

### Protocol Registration and Results Preview

[Close](#)

## Efficacy of Nalmefene in Patients With Alcohol Dependence (ESENSE1)

**This study has been completed.**

Sponsor:	H. Lundbeck A/S
Collaborators:	
Information provided by (Responsible Party):	H. Lundbeck A/S
ClinicalTrials.gov Identifier:	NCT00811720

### Purpose

The purpose of the study is to evaluate the efficacy, safety and tolerability of nalmefene in the treatment of alcohol dependence.

Condition	Intervention	Phase
Alcohol Dependence	Drug: Placebo Drug: Nalmefene	Phase 3

Study Type: Interventional

Study Design: Treatment, Parallel Assignment, Double Blind (Subject, Investigator), Randomized, Efficacy Study

Official Title: Nalmefene Efficacy Study I: Randomised, Double-blind, Placebo-controlled, Parallel-group, Efficacy Study of 20 mg Nalmefene, As-needed Use, in Patients With Alcohol Dependence

### Further study details as provided by H. Lundbeck A/S:

Primary Outcome Measure:

- Change From Baseline in the Monthly Number of Heavy Drinking Days (HDDs) [Time Frame: Baseline and Month 6] [Designated as safety issue: No]  
Number of HDDs over a month (28 days), where one HDD was defined as a day with alcohol consumption  $\geq 60$  grams (g) for men and  $\geq 40$  g for women.
- Change From Baseline in the Monthly Total Alcohol Consumption (TAC) [Time Frame: Baseline and Month 6] [Designated as safety issue: No]  
TAC was defined as mean daily alcohol consumption in g/day over a month (28 days).

Secondary Outcome Measures:

- Drinking Risk Level (RSDRL) Response [Time Frame: Month 6] [Designated as safety

issue: No]

RSDRL response was defined as a downward shift from baseline in Drinking Risk Level (DRL); for patients at very high risk at Baseline: a shift to medium risk or below, and for patients at high or medium risk at Baseline: a shift to low risk or below.

- Change From Baseline in Clinical Status Using CGI-S [Time Frame: Baseline and Week 24] [Designated as safety issue: No]  
The Clinical Global Impression - Severity of Illness (CGI-S) provides the clinician's impression of the patient's current state of mental illness. The clinician uses his or her clinical experience of this patient population to rate the severity of the patient's current mental illness on a 7-point scale ranging from 1 (Normal - not at all ill) to 7 (among the most extremely ill patients).
- Change in Clinical Status Using the CGI-I [Time Frame: Week 24] [Designated as safety issue: No]  
The Clinical Global Impression - Global Improvement (CGI-I) provides the clinician's impression of the patient's improvement (or worsening). The clinician assesses the patient's condition relative to a baseline on a 7-point scale ranging from 1 (very much improved) to 7 (very much worse).
- Liver Function Test Gamma-glutamyl Transferase (GGT) [Time Frame: Week 24] [Designated as safety issue: No]  
GGT values
- Liver Function Test Alanine Aminotransferase (ALAT) [Time Frame: Week 24] [Designated as safety issue: No]  
ALAT values

Enrollment: 598

Study Start Date: December 2008

Study Completion Date: November 2010

Primary Completion Date: October 2010

Arms	Assigned Interventions
Placebo Comparator: Placebo	Drug: Placebo as-needed use, tablets, orally, 6 months
Experimental: Nalmefene	Drug: Nalmefene 18.06 mg, as-needed use, tablets, orally, 6 months. 18.06 mg nalmefene equals 20 mg nalmefene hydrochloride.  Other Names: <ul style="list-style-type: none"> <li>• Selincro™</li> </ul>

Alcohol dependence is a maladaptive pattern of alcohol use, leading to clinically significant impairment or distress, as manifested by at least three of a number of criteria such as tolerance, withdrawal symptoms, frequent use of alcohol in larger amounts or over longer periods than was intended, and others. Excessive intake of alcohol reduces the life span by a decade, and alcohol drinking is strongly related to mortality from liver cirrhosis, chronic pancreatitis, certain cancers, hypertension, accidents and violence. This study is planned to evaluate the efficacy and safety of

as-needed use of nalmefene 18.06 mg versus placebo in decreasing monthly Heavy Drinking Days (HDDs) and decreasing the total consumption during a period of 6 months in adult patients with alcohol dependence.

