Clinical trial results:
Smoking Cessation of Young Adults in Northern Finland
Summary

EudraCT number	2012-000596-16
Trial protocol	FI
Global end of trial date	02 September 2016

Results information

Result version number	v1 (current)
This version publication date	25 November 2021
First version publication date	25 November 2021
Summary attachment (see zip file)	Published Clinical Trial Article (Varenicline and Nicotine Patch Therapies etc. Tuisku et al. 2016.pdf)

Trial information

Trial identification

Sponsor protocol code	EETTMK:99/2011

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01531049
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Lapand Hospital District/ Lapland Central Hospital
Sponsor organisation address	Ounasrinteentie 22, Rovaniemi, Finland, 96200
Public contact	Tuula Toljamo, Lapland Hospital District/ Lapland Central Hospital, +358 407218759, tuula.toljamo@lshp.fi
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Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	12 October 2015
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 October 2015
Global end of trial reached?	Yes
Global end of trial date	02 September 2016
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To investigate the efficacy of varenicline and nicotine patch therapy as a smoking cessation aid in young adults. The study included 52 weeks follow up, but only 26 weeks follow up were analysed and reported in the end.

Protection of trial subjects:

To take part for the study was voluntary and all subjects were willing to quit smoking. All subjects that were recruited had a telephone number to the research nurse and it was recommended to call when having any problems. They were also asked at every follow up contact whether they had any side effects to study medication. Study nurse had continuous access to consult a doctor if needed.

Background therapy:

None.

Evidence for comparator:

Tobacco use is known to be a major health risk. The tobacco habit is often adopted at a young age. Nicotine replacement therapy and varenicline, the two comparators used in the trial, have been shown to be effective in smoking cessation in adults, but there were no evidence-based guidelines for smoking cessation targeted especially to young smokers. This is particularly true for young adults, a group that has been rarely analysed separately from either adolescent or adult smokers. Our study investigated the efficacy of varenicline and the nicotine patch therapy as a smoking cessation aid in volunteer daily smokers in their twenties.

Actual start date of recruitment	01 March 2012
Long term follow-up planned	Yes
Long term follow-up rationale	Safety, Efficacy
Long term follow-up duration	12 Months
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Finland: 291
Worldwide total number of subjects	291
EEA total number of subjects	291

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0

Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	291
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The recruited subjects were 18- to 26-year-old men and women who were recruited on a voluntary basis during 2012 until spring 2014 via community media, colleges and the army in northern parts of Finland.

Pre-assignment

Screening details:

The recruited subjects were daily smokers and motivated to quit as well as to be volunteers in this study that investigated different pharmacological treatments for smoking cessation with 52-week follow-up. Exclusion criteria: drug/alcohol abuse, allergy towards study medication, lactation, pregnancy or intension to become pregnant during study.

Period 1

Period 1 title	Baseline period (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo patch group

Arm description:

Light smokers (Heaviness of smoking index points 0-2) were randomised to placebo or nicotine patch 10mg/16h arm. In placebo patch arm, subjects were treated with a placebo patch that resembled medication-type patch, but was not identical to the nicotine patch. The duration of placebo treatment was 8 weeks. The placebo arm were compared to nicotine patch 10mg/16h arm.

Arm type	Placebo
Investigational medicinal product name	Placebo patch
Investigational medicinal product code	
Other name	Leukomed T (brand name)
Pharmaceutical forms	Cutaneous patch
Routes of administration	Cutaneous use

Dosage and administration details:

One patch daily for 8 weeks.

Arm title	Nicotine patch 10mg/16h group

Arm description:

In this arm, subjects were light daily smokers and were treated with nicotine patch 10mg/16h for 8 weeks, and during analysis, this treatment arm was compared to placebo arm with light smokers.

Arm type	Experimental
Investigational medicinal product name	Nicotine patch 10mg/16h
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cutaneous patch
Routes of administration	Cutaneous use

Dosage and administration details:

In this arm nicotine patch 10mg/16h were used with daily exchange and the duration of treatment was 8 weeks.

Arm title	Nicotine patch 15mg/16h group

Arm description:

Heavy smokers (Heaviness of smoking index 3-6 points) were randomised to nicotine patch 15mg/16h arm or varenicline arm. In this arm, subjects were heavy smokers that were treated with nicotine patch 15mg/16h for 8 weeks and were compared to varenicline arm.

