Stimate[®] (desmopressin acetate)

1 CSL Behring

2				
3	Stimate [®]			
4	(desmopressin acetate)			
5	Nasal Spray, 1.5 mg/mL			
6				
7	R _x only			
8				
9	DESCRIPTION			
10	Stimate[®] (desmopressin acetate) is a synthet	ic analogue of the natural pituitary hormone 8-		
11	arginine vasopressin (ADH), an antidiuretic	hormone affecting renal water conservation.		
12		mopressin acetate in an aqueous solution at a pH		
13		ompression pump delivers 0.1 mL (150 mcg) of		
14	solution per spray. It is chemically defined as fo			
15	I I J			
16	Mol. Wt. 1183.34 Empirical formula: $C_{46}H_{64}N_{14}O_{12}S_2 \bullet$	$C_2H_4O_2\bullet 3H_2O$		
	Ö			
	O ∥ SCH₂CH₂C-Tyr-Phe-GIn-Asn-Cys-Pro-D-Arg-Gly-NH₂+M 1 2 3 4 5 6 7 8 9	CH_COOH+3H2O		
	1 2 3 4 5 6 7 8 9			
17				
18	1-(3-mercaptopropionic acid)-8-D-arginine vasopressin monoacetate (salt) trihydrate.			
19				
20	Stimate [®] Nasal Spray is provided as an aqueous solution for intranasal use.			
21				
22	Each mL contains:			
	Active ingredient:			
	Desmopressin acetate	1.5 mg		
	Inactive ingredients:			
	Sodium chloride	7.5 mg		
	Buffer:			
	Citric acid monohydrate	1.7 mg		
	Disodium phosphate dihydrate	3 mg		
	Preservative:			
	Benzalkonium chloride	0.1 mg		
	Purified water	To 1 mL		
23				
24	-	CLINICAL PHARMACOLOGY		
25	Stimate [®] Nasal Spray contains as active subst	ance, desmopressin acetate, which is a synthetic		
26		sopressin. One spray or 0.1 mL (150 mcg) of		
27	Stimate [®] Nasal Spray solution has an antidiuretic activity of about 600 International Units.			
28		-		
20	Desmonressin exetete has been shown to be mo	ra notant than argining vaconressin in increasing		

Desmopressin acetate has been shown to be more potent than arginine vasopressin in increasing plasma levels of Factor VIII activity in patients with hemophilia and von Willebrand's disease

31 Type I.

Dose-response studies were performed in healthy persons using doses of 150 to 450 mcg, administered as one to three sprays. The response to **Stimate[®] Nasal Spray** is dose-related, with maximal plasma levels of 150 to 250 percent of initial concentrations achieved for both Factor VIII and von Willebrand factor.¹ The increase is rapid and evident within 30 minutes, reaching a maximum at about 1.5 hours.¹

38

The percentage increase of Factor VIII and von Willebrand factor levels in patients with mild 39 hemophilia A and von Willebrand's disease was not notably different from that observed in 40 normal healthy individuals when treated with 300 mcg of **Stimate[®] Nasal Spray**.¹⁻⁴ In patients 41 with von Willebrand's disease, levels of Factor VIII coagulant activity and von Willebrand factor 42 antigen remained greater than 30 U/dL for 8 hours after a 300 mcg dose of Stimate[®] Nasal 43 Spray.⁵ After 300 mcg of Stimate[®] Nasal Spray, the percentage increase of Factor VIII and von 44 Willebrand factor levels in patients with mild hemophilia A and von Willebrand's disease was 45 less than observed after 0.3 mcg/kg of intravenous desmopressin acetate.²⁻⁴ 46

47

Plasminogen activator activity increases rapidly after intravenous desmopressin acetate infusion,
 but there has been no clinically significant fibrinolysis in patients treated with desmopressin
 acetate.