## ► Eligibility

Ages Eligible for Study: 18 Years and older

Genders Eligible for Study: Both

Inclusion Criteria:

In- and outpatients who:

- had a primary diagnosis of alcohol dependence according to Diagnostic and Statistical Manual of Mental Disorders - Text revision (DSM-IV-TR) criteria
- had had  $\geq 6$  HDDs in the 4 weeks preceding the Screening Visit
- had had an average alcohol consumption at WHO medium risk level or above in the 4 weeks preceding the Screening Visit

Exclusion Criteria:

The patient:

- had a DSM-IV Axis I disorder other than alcohol dependence or nicotine dependence
- had an antisocial personality disorder
- had risk of suicide evaluated by the suicidality module of the Mini-International Neuropsychiatric Interview (MINI)
- had a history of delirium tremens or alcohol withdrawal seizures
- reported current or recent (within 3 months preceding screening) treatment with disulfiram, acamprosate, topiramate, naltrexone or carbimide, or with any opioid antagonists
- reported current or recent treatment with antipsychotics or antidepressants
- was pregnant or breast-feeding

Other protocol-defined inclusion and exclusion criteria may apply.

## ► Contacts and Locations

### Locations

#### Austria

AT001

Linz, Austria, 4020

AT004

Salzburg, Austria, 5020

AT002

Vienna, Austria, 1230

AT003

Wien, Austria, 1090

#### Finland

FI009

Helsinki, Finland, 800

FI008

Helsinki, Finland, 560

FI007

Järvenpää, Finland, 4480

FI013

Kuopio, Finland, 70100

FI004

Kuusankoski, Finland, 45700

FI001

Mikkeli, Finland, 50100

FI015

Oulu, Finland, 90100

FI003

Tampere, Finland, 33100

FI002

Tampere, Finland, 339000

FI014

Turku, Finland, 20100

FI011

Vantaa, Finland, 1600

## **Germany**

DE011

Bad Saarow, Germany, 15526

DE002

Berlin, Germany, 10629

DE005

Berlin, Germany, 10365

DE008

Berlin, Germany, 13156

DE016

Berlin, Germany, 10245

DE017

Berlin, Germany, 12524

DE019

Berlin, Germany, 13187

DE003

Essen, Germany, NW 45136

DE001

Hamburg, Germany, 22143

DE006

Hamburg, Germany, 20246

DE007

Leukersdorf, Germany, 09387

DE003

Mannheim, Germany, BW68159

DE014

Munich, Germany, 80336

DE010

Regensburg, Germany, BY 93053

DE018

Siegen, Germany, 57072

DE020

Wallerfing, Germany, 94574

### Sweden

SE011

Gothenburg, Sweden, 402 76

SE005

Kalmar, Sweden, 391 85

SE006

Linköping, Sweden, 857 58

SE001

Malmö, Sweden, 211 22

SE002

Stockholm, Sweden, 141 86

SE004

Stockholm, Sweden, 118 91

SE008

Stockholm, Sweden, 17176

SE009

Uppsala, Sweden, 756 43

### Investigators

Study Director: Email contact via H. Lundbeck A/S      LundbeckClinicalTrials@lundbeck.com

### ▶ More Information

Results Publications:

[Mann K, Bladström A, Torup L, Gual A, van den Brink W. Extending the treatment options in alcohol dependence: a randomized controlled study of as-needed nalmefene. \*Biol Psychiatry\*. 2013 Apr 15;73\(8\):706-13. doi: 10.1016/j.biopsych.2012.10.020. Epub 2012 Dec 11.](#)

