

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
Warnings and Precautions, Recurrent Atrial Fibrillation or Flutter (5.3) 08/2012

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 (≥ 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.

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: 06/2013

FULL PRESCRIBING INFORMATION: CONTENTS*

1 INDICATIONS AND USAGE

2 DOSAGE AND ADMINISTRATION

3 DOSAGE FORMS AND STRENGTHS

4 CONTRAINDICATIONS

5 WARNINGS AND PRECAUTIONS

5.1 Monitoring: Laboratory Tests

5.2 Fish Allergy

5.3 Recurrent Atrial Fibrillation (AF) or Flutter

6 ADVERSE REACTIONS

6.1 Clinical Trials Experience

6.2 Postmarketing Experience

7 DRUG INTERACTIONS

7.1 Anticoagulants or Other Drugs Affecting Coagulation

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

8.3 Nursing Mothers

8.4 Pediatric Use

8.5 Geriatric Use

9 DRUG ABUSE AND DEPENDENCE

11 DESCRIPTION

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

12.3 Pharmacokinetics

13 NONCLINICAL TOXICOLOGY

13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

14 CLINICAL STUDIES

14.1 Severe Hypertriglyceridemia

14.2 Other Clinical Experience

16 HOW SUPPLIED/STORAGE AND HANDLING

17 PATIENT COUNSELING INFORMATION

17.1 Information for Patients

17.2 FDA-Approved Patient Labeling

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

1 **FULL PRESCRIBING INFORMATION**

2 **1 INDICATIONS AND USAGE**

3 LOVAZA[®] (omega-3-acid ethyl esters) is indicated as an adjunct to diet to reduce
4 triglyceride (TG) levels in adult patients with severe (≥ 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 ^a	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 ^a Studies included subjects with HTG and severe HTG.

78

79 Additional adverse reactions from clinical studies are listed below:

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

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

82 *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 |
128 Studies with omega-3-acid ethyl esters have demonstrated excretion in human milk. The effect
129 of this excretion on the infant of a nursing mother is unknown; caution should be exercised when
130 LOVAZA is administered to a nursing mother. An animal study in lactating rats given oral
131 gavage ¹⁴C-ethyl EPA demonstrated that drug levels were 6 to 14 times higher in milk than in
132 plasma.

133 **8.4 Pediatric Use**

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

135 **8.5 Geriatric Use**

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

139 **9 DRUG ABUSE AND DEPENDENCE**

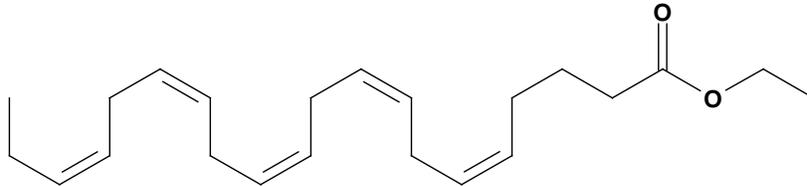
140 LOVAZA does not have any known drug abuse or withdrawal effects.

141 **11 DESCRIPTION**

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

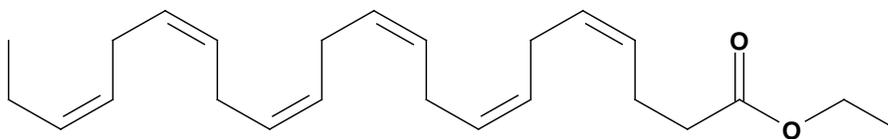
145 esters of eicosapentaenoic acid (EPA - approximately 465 mg) and docosahexaenoic acid (DHA
146 - approximately 375 mg).

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



149
150

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



153
154

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

158 **12 CLINICAL PHARMACOLOGY**

159 **12.1 Mechanism of Action**

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

166 **12.3 Pharmacokinetics**

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

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

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

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

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

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

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

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

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

191 **13 NONCLINICAL TOXICOLOGY**

192 **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

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

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

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

208 **14 CLINICAL STUDIES**

209 **14.1 Severe Hypertriglyceridemia**

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

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

218
 219 **Table 2. Median Baseline and Percent Change From Baseline in Lipid Parameters in**
 220 **Patients with Severe Hypertriglyceridemia (≥ 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

221 BL = Baseline (mg/dL); % Change = Median Percent Change from Baseline;
 222 Difference = LOVAZA Median % Change – Placebo Median % Change

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

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

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

232 **14.2 Other Clinical Experience**

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

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

245

246 **Table 3. Response to the Addition of LOVAZA 4 grams per day to Ongoing Simvastatin**
 247 **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

