

## HIGHLIGHTS OF PRESCRIBING INFORMATION

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

LOVAZA (omega-3-acid ethyl esters) Capsules, for oral use

Initial U.S. Approval: 2004

### RECENT MAJOR CHANGES

Indications and Usage, Limitations of Use (1) 06/2013

### INDICATIONS AND USAGE

LOVAZA is a combination of ethyl esters of omega 3 fatty acids, principally EPA and DHA, indicated as an adjunct to diet to reduce triglyceride (TG) levels in adult patients with severe ( $\geq 500$  mg/dL) hypertriglyceridemia. (1)

Limitations of Use:

- The effect of LOVAZA on the risk for pancreatitis in patients with severe hypertriglyceridemia has not been determined. (1)
- The effect of LOVAZA on cardiovascular mortality and morbidity in patients with severe hypertriglyceridemia has not been determined. (1)

### DOSAGE AND ADMINISTRATION

- The daily dose of LOVAZA is 4 grams per day taken as a single 4-gram dose (4 capsules) or as two 2-gram doses (2 capsules given twice daily). (2)
- Patients should be advised to swallow LOVAZA capsules whole. Do not break open, crush, dissolve or chew LOVAZA. (2)

### DOSAGE FORMS AND STRENGTHS

Capsules: 1-gram (3)

### CONTRAINDICATIONS

LOVAZA is contraindicated in patients with known hypersensitivity (e.g., anaphylactic reaction) to LOVAZA or any of its components. (4)

### WARNINGS AND PRECAUTIONS

- In patients with hepatic impairment, monitor ALT and AST levels periodically during therapy. (5.1)
- LOVAZA may increase levels of LDL. Monitor LDL levels periodically during therapy. (5.1)
- Use with caution in patients with known hypersensitivity to fish and/or shellfish. (5.2)
- There is a possible association between LOVAZA and more frequent recurrences of symptomatic atrial fibrillation or flutter in patients with paroxysmal or persistent atrial fibrillation, particularly within the first months of initiating therapy. (5.3)

### ADVERSE REACTIONS

The most common adverse reactions (incidence  $>3\%$  and greater than placebo) were eructation, dyspepsia, and taste perversion. (6)

To report SUSPECTED ADVERSE REACTIONS, contact GlaxoSmithKline at 1-888-825-5249 or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).

### DRUG INTERACTIONS

Omega-3-acids may prolong bleeding time. Patients taking LOVAZA and an anticoagulant or other drug affecting coagulation (e.g., anti-platelet agents) should be monitored periodically. (7.1)

### USE IN SPECIFIC POPULATIONS

- Pregnancy: Use during pregnancy only if the potential benefit justifies the potential risk to the fetus. (8.1)

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

Revised: 09/2013

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\*Sections or subsections omitted from the full prescribing information are not listed.

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## 1 FULL PRESCRIBING INFORMATION

### 2 1 INDICATIONS AND USAGE

3 LOVAZA<sup>®</sup> (omega-3-acid ethyl esters) is indicated as an adjunct to diet to reduce  
4 triglyceride (TG) levels in adult patients with severe ( $\geq 500$  mg/dL) hypertriglyceridemia.

5 **Usage Considerations:** Patients should be placed on an appropriate lipid-lowering diet  
6 before receiving LOVAZA and should continue this diet during treatment with LOVAZA.

7 Laboratory studies should be done to ascertain that the lipid levels are consistently  
8 abnormal before instituting LOVAZA therapy. Every attempt should be made to control serum  
9 lipids with appropriate diet, exercise, weight loss in obese patients, and control of any medical  
10 problems such as diabetes mellitus and hypothyroidism that are contributing to the lipid  
11 abnormalities. Medications known to exacerbate hypertriglyceridemia (such as beta blockers,  
12 thiazides, estrogens) should be discontinued or changed if possible prior to consideration of  
13 triglyceride-lowering drug therapy.