51

The effect of repeated intravenous desmopressin acetate administration when doses were given every 12 to 24 hours has generally shown a diminution of the Factor VIII activity increase noted after a single dose. It is possible to reproduce the initial response in some patients after an interval of one week, but other patients may require as long as 6 weeks.^{2,4,6}

- The half-life of **Stimate[®] Nasal Spray** was between 3.3 and 3.5 hours, over the range of intranasal doses, 150 to 450 mcg.¹ Plasma concentrations of **Stimate[®] Nasal Spray** were maximal approximately 40 to 45 minutes after dosing.¹
- 61 The bioavailability of **Stimate[®] Nasal Spray** when administered by the intranasal route as a 1.5 62 mg/mL solution is between 3.3 and 4.1 percent.¹
- 63

60

The change in structure of arginine vasopressin to desmopressin acetate has resulted in a decreased vasopressor action and decreased actions on visceral smooth muscle relative to the enhanced antidiuretic activity, so that clinically effective antidiuretic doses are usually below threshold levels for effects on vascular or visceral smooth muscle.

6869 INDICATIONS AND USAGE

Before the initial therapeutic administration of Stimate[®] Nasal Spray, the physician should
 establish that the patient shows an appropriate change in the coagulation profile following a test
 dose of intranasal administration of Stimate[®] Nasal Spray.²⁻⁴

- 73
- 74 Desmopressin acetate is also available as a solution for injection (DDAVP[®] Injection) when the
- ⁷⁵ intranasal route may be compromised. These situations include nasal congestion and blockage,
- nasal discharge, atrophy of nasal mucosa, and severe atrophic rhinitis. Intranasal delivery may
- also be inappropriate where there is an impaired level of consciousness.

79 Hemophilia A

80 **Stimate[®] Nasal Spray** is indicated for patients with hemophilia A with Factor VIII coagulant 81 activity levels greater than 5%.

82

B3 Desmopressin acetate will also stop bleeding in patients with hemophilia A with episodes of spontaneous or trauma-induced injuries such as hemarthroses, intramuscular hematomas or mucosal bleeding.^{2,3}

86

In the outpatient setting during two clinical trials where patients recorded bleeding episodes, **Stimate[®] Nasal Spray** provided effective hemostasis 100% of the time in 2 of the 5 patients. For those patients not responding in 100% of bleeding occasions, 45% (14 of 31) of bleeding episodes were effectively controlled with **Stimate[®] Nasal Spray**.

91

Desmopressin acetate is not indicated for the treatment of hemophilia A with Factor VIII coagulant activity levels equal to or less than 5%, or for the treatment of hemophilia B, or in patients who have Factor VIII antibodies.

95

96 von Willebrand's Disease (Type I)

Stimate[®] Nasal Spray is indicated for patients with mild to moderate classic von Willebrand's
 disease (Type I) with Factor VIII levels greater than 5%.

99

Desmopressin acetate will also stop bleeding in mild to moderate von Willebrand's disease
 patients with episodes of spontaneous or trauma-induced injuries such as hemarthroses,
 intramuscular hematomas, mucosal bleeding or menorrhagia.^{2,3}

103

In the outpatient setting during two clinical trials where patients recorded bleeding episodes, Stimate[®] Nasal Spray provided effective hemostasis 100% of the time in 75% of the patients (n=16). For those patients not responding in 100% of bleeding occasions, 78% (64 of 82) of bleeding episodes were effectively controlled with Stimate[®] Nasal Spray.

108

109 Patients may respond in a variable fashion depending on the type of molecular defect they have.

- Bleeding time and Factor VIII coagulant activity, ristocetin cofactor activity, and von Willebrand
- 111 factor antigen should be checked after initial administration of **Stimate**[®] Nasal Spray to ensure
- 112 that adequate levels have been achieved.
- 113

Stimate[®] Nasal Spray is not indicated for the treatment of severe classic von Willebrand's disease (Type I) and when there is evidence of an abnormal molecular form of Factor VIII antigen. See *WARNINGS*.

117

118 **CONTRAINDICATIONS**

- 119 None.
- 120
- 121

122 WARNINGS

123 For intranasal use only.

124

Very rare cases of hyponatremia have been reported from world-wide postmarketing experience in patients treated with Stimate (desmopressin acetate). Stimate is a potent antidiuretic which, when administered, may lead to water intoxication and/or hyponatremia. Unless properly diagnosed and treated hyponatremia can be fatal. Therefore, fluid restriction is recommended and should be discussed with the patient and/or guardian. Careful medical supervision is required.

