema, rash, pruritus and oral hypoesthesia [*see Adverse Reactions (6.1)*].

If a severe hypersensitivity reaction occurs, discontinue STRENSIQ treatment and initiate appropriate medical treatment. Consider the risks and benefits of re-administering STRENSIQ to individual patients following a severe reaction. If the decision is made to re-administer the product, monitor patients for a reoccurrence of signs and symptoms of a severe hypersensitivity reaction.

### **5.2 Lipodystrophy**

Localized lipodystrophy, including lipoatrophy and lipohypertrophy, has been reported at injection sites after several months in patients treated with STRENSIQ in clinical trials [*see Adverse Reactions (6.1)*]. Advise patients to follow proper injection technique and to rotate injection sites [*see Dosage and Administration (2.4)*].

### **5.3 Ectopic Calcifications**

Patients with HPP are at increased risk for developing ectopic calcifications. In clinical trials with STRENSIQ, 14 cases (14%) of ectopic calcification of the eye including the cornea and conjunctiva, and the kidneys (nephrocalcinosis) were reported. There was insufficient information to determine whether or not the reported events were consistent with the disease or due to STRENSIQ. No visual changes or changes in renal function were reported resulting from the occurrence of ectopic calcifications.

Ophthalmology examinations and renal ultrasounds are recommended at baseline and periodically during treatment with STRENSIQ to monitor for signs and symptoms of ophthalmic and renal ectopic calcifications and for changes in vision or renal function.

## **6 ADVERSE REACTIONS**

The following adverse reactions are described below and elsewhere in the labeling:

- Hypersensitivity Reactions [*see Warnings and Precautions (5.1)*]
- Lipodystrophy [*see Warnings and Precautions (5.2)*]

- Ectopic Calcifications [see Warnings and Precautions (5.3)]

## 6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The data described below reflect exposure to STRENSIQ in 99 patients with perinatal/infantile- or juvenile-onset HPP (age 1 day to 58 years) treated with STRENSIQ, most for more than 2 years (range 1 day to 312 weeks [78 months]); 51 patients received at least 96 weeks (24 months) of treatment and 39 patients received 168 weeks (42 months) or more of treatment.

### *Common Adverse Reactions*

Overall, the most common adverse reactions reported were injection site reactions (63%). Other common adverse reactions included lipodystrophy (28%), ectopic calcifications (14%), and hypersensitivity reactions (12%).

Table 4 summarizes the adverse reactions that occurred at a rate of at least 10% in clinical trials following subcutaneous injection of STRENSIQ, by patient population and STRENSIQ dosage regimen.

The frequency of injection site reactions, lipodystrophy and ectopic calcification were higher in patients with juvenile-onset HPP as compared to perinatal/infantile-onset HPP patients.

The majority of injection site reactions resolved within a week. Two patients experienced injection site reactions that led to reductions of their STRENSIQ dose. One patient switched from six times per week dosing to 3 times per week dosing as a result of injection site reactions. One other patient experienced a severe injection site reaction of injection site discoloration and withdrew from the trial.













Formation of anti-drug antibodies resulted in reduced systemic exposure of asfotase alfa.

## **13 NONCLINICAL TOXICOLOGY**

### **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

Long-term studies in animals to evaluate carcinogenic potential or studies to evaluate mutagenic potential have not been performed with asfotase alfa. Asfotase alfa at intravenous doses up to 50 mg/kg/day administered daily in pregnant rats (approximately 21 times the human AUC of 65486 ng.h/mL at 2 mg/kg dose administered three times weekly for a 50 kg individual) was found to have no adverse effect on fertility and reproductive performance of male and female rats.