#### 14 **Limitations of Use:**

15 The effect of LOVAZA on the risk for pancreatitis in patients with severe  
16 hypertriglyceridemia has not been determined.

17 The effect of LOVAZA on cardiovascular mortality and morbidity in patients with severe  
18 hypertriglyceridemia has not been determined.

### 19 2 DOSAGE AND ADMINISTRATION

- 20 • Assess triglyceride levels carefully before initiating therapy. Identify other causes (e.g.,  
21 diabetes mellitus, hypothyroidism, or medications) of high triglyceride levels and manage as  
22 appropriate. [*see Indications and Usage (1)*].
- 23 • Patients should be placed on an appropriate lipid-lowering diet before receiving LOVAZA,  
24 and should continue this diet during treatment with LOVAZA. In clinical studies, LOVAZA  
25 was administered with meals.

26 The daily dose of LOVAZA is 4 grams per day. The daily dose may be taken as a single  
27 4-gram dose (4 capsules) or as two 2-gram doses (2 capsules given twice daily).

28 Patients should be advised to swallow LOVAZA capsules whole. Do not break open,  
29 crush, dissolve or chew LOVAZA.

### 30 3 DOSAGE FORMS AND STRENGTHS

31 LOVAZA (omega-3-acid ethyl esters) capsules are supplied as 1-gram transparent soft-  
32 gelatin capsules filled with light-yellow oil and bearing the designation LOVAZA.

### 33 4 CONTRAINDICATIONS

34 LOVAZA is contraindicated in patients with known hypersensitivity (e.g., anaphylactic  
35 reaction) to LOVAZA or any of its components.

36 **5 WARNINGS AND PRECAUTIONS**

37 **5.1 Monitoring: Laboratory Tests**

38 In patients with hepatic impairment, alanine aminotransferase (ALT) and aspartate  
39 aminotransferase (AST) levels should be monitored periodically during therapy with LOVAZA.  
40 In some patients, increases in ALT levels without a concurrent increase in AST levels were  
41 observed.

42 In some patients, LOVAZA increases LDL-C levels. LDL-C levels should be monitored  
43 periodically during therapy with LOVAZA.

44 Laboratory studies should be performed periodically to measure the patient's TG levels  
45 during therapy with LOVAZA.

46 **5.2 Fish Allergy**

47 LOVAZA contains ethyl esters of omega-3 fatty acids (EPA and DHA) obtained from the  
48 oil of several fish sources. It is not known whether patients with allergies to fish and/or shellfish,  
49 are at increased risk of an allergic reaction to LOVAZA. LOVAZA should be used with caution  
50 in patients with known hypersensitivity to fish and/or shellfish.

51 **5.3 Recurrent Atrial Fibrillation (AF) or Flutter**

52 In a double-blind, placebo-controlled trial of 663 patients with symptomatic paroxysmal  
53 AF (n=542) or persistent AF (n=121), recurrent AF or flutter was observed in patients  
54 randomized to LOVAZA who received 8 grams/day for 7 days and 4 grams/day thereafter for 23  
55 weeks at a higher rate relative to placebo. Patients in this trial had median baseline triglycerides  
56 of 127 mg/dL, had no substantial structural heart disease, were taking no anti-arrhythmic therapy  
57 (rate control permitted), and were in normal sinus rhythm at baseline.

58 At 24 weeks, in the paroxysmal AF stratum, there were 129 (47%) first recurrent  
59 symptomatic AF or flutter events on placebo and 141 (53%) on LOVAZA [primary endpoint,  
60 HR 1.19; 95% CI 0.93, 1.35]. In the persistent AF stratum, there were 19 (35%) events on  
61 placebo and 34 (52%) events on LOVAZA [HR 1.63; 95% CI 0.91, 2.18]. For both strata  
62 combined, the HR was 1.25; 95% CI 1.00, 1.40. Although the clinical significance of these  
63 results is uncertain, there is a possible association between LOVAZA and more frequent  
64 recurrences of symptomatic atrial fibrillation or flutter in patients with paroxysmal or persistent  
65 atrial fibrillation, particularly within the first 2 to 3 months of initiating therapy.