131

When Stimate Nasal Spray is administered, in particular in pediatric and geriatric patients, fluid 132 intake should be adjusted downward in order to decrease the potential occurrence of water 133 intoxication and hyponatremia (See PRECAUTIONS, Pediatric Use and Geriatric Use.) All 134 patients receiving Stimate therapy should be observed for the following signs or symptoms 135 associated with hyponatremia: headache, nausea/vomiting, decreased serum sodium, weight 136 gain, restlessness, fatigue, lethargy, disorientation, depressed reflexes, loss of appetite, 137 irritability, muscle weakness, muscle spasms or cramps and abnormal mental status such as 138 hallucinations, decreased consciousness and confusion. Severe symptoms may include one or a 139 combination of the following: seizure, coma and/or respiratory arrest. Particular attention should 140 be paid to the possibility of the rare occurrence of an extreme decrease in plasma osmolality that 141 may result in seizures that could lead to coma. 142

143

Stimate should be used with caution in patients with habitual or psychogenic polydipsia, who may be more likely to drink excessive amounts of fluids, putting them at greater risk of hyponatremia.

147

Stimate[®] Nasal Spray should not be used to treat patients with Type IIB von Willebrand's
 disease since platelet aggregation may be induced.

150

151 **PRECAUTIONS**

152 General

Desmopressin acetate has infrequently produced changes in blood pressure causing either a slight elevation in blood pressure or a transient fall in blood pressure and a compensatory increase in heart rate. The drug should be used with caution in patients with coronary artery insufficiency and/or hypertensive cardiovascular disease.

157

Stimate[®] Nasal Spray should be used with caution in patients with conditions associated with fluid and electrolyte imbalance, such as cystic fibrosis, heart failure and renal disorders because these patients are prone to hyponatremia.

161

162 There have been rare reports of thrombotic events (thrombosis⁷, acute cerebrovascular 163 thrombosis, acute myocardial infarction) following desmopressin acetate injection in patients 164 predisposed to thrombus formation. No causality has been determined; however, the drug should 165 be used with caution in these patients.

- 167 Severe allergic reactions have been reported rarely.^{2,8-10} Fatal anaphylaxis has been reported in 168 one patient who received intravenous DDAVP[®] (desmopressin acetate). It is not known whether 169 antibodies to desmopressin acetate are produced after repeated administration.
- 170

Since Stimate[®] Nasal Spray is used intranasally, changes in the nasal mucosa such as scarring,
 edema, or other disease may cause erratic, unreliable absorption in which case Stimate[®] Nasal
 Spray should be discontinued until the nasal problems resolve. For such situations, DDAVP[®]
 Initiation should be appridded

- 174 Injection should be considered.
- 175

176 Information for Patients

Patients should be informed that the bottle accurately delivers 25 sprays of 150 mcg each. Any solution remaining after 25 sprays should be discarded since the amount delivered thereafter may be substantially less than 150 mcg of drug. No attempt should be made to transfer remaining

- solution to another bottle. Patients should be instructed to read accompanying directions on use
- 181 of the spray pump carefully before use.
- 182

Patients should also be advised that if bleeding is not controlled, the physician should be contacted.^{2,3}

185

186 Hemophilia A

187 Laboratory tests for assessing patient status include levels of Factor VIII coagulant, Factor VIII

antigen and Factor VIII ristocetin cofactor (von Willebrand factor) as well as activated partial

- thromboplastin time. Factor VIII coagulant activity should be determined before giving **Stimate**[®]
- 190 Nasal Spray for hemostasis. If Factor VIII coagulant activity is present at less than 5% of
- 191 normal, **Stimate[®] Nasal Spray** should not be relied on.
- 192

193 von Willebrand's Disease

Laboratory tests for assessing patient status include levels of Factor VIII coagulant activity,VWF:RCo and VWF:Ag.

196

197 Drug Interactions

Although the pressor activity of desmopressin acetate is very low, its use with other pressor agents should be done only with careful patient monitoring. The concomitant administration of drugs that may increase the risk of water intoxication with hyponatremia (e.g., tricyclic antidepressants, selective serotonin re-uptake inhibitors, chlorpromazine, opiate analgesics, NSAIDS, lamotrigine and carbamazepine) should be performed with caution.