Arm type	Experimental
Investigational medicinal product name	Nicotine patch 15mg/16h
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cutaneous patch
Routes of administration	Cutaneous use

Dosage and administration details:

15mg/16h nicotine patch daily for 8 weeks.

Arm title	Varenicline group

Arm description:

In this arm, the subjects were heavy smokers and treated with varenicline for 12 weeks. They were compared to heavy smokers in nicotine patch 15mg/16 h arm during analysis.

Arm type	Experimental
Investigational medicinal product name	Varenicline
Investigational medicinal product code	
Other name	Brand name was Champix (Pfizer).
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

0.5mg oral tablets once daily for 3 days and 0.5mg twice a day till the end of the first week. From the 2nd week until the end of the 12th week, the dosing was 1 mg twice a day.

Number of subjects in period 1	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group
Started	86	94	51
4 weeks phone call contact	78	88	45
12 weeks counselling visit	65	74 [1]	36 [2]
Completed	64	75	38
Not completed	22	19	13
Refused to use randomised therapy	-	1	-
Moved to other city	-	1	1
Lost to follow-up	22	15	9
Lack of motivation	-	2	1
Did not arrive to first visit	-	-	1
Did not want to continue in randomised group	-	-	1

Number of subjects in period 1	Varenicline group
Started	60
4 weeks phone call contact	60
12 weeks counselling visit	51
Completed	44
Not completed	16
Refused to use randomised therapy	-
Moved to other city	-

Lost to follow-up	15
Lack of motivation	1
Did not arrive to first visit	-
Did not want to continue in randomised group	-

Notes:

[1] - The number of subjects at this milestone seems inconsistent with the number of subjects in the arm. It is expected that the number of subjects will be greater than, or equal to the number that completed, minus those who left.

Justification: If a subject missed a control visit but attended subsequent controls, his/her smoking status at the missed control was assumed to be the same as that recorded at the time when he/she came to the next control session.

[2] - The number of subjects at this milestone seems inconsistent with the number of subjects in the arm. It is expected that the number of subjects will be greater than, or equal to the number that completed, minus those who left.

Justification: If a subject missed a control visit but attended subsequent controls, his/her smoking status at the missed control was assumed to be the same as that recorded at the time when he/she came to the next control session.

Baseline characteristics

Reporting groups	
Reporting group title	Placebo patch group
Reporting group description:	
Light smokers (Heaviness of smoking index points 0-2) were randomised to placebo or nicotine patch 10mg/16h arm. In placebo patch arm, subjects were treated with a placebo patch that resembled medication-type patch, but was not identical to the nicotine patch. The duration of placebo treatment was 8 weeks. The placebo arm were compared to nicotine patch 10mg/16h arm.	
Reporting group title	Nicotine patch 10mg/16h group
Reporting group description:	
In this arm, subjects were light daily smokers and were treated with nicotine patch 10mg/16h for 8 weeks, and during analysis, this treatment arm was compared to placebo arm with light smokers.	
Reporting group title	Nicotine patch 15mg/16h group
Reporting group description:	
Heavy smokers (Heaviness of smoking index 3-6 points) were randomised to nicotine patch 15mg/16h arm or varenicline arm. In this arm, subjects were heavy smokers that were treated with nicotine patch 15mg/16h for 8 weeks and were compared to varenicline arm.	
Reporting group title	Varenicline group
Reporting group description:	
In this arm, the subjects were heavy smokers and treated with varenicline for 12 weeks. They were compared to heavy smokers in nicotine patch 15mg/16 h arm during analysis.	

Reporting group values	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group
Number of subjects	86	94	51
Age categorical			
Units: Subjects			
Age continuous			
Units: years			
median	20	21	22
inter-quartile range (Q1-Q3)	18 to 23.3	19 to 23	19 to 24
Gender categorical			
Units: Subjects			
Female	44	49	23
Male	42	45	28
weight			
Units: kilogram(s)			
median	70.1	70.5	71.2
inter-quartile range (Q1-Q3)	61.0 to 82.7	62.0 to 78.2	61.5 to 82.9
Motivation to quit			
Motivation to quit was reported in numeric scale 1 to 10 (1 for lowest motivation; 10 for highest motivation)			
Units: 1-10			
median	8	7	7
inter-quartile range (Q1-Q3)	7.0 to 8.0	6.0 to 8.0	6.0 to 8.0
Number of daily cigarettes			
Units: number			
median	10	10	18
inter-quartile range (Q1-Q3)	8.0 to 15.0	7.0 to 14.3	15.0 to 20.0
Height			