66 LOVAZA is not indicated for the treatment of AF or flutter.

67 **6 ADVERSE REACTIONS**

68 **6.1 Clinical Trials Experience**

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

72 Adverse reactions reported in at least 3% and at a greater rate than placebo for patients  
73 treated with LOVAZA based on pooled data across 23 clinical studies are listed in Table 1.

74  
75  
76

**Table 1. Adverse Reactions Occurring at Incidence  $\geq 3\%$  and Greater than Placebo in Clinical Studies of LOVAZA**

Adverse Reaction <sup>a</sup>	LOVAZA (N = 655)		Placebo (N = 370)	
	n	%	n	%
Eructation	29	4	5	1
Dyspepsia	22	3	6	2
Taste perversion	27	4	1	<1

77  
78

<sup>a</sup> Studies included subjects with HTG and severe HTG.

79  
80  
81  
82

Additional adverse reactions from clinical studies are listed below:

*Digestive System:* Constipation, gastrointestinal disorder and vomiting.

*Metabolic and Nutritional Disorders:* Increased ALT and increased AST.

*Skin:* Pruritus and rash.

## 83 **6.2 Postmarketing Experience**

84 In addition to adverse reactions reported from clinical trials, the events described below  
85 have been identified during post-approval use of LOVAZA. Because these events are reported  
86 voluntarily from a population of unknown size, it is not possible to reliably estimate their  
87 frequency or to always establish a causal relationship to drug exposure.

88 The following events have been reported: anaphylactic reaction, hemorrhagic diathesis.

## 89 **7 DRUG INTERACTIONS**

### 90 **7.1 Anticoagulants or Other Drugs Affecting Coagulation**

91 Some studies with omega-3-acids demonstrated prolongation of bleeding time. The  
92 prolongation of bleeding time reported in these studies has not exceeded normal limits and did  
93 not produce clinically significant bleeding episodes. Clinical studies have not been done to  
94 thoroughly examine the effect of LOVAZA and concomitant anticoagulants. Patients receiving  
95 treatment with LOVAZA and an anticoagulant or other drug affecting coagulation (e.g., anti-  
96 platelet agents) should be monitored periodically.

## 97 **8 USE IN SPECIFIC POPULATIONS**

### 98 **8.1 Pregnancy**

99 Pregnancy Category C: There are no adequate and well-controlled studies in pregnant  
100 women. It is unknown whether LOVAZA can cause fetal harm when administered to a pregnant  
101 woman or can affect reproductive capacity. LOVAZA should be used during pregnancy only if  
102 the potential benefit to the patient justifies the potential risk to the fetus.

103 Animal Data: Omega-3-acid ethyl esters have been shown to have an embryocidal effect  
104 in pregnant rats when given in doses resulting in exposures 7 times the recommended human  
105 dose of 4 grams/day based on a body surface area comparison.

106 In female rats given oral gavage doses of 100, 600, and 2,000 mg/kg/day beginning 2  
107 weeks prior to mating and continuing through gestation and lactation, no adverse effects were  
108 observed in the high dose group (5 times human systemic exposure following an oral dose of 4  
109 grams/day based on body surface area comparison).

110 In pregnant rats given oral gavage doses of 1,000, 3,000, and 6,000 mg/kg/day from  
111 gestation day 6 through 15, no adverse effects were observed (14 times human systemic  
112 exposure following an oral dose of 4 grams/day based on a body surface area comparison).

113 In pregnant rats given oral gavage doses of 100, 600, and 2,000 mg/kg/day from gestation  
114 day 14 through lactation day 21, no adverse effects were seen at 2,000 mg/kg/day (5 times the  
115 human systemic exposure following an oral dose of 4 grams/day based on a body surface area  
116 comparison). However, decreased live births (20% reduction) and decreased survival to postnatal  
117 day 4 (40% reduction) were observed in a dose-ranging study using higher doses of 3,000  
118 mg/kg/day (7 times the human systemic exposure following an oral dose of 4 grams/day based  
119 on a body surface area comparison).