## **14 CLINICAL STUDIES**

### **14.1 Perinatal/Infantile-Onset HPP**

Study 1 was a 24-week prospective single-arm trial in 11 patients, 7/11 (64%) were female and 10/11 (91%) were white, aged 3 weeks to 39.5 months with severe perinatal/infantile-onset HPP. Severe perinatal/infantile-onset HPP was defined as biochemical, medical history and radiographic evidence of HPP as well as the presence of any of the following: rachitic chest deformity, vitamin B6-dependent seizures, or failure to thrive. Ten of 11 patients completed the 24-week trial and continued treatment in the extension phase. Nine patients have been treated for at least 216 weeks (54 months) and 4 patients have been treated for over 240 weeks (60 months). Patients received STRENSIQ at 3 mg/kg per week for the first month; subsequently, dose increases up to 9 mg/kg per week were allowed for changes in weight and/or for lack of efficacy. All 10 patients required dose increases of up to 6 mg/kg per week or higher; 9 patients increased between 4 and 24 weeks after starting treatment and 1 patient increased after 70 weeks due to suboptimal clinical response. One patient's dose was decreased from 9 mg/kg per week to 6 mg/kg per week based on PK data.

Study 2 was a prospective open-label study in 59 patients, 32/59 (54%) were female and 46/59 (78%) were white, aged 1 day to 78 months with perinatal/ infantile-onset HPP. Patients received STRENSIQ at 6 mg/kg per week for the first 4 weeks. Ten patients received dose increases higher than 6 mg/kg per week due to suboptimal clinical response, with dose increases occurring between 8 and 24 weeks after starting treatment. The recommended dosage regimen of STRENSIQ for the treatment of perinatal/infantile-onset HPP is up to 9 mg/kg per week administered subcutaneously as 3 mg/kg three times per week [*see Dosage and Administration (2.1)*].

Forty-one patients have been treated for at least 24 weeks (6 months) and 15 patients have been treated for at least 96 weeks (24 months).

#### Survival and Ventilation-Free Survival

Survival and invasive ventilation-free survival were compared in STRENSIQ-treated patients (Studies 1 and 2) with a historical cohort of untreated patients with similar clinical characteristics (Table 7 and Figure 1).

**Table 7: Survival and Invasive Ventilation-Free Survival in STRENSIQ-Treated versus Historical Control Patients with Perinatal/ Infantile-Onset HPP**

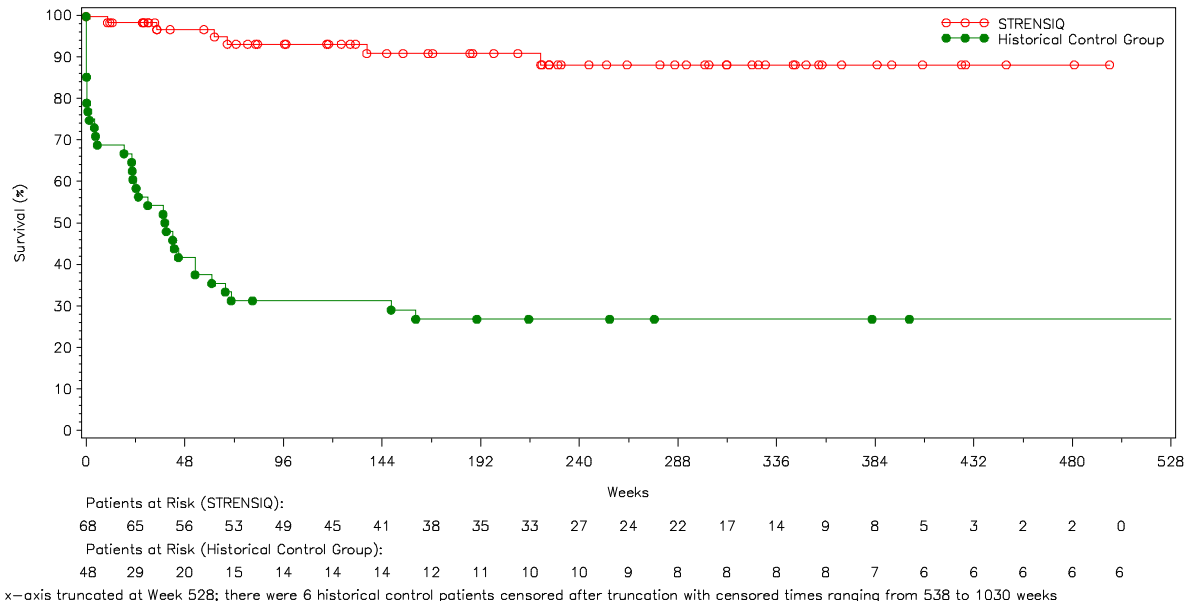
	STRENSIQ-Treated	Historical Controls
Survival	n = 68	n = 48
Alive at Point of Last Contact (%)	91	27
Hazard Ratio (STRENSIQ/Historical Control), 95% Confidence Interval*	0.14 (0.05, 0.39)	
Kaplan-Meier Estimate and Alive at Age 1 Year (Week 48) (%)	97	42
Invasive Ventilation-Free Survival**	n = 54	n =48
Alive and Not on Ventilation at Point of Last Contact (%)	85	25
Hazard Ratio (STRENSIQ/Historical Control), 95% Confidence Interval*	0.21 (0.09, 0.51)	
Kaplan-Meier Estimate of Alive and Not on Ventilation at Age 1 Year (Week 48) (%)	96	31