Responsible Party: H. Lundbeck A/S

Study ID Numbers: 12014A

2007-002334-11 [EudraCT Number]

Health Authority: Austria: Agency for Health and Food Safety

Finland: Finnish Medicines Agency

Germany: Federal Institute for Drugs and Medical Devices

Sweden: Medical Products Agency

# Study Results

## Participant Flow

Recruitment Details	
Pre-Assignment Details	

Arm/Group Title	Placebo	Nalmefene 18.06 mg	Total (Not public)
▼ Arm/Group Description	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months	
<b>Period Title: All Randomised Patients</b>			
Started	298	306	604
Completed	296	302	598
Not Completed	2	4	6
<u>Reason Not Completed</u>			
Did not receive placebo/nalmefene	2	4	6
(Not Public)	Not Completed = 2 Total from all reasons = 2	Not Completed = 4 Total from all reasons = 4	
<b>Period Title: All Treated Patients</b>			
Started	296	302	598
Completed	200 [1]	138 [2]	338
Not Completed	96	164	260
<u>Reason Not Completed</u>			
Adverse Event	20	62	82
Lack of Efficacy	22	18	40
Non-compliance	0	14	14
Protocol Violation	9	16	25
Withdrawal by Subject	28	34	62
Lost to Follow-up	10	16	26
Other Reason	7	4	11
(Not Public)	Not Completed = 96 Total from all reasons = 96	Not Completed = 164 Total from all reasons = 164	
[1] Patients who had the final visit of the study protocol			
[2] Patients who had the final visit of the study protocol			

## Baseline Characteristics

Arm/Group Title	Placebo	Nalmefene 18.06 mg	Total
-----------------	---------	--------------------	-------

▼ Arm/Group Description	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months	
<b>Overall Number of Baseline Participants</b>	298	306	<b>604</b>
▼ Baseline Analysis Population Description [Not specified]			
Age, Continuous [1] Mean (Standard Deviation) Units: years	52.1 (9.1)	51.0 (10.1)	51.6 (9.6)
	[1] All-patients-randomised set (APRS).		
Gender, Male/Female [1] Measure Type: Number Units: participants <b>NOTE : Baseline Measure Description is shorter than the Baseline Measure Title.</b>			
Female	96	102	198
Male	202	204	406
	[1] APRS.		
Previously Treated for Alcohol Dependence [1] Measure Type: Number Units: participants <b>NOTE : Baseline Measure Description is shorter than the Baseline Measure Title.</b>			
NO	209	215	424
YES	89	91	180
	[1] APRS.		
Previously Treated for Alcohol Withdrawal Symptoms [1] Measure Type: Number Units: participants <b>NOTE : Baseline Measure Description is shorter than the Baseline Measure Title.</b>			
NO	245	246	491
YES	53	60	113
	[1] APRS.		
Total Monthly Heavy			