203

204 DDAVP[®] Injection has been used with epsilon aminocaproic acid without adverse effects.

205

206 Carcinogenicity, Mutagenicity, Impairment of Fertility

There have been no long-term studies in animals to assess the carcinogenic, mutagenic or impairment of fertility potential of **Stimate**[®] **Nasal Spray**.

210 **Pregnancy Category B**

211 Reproduction studies performed in rats and rabbits by the subcutaneous route at doses up to 10

mcg/kg/day have revealed no evidence of harm to the fetus due to desmopressin acetate. This dose is equivalent to 10 times (for Factor VIII stimulation) or 38 times (for diabetes insipidus)

- the systemic human dose based on a mg/M^2 surface area.
- 215

There are no adequate and well-controlled studies in pregnant women. Several publications of 216 217 desmopressin acetate's use in the management of diabetes insipidus during pregnancy are available; these include a few anecdotal reports of congenital anomalies and low birth weight 218 babies. However, no causal connection between these events and desmopressin acetate has been 219 established. A 15-year, Swedish epidemiologic study of the use of desmopressin acetate in 220 pregnant women with diabetes insipidus found the rate of birth defects to be no greater than that 221 in the general population. As opposed to preparations containing natural hormones, 222 desmopressin acetate in antidiuretic doses has no uterotonic action and the physician will have to 223 weigh the therapeutic advantages against the possible risks in each case. 224

225

226 Nursing Mothers

There have been no controlled studies in nursing mothers. A single study in postpartum women demonstrated a marked change in plasma, but little if any change in assayable DDAVP[®] in breast milk following an intranasal dose of 10 mcg. It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when **Stimate[®] Nasal Spray** is administered to a nursing woman.

232

233 Pediatric Use

Use in infants and children will require careful fluid intake restriction to prevent possible hyponatremia and water intoxication. **Stimate**[®] **Nasal Spray** should not be used in infants younger than 11 months in the treatment of hemophilia A or von Willebrand's disease; safety and effectiveness in children between 11 months and 12 years of age has been demonstrated.²⁻⁴

238

239 Geriatric Use

Clinical studies of Stimate[®] did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently than younger subjects. However, other postmarketing experience has indicated the occurrence of hyponatremia with the use of desmopressin acetate and fluid overload.

244

Therefore, in elderly patients fluid intake should be adjusted downward in an effort to decrease the potential occurrence of water intoxication and hyponatremia. Particular attention should be paid to the possibility of the rare occurrence of an extreme decrease in plasma osmolality that may result in seizures, and that could lead to coma.

249

Patients who do not have need of antidiuretic hormone for its antidiuretic effect should be cautioned to ingest only enough fluid to satisfy thirst, in an effort to decrease the potential occurrence of water intoxication and hyponatremia.

- 253
- As for all patients, dosing for geriatric patients should be appropriate to their clinical condition.

256 ADVERSE REACTIONS

Infrequently, DDAVP[®] Injection has produced transient headache, nausea, mild abdominal cramps and vulval pain. These symptoms disappeared with reduction in dosage. Occasional facial flushing has been reported with the administration of DDAVP[®] Injection. Infrequently, high doses of intranasal DDAVP[®] have produced transient headache and nausea. Nasal congestion, rhinitis and flushing have also been reported occasionally along with mild abdominal cramps. These symptoms disappeared with reduction in dosage. Nosebleed, sore throat, cough and upper respiratory infections have also been reported.

264

In addition to those listed above, the following have also been reported in clinical trials with Stimate[®] Nasal Spray: Somnolence, dizziness, itchy or light-sensitive eyes, insomnia, chills, warm feeling, pain, chest pain, palpitations, tachycardia, dyspepsia, edema, vomiting, agitation and balanitis.¹⁻⁴

269

DDAVP[®] Injection (desmopressin acetate) has infrequently produced changes in blood pressure causing either a slight elevation or a transient fall with a compensatory increase in heart rate.

- 272 Severe allergic reactions including anaphylaxis have been reported rarely with DDAVP[®] 273 Injection.
- 274

275 **Post Marketing**

There have been rare reports of convulsions from hyponatremia associated with concomitant use of desmopressin and the following medications: oxybutynin and imipramine.

- 279 See *WARNINGS* for the possibility of water intoxication, hyponatremia and coma.¹¹
- 280

284

278

281 To report **SUSPECTED** ADVERSE **REACTIONS**, contact CSL Behring **Pharmacovigilance** 1-866-915-6958 1-800-FDA-1088 at FDA at 282 or or 283 www.fda.gov/medwatch.

