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Trial record **1 of 1** for: OM-EPA-003  
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## Epanova® for Lowering Very High Triglycerides (EVOLVE)

**This study has been completed.**

**Sponsor:**  
AstraZeneca

**Information provided by (Responsible Party):**  
AstraZeneca

**ClinicalTrials.gov Identifier:**  
NCT01242527  
 First received: November 15, 2010  
 Last updated: June 24, 2016  
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[History of Changes](#)

- [Full Text View](#)
- [Tabular View](#)
- [Study Results](#)**
- [Disclaimer](#)
- [How to Read a Study Record](#)

Results First Received: June 26, 2013

<b>Study Type:</b>	Interventional
<b>Study Design:</b>	Allocation: Randomized; Endpoint Classification: Safety/Efficacy Study; Intervention Model: Parallel Assignment; Masking: Double Blind (Subject, Caregiver, Investigator, Outcomes Assessor); Primary Purpose: Treatment
<b>Condition:</b>	Severe Hypertriglyceridemia
<b>Interventions:</b>	Drug: placebo Drug: omefas

**Participant Flow**  
[Hide Participant Flow](#)

**Recruitment Details**

**Key information relevant to the recruitment process for the overall study, such as dates of the recruitment period and locations**  
 The enrollment period started April 2011 and the last subject visit was February 2012. All subjects were qualified at the clinical site and eligibility was determined by each PI (74 US and International clinical sites).

**Pre-Assignment Details**

**Significant events and approaches for the overall study following participant enrollment, but prior to group assignment**  
 Subjects who needed to washout omega-3 drugs/supplements or adjust or add a permitted statin, CAI or combination had an 8-week screening. All other subjects, including those on a stable statin, CAI or statin-CAI, or who needed to washout of bile acid sequestrants, fibrates, niacin and other lipid altering supplements had a 4-week screening period.

**Reporting Groups**

	Description
<b>Olive Oil (Placebo Control)</b>	placebo : 4 capsules (1g) daily for 12 weeks
<b>Epanova 2 g</b>	omefas : 2 capsules (1g) + 2 placebo daily for 12 weeks
<b>Epanova 3 g</b>	omefas : 3 capsules (1g) + 1 placebo daily for 12 weeks
<b>Epanova 4 g</b>	omefas : 4 capsules (1g) daily for 12 weeks

**Participant Flow: Overall Study**

	Olive Oil (Placebo Control)	Epanova 2 g	Epanova 3 g	Epanova 4 g
<b>STARTED</b>	99	100	101	99
<b>COMPLETED</b>	94	93	87	90

NOT COMPLETED	5	7	14	9
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**▶ Baseline Characteristics**

Hide Baseline Characteristics

**Population Description**

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.

No text entered.

**Reporting Groups**

	Description
Olive Oil (Placebo)	placebo : 4 capsules (1g) daily for 12 weeks
Epanova 2 g	omefas : 2 capsules (1g) + 2 placebo daily for 12 weeks
Epanova 3 g	omefas : 3 capsules (1g) + 1 placebo daily for 12 weeks
Epanova 4 g	omefas : 4 capsules (1g)daily for 12 weeks
Total	Total of all reporting groups

**Baseline Measures**

	Olive Oil (Placebo)	Epanova 2 g	Epanova 3 g	Epanova 4 g	Total
<b>Overall Participants Analyzed</b> [Units: Participants]	99	100	101	99	399
<b>Age</b> [Units: Years] Mean (Standard Deviation)	50.8 (10.59)	51.1 (9.79)	51.2 (8.75)	52.9 (10.92)	51.5 (10.04)
<b>Gender</b> [Units: Participants]					
Female	22	20	22	28	92
Male	77	80	79	71	307
<b>Ethnicity (NIH/OMB)</b> [Units: Participants]					
Hispanic or Latino	6	8	4	7	25
Not Hispanic or Latino	93	92	97	92	374
Unknown or Not Reported	0	0	0	0	0