120 In pregnant rabbits given oral gavage doses of 375, 750, and 1,500 mg/kg/day from  
121 gestation day 7 through 19, no findings were observed in the fetuses in groups given 375  
122 mg/kg/day (2 times human systemic exposure following an oral dose of 4 grams/day based on a  
123 body surface area comparison). However, at higher doses, evidence of maternal toxicity was  
124 observed (4 times human systemic exposure following an oral dose of 4 grams/day based on a  
125 body surface area comparison).

### 126 **8.3 Nursing Mothers**

127 Studies with omega-3-acid ethyl esters have demonstrated excretion in human milk. The  
128 effect of this excretion on the infant of a nursing mother is unknown; caution should be exercised  
129 when LOVAZA is administered to a nursing mother. An animal study in lactating rats given oral  
130 gavage <sup>14</sup>C-ethyl EPA demonstrated that drug levels were 6 to 14 times higher in milk than in  
131 plasma.

### 132 **8.4 Pediatric Use**

133 Safety and effectiveness in pediatric patients have not been established.

### 134 **8.5 Geriatric Use**

135 A limited number of patients older than 65 years were enrolled in the clinical studies of  
136 LOVAZA. Safety and efficacy findings in subjects older than 60 years did not appear to differ  
137 from those of subjects younger than 60 years.

## 138 **9 DRUG ABUSE AND DEPENDENCE**

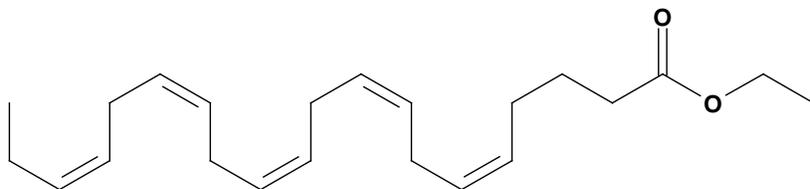
139 LOVAZA does not have any known drug abuse or withdrawal effects.

## 140 **11 DESCRIPTION**

141 LOVAZA, a lipid-regulating agent, is supplied as a liquid-filled gel capsule for oral  
142 administration. Each 1-gram capsule of LOVAZA contains at least 900 mg of the ethyl esters of  
143 omega-3 fatty acids sourced from fish oils. These are predominantly a combination of ethyl

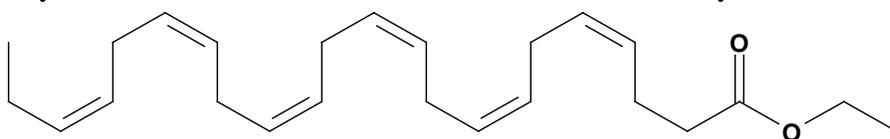
144 esters of eicosapentaenoic acid (EPA - approximately 465 mg) and docosahexaenoic acid (DHA  
145 - approximately 375 mg).

146 The empirical formula of EPA ethyl ester is  $C_{22}H_{34}O_2$ , and the molecular weight of EPA  
147 ethyl ester is 330.51. The structural formula of EPA ethyl ester is:



148  
149

150 The empirical formula of DHA ethyl ester is  $C_{24}H_{36}O_2$ , and the molecular weight of DHA  
151 ethyl ester is 356.55. The structural formula of DHA ethyl ester is:



152  
153

154 LOVAZA capsules also contain the following inactive ingredients: 4 mg  $\alpha$ -tocopherol (in  
155 a carrier of soybean oil), and gelatin, glycerol, and purified water (components of the capsule  
156 shell).