Units: cent			
arithmetic mean	170.6	170.1	171.7
standard deviation	± 8.7	± 8.9	± 10.3
Smoking initiation age			
Units: year			
arithmetic mean	14.8	15.3	14.4
standard deviation	± 2.3	± 2.0	± 2.0
Duration of smoking			
Units: year			
arithmetic mean	5.8	5.9	7.0
standard deviation	± 3.1	± 3.0	± 2.7
Heaviness of Smoking Index (HSI)			
Heaviness of smoking Index consists of two questions: 1)How soon after wake up do you have your first cigarette? A. within 5 min (3points), B. 6-30min (2 points), C. 31-60 min. (1 point). 2) How many cigarettes do you typically smoke per day? A. 31 or more, B. 21-30, C. 11-20 (1 point).			
Units: cigarettes			
arithmetic mean	1.3	1.3	3.3
standard deviation	± 0.8	± 0.8	± 0.9

Reporting group values	Varenicline group	Total	
Number of subjects	60	291	
Age categorical			
Units: Subjects			
Age continuous			
Units: years			
median	21		
inter-quartile range (Q1-Q3)	19 to 23.8	-	
Gender categorical			
Units: Subjects			
Female	30	146	
Male	30	145	
weight			
Units: kilogram(s)			
median	72.6		
inter-quartile range (Q1-Q3)	62.2 to 79.7	-	
Motivation to quit			
Motivation to quit was reported in numeric scale 1 to 10 (1 for lowest motivation; 10 for highest motivation)			
Units: 1-10			
median	7		
inter-quartile range (Q1-Q3)	6.0 to 8.0	-	
Number of daily cigarettes			
Units: number			
median	14		
inter-quartile range (Q1-Q3)	10.0 to 20.0	-	
Height			
Units: cent			
arithmetic mean	169.9		
standard deviation	± 7.8	-	
Smoking initiation age			
Units: year			

arithmetic mean	14.1		
standard deviation	± 1.9	-	
Duration of smoking			
Units: year			
arithmetic mean	7.3		
standard deviation	± 2.8	-	
Heaviness of Smoking Index (HSI)			
Heaviness of smoking Index consists of two questions: 1)How soon after wake up do you have your first cigarette? A. within 5 min (3points), B. 6-30min (2 points), C. 31-60 min. (1 point). 2) How many cigarettes do you typically smoke per day? A. 31 or more, B. 21-30, C. 11-20 (1 point).			
Units: cigarettes			
arithmetic mean	3.5		
standard deviation	± 0.7	-	

End points

End points reporting groups

Reporting group title	Placebo patch group

Reporting group description:

Light smokers (Heaviness of smoking index points 0-2) were randomised to placebo or nicotine patch 10mg/16h arm. In placebo patch arm, subjects were treated with a placebo patch that resembled medication-type patch, but was not identical to the nicotine patch. The duration of placebo treatment was 8 weeks. The placebo arm were compared to nicotine patch 10mg/16h arm.

Reporting group title	Nicotine patch 10mg/16h group

Reporting group description:

In this arm, subjects were light daily smokers and were treated with nicotine patch 10mg/16h for 8 weeks, and during analysis, this treatment arm was compared to placebo arm with light smokers.

Reporting group title	Nicotine patch 15mg/16h group

Reporting group description:

Heavy smokers (Heaviness of smoking index 3-6 points) were randomised to nicotine patch 15mg/16h arm or varenicline arm. In this arm, subjects were heavy smokers that were treated with nicotine patch 15mg/16h for 8 weeks and were compared to varenicline arm.

Reporting group title	Varenicline group

Reporting group description:

In this arm, the subjects were heavy smokers and treated with varenicline for 12 weeks. They were compared to heavy smokers in nicotine patch 15mg/16 h arm during analysis.

Primary: Self-reported smoking abstinence at 12 weeks

End point title	Self-reported smoking abstinence at 12 weeks

End point description:

Abstinence rates at 12 week visit were compared in light smokers (placebo arm vs. nicotine patch 10mg/16h arm) and in heavy smokers (nicotine patch 15mg/16h arm vs. varenicline arm) separately.

End point type	Primary

End point timeframe:

Primary end point was assessed at 12 weeks follow up visit (at the time of the end of treatment).

End point values	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group	Varenicline group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	86	94	51	60
Units: Number of subjects				
Not smoking	15	22	8	22
Continues smoking	71	72	43	38

Statistical analyses

Statistical analysis title	Cross-tabulation placebo vs. nicotine 10mg/16h

Statistical analysis description:

The distribution of categorical variables between the study groups was compared with cross-tabulation.