\* Adjusted for year of diagnosis.

\*\* Alive and not initiating invasive ventilation after start of STRENSIQ treatment. STRENSIQ-treated patients on invasive ventilation at baseline were excluded from this analysis.

In patients who required any form of respiratory support, 21 of 26 (81%) of the treated patients survived through their last assessment (median age at last assessment was 3.2 years of age), versus 1 of 20 (5%) of historical controls.

**Figure 1: Overall Survival in STRENSIQ-Treated versus Historical Control Patients with Perinatal/ Infantile-Onset HPP**



**Skeletal Manifestations**

Radiographs from 68 STRENSIQ-treated perinatal/infantile-onset HPP patients, including 64 patients in Studies 1 and 2, and 4 patients in Study 3 [see *Clinical Studies (14.2)*], were examined to assess HPP-related rickets using the 7-point Radiographic Global Impression of Change (RGI-C) scale. Patients with a minimum RGI-C score of +2 were defined as “responders”. Radiologic improvements could be seen by Month 24; at last assessment, 50/68 [74%] treated patients were rated as RGI-C responders. No comparative data were available from historical controls. The mean time interval between the baseline and last RGI-C assessment was 24 months (range was 1 month to 67 months).

Eighteen perinatal/infantile-onset HPP patients experienced fractures during the course of treatment. There were insufficient data to determine the effect of STRENSIQ on fractures.

**Growth**

Height and weight measurements (as measured by z-scores) were available post-treatment for 72 perinatal/infantile-onset HPP patients, including 68 patients enrolled in Studies 1 and 2, and 4 patients enrolled in Study 3 (Table 8).

**Table 8: Perinatal/Infantile-Onset Height and Weight Measurements as Measured by Z-Score**

	Height Z-score				Weight Z-score			
	Baseline		Last Assessment		Baseline		Last Assessment	
	Mean	Min, Max	Mean	Min, Max	Mean	Min, Max	Mean	Min, Max
Studies 1 and 2* (N=68)	-3.3	-10.1, 0.9	-2.9	-10.6, 0.4	-3.2	-23.8, 0	-2.4	-20.9, 1.1

Study 3 (N=4)**	-2.6	-6.6, -0.7	-1.5	-5.8, 0.4	-2.5	-8.2, -1.0	-1.5	-5.4, 0.5
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\*The mean time interval between baseline and last assessment was 21 months (range was 1 month to 72 months).

\*\*The mean time between baseline and last assessment was 56 months (range was 53 months to 60 months).