<p><b>Drinking Days (HDD) [1]</b>                  Mean (Standard Deviation)                  Units: days</p>	<p>19.53 (6.96)</p>	<p>19.51 (7.29)</p>	<p>19.52 (7.12)</p>
<p>[1] APRS.                  Based on Timeline Followback (TLFB) data from the month preceding the screening visit.</p>			
<p><b>Total Alcohol Consumption (TAC) g Alcohol/Day [1]</b>                  Mean (Standard Deviation)                  Units: g</p>	<p>84.11 (41.49)</p>	<p>84.79 (42.07)</p>	<p>84.45 (41.75)</p>
<p>[1] APRS.                  Based on TLFB data from the month preceding the screening visit.</p>			
<p><b>Drinking Risk Level (DRL) [1]</b>                  Measure Type: Number                  Units: participants   <b>NOTE : Baseline Measure Description is shorter than the Baseline Measure Title.</b></p>			
<p>Unknown</p>	<p>0</p>	<p>1</p>	<p>1</p>
<p>Low</p>	<p>2</p>	<p>1</p>	<p>3</p>
<p>Medium</p>	<p>60</p>	<p>68</p>	<p>128</p>
<p>High</p>	<p>119</p>	<p>114</p>	<p>233</p>
<p>Very High</p>	<p>117</p>	<p>122</p>	<p>239</p>
<p>[1] APRS.</p>			
<p><b>Clinical Global Impression - Severity of Illness (CGI-S) [1]</b>                  Mean (Standard Deviation)                  Units: units on a scale</p>	<p>3.96 (1.52)</p>	<p>4.02 (1.48)</p>	<p>3.99 (1.50)</p>
<p>[1] APRS.                  The Clinical Global Impression - Severity of Illness (CGI-S) provides the clinician's impression of the patient's current state of mental illness. The clinician uses his or her clinical experience of this patient population to rate the severity of the patient's current mental illness on a 7-point scale ranging from 1 (Normal - not at all ill) to 7 (among the most extremely ill patients).</p>			
<p><b>Gamma-glutamyl Transferase (GGT) [1]</b>                  Mean (Standard Deviation)                  Units: international units per liter (IU/L)   <b>NOTE : Baseline Measure Description is shorter than the Baseline Measure Title.</b></p>	<p>83.55 (90.83)</p>	<p>80.29 (103.51)</p>	<p>81.90 (97.39)</p>
<p>[1] APRS.</p>			

Alanine Aminotransferase (ALAT) [1] Mean (Standard Deviation) Units: IU/L NOTE : Baseline Measure Description is shorter than the Baseline Measure Title.	34.13 (21.77)	33.15 (18.09)	33.63 (19.98)
	[1] APRS.		

**Outcome Measures**

1. Primary Outcome

Title:	Change From Baseline in the Monthly Number of Heavy Drinking Days (HDDs)
Description:	Number of HDDs over a month (28 days), where one HDD was defined as a day with alcohol consumption $\geq 60$ grams (g) for men and $\geq 40$ g for women.
Time Frame:	Baseline and Month 6
Safety Issue?	No

Outcome Measure Data

Analysis Population Description  
 Full-analysis set (FAS) - all patients in the all-patients-treated set (APTS) who had at least one valid post-baseline assessment in the main treatment period of both co-primary efficacy variables (HDD and TAC) and had an average alcohol consumption at medium Drinking Risk Level (DRL) or above according to WHO criteria at Baseline.

Arm/Group Title	Placebo	Nalmefene 18.06 mg
Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	213	152
Mean (Standard Error) Units: days	-8.91 (0.56)	-11.24 (0.60)

Statistical Analysis 1

Statistical Analysis Overview	Comparison Groups	Placebo, Nalmefene 18.06 mg
	Comments	The primary hypothesis concerned the treatment effect at Month 6. The null hypothesis

		<p>of no difference in treatment effect was tested against the alternative hypothesis that there was a difference in treatment effect.</p> <p>MMRM model with the Baseline score as a covariate; site, sex, time in months (Month 1-6); and treatment as fixed effects. The Baseline score-by-time and treatment-by-time interactions were also included in the model. An unstructured covariance matrix was used.</p>
	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]
Statistical Test of Hypothesis	P-Value	0.002
	Comments	[Not specified]
	Method	Other [Adjusted change from Baseline to Month 6]
	Comments	[Not specified]
Method of Estimation	Estimation Parameter	Mean Difference (Final Values)
	Estimated Value	-2.33
	Confidence Interval	(2-Sided) 95% -3.81 to -0.85
	Parameter Dispersion	Type: Standard Error of the mean Value: 0.75
	Estimation Comments	The Number of Participants Analyzed is participants with efficacy measurement available at this endpoint, that is, 213 participants in the placebo group and 152 participants in the nalmefene group.