248 BL = Baseline (mg/dL); EOT = End of Treatment (mg/dL); Median % Change = Median Percent
 249 Change from Baseline; Difference = LOVAZA Median % Change – Placebo Median % Change
 250

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

253 **16 HOW SUPPLIED/STORAGE AND HANDLING**

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

256 Bottles of 120: NDC 0173-0783-02
 257

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

260 **17 PATIENT COUNSELING INFORMATION**

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

262 **17.1 Information for Patients**

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

272 **17.2 FDA-Approved Patient Labeling**

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

275
276 Manufactured for GlaxoSmithKline by:
277 Catalent Pharma Solutions
278 St. Petersburg, FL 33716

279
280 Distributed by:



281
282 GlaxoSmithKline
283 Research Triangle Park, NC 27709

284
285 LOVAZA is a registered trademark of the GlaxoSmithKline group of companies.

286
287 ©Year, GlaxoSmithKline. All rights reserved.

288
289 LVZ:XPI

290

294 **PATIENT INFORMATION**
295 **LOVAZA[®] (lō-vā-ză)**
296 **(omega-3-acid ethyl esters)**
297 **Capsules**
298

299 Read this Patient Information before you start taking LOVAZA, and each time
300 you get a refill. There may be new information. This information does not
301 take the place of talking with your doctor about your medical condition or
302 your treatment.
303

304 **What is LOVAZA?**

305 LOVAZA is a prescription medicine used along with a low fat and low
306 cholesterol diet to lower very high triglyceride (fat) levels in adults.
307

308 It is not known if LOVAZA changes your risk of having inflammation of your
309 pancreas (pancreatitis).
310

311 It is not known if LOVAZA prevents you from having a heart attack or stroke.
312
313
314

315 It is not known if LOVAZA is safe and effective in children.
316

317 **Who should not take LOVAZA?**

318 Do not take LOVAZA if you are allergic to omega-3-acid ethyl esters or any
319 of the ingredients in LOVAZA. See the end of this leaflet for a complete list
320 of ingredients in LOVAZA.
321

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

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

- 324 • have diabetes.
- 325 • have a low thyroid problem (hypothyroidism).
- 326 • have a liver problem.
- 327 • have a pancreas problem.
- 328 • have a certain heart rhythm problem called atrial fibrillation or flutter.
- 329 • are allergic to fish or shellfish. It is not known if people who are allergic to
330 fish or shellfish are also allergic to LOVAZA.

- 331 • are pregnant or plan to become pregnant. It is not known if LOVAZA will
332 harm your unborn baby.
333 • are breastfeeding or plan to breastfeed. LOVAZA can pass into your
334 breast milk. You and your doctor should decide if you will take LOVAZA or
335 breastfeed.

336

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

339

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

343

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

346

347 **How should I take LOVAZA?**

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

361

362 **What are the possible side effects of LOVAZA?**

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

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

369

370 The most common side effects of LOVAZA include:

- 371 • burping
372 • upset stomach
373 • a change in your sense of taste
374

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

377
378 These are not all the possible side effects of LOVAZA. For more information,
379 ask your doctor or pharmacist.

380
381 Call your doctor for medical advice about side effects. You may report side
382 effects to FDA at 1-800-FDA-1088.

383
384 **How should I store LOVAZA?**

- 385 • Store LOVAZA at room temperature between 68°F to 77°F (20°C to
386 25°C).
387 • Do not freeze LOVAZA.
388 • Safely throw away medicine that is out of date or no longer needed.

389
390 **Keep LOVAZA and all medicines out of the reach of children.**

391
392 **General information about the safe and effective use of LOVAZA**

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

397
398 This Patient Information Leaflet summarizes the most important information
399 about LOVAZA. If you would like more information, talk with your doctor.
400 You can ask your doctor or pharmacist for information about LOVAZA that is
401 written for health professionals.

402
403 For more information go to www.LOVAZA.com or call 1-888-825-5249.

404
405 **What are the ingredients in LOVAZA?**

406 Active Ingredient: omega-3-acid ethyl esters, mostly EPA and DHA
407 Inactive Ingredients: alpha-tocopherol (in soybean oil), gelatin, glycerol,
408 purified water.

409

410 This patient labeling has been approved by the U.S. Food and Drug
411 Administration.

412

413 Manufactured for GlaxoSmithKline by:

414 Catalent Pharma Solutions

415 St. Petersburg, FL 33716

416

417 Distributed by:



418

419 GlaxoSmithKline

420 Research Triangle Park, NC 27709

421

422 ©Year, GlaxoSmithKline. All rights reserved.

423

424 Month Year

425 LVZ: XPIL