285 **OVERDOSAGE**

Signs of overdose may include confusion, drowsiness, continuing headache, problems with passing urine and rapid weight gain due to fluid retention. (See *WARNINGS*.) In cases of overdosage, the dosage should be reduced, frequency of administration decreased, or the drug withdrawn according to the severity of the condition.

- 290
- 291 There is no known specific antidote for desmopressin acetate or **Stimate[®] Nasal Spray**.
- 292

An oral LD_{50} has not been established. An intravenous dose of 2 mg/kg in mice demonstrated no effect.

- 295
- 296

IN-8155-08

297 DOSAGE AND ADMINISTRATION

298 Hemophilia A and von Willebrand's Disease (Type I)

Stimate[®] Nasal Spray is administered by nasal insufflation, one spray per nostril, to provide a total dose of 300 mcg. In patients weighing less than 50 kg, 150 mcg administered as a single spray provided the expected effect on Factor VIII coagulant activity, Factor VIII ristocetin cofactor activity and skin bleeding time.^{3,4} If **Stimate[®] Nasal Spray** is used preoperatively, it should be administered 2 hours prior to the scheduled procedure.^{12,13}

304

The necessity for repeat administration of **Stimate**[®] **Nasal Spray** or use of any blood products for hemostasis should be determined by laboratory response as well as the clinical condition of the patient. Fluid restriction should be observed, and fluid intake should be limited to a minimum, from 1 hour before desmopressin administration, until at least 24 hours after administration. The tendency toward tachyphylaxis (lessening of response) with repeated administration given more frequently than once every 48 hours should be considered in treating each patient.

312

The nasal spray pump can only deliver doses of 0.1 mL (150 mcg) or multiples of 0.1 mL. If doses other than these are required, DDAVP[®] Injection may be used.

315

The spray pump must be primed prior to the first use. To prime pump, press down 4 times. The bottle should be discarded after 25 sprays since the amount delivered thereafter per spray may be substantially less than 150 mcg of drug.

319

320 HOW SUPPLIED

A 2.5 mL bottle with spray pump capable of delivering 25 sprays of 150 mcg (NDC 0053-6871-00).

323

Store at room temperature not to exceed 25° C (77°F) for the period indicated by the expiration date on the label. Discard six months after being opened. Store bottle in upright position.

326

327 Revised April 2012

- 328
- 329 Manufactured for:
- 330 CSL Behring LLC
- 331 King of Prussia, PA 19406-0901
- 332 US License No. 1767
- 332 00 L
- 334 By:
- 335 Ferring GmbH
- 336 Kiel, Germany
- 337
- 338

Stimate [®]
(desmopressin acetate)

339 **REFERENCES**

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373				
374	PATIENT INSTRUCTION GUIDE			
375				
376 377				
378	Stimate [®] Nasal Spray			
379	(Pronounced Stim-ate)			
380	(desmopressin acetate)			
381	_			
382	Read this patient information leaflet before you start taking Stimate [®] Nasal Spray and each time			
383		n. This information does not take the place of		
384	talking to your healthcare provider about your m	edical condition or your treatment.		
385				
386	What is the most important information I sho	uld know about Stimate [®] Nasal Spray?		
387				
388		at risk for water intoxication, fluid overload		
389 390	and low sodium levels in the blood. You must follow your healthcare provider's instructions on limiting the amount of fluid you can drink when taking Stimute [®] Nagal			
390 391				
392	Spray.Do not drink more than you need to satisfy your thirst.			
392 393	 Do not drink more than you need to satisfy your tillist. You can have serious side effects such as seizures, coma, and death from drinking too 			
394	• You can have serious side effects such as seizures, coma, and death from drinking too much fluid.			
395		er risk for these conditions and must follow their		
396	 Clinicities and elderly patients are at higher risk for these conditions and <u>must</u> follow then healthcare provider's restrictions on drinking fluids. 			
397		88		
398	Call your healthcare provider right away if you	have any of the following symptoms while using		
399	Stimate [®] Nasal Spray. They may mean that you	r blood sodium level is low:		
400				
	Headache	• Loss of appetite		
	• Nausea	• Irritability		
	Vomiting	Muscle weakness		
	Weight gain	• Muscle spasms or cramps		
	Restlessness	Hallucinations		
	Tiredness	Confusion		
401				

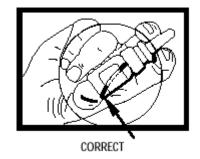
Using Stimate[®] Nasal Spray the wrong way may cause it not to work to control bleeding.