**▶ Outcome Measures**

1. Primary: Fasting Serum Triglycerides [ Time Frame: 12 weeks ]

Hide Outcome Measure 1

<b>Measure Type</b>	Primary
<b>Measure Title</b>	Fasting Serum Triglycerides
<b>Measure Description</b>	The primary endpoints are the differences in mean percent changes from baseline to end-of-treatment in triglycerides between placebo and the 2g/day, 3g/day and 4g/day Epanova groups
<b>Time Frame</b>	12 weeks
<b>Safety Issue</b>	No

**Population Description**

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.

The Intent-to-Treat (ITT) Population was comprised of all subjects who were randomized. In the event that randomized subjects terminated before treatment or had no post-treatment efficacy assessments, a modified ITT Population was implemented.

**Reporting Groups**

	Description
<b>Olive Oil (Placebo)</b>	placebo : 4 capsules (1g) daily for 12 weeks
<b>Epanova 2 g</b>	omefas : 2 capsules (1g) + 2 placebo daily for 12 weeks
<b>Epanova 3 g</b>	omefas : 3 capsules (1g) + 1 placebo daily for 12 weeks
<b>Epanova 4 g</b>	omefas : 4 capsules (1g)daily for 12 weeks

**Measured Values**

	Olive Oil (Placebo)	Epanova 2 g	Epanova 3 g	Epanova 4 g
<b>Participants Analyzed</b> [Units: Participants]	98	99	97	99
<b>Fasting Serum Triglycerides</b> [Units: Percent change from baseline] Least Squares Mean (95% Confidence Interval)	-4.26 (-13.07 to 5.44)	-25.94 (-32.84 to -18.33)	-25.46 (-32.44 to -17.75)	-30.86 (-37.32 to -23.74)

**Statistical Analysis 1 for Fasting Serum Triglycerides**

<b>Groups</b> <sup>[1]</sup>	Olive Oil (Placebo) vs. Epanova 2 g
<b>Method</b> <sup>[2]</sup>	ANCOVA p-value on ranked data
<b>P Value</b> <sup>[3]</sup>	0.005
<b>Placebo adjusted % change from baseline</b> <sup>[4]</sup>	-21.68
<b>95% Confidence Interval</b>	-40.70 to -2.89

<b>[1]</b>	Additional details about the analysis, such as null hypothesis and power calculation: No text entered.
<b>[2]</b>	Other relevant method information, such as adjustments or degrees of freedom: ANCOVA model with baseline value as covariate, and treatment and user/non-user of lipid-altering drugs as factors
<b>[3]</b>	Additional information, such as whether or not the p-value is adjusted for multiple comparisons and the a priori threshold for statistical significance: P-value adjusted with Dunnett's procedure for multiple comparisons of Epanova vs olive oil
<b>[4]</b>	Other relevant estimation information: ANCOVA on log-scale TG with baseline value as covariate and treatment and user/non-user of lipid-altering drugs as factors

**Statistical Analysis 2 for Fasting Serum Triglycerides**

<b>Groups</b> <sup>[1]</sup>	Olive Oil (Placebo) vs. Epanova 3 g
<b>Method</b> <sup>[2]</sup>	ANCOVA p-value on ranked data
<b>P Value</b> <sup>[3]</sup>	0.007
<b>Placebo adjusted % change from baseline</b> <sup>[4]</sup>	-21.19
<b>95% Confidence Interval</b>	-40.32 to -2.29

<b>[1]</b>	Additional details about the analysis, such as null hypothesis and power calculation: No text entered.
<b>[2]</b>	Other relevant method information, such as adjustments or degrees of freedom: ANCOVA model with baseline value as covariate, and treatment and user/non-user of lipid-altering drugs as factors
<b>[3]</b>	Additional information, such as whether or not the p-value is adjusted for multiple comparisons and the a priori threshold for statistical significance: P-value adjusted with Dunnett's procedure for multiple comparisons of Epanova vs olive oil
<b>[4]</b>	Other relevant estimation information:

ANCOVA on log-scale TG with baseline value as covariate, and treatment and user/non-user of lipid-altering drugs as factors

**Statistical Analysis 3 for Fasting Serum Triglycerides**

<b>Groups</b> <sup>[1]</sup>	Olive Oil (Placebo) vs. Epanova 4 g
<b>Method</b> <sup>[2]</sup>	ANCOVA p-value on ranked data
<b>P Value</b> <sup>[3]</sup>	<0.001
<b>Placebo adjusted % change from baseline</b> <sup>[4]</sup>	-26.60
<b>95% Confidence Interval</b>	-45.12 to -8.38

<b>[1]</b>	Additional details about the analysis, such as null hypothesis and power calculation: No text entered.
<b>[2]</b>	Other relevant method information, such as adjustments or degrees of freedom: ANCOVA model with baseline value as covariate, and treatment and user/non-user of lipid-altering drugs as factors
<b>[3]</b>	Additional information, such as whether or not the p-value is adjusted for multiple comparisons and the a priori threshold for statistical significance: P-value adjusted with Dunnett's procedure for multiple comparisons of Epanova vs olive oil
<b>[4]</b>	Other relevant estimation information: ANCOVA on log-scale TG with baseline value as covariate, and treatment and user/non-user of lipid-altering drugs as factors

**Serious Adverse Events**

 Hide Serious Adverse Events

<b>Time Frame</b>	No text entered.
<b>Additional Description</b>	No text entered.

**Reporting Groups**

	Description
<b>Olive Oil (Placebo)</b>	placebo : 4 capsules (1g) daily for 12 weeks
<b>Epanova 2 g</b>	omefas : 2 capsules (1g) + 2 placebo daily for 12 weeks
<b>Epanova 3 g</b>	omefas : 3 capsules (1g) + 1 placebo daily for 12 weeks
<b>Epanova 4 g</b>	omefas : 4 capsules (1g)daily for 12 weeks

**Serious Adverse Events**

	Olive Oil (Placebo)	Epanova 2 g	Epanova 3 g	Epanova 4 g
<b>Total, serious adverse events</b>				
<b># participants affected / at risk</b>	2/99 (2.02%)	1/100 (1.00%)	4/101 (3.96%)	0/99 (0.00%)
<b>Cardiac disorders</b>				
<b>Myocarditis <sup>†1</sup></b>				
<b># participants affected / at risk</b>	1/99 (1.01%)	0/100 (0.00%)	0/101 (0.00%)	0/99 (0.00%)
<b># events</b>	1	0	0	0
<b>Angina pectoris <sup>†1</sup></b>				
<b># participants affected / at risk</b>	0/99 (0.00%)	1/100 (1.00%)	1/101 (0.99%)	0/99 (0.00%)
<b># events</b>	0	1	1	0
<b>Coronary artery disease <sup>†1</sup></b>				
<b># participants affected / at risk</b>	0/99 (0.00%)	0/100 (0.00%)	1/101 (0.99%)	0/99 (0.00%)
<b># events</b>	0	0	1	0
<b>Implantable defibrillator insertion <sup>†1</sup></b>				
<b># participants affected / at risk</b>	0/99 (0.00%)	0/100 (0.00%)	1/101 (0.99%)	0/99 (0.00%)
<b># events</b>	0	0	1	0
<b>Gastrointestinal disorders</b>				

<b>Abdominal pain <sup>†1</sup></b>				
# participants affected / at risk	1/99 (1.01%)	0/100 (0.00%)	0/101 (0.00%)	0/99 (0.00%)
# events	1	0	0	0
<b>Respiratory, thoracic and mediastinal disorders</b>				
<b>Pulmonary embolism <sup>†1</sup></b>				
# participants affected / at risk	0/99 (0.00%)	0/100 (0.00%)	1/101 (0.99%)	0/99 (0.00%)
# events	0	0	1	0

<sup>†</sup> Events were collected by systematic assessment  
<sup>1</sup> Term from vocabulary, MedDRA 14.1

**Other Adverse Events**

Hide Other Adverse Events

<b>Time Frame</b>	No text entered.
<b>Additional Description</b>	No text entered.