## 157 **12 CLINICAL PHARMACOLOGY**

### 158 **12.1 Mechanism of Action**

159 The mechanism of action of LOVAZA is not completely understood. Potential  
160 mechanisms of action include inhibition of acyl-CoA:1,2-diacylglycerol acyltransferase,  
161 increased mitochondrial and peroxisomal  $\beta$ -oxidation in the liver, decreased lipogenesis in the  
162 liver, and increased plasma lipoprotein lipase activity. LOVAZA may reduce the synthesis of  
163 triglycerides in the liver because EPA and DHA are poor substrates for the enzymes responsible  
164 for TG synthesis, and EPA and DHA inhibit esterification of other fatty acids.

### 165 **12.3 Pharmacokinetics**

166 In healthy volunteers and in patients with hypertriglyceridemia, EPA and DHA were  
167 absorbed when administered as ethyl esters orally. Omega-3-acids administered as ethyl esters  
168 (LOVAZA) induced significant, dose-dependent increases in serum phospholipid EPA content,  
169 though increases in DHA content were less marked and not dose-dependent when administered  
170 as ethyl esters.

171 Specific Populations: *Age:* Uptake of EPA and DHA into serum phospholipids in  
172 subjects treated with LOVAZA was independent of age (<49 years versus  $\geq$ 49 years).

173 *Gender:* Females tended to have more uptake of EPA into serum phospholipids than  
174 males. The clinical significance of this is unknown.

175 *Pediatric:* Pharmacokinetics of LOVAZA have not been studied.

176 *Renal or Hepatic Impairment:* LOVAZA has not been studied in patients with renal  
177 or hepatic impairment.

178 **Drug-Drug Interactions:** *Simvastatin:* In a 14-day study of 24 healthy adult subjects,  
179 daily co-administration of simvastatin 80 mg with LOVAZA 4 grams did not affect the extent  
180 (AUC) or rate ( $C_{max}$ ) of exposure to simvastatin or the major active metabolite, beta-hydroxy  
181 simvastatin at steady state.

182 *Atorvastatin:* In a 14-day study of 50 healthy adult subjects, daily co-administration  
183 of atorvastatin 80 mg with LOVAZA 4 grams did not affect AUC or  $C_{max}$  of exposure to  
184 atorvastatin, 2-hydroxyatorvastatin, or 4-hydroxyatorvastatin at steady state.

185 *Rosuvastatin:* In a 14-day study of 48 healthy adult subjects, daily co-administration  
186 of rosuvastatin 40 mg with LOVAZA 4 grams did not affect AUC or  $C_{max}$  of exposure to  
187 rosuvastatin at steady state.

188 *In vitro* studies using human liver microsomes indicated that clinically significant  
189 cytochrome P450 mediated inhibition by EPA/DHA combinations are not expected in humans.

## 190 **13 NONCLINICAL TOXICOLOGY**

### 191 **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

192 In a rat carcinogenicity study with oral gavage doses of 100, 600, and 2,000 mg/kg/day,  
193 males were treated with omega-3-acid ethyl esters for 101 weeks and females for 89 weeks  
194 without an increased incidence of tumors (up to 5 times human systemic exposures following an  
195 oral dose of 4 grams/day based on a body surface area comparison). Standard lifetime  
196 carcinogenicity bioassays were not conducted in mice.

197 Omega-3-acid ethyl esters were not mutagenic or clastogenic with or without metabolic  
198 activation in the bacterial mutagenesis (Ames) test with *Salmonella typhimurium* and  
199 *Escherichia coli* or in the chromosomal aberration assay in Chinese hamster V79 lung cells or  
200 human lymphocytes. Omega-3-acid ethyl esters were negative in the in vivo mouse micronucleus  
201 assay.

202 In a rat fertility study with oral gavage doses of 100, 600, and 2,000 mg/kg/day, males  
203 were treated for 10 weeks prior to mating and females were treated for 2 weeks prior to and  
204 throughout mating, gestation, and lactation. No adverse effect on fertility was observed at 2,000  
205 mg/kg/day (5 times human systemic exposure following an oral dose of 4 grams/day based on a  
206 body surface area comparison).