## 14.2 Juvenile-Onset HPP

Study 3 was a prospective open-label 24-week trial that included 8 juvenile-onset HPP patients and 5 perinatal/ infantile-onset HPP patients, 11/13 (85%) were male and 12/13 (92%) were white [see *Clinical Studies (14.1)*]; on entry, patients were 6 to 12 years of age. All 8 juvenile-onset patients entered the extension study and were treated for at least 48 months. At trial entry, patients were randomized to receive STRENSIQ at 6 mg/kg per week or 9 mg/kg per week. Two patients received dose reductions during the primary treatment period, including one patient who experienced a decrease in vitamin B6 levels and one patient who experienced recurrent injection site reactions. During the extension phase, the dosing regimen for all patients was initially changed to 3 mg/kg per week. Dosing was subsequently increased to 6 mg/kg per week, with no patients requiring doses higher than 6 mg/kg per week. The recommended dosage regimen of STRENSIQ for the treatment of juvenile-onset HPP is 6 mg/kg per week [see *Dosage and Administration (2.1)*].

### Growth

Height and weight measurements (as measured by z-scores) in 8 STRENSIQ-treated patients were compared with a historical cohort of 32 untreated patients with similar clinical characteristics (Table 9). Height and weight data for historical patients were collected from medical records.

**Table 9: Juvenile-Onset Height and Weight Measurements as Measured by Z-Score**

	Height Z-score				Weight Z-score			
	Baseline		Last Assessment		Baseline		Last Assessment	
	Mean	Min, Max	Mean	Min, Max	Mean	Min, Max	Mean	Min, Max
STRENSIQ (N=8)*	-1.5	-3.8, 0	-0.9	-2, 0	-1.1	-3.5, 2.3	0	-1.3, 2.2
Control (N=32)**	-1.1	-4.9, 2.6	-1.1	-4.9, 1.8	-1.2	-5, 2.1	-1	-5.7, 2.1

\* The mean time interval between baseline and last assessment was 55 months (range was 53 months to 60 months).

\*\* The mean time interval between baseline and last assessment was 61 months (range was 19 months to 109 months).

### Skeletal Manifestations

Radiographs from 8 STRENSIQ-treated patients and 32 historical controls were compared to assess HPP-related rickets using the 7-point RGI-C (Radiographic Global Impression of Change) scale. Patients who achieved a RGI-C score of 2 or higher (corresponding to substantial healing of rickets) were classified as being responders to treatment. All 8 treated patients were rated as responders by Month 54 of treatment. The mean duration between the baseline and last RGI-C assessments for control patients was 56 months (range was 8 to 95 months). At last assessment, 2/32 (6%) of control patients were rated as responders.

Eight of 20 (40%) patients with juvenile-onset HPP experienced new fractures during the course of treatment. There were insufficient data to assess the effect of STRENSIQ on fractures.



## Gait/Mobility

Gait was assessed using a modified Performance Oriented Mobility Assessment-Gait (MPOMA-G) scale) in 8 STRENSIQ-treated patients at 6 month intervals out to 36 months. Mobility was also assessed using the 6 Minute Walk Test (6MWT) in 7 of the 8 patients. Step length improved by at least 1 point in either foot in 6/8 patients compared to 1/6 (17%) control patients. The proportion of patients who had 6MWT percent predicted values within the normal range for age, sex, and height-matched peers increased from 0/8 patients at baseline to 6/6 patients (100%) by Month 48 and all 6 were also able to walk longer distances at this time point compared to baseline.