- Call your healthcare provider right away if you have any uncontrolled bleeding.
- 403 404

406	What is Stimate [®] Nasal Spray?
407	Stimate [®] Nasal Spray is a prescription medicine used to stop some types of bleeding in people
408	with mild hemophilia A or mild to moderate von Willebrand's disease Type 1.
409	
410	Stimate [®] Nasal Spray should not be used in children under 11 months of age.
411	
412	What should I tell my healthcare provider before I use Stimate [®] Nasal Spray?
413	
414	Before taking Stimate [®] Nasal Spray, tell your healthcare provider about all of your medical
415	conditions, including if you:
416	• Have any nasal problems such as a stuffy nose, have ever had surgery on your nose, or
417	have trouble breathing through your nose. You may need to use another form of this
418	medicine.
419	• Have or have had any heart, blood circulation, or blood pressure problems.
420	• Have a condition that causes fluid or water imbalance problems such as:
421	Cystic fibrosis
422	• Heart failure
423	Kidney problems
424	• Have or have had a condition that causes you to be very thirsty.
425	• Are pregnant or plan to become pregnant. It is not known if Stimate [®] Nasal Spray will
426	harm your unborn baby.
427	 Are breast-feeding or plan to breast-feed. It is not known if Stimate[®] Nasal Spray passes
428	into your breast milk. You and your healthcare provider should decide if you will take
429	Stimate [®] Nasal Spray.
430	Stillate Adsarspray.
431	Tell your healthcare provider and pharmacist about all the medicines you take, including
432	prescription and non-prescription medicines, such as over-the-counter medicines, vitamins,
433	supplements and herbal remedies.
434	supplements and nerour remedies.
435	Using Stimate [®] Nasal Spray with certain other medicines can affect the way Stimate [®] Nasal
436	Spray works.
437	
438	Know the medicines you take. Keep a list of them and show it to your healthcare provider and
439	pharmacist when you get a new medicine.
440	
441	It is especially important to tell your healthcare provider if you take:
442	 Blood pressure or heart medicines
443	 Antidepressants
444	 Anti-anxiety medicines
445	 Antihistamines
446	
447	Seizure medicines
448	Medicines for over-active urinary bladder
449	

Ask your healthcare provider or pharmacist if you are not sure if your medicine is one of these. 450 451 How should I use Stimate[®] Nasal Spray? 452 • Use Stimate[®] Nasal Spray exactly as your healthcare provider told you. Do not use more 453 Stimate[®] Nasal Spray or take it more often than your healthcare provider told you. 454 • The Stimate[®] Nasal Sprav pump provides the correct dose of your medicine. For detailed 455 instructions on how to use the nasal spray pump, see the *Patient Instructions for Use* at 456 the end of this leaflet. 457 • The nasal spray pump delivers 25 sprays of Stimate[®] Nasal Spray and each spray 458 contains a measured amount of medicine. Any medicine left in the spray pump after 25 459 sprays should be thrown away because, at that time, the amount of medicine in each 460 spray may be a lot less than the correct amount. Do not put any leftover medicine into 461 another bottle. 462 • If your symptoms do not improve, or if they become worse, contact your healthcare 463 provider. Do not stop taking Stimate[®] Nasal Spray without talking to your healthcare 464 provider. 465 • If you use too much Stimate[®] Nasal Spray, call your healthcare provider or go to the 466 nearest hospital emergency department right away. 467 468 What are the possible side effects of Stimate[®] Nasal Spray? 469 470 Stimate[®] Nasal Spray may cause serious side effects, that come from having too much water 471 in the body. See "What is the most important information I should know about Stimate" 472 473 Nasal Sprav?". 474 Common side effects of Stimate Nasal Spray include: 475 • Occasional facial flushing 476 • Nasal congestion 477 Runny nose 478 479 • Nosebleed • Sore throat 480 481 • Cough Upper respiratory infections. 482 • 483 Tell your healthcare provider about any side effect that bothers you or does not go away. These 484 are not all the possible side effects of Stimate[®] Nasal Spray. If you have questions, talk to your 485 healthcare provider. 486 487 488 Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088. 489 490 491