## 207 **14 CLINICAL STUDIES**

### 208 **14.1 Severe Hypertriglyceridemia**

209 The effects of LOVAZA 4 grams per day were assessed in 2 randomized, placebo-  
210 controlled, double-blind, parallel-group studies of 84 adult patients (42 on LOVAZA, 42 on  
211 placebo) with very high triglyceride levels. Patients whose baseline triglyceride levels were  
212 between 500 and 2,000 mg/dL were enrolled in these 2 studies of 6 and 16 weeks duration. The  
213 median triglyceride and LDL-C levels in these patients were 792 mg/dL and 100 mg/dL,  
214 respectively. Median HDL-C level was 23.0 mg/dL.

215 The changes in the major lipoprotein lipid parameters for the groups receiving LOVAZA  
216 or placebo are shown in Table 2.

217

218 **Table 2. Median Baseline and Percent Change From Baseline in Lipid Parameters in**  
219 **Patients with Severe Hypertriglyceridemia ( $\geq 500$  mg/dL)**

Parameter	LOVAZA N = 42		Placebo N = 42		Difference
	BL	% Change	BL	% Change	
TG	816	-44.9	788	+6.7	-51.6
Non-HDL-C	271	-13.8	292	-3.6	-10.2
TC	296	-9.7	314	-1.7	-8.0
VLDL-C	175	-41.7	175	-0.9	-40.8
HDL-C	22	+9.1	24	0.0	+9.1
LDL-C	89	+44.5	108	-4.8	+49.3

220 BL = Baseline (mg/dL); % Change = Median Percent Change from Baseline;

221 Difference = LOVAZA Median % Change – Placebo Median % Change

222

223 LOVAZA 4 grams per day reduced median TG, VLDL-C, and non-HDL-C levels and  
224 increased median HDL-C from baseline relative to placebo. Treatment with LOVAZA to reduce  
225 very high TG levels may result in elevations in LDL-C and non-HDL-C in some individuals.  
226 Patients should be monitored to ensure that the LDL-C level does not increase excessively.

227 The effect of LOVAZA on the risk of pancreatitis in patients with severe  
228 hypertriglyceridemia has not been determined.

229 The effect of LOVAZA on cardiovascular mortality and morbidity in patients with severe  
230 hypertriglyceridemia has not been determined.

## 231 **14.2 Other Clinical Experience**

232 The effects of LOVAZA 4 grams per day as add-on therapy to treatment with simvastatin  
233 were evaluated in a randomized, placebo-controlled, double-blind, parallel-group study of 254  
234 adult patients (122 on LOVAZA and 132 on placebo) with persistent high triglycerides (200 to  
235 499 mg/dL) despite simvastatin therapy. Patients were treated with open-label simvastatin 40 mg  
236 per day for 8 weeks prior to randomization to control their LDL-C to no greater than 10% above  
237 NCEP ATP III goal and remained on this dose throughout the study. Following 8 weeks of open-  
238 label treatment with simvastatin, patients were randomized to either LOVAZA 4 grams per day  
239 or placebo for an additional 8 weeks with simvastatin co-therapy. The median baseline  
240 triglyceride and LDL-C levels in these patients were 268 mg/dL and 89 mg/dL, respectively.  
241 Median baseline non-HDL-C and HDL-C levels were 138 mg/dL and 45 mg/dL, respectively.

242 The changes in the major lipoprotein lipid parameters for the groups receiving LOVAZA  
243 plus simvastatin or placebo plus simvastatin are shown in Table 3.

244

245 **Table 3. Response to the Addition of LOVAZA 4 grams per day to Ongoing Simvastatin**  
 246 **40 mg per day Therapy in Patients with High Triglycerides (200 to 499 mg/dL)**

Parameter	LOVAZA + Simvastatin N = 122			Placebo + Simvastatin N = 132			Difference	P-Value
	BL	EOT	Median % Change	BL	EOT	Median % Change		
Non-HDL-C	137	123	-9.0	141	134	-2.2	-6.8	<0.0001
TG	268	182	-29.5	271	260	-6.3	-23.2	<0.0001
TC	184	172	-4.8	184	178	-1.7	-3.1	<0.05
VLDL-C	52	37	-27.5	52	49	-7.2	-20.3	<0.05
Apo-B	86	80	-4.2	87	85	-1.9	-2.3	<0.05
HDL-C	46	48	+3.4	43	44	-1.2	+4.6	<0.05
LDL-C	91	88	+0.7	88	85	-2.8	+3.5	=0.05