## 2. Primary Outcome

<b>Title:</b>	Change From Baseline in the Monthly Total Alcohol Consumption (TAC)
<b>▼ Description:</b>	TAC was defined as mean daily alcohol consumption in g/day over a

	month (28 days).
Time Frame:	Baseline and Month 6
Safety Issue?	No

▼ Outcome Measure Data 

▼ Analysis Population Description
FAS

Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼ Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	213	152
Mean (Standard Error) Units: g	-39.70 (2.25)	-50.66 (2.41)

▼ Statistical Analysis 1 

Statistical Analysis Overview	Comparison Groups	Placebo, Nalmefene 18.06 mg
	Comments	The primary hypothesis concerned the treatment effect at Month 6. The null hypothesis of no difference in treatment effect was tested against the alternative hypothesis that there was a difference in treatment effect. MMRM model with the Baseline score as a covariate; site, sex, time in months (Month 1-6); and treatment as fixed effects. The Baseline score-by-time and treatment-by-time interactions were also included in the model. An unstructured covariance matrix was used.
	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]

Statistical Test of Hypothesis	P-Value	<0.001
	Comments	[Not specified]
	Method	Other [Adjusted change from Baseline to Month 6]
	Comments	[Not specified]
Method of Estimation	Estimation Parameter	Mean Difference (Final Values)
	Estimated Value	-10.96
	Confidence Interval	(2-Sided) 95% -16.81 to -5.11
	Parameter Dispersion	Type: Standard Error of the mean Value: 2.98
	Estimation Comments	The Number of Participants Analyzed is participants with efficacy measurement available at this endpoint, that is, 213 participants in the placebo group and 152 participants in the nalmefene group.

### 3. Secondary Outcome

Title:	Drinking Risk Level (RSDRL) Response
▼ Description:	RSDRL response was defined as a downward shift from baseline in Drinking Risk Level (DRL); for patients at very high risk at Baseline: a shift to medium risk or below, and for patients at high or medium risk at Baseline: a shift to low risk or below.
Time Frame:	Month 6
Safety Issue?	No

#### ▼ Outcome Measure Data

▼ Analysis Population Description
FAS

Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼ Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	289	290
Measure Type: Number Units: percentage of participants	44.3	36.9

--	--

▼ Statistical Analysis 1 

Statistical Analysis Overview	Comparison Groups	Placebo, Nalmefene 18.06 mg
	Comments	The analysis of RSDRL used a logistic regression (LREG) model, with country, sex, Baseline DRL, and treatment as fixed effects, and missing values imputed as non-response.
	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]
Statistical Test of Hypothesis	P-Value	0.039
	Comments	[Not specified]
	Method	Other [Adjusted Odds Ratio (OR) response]
	Comments	[Not specified]

Method of Estimation	Estimation Parameter	Odds Ratio (OR)
	Estimated Value	0.70
	Confidence Interval	(2-Sided) 95% 0.50 to 0.98
	Estimation Comments	[Not specified]

#### 4. Secondary Outcome

Title:	Change From Baseline in Clinical Status Using CGI-S
▼ Description:	The Clinical Global Impression - Severity of Illness (CGI-S) provides the clinician's impression of the patient's current state of mental illness. The clinician uses his or her clinical experience of this patient population to rate the severity of the patient's current mental illness on a 7-point scale ranging from 1 (Normal - not at all ill) to 7 (among the most extremely ill patients).
Time Frame:	Baseline and Week 24
Safety Issue?	No

#### ▼ Outcome Measure Data

▼ Analysis Population Description
FAS

Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼ Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	210	152
Mean (Standard Error) Units: units on a scale	-0.90 (0.08)	-1.27 (0.08)

#### ▼ Statistical Analysis 1

Statistical Analysis Overview	Comparison Groups	Placebo, Nalmefene 18.06 mg
	Comments	MMRM model with the Baseline score as a covariate, and site, sex, time in weeks, and treatment as fixed effects. The Baseline score-by-time and treatment-by-time interactions were also included in the model; an unstructured covariance matrix was used.