492	How should I store Stimate [®] Nasal Spray?
493	• Store at room temperature, but not higher than 77°F (25°C).
494	• Throw away Stimate [®] Nasal Spray six months after it is opened, or when the expiration
495	date has passed, if this date is before the six months is up.
496	• Store Stimate [®] Nasal Spray standing upright.
497	
498	Keep Stimate [®] Nasal Spray and all medicines out of the reach of children.
499	
500	General information about Stimate [®] Nasal Spray
501	Medicines are sometimes prescribed for conditions that are not mentioned in the patient leaflet.
502	Do not use Stimate [®] Nasal Spray for a condition for which it was not prescribed. Do not give
503	Stimate [®] Nasal Spray to other people, even if they have the same symptoms you have. It may
504	harm them.
505	
506	This patient information leaflet summarizes the most important information about Stimate®
507	Nasal Spray. If you would like more information about Stimate [®] Nasal Spray, talk with your
508	healthcare provider. You can ask your healthcare provider or pharmacist for information about
509	Stimate [®] Nasal Spray that is written for health professionals. For more information, go to
510	www.stimate.com or call CSL Behring Medical Affairs at 1-800-504-5434.
511	
512	What are the ingredients in Stimate [®] Nasal Spray?
513	
514	Active ingredients: desmopressin acetate
515	Inactive ingredients: sodium chloride, citric acid monohydrate, disodium phosphate dihydrate,
516	benzalkonium chloride, purified water.
517	
518	Patient Instructions for Use
519	
520	Read these instructions carefully before you use your Stimate [®] Nasal Spray pump. The
521	following instructions tell you how to prepare, or prime, your Stimate [®] Nasal Spray pump so that
522	it is ready to use.
523	
524	Using your Stimate [®] Nasal Spray Pump
525	
526	1. Remove the protective cap.
527	
528	2. When using Stimate [®] Nasal Spray for the first time, the spray pump must be primed by
529	pressing down on the ring at the top of the pump 4 times. Hold the spray tip away from
530	your face and eyes. See Figure A.
531	



533 Figure A

- 534
- 535
- When primed, the Stimate[®] Nasal Spray pump delivers one dose of medicine each time it is pressed. For the right dose, tilt your Stimate[®] Nasal Spray pump so that the tube inside the spray pump draws the medicine up from the deepest part of the medicine inside the container. See Figures A and B.
- 540



541		
542	Figure	e B
543		
544	4.	Put the spray nozzle tip into your nostril and press the spray pump one time for one dose
545		(150-micrograms). If two doses are prescribed, spray each nostril one time (for a dose of
546		300-micrograms).
547		
548	5.	When you finish using your Stimate [®] Nasal Spray, put the cap over the tip of the pump.
549		
550	6.	If Stimate [®] Nasal Spray has not been used for one week, you will need to prime the pump
551		again by pressing one time, or until you see a fine mist.
552		
553		

CSL Behring LLC	Stimate [®]	Package Insert
_	(desmopressin acetate)	Revised: April 2012
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Use this check-off chart to help you keep track of the number of sprays used. This will help make sure that you receive 25 sprays with each bottle of Stimate[®] Nasal Spray. There is extra medicine in the bottle to allow for priming. When using the chart to check off sprays, do not count the priming sprays.

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Stimate[®] Nasal Spray 25 Spray Check-off Chart

1	2	3	4	5
6	1	8	9	10
Ū	12	13	14	15
16	\overline{U}	18	19	20
21	22	23	24	25

562

Keep this chart with your Stimate[®] Nasal Spray or put it someplace where you can easily get it.

565

Check off number 1 on the chart with your first dose of Stimate[®] Nasal Spray. Check off the numbers after each use of Stimate[®] Nasal Spray. If your healthcare provider prescribed a 2-spray dose (300-micrograms), then two numbers should be checked off.

569

570 **3.** Throw away the Stimate[®] Nasal Spray after 25 sprays.