**Frequency Threshold**

Threshold above which other adverse events are reported	5
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**Reporting Groups**

	Description
<b>Olive Oil (Placebo)</b>	placebo : 4 capsules (1g) daily for 12 weeks
<b>Epanova 2 g</b>	omefas : 2 capsules (1g) + 2 placebo daily for 12 weeks
<b>Epanova 3 g</b>	omefas : 3 capsules (1g) + 1 placebo daily for 12 weeks
<b>Epanova 4 g</b>	omefas : 4 capsules (1g)daily for 12 weeks

**Other Adverse Events**

	Olive Oil (Placebo)	Epanova 2 g	Epanova 3 g	Epanova 4 g
<b>Total, other (not including serious) adverse events</b>				
# participants affected / at risk	5/99 (5.05%)	23/100 (23.00%)	18/101 (17.82%)	16/99 (16.16%)
<b>Gastrointestinal disorders</b>				
<b>Diarrhoea <sup>†1</sup></b>				
# participants affected / at risk	2/99 (2.02%)	10/100 (10.00%)	6/101 (5.94%)	10/99 (10.10%)
# events	3	12	7	11
<b>Nausea <sup>†1</sup></b>				
# participants affected / at risk	1/99 (1.01%)	6/100 (6.00%)	9/101 (8.91%)	5/99 (5.05%)
# events	1	9	11	5
<b>Infections and infestations</b>				
<b>Nasopharyngitis <sup>†1</sup></b>				
# participants affected / at risk	2/99 (2.02%)	7/100 (7.00%)	3/101 (2.97%)	1/99 (1.01%)
# events	3	7	3	1

<sup>†</sup> Events were collected by systematic assessment  
<sup>1</sup> Term from vocabulary, MedDRA 14.1

**Limitations and Caveats**

Hide Limitations and Caveats

Limitations of the study, such as early termination leading to small numbers of participants analyzed and technical problems with measurement leading to unreliable or uninterpretable data

No text entered.

**More Information**

[Hide More Information](#)**Certain Agreements:**

Principal Investigators are **NOT** employed by the organization sponsoring the study.

There **IS** an agreement between Principal Investigators and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.

The agreement is:

- The only disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is **less than or equal to 60 days**. The sponsor cannot require changes to the communication and cannot extend the embargo.
- The only disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is **more than 60 days but less than or equal to 180 days**. The sponsor cannot require changes to the communication and cannot extend the embargo.

Other disclosure agreement that restricts the right of the PI to discuss or publish trial results after the trial is completed.

- Restriction Description:** Individual investigators may publish data arising from their own subjects. The PI will provide the Sponsor with copies of written publications (including abstracts and posters) at least 60 days in advance of submission. Data will be reviewed by all participating investigators prior to publication. The Sponsor will have 60 days to review all definitive publications, such as manuscripts and book chapters, and a minimum of 30 days to review all abstracts.

**Results Point of Contact:**

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Organization: AstraZeneca Pharmaceuticals

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Kastelein JJ, Maki KC, Susekov A, Ezhov M, Nordestgaard BG, Machielse BN, Kling D, Davidson MH. Omega-3 free fatty acids for the treatment of severe hypertriglyceridemia: the EpanoVa fOr Lowering Very high triglyceridEs (EVOLVE) trial. *J Clin Lipidol.* 2014 Jan-Feb;8(1):94-106. doi: 10.1016/j.jacl.2013.10.003.

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