## **16 HOW SUPPLIED/STORAGE AND HANDLING**

STRENSIQ is supplied as a sterile, nonpyrogenic, preservative free, clear, slightly opalescent or opalescent, colorless to slightly yellow aqueous solution; a few small translucent or white particles may be present. The product is available as single-use vials in a carton of one (1) or twelve (12) vials at the following strengths:

**Table 10: STRENSIQ Vial Presentations**

<b>Strength</b>	<b>National Drug Code (NDC)</b>	<b>Quantity of 2 mL Vials in Carton</b>
18 mg/0.45 mL	NDC 25682-010-01	1
	NDC 25682-010-12	12
28 mg/0.7 mL	NDC 25682-013-01	1
	NDC 25682-013-12	12
40 mg/mL	NDC-25682-016-01	1
	NDC-25682-016-12	12
For pediatric patients 40 kg and greater		
80 mg/0.8 mL	NDC 25682-019-01	1
	NDC 25682-019-12	12

STRENSIQ vials must be stored in the original carton until the time of use under refrigerated conditions at 2°C to 8°C (36°F to 46°F) and protected from light.

Once removed from refrigeration, STRENSIQ should be administered within 1 hour.

Do not use beyond the expiration date stamped on the carton.

**DO NOT FREEZE OR SHAKE.**

Vials are single-use only. Discard any unused product.

## **17 PATIENT COUNSELING INFORMATION**

Advise the patient to read the FDA-approved patient labeling (Patient Labeling and Instructions for Use).

Advise patients or caregivers of the following:

### Preparation

- When preparing a volume for injection greater than 1 mL, split the volume equally between two syringes, and administer two injections. When administering the two injections, use two separate injection sites.
- Inspect the solution in the vial(s) for particulate matter and discoloration.
- Assemble injection supplies. Administer STRENSIQ using sterile disposable syringes and injection needles. The syringes should be of small enough volume that the prescribed dose can be withdrawn from the vial with reasonable accuracy. Always use a new syringe and needle.
- Remove vial cap, aseptically prepare the vial and insert the syringe into the vial to withdraw the prescribed dose for administration.
- Remove any air bubbles in the syringe and verify the correct dose.

#### Administration

- Administer STRENSIQ within 1 hour upon removal of the vial(s) from refrigeration.
- Rotate the injection site to reduce the risk of lipohypertrophy and injection site atrophy.
- Do NOT administer injections in areas that are reddened, inflamed, or swollen.
- Inject STRENSIQ subcutaneously into the determined site and properly dispose of the needle.
- STRENSIQ vials are single use only. Discard any unused product.

#### Hypersensitivity Reactions

- Reactions related to administration and injection may occur during and after STRENSIQ treatment. Inform patients of the signs and symptoms of hypersensitivity reactions, and have them seek immediate medical care should signs and symptoms occur.

#### Lipodystrophy

- Lipohypertrophy (enlargement or thickening of tissue) and localized atrophy (depression in the skin) have been reported at injection sites after several months. Follow proper injection technique and rotate injection sites.

### Hypophosphatasia (HPP) Registry

- A registry has been established in order to better understand HPP in the population, and to monitor and evaluate long-term treatment effects of STRENSIQ. Patients and their caregivers should be encouraged to participate and advised that their participation is voluntary and may involve long-term follow-up. For more information, visit [www.hppregistry.com](http://www.hppregistry.com)

STRENSIQ is manufactured by:

Alexion Pharmaceuticals, Inc.

Cheshire, CT 06410 USA

U.S. License Number: 1743

1-888-765-4747 (phone)

**Patient Information**  
**STRENSIQ™ (stren' sik)**  
**(asfotase alfa) injection, for subcutaneous use**

**What is STRENSIQ?**

STRENSIQ is a prescription medicine used to treat people with perinatal, infantile, and juvenile onset hypophosphatasia (HPP).

**Before using STRENSIQ, tell your healthcare provider about all of your medical conditions, including if you:**

- are allergic to asfotase alfa or any of the ingredients in STRENSIQ. See the end of this leaflet for a complete list of ingredients in STRENSIQ.
- are pregnant or planning to become pregnant. It is not known if STRENSIQ will harm your unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if STRENSIQ passes into your breast milk. Talk to your healthcare provider about the best way to feed your baby if you use STRENSIQ.