	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]
Statistical Test of Hypothesis	P-Value	<0.001
	Comments	[Not specified]
	Method	Other [Adjusted change from Baseline to Week 24]
	Comments	[Not specified]
Method of Estimation	Estimation Parameter	Mean Difference (Final Values)
	Estimated Value	-0.37
	Confidence Interval	(2-Sided) 95% -0.57 to -0.16
	Parameter Dispersion	Type: Standard Error of the mean Value: 0.10
	Estimation Comments	The Number of Participants Analyzed is participants with efficacy measurement available at this endpoint, that is, 210 participants in the placebo group and 152 participants in the nalmefene group.

### 5. Secondary Outcome

Title:	Change in Clinical Status Using the CGI-I
▼ Description:	The Clinical Global Impression - Global Improvement (CGI-I) provides the clinician's impression of the patient's improvement (or worsening). The clinician assesses the patient's condition relative to a baseline on a 7-point scale ranging from 1 (very much improved) to 7 (very much worse).
Time Frame:	Week 24
Safety Issue?	No

▼ Outcome Measure Data 

▼ Analysis Population Description
FAS

Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼		

Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	210	152
Mean (Standard Error) Units: units on a scale	2.65 (0.07)	2.30 (0.08)

▼ Statistical Analysis 1 

Statistical Analysis Overview	Comparison Groups	Placebo, Nalmefene 18.06 mg
	Comments	MMRM model with the Baseline CGI-S score as a covariate, and site, sex, time in weeks, and treatment as fixed effects. The Baseline CGI-S score-by-time and treatment-by-time interactions were also included in the model. An unstructured covariance matrix was used.
	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]
Statistical Test of Hypothesis	P-Value	<0.001
	Comments	[Not specified]
	Method	Other [Adjusted change from Baseline to Week 24]

	Comments	[Not specified]
Method of Estimation	Estimation Parameter	Mean Difference (Final Values)
	Estimated Value	-0.34
	Confidence Interval	(2-Sided) 95% -0.53 to -0.15
	Parameter Dispersion	Type: Standard Error of the mean Value: 0.10
	Estimation Comments	The Number of Participants Analyzed is participants with efficacy measurement available at this endpoint, that is, 210 participants in the placebo group and 152 participants in the nalmefene group.

## 6. Secondary Outcome

Title:	Liver Function Test Gamma-glutamyl Transferase (GGT)
▼ Description:	GGT values  NOTE : Outcome Measure Description is shorter than the Outcome Measure Title.
Time Frame:	Week 24
Safety Issue?	No

### ▼ Outcome Measure Data

▼ Analysis Population Description
FAS

Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼ Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	211	158
Geometric Mean (Geometric Coefficient of Variation) Units: IU/L	45.7 (56.2%)	40.3 (52.5%)

### ▼ Statistical Analysis 1

Statistical Analysis	Comparison Groups	Placebo, Nalmefene 18.06 mg
----------------------	-------------------	-----------------------------

Overview	Comments	Log-transformed GGT values were analysed using an MMRM model with the log-transformed Baseline value as a covariate, and site, sex, time in weeks, and treatment as fixed effects. Log-transformed Baseline value-by-time interaction and treatment-by-time interaction were included in the model. An unstructured covariance matrix was used.
	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]
Statistical Test of Hypothesis	P-Value	0.009
	Comments	[Not specified]
	Method	Other [Adjusted values]
	Comments	[Not specified]
Method of Estimation	Estimation Parameter	Other[Ratio to placebo]
	Estimated Value	0.88
	Confidence Interval	(2-Sided) 95% 0.80 to 0.97
	Estimation Comments	The Number of Participants Analyzed is participants with efficacy measurement available at this endpoint, that is, 211 participants in the placebo group and 158 participants in the nalmefene group.