The difference between the observed proportions of abstinence (with 95% confidence interval) in the study groups was used as the effects size measure. The statistical significance of difference in tobacco abstinence rates were evaluated with chi-square test.

Comparison groups	Nicotine patch 10mg/16h group v Placebo patch group
Number of subjects included in analysis	180
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	= 0.36 [1]
Method	Chi-squared
Parameter estimate	Effect size
Point estimate	6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6
upper limit	17.5

Notes:

[1] - The were no statistically significant differences between the groups of light smokers (i.e. smokers randomised to placebo and nicotine patch 10mg/16h groups) at week 12.

Statistical analysis title	Cross-tabulation nicotine 15mg/16h vs. varenicline

Statistical analysis description:

The distribution of categorical variables between the study groups was compared with cross-tabulation. The difference between the observed proportions of abstinence (with 95% confidence interval) in the study groups was used as the effects size measure. The statistical significance of difference in tobacco abstinence rates were evaluated with chi-square test.

Comparison groups	Nicotine patch 15mg/16h group v Varenicline group
Number of subjects included in analysis	111
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	= 0.018 [2]
Method	Chi-squared
Parameter estimate	effect size
Point estimate	21
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.4
upper limit	25.7

Notes:

[2] - The was statistically significant difference between the groups of heavy smokers (i.e. smokers randomised to varenicline group and nicotine patch 15mg/16h groups) at week 12. Smoking abstinence was more common in varenicline group.

Secondary: Self-reported smoking abstinence at 4 weeks

End point title	Self-reported smoking abstinence at 4 weeks

End point description:

Abstinence rates at 4 weeks were analysed between placebo arm and nicotine patch 10mg/16h arm and between nicotine patch 15mg/16h and varenicline arm.

End point type	Secondary

End point timeframe:

Self-reported smoking abstinence at 4 weeks follow up phone call control.

End point values	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group	Varenicline group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	86	94	51	60
Units: Number of subjects				
Not smoking	17	25	10	44
Continues smoking	69	69	41	16

Statistical analyses

Statistical analysis title	Cross-tabulation placebo vs. nicotine 10mg/16h
Comparison groups	Placebo patch group v Nicotine patch 10mg/16h group
Number of subjects included in analysis	180
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	= 0.296
Method	Chi-squared
Parameter estimate	effect size
Point estimate	6.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.6
upper limit	18.8

Statistical analysis title	Cross-tabulation varenicline vs. nicotine 15mg/16h

Statistical analysis description:

The distribution of categorical variables between the study groups was compared with cross-tabulation. The difference between the observed proportions of abstinence (with 95% confidence interval) in the study groups was used as the effects size measure. The statistical significance of difference in tobacco abstinence rates were evaluated with chi-square test.

Comparison groups	Nicotine patch 15mg/16h group v Varenicline group
Number of subjects included in analysis	111
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	< 0.001
Method	Chi-squared
Parameter estimate	effect size
Point estimate	53.7

Confidence interval	
level	95 %
sides	2-sided
lower limit	35.9
upper limit	66.6

Secondary: Self-reported smoking abstinence at week 26

End point title	Self-reported smoking abstinence at week 26

End point description:

End point type	Secondary

End point timeframe:

Self-reported abstinence of smoking at week 26 follow up contact. 52 weeks follow up was included in study, but we did not analyse or report it in the end because it was thought not to be as important/interesting as other end points.

End point values	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group	Varenicline group
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	86	94	51	60
Units: Number of subjects				
Not smoking	13	19	5	11
Continues smoking	73	75	46	49

Statistical analyses

Statistical analysis title	Cross-tabulation placebo vs. nicotine 10mg/16h

Statistical analysis description:

The distribution of categorical variables between the study groups was compared with cross-tabulation. The difference between the observed proportions of abstinence (with 95% confidence interval) in the study groups was used as the effects size measure. The statistical significance of difference in tobacco abstinence rates were evaluated with chi-square test.

Comparison groups	Placebo patch group v Nicotine patch 10mg/16h group
Number of subjects included in analysis	180
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	= 0.437
Method	Chi-squared
Parameter estimate	effect size
Point estimate	5.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.3
upper limit	16.1

Statistical analysis title	Cross-tabulation nicotine 15mg/16h vs. varenicline

Statistical analysis description:

The distribution of categorical variables between the study groups was compared with cross-tabulation. The difference between the observed proportions of abstinence (with 95% confidence interval) in the study groups was used as the effects size measure. The statistical significance of difference in tobacco abstinence rates were evaluated with chi-square test.