**Tell your healthcare provider about all the medications you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

There is a registry for people who use STRENSIQ. The purpose of this registry is to collect information about HPP and about what happens when you use STRENSIQ for a long time. For more information about this registry, talk with your healthcare provider or go to [www.hppregistry.com](http://www.hppregistry.com).

**How should I use STRENSIQ?**

- See the "Instructions for Use" that come with STRENSIQ for detailed instructions about the right way to use STRENSIQ.
- Use STRENSIQ exactly as your healthcare provider tells you to.
- Your healthcare provider will tell you how much STRENSIQ to use and when to use it.
- Your healthcare provider may change your dose if needed.
- Change (rotate) your injection site with each injection. **Do not** use the same injection site for each injection.

**What are the possible side effects of STRENSIQ?**

**STRENSIQ may cause serious side effects, including:**

- **serious allergic (hypersensitivity) reactions.** Serious allergic reactions have happened in some people who use STRENSIQ. Stop using STRENSIQ and go to the nearest hospital emergency room right away if you have any of the signs and symptoms of a serious allergic reaction including:
  - difficulty breathing
  - swelling of your eyes, lips or tongue
  - hives
  - feeling faint
  - nausea or vomiting
  - dizziness
  - itching of lips, tongue or throat
- **skin thickening or pits at the injection site (lipodystrophy).** Lipodystrophy at the injection site has happened several months after using STRENSIQ.
- **calcium build up in your eyes and kidneys.** Your healthcare provider should check your eyes and kidneys while you use STRENSIQ.

**The most common side effects of STRENSIQ include** local skin injection site reactions (including skin red patches, bruising, color change, pain, itching, thinning, swelling, pits, and bumps) and calcium build up in your eyes and kidneys.

These are not all the possible side effects of STRENSIQ. For more information, ask your healthcare provider or pharmacist. Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

**General information about the safe and effective use of STRENSIQ**

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use STRENSIQ for a condition for which it was not prescribed. Do not give STRENSIQ to other people, even if they have the same symptoms that you have. It may harm them. You can ask your pharmacist or healthcare provider for information about STRENSIQ that is written for healthcare professionals.

**What are the ingredients in STRENSIQ?**

- **Active ingredient:** asfotase alfa
- **Inactive ingredients:** dibasic sodium phosphate, heptahydrate; monobasic sodium phosphate, monohydrate and sodium chloride.

Manufactured by: Alexion Pharmaceuticals, Inc., Cheshire, CT 06410, USA U.S. License Number: 1743  
For more information, go to [www.strensiq.com](http://www.strensiq.com) or call 888-765-4747.

**Instructions for Use**  
**STRENSIQ™ (stren' sik)**  
**(asfotase alfa)**  
**injection, for subcutaneous use**  
**vial**

Read this Instructions for Use before you start using STRENSIQ and each time you get a refill. There may be new information. This information does not take the place of talking to your healthcare provider about your medical condition or your treatment.

**Do not share your syringes or needles with anyone else. You may give an infection to them or get an infection from them.**

**Supplies needed to give your STRENSIQ injection (See Figure A):**



- 1 or 2 STRENSIQ vial(s)
- 1 or 2 sterile disposable 1 mL syringes for injection with 25 to 29 Gauge (G), ½ inch needles.
- 2 alcohol wipes
- 1 gauze or cotton ball
- a clean flat surface like a table
- 1 sharps container for throwing away used needles and syringes. See “**Disposing of used needles and syringes**” at the end of these instructions.