247 BL = Baseline (mg/dL); EOT = End of Treatment (mg/dL); Median % Change = Median Percent  
 248 Change from Baseline; Difference = LOVAZA Median % Change – Placebo Median % Change  
 249

250 LOVAZA 4 grams per day significantly reduced non-HDL-C, TG, TC, VLDL-C, and  
 251 Apo-B levels and increased HDL-C and LDL-C from baseline relative to placebo.

252 **16 HOW SUPPLIED/STORAGE AND HANDLING**

253 LOVAZA (omega-3-acid ethyl esters) capsules are supplied as 1-gram transparent soft-  
 254 gelatin capsules filled with light-yellow oil and bearing the designation LOVAZA.

255 Bottles of 120: NDC 0173-0783-02  
 256

257 Store at 25°C (77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP  
 258 Controlled Room Temperature]. Do not freeze. Keep out of reach of children.

259 **17 PATIENT COUNSELING INFORMATION**

260 *See FDA-approved patient labeling (17.2).*

261 **17.1 Information for Patients**

- 262 • LOVAZA should be used with caution in patients with known sensitivity or allergy to fish  
 263 and/or shellfish [see Warnings and Precautions (5.2)].
- 264 • Patients should be advised that use of lipid-regulating agents does not reduce the importance  
 265 of adhering to diet [see Dosage and Administration (2)].
- 266 • Patients should be advised not to alter LOVAZA capsules in any way and to ingest intact  
 267 capsules only [see Dosage and Administration (2)].
- 268 • Instruct patients to take LOVAZA as prescribed. If a dose is missed, patients should take it as  
 269 soon as they remember. However, if they miss one day of LOVAZA, they should not double  
 270 the dose when they take it.

271 **17.2 FDA-Approved Patient Labeling**

272 Patient labeling is provided as a tear-off leaflet at the end of this full prescribing  
 273 information.

274

275 Manufactured for:



276

277 GlaxoSmithKline

278 Research Triangle Park, NC 27709

279

280 LOVAZA is a registered trademark of the GlaxoSmithKline group of companies.

281

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283

284 LVZ:11PI

285

**PATIENT INFORMATION**  
**LOVAZA<sup>®</sup> (lō-vā-ză)**  
**(omega-3-acid ethyl esters)**  
**Capsules**

Read this Patient Information before you start taking LOVAZA, and each time you get a refill. There may be new information. This information does not take the place of talking with your doctor about your medical condition or your treatment.

**What is LOVAZA?**

LOVAZA is a prescription medicine used along with a low fat and low cholesterol diet to lower very high triglyceride (fat) levels in adults.

It is not known if LOVAZA changes your risk of having inflammation of your pancreas (pancreatitis).

It is not known if LOVAZA prevents you from having a heart attack or stroke.

It is not known if LOVAZA is safe and effective in children.

**Who should not take LOVAZA?**

Do not take LOVAZA if you are allergic to omega-3-acid ethyl esters or any of the ingredients in LOVAZA. See the end of this leaflet for a complete list of ingredients in LOVAZA.

**What should I tell my doctor before taking LOVAZA?**

**Before you take LOVAZA, tell your doctor if you:**

- have diabetes.
- have a low thyroid problem (hypothyroidism).
- have a liver problem.
- have a pancreas problem.
- have a certain heart rhythm problem called atrial fibrillation or flutter.
- are allergic to fish or shellfish. It is not known if people who are allergic to fish or shellfish are also allergic to LOVAZA.
- are pregnant or plan to become pregnant. It is not known if LOVAZA will harm your unborn baby.