## 7. Secondary Outcome

Title:	Liver Function Test Alanine Aminotransferase (ALAT)
▼ Description:	ALAT values  NOTE : Outcome Measure Description is shorter than the Outcome Measure Title.
Time Frame:	Week 24
Safety Issue?	No

▼ Outcome Measure Data 

▼ Analysis Population Description  
FAS

Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼ Arm/Group Description:	as-needed use, tablets, orally, 6 months	as-needed use, tablets, orally, 6 months
Number of Participants Analyzed	209	158
Geometric Mean (Geometric Coefficient of Variation) Units: IU/L	28.1 (44.7%)	25.4 (42.6%)

▼ Statistical Analysis 1 

Statistical Analysis Overview	Comparison Groups	Placebo, Nalmefene 18.06 mg
	Comments	Log-transformed ALAT values were analysed using an MMRM model with the log-transformed Baseline value as a covariate, and site, sex, time in weeks, and treatment as fixed effects. Log-transformed Baseline value-by-time and treatment-by-time interactions were included in the model. An unstructured covariance matrix was used.
	Non-Inferiority or Equivalence Analysis?	No
	Comments	[Not specified]
Statistical Test of Hypothesis	P-Value	0.011
	Comments	[Not specified]

	Method	Other [Adjusted values]
	Comments	[Not specified]
Method of Estimation	Estimation Parameter	Other[Ratio to placebo]
	Estimated Value	0.90
	Confidence Interval	(2-Sided) 95% 0.84 to 0.98
	Estimation Comments	The Number of Participants Analyzed is participants with efficacy measurement available at this endpoint, that is, 209 participants in the placebo group and 158 participants in the nalmefene group.

**Adverse Events**

Time Frame	Serious Adverse Events: 24 weeks, a 4-week run-out period, and a safety follow-up (visit/telephone call) scheduled for 4 weeks after completion of the study or after withdrawal from the study. Other Adverse Events: 24 weeks and a 4-week run-out period.	
Additional Description		
Source Vocabulary Name	[Not specified]	
Assessment Type	[Not specified] ◆ NOTE : An Assessment Type for Table Default has not been specified.	
Arm/Group Title	Placebo	Nalmefene 18.06 mg
▼ Arm/Group Description	[Not specified] ◆ NOTE : An entry in Arm/Group Description is recommended.	[Not specified] ◆ NOTE : An entry in Arm/Group Description is recommended.
<b>▼ Serious Adverse Events</b>		
	<b>Placebo</b>	<b>Nalmefene 18.06 mg</b>
	Affected / at Risk (%)	Affected / at Risk (%)
Total	18/296 (6.08%)	17/302 (5.63%)
Cardiac disorders		
Cardiac arrest <sup>A</sup>	1/296 (0.34%)	0/302 (0%)
Gastrointestinal disorders		

Gastric ulcer perforation	A	0/296 (0%)	1/302 (0.33%)
Haemorrhoids	A	1/296 (0.34%)	0/302 (0%)
General disorders			
Non-cardiac chest pain	A	0/296 (0%)	1/302 (0.33%)
Hepatobiliary disorders			
Biliary colic	A	1/296 (0.34%)	0/302 (0%)
Cholecystitis acute	A	1/296 (0.34%)	0/302 (0%)
Infections and infestations			
Postoperative wound infection	A	1/296 (0.34%)	0/302 (0%)
Injury, poisoning and procedural complications			
Alcohol poisoning	A	1/296 (0.34%)	1/302 (0.33%)
Ankle fracture	A	0/296 (0%)	1/302 (0.33%)
Fall	A	1/296 (0.34%)	0/302 (0%)
Femoral neck fracture	A	0/296 (0%)	1/302 (0.33%)
Fibula fracture	A	0/296 (0%)	1/302 (0.33%)
Hand fracture	A	0/296 (0%)	1/302 (0.33%)
Humerus fracture	A	1/296 (0.34%)	0/302 (0%)
Multiple injuries	A	1/296 (0.34%)	0/302 (0%)
Rib fracture	A	1/296 (0.34%)	0/302 (0%)
Road traffic accident	A	1/296 (0.34%)	0/302 (0%)
Subdural haematoma	A	1/296 (0.34%)	0/302 (0%)
Investigations			
Blood lactic acid increased	A	1/296 (0.34%)	0/302 (0%)
Blood potassium increased	A	1/296 (0.34%)	0/302 (0%)
Blood sodium decreased	A	1/296 (0.34%)	0/302 (0%)
Musculoskeletal and connective tissue disorders			
Back pain	A	0/296 (0%)	1/302 (0.33%)
Intervertebral disc protrusion	A	0/296 (0%)	1/302 (0.33%)
Osteoarthritis	A	1/296 (0.34%)	0/302 (0%)
Pain in extremity	A	0/296 (0%)	1/302 (0.33%)
Polyarthritis	A	0/296 (0%)	1/302 (0.33%)
Tendonitis	A	0/296 (0%)	1/302 (0.33%)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Laryngeal cancer	A	1/296 (0.34%)	0/302 (0%)
Malignant melanoma	A	1/296 (0.34%)	0/302 (0%)