**Figure A**



### Preparing your STRENSIQ dose:

- Prepare a clean flat surface, like a table or counter top
- Gather all the supplies you will need to give your STRENSIQ injection
- Wash your hands with soap and water

<p><b>Step 1:</b> Check the liquid in the STRENSIQ vial. STRENSIQ liquid should look clear or slightly yellow and may have a few small white particles in it. Do not use it if the liquid is discolored or contains any lumps or large particles in it. Throw it away and get a new vial.</p>	
<p><b>Step 2:</b> Using your thumb, flip the plastic cap off the STRENSIQ vial.</p>	 An illustration showing two hands. The left hand holds a small glass vial with a red cap. The right hand uses the thumb to flip the cap off the vial.
<p><b>Step 3:</b> Remove the needle from the package. Pick up the syringe and place the needle on the tip of the syringe. Push down and twist the needle onto the syringe until it is tight.</p>	
<p><b>Step 4:</b> Hold the syringe with the needle pointing up and pull back the plunger until the top of the plunger reaches the line for your prescribed dose.</p>	
<p><b>Step 5:</b> Pull the cap straight off of the needle.</p> <ul style="list-style-type: none"><li>• <b>Do not</b> touch the needle or let the needle touch any surface.</li></ul>	 An illustration showing two hands. The left hand holds a syringe with a needle attached. The right hand is pulling the orange cap off the needle.

**Step 6:** Hold the STRENSIQ vial firmly on a flat surface, then push the needle through the rubber stopper of the STRENSIQ vial.



**Step 7:** Keeping the needle in the STRENSIQ vial, lift the vial and turn it upside down with the needle pointing toward the ceiling. Slowly push the plunger all the way in.



**Step 8:** With the needle tip still in the liquid, slowly pull back the plunger until the top of the plunger reaches the line slightly past the line for your prescribed dose. Do not pull the needle out of the STRENSIQ vial. Slowly push the plunger up until the top of the plunger reaches the line for your prescribed dose.

- Check the syringe to make sure that you have the right dose.

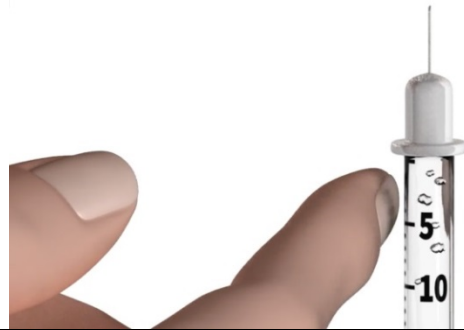


**Step 9:** Turn the STRENSIQ vial upright and pull the syringe straight out of the vial's rubber stopper.

- **Do not** touch the needle or allow the needle to touch any surface.



**Step 10:** Hold the syringe with the needle pointing up and tap the barrel of the syringe with your finger to remove any air bubbles.



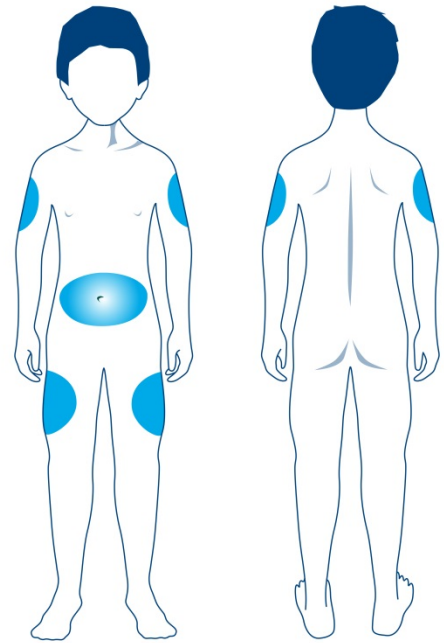


### Giving your STRENSIQ injection:

- Inject your STRENSIQ exactly as your healthcare provider has shown you.
- You should use STRENSIQ within 1 hour after you remove it from the refrigerator.

**Step 11:** Choose your injection site. STRENSIQ is injected under the skin (subcutaneously) of your stomach-area (abdomen), upper arms, or upper legs.

- **Change (rotate) your injection site with each injection.** Do not use the same injection site for each injection.
- **Do not** inject STRENSIQ into skin that is red, hot, or swollen.
- Wipe your skin with an alcohol wipe. Let the site dry before you inject your dose.