- 326 • are breastfeeding or plan to breastfeed. LOVAZA can pass into your  
327 breast milk. You and your doctor should decide if you will take LOVAZA or  
328 breastfeed.

329

330 **Tell your doctor about all the medicines you take**, including prescription  
331 and non-prescription medicine, vitamins, and herbal supplements.

332

333 LOVAZA can interact with certain other medicines that you are taking. Using  
334 LOVAZA with medicines that affect blood clotting (anticoagulants or blood  
335 thinners) may cause serious side effects.

336

337 Know the medicines you take. Keep a list of them to show your doctor and  
338 pharmacist when you get a new medicine.

339

#### 340 **How should I take LOVAZA?**

- 341 • Take LOVAZA exactly as your doctor tells you to take it.  
342 • You should not take more than 4 capsules of LOVAZA each day. Either  
343 take all 4 capsules at one time, or 2 capsules two times a day.  
344 • Do not change your dose or stop LOVAZA without talking to your doctor.  
345 • Take LOVAZA with or without food.  
346 • Take LOVAZA capsules whole. Do not break, crush, dissolve, or chew  
347 LOVAZA capsules before swallowing. If you cannot swallow LOVAZA  
348 capsules whole, tell your doctor. You may need a different medicine.  
349 • Your doctor may start you on a diet that is low in saturated fat,  
350 cholesterol, carbohydrates, and low in added sugars before giving you  
351 LOVAZA. Stay on this diet while taking LOVAZA.  
352 • Your doctor should do blood tests to check your triglyceride, bad  
353 cholesterol and liver function levels while you take LOVAZA.

354

#### 355 **What are the possible side effects of LOVAZA?**

356 **LOVAZA may cause serious side effects, including:**

- 357 • increases in the results of blood tests used to check your liver function  
358 (ALT and AST) and your bad cholesterol levels (LDL-C).  
359 • increases in the frequency of a heart rhythm problem (atrial fibrillation or  
360 flutter) may especially happen in the first few months of taking LOVAZA if  
361 you already have that problem.

362

363 The most common side effects of LOVAZA include:

- 364 • burping  
365 • upset stomach

366 • a change in your sense of taste

367

368 Talk to your doctor if you have a side effect that bothers you or does not go  
369 away.

370

371 These are not all the possible side effects of LOVAZA. For more information,  
372 ask your doctor or pharmacist.

373

374 Call your doctor for medical advice about side effects. You may report side  
375 effects to FDA at 1-800-FDA-1088.

376

### 377 **How should I store LOVAZA?**

378 • Store LOVAZA at room temperature between 68°F to 77°F (20°C to  
379 25°C).

380 • Do not freeze LOVAZA.

381 • Safely throw away medicine that is out of date or no longer needed.

382

383 **Keep LOVAZA and all medicines out of the reach of children.**

384

### 385 **General information about the safe and effective use of LOVAZA**

386 Medicines are sometimes prescribed for purposes other than those listed in a  
387 Patient Information leaflet. Do not use LOVAZA for a condition for which it  
388 was not prescribed. Do not give LOVAZA to other people, even if they have  
389 the same symptoms you have. It may harm them.

390

391 This Patient Information Leaflet summarizes the most important information  
392 about LOVAZA. If you would like more information, talk with your doctor.

393 You can ask your doctor or pharmacist for information about LOVAZA that is  
394 written for health professionals.

395

396 For more information go to [www.LOVAZA.com](http://www.LOVAZA.com) or call 1-888-825-5249.

397

### 398 **What are the ingredients in LOVAZA?**

399 Active Ingredient: omega-3-acid ethyl esters, mostly EPA and DHA

400 Inactive Ingredients: alpha-tocopherol (in soybean oil), gelatin, glycerol,  
401 purified water.

402

403 This patient labeling has been approved by the U.S. Food and Drug  
404 Administration.

405

406 Manufactured for:



407

408 GlaxoSmithKline

409 Research Triangle Park, NC 27709

410

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412

413 June 2013

414 LVZ:9PIL