Nervous system disorders			
Convulsion	A	2/296 (0.68%)	0/302 (0%)
Dizziness	A	0/296 (0%)	1/302 (0.33%)
Psychiatric disorders			
Alcohol abuse	A	1/296 (0.34%)	0/302 (0%)
Alcoholism	A	2/296 (0.68%)	2/302 (0.66%)
Completed suicide	A	2/296 (0.68%)	0/302 (0%)
Depression	A	0/296 (0%)	1/302 (0.33%)
Renal and urinary disorders			
Renal failure	A	1/296 (0.34%)	0/302 (0%)
Respiratory, thoracic and mediastinal disorders			
Epiglottic cyst	A	0/296 (0%)	1/302 (0.33%)
Epistaxis	A	0/296 (0%)	1/302 (0.33%)
Pneumothorax	A	1/296 (0.34%)	0/302 (0%)
Vascular disorders			
Hypertension	A	1/296 (0.34%)	0/302 (0%)
Indicates events were collected by non-systematic methods.			
A Term from vocabulary, Meddra 13.0			
<b>▼ Other (Not Including Serious) Adverse Events</b>			
Frequency Threshold for Reporting Other Adverse Events	5%		
	<b>Placebo</b>		<b>Nalmefene 18.06 mg</b>
	Affected / at Risk (%)		Affected / at Risk (%)
Total	113/296 (38.18%)		191/302 (63.25%)
Gastrointestinal disorders			
Nausea	A	18/296 (6.08%)	83/302 (27.48%)
Vomiting	A	8/296 (2.7%)	24/302 (7.95%)
General disorders			
Fatigue	A	25/296 (8.45%)	53/302 (17.55%)
Infections and infestations			
Nasopharyngitis	A	39/296 (13.18%)	36/302 (11.92%)
Nervous system disorders			
Dizziness	A	23/296 (7.77%)	84/302 (27.81%)
Headache	A	27/296 (9.12%)	36/302 (11.92%)
Psychiatric disorders			
Insomnia	A	10/296 (3.38%)	31/302 (10.26%)
Sleep disorder	A	1/296 (0.34%)	32/302 (10.6%)
Skin and subcutaneous tissue disorders			

Hyperhidrosis <sup>A</sup>	5/296 (1.69%)	16/302 (5.3%)
Indicates events were collected by non-systematic methods.		
<b>A</b> Term from vocabulary, Meddra 13.0		

## ▶ Limitations and Caveats

[Not Specified]

## ▶ More Information

### Certain Agreements

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

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

The main publication has to be published before any sub publication. The investigators shall obtain Lundbeck's written approval before publishing any publication relating to nalmefene, the Study, the Protocol and/or the results recorded during the Study.

### Results Point of Contact

Name/Official	H. Lundbeck A/S
Title:	
Organization:	H. Lundbeck A/S
Phone:	+45 3630 1311
Email:	LundbeckClinicalTrials@lundbeck.com

[Close](#)