**Step 12:** Pinch the skin. Hold the syringe at a 90° angle (straight up and down) and insert the needle into your skin. For patients with little fat, hold the syringe at a 45° angle and insert the needle into your skin.

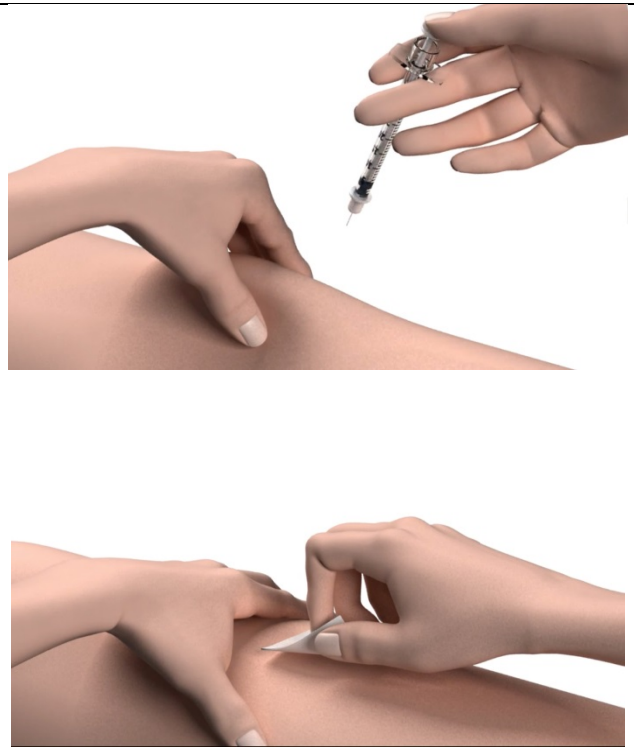


**Step 13:** Push the plunger all the way in to give your dose.

**Step 14:** Pull the needle out of your skin.

- If you see blood after you take the needle out of your skin, press your injection site with a piece of gauze or alcohol wipe.
- **Do not** recap the needle. Recapping the needle can lead to a needle stick injury.

If you need a second injection for your prescribed dose, get another STRENSIQ vial and repeat steps 1 through 14.



**Disposing of used needles and syringes:**

- Put your used needles in a FDA-cleared sharps disposal container right away after use. **Do not** throw away (dispose of) loose needles and syringes in your household trash.
- If you do not have a FDA-cleared sharps disposal container, you may use a household container that is:
  - made of a heavy-duty plastic,
  - can be closed with a tight-fitting, puncture-resistant lid, without sharps being able to come out,
  - upright and stable during use,
  - leak-resistant, and
  - properly labeled to warn of hazardous waste inside the container.
- When your sharps disposal container is almost full, you will need to follow your community guidelines for the right way to dispose of your sharps disposal container. There may be state or local laws about how you should throw away used needles and syringes. For more information about safe sharps disposal, and for specific information about sharps disposal in the state that you live in, go to the FDA's website at: <http://www.fda.gov/safesharpsdisposal>.
- Do not dispose of your used sharps disposal container in your household trash unless your community guidelines permit this. Do not recycle your used sharps disposal container.

### **How should I store STRENSIQ?**

- Store STRENSIQ in the original carton in the refrigerator between 36°F to 46°F (2°C to 8°C) until you are ready to use it.
- Do not freeze your STRENSIQ vials. Do not use STRENSIQ if it has been frozen.
- Do not shake your STRENSIQ vials.
- Protect STRENSIQ from light until you are ready to use it.
- Do not use STRENSIQ after the expiration date printed on the carton.
- STRENSIQ vials are for 1 time use only. Throw away any unused STRENSIQ left in the vial.

**Keep STRENSIQ and all medicines, needles and syringes out of the reach of children.**

This Instructions for Use has been approved by the U.S. Food and Drug Administration.

Manufactured by:

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Approved: Month/Year