Comparison groups	Nicotine patch 15mg/16h group v Varenicline group
Number of subjects included in analysis	111
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	= 0.28
Method	Chi-squared
Parameter estimate	effect size
Point estimate	8.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.1
upper limit	21.4

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events were requested at 4, 12, 26 and 52 weeks with an open question. In addition, all subjects were given a phone number for study nurse and they were advised to call if any questions or problems such as side effects came up.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	22.0

Reporting groups

Reporting group title	Placebo patch group
Reporting group description: -	
Reporting group title	Nicotine patch 10mg/16h group
Reporting group description: -	
Reporting group title	Nicotine patch 15mg/16h group
Reporting group description: -	
Reporting group title	Varenicline group
Reporting group description: -	

Serious adverse events	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	0 / 49 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			

Serious adverse events	Varenicline group		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 60 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			

Frequency threshold for reporting non-serious adverse events: 0.1 %

Non-serious adverse events	Placebo patch group	Nicotine patch 10mg/16h group	Nicotine patch 15mg/16h group
Total subjects affected by non-serious adverse events			
subjects affected / exposed	15 / 86 (17.44%)	26 / 93 (27.96%)	16 / 49 (32.65%)

Cardiac disorders			
Palpitations			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	1 / 49 (2.04%)
occurrences (all)	0	0	1
Nervous system disorders			
Pain of skin	Additional description: At the side of the patch		
subjects affected / exposed	0 / 86 (0.00%)	2 / 93 (2.15%)	3 / 49 (6.12%)
occurrences (all)	0	2	6
Paraesthesia			
subjects affected / exposed	0 / 86 (0.00%)	1 / 93 (1.08%)	2 / 49 (4.08%)
occurrences (all)	0	1	4
Headache			
subjects affected / exposed	1 / 86 (1.16%)	0 / 93 (0.00%)	1 / 49 (2.04%)
occurrences (all)	1	0	1
General disorders and administration site conditions			
Cutaneous symptom	Additional description: Cutaneous irritation		
subjects affected / exposed	7 / 86 (8.14%)	19 / 93 (20.43%)	8 / 49 (16.33%)
occurrences (all)	8	20	16
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	1 / 86 (1.16%)	5 / 93 (5.38%)	1 / 49 (2.04%)
occurrences (all)	1	5	2
Abdominal pain			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	0	0	0
Flatulence			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	0	0	0
Constipation			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	0	0	0
Psychiatric disorders			
Abnormal dreams			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	0	0	0
Nervousness			

subjects affected / exposed	6 / 86 (6.98%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	7	0	0
Insomnia			
subjects affected / exposed	3 / 86 (3.49%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	4	0	0
Anxiety			
subjects affected / exposed	4 / 86 (4.65%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	4	0	0
Fatigue			
subjects affected / exposed	3 / 86 (3.49%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	3	0	0
Sexual inhibition			
subjects affected / exposed	0 / 86 (0.00%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	0	0	0
Musculoskeletal and connective tissue disorders			
Muscle discomfort			
subjects affected / exposed	1 / 86 (1.16%)	1 / 93 (1.08%)	1 / 49 (2.04%)
occurrences (all)	1	1	1
Metabolism and nutrition disorders			
Night sweats			
subjects affected / exposed	2 / 86 (2.33%)	0 / 93 (0.00%)	0 / 49 (0.00%)
occurrences (all)	2	0	0

Non-serious adverse events	Varenicline group		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	36 / 60 (60.00%)		
Cardiac disorders			
Palpitations			
subjects affected / exposed	0 / 60 (0.00%)		
occurrences (all)	0		
Nervous system disorders			
Pain of skin	Additional description: At the side of the patch		
subjects affected / exposed	0 / 60 (0.00%)		
occurrences (all)	0		
Paraesthesia			
subjects affected / exposed	0 / 60 (0.00%)		
occurrences (all)	0		

Headache			
subjects affected / exposed	3 / 60 (5.00%)		
occurrences (all)	3		
General disorders and administration site conditions			
Cutaneous symptom	Additional description: Cutaneous irritation		
subjects affected / exposed	1 / 60 (1.67%)		
occurrences (all)	2		
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	25 / 60 (41.67%)		
occurrences (all)	42		
Abdominal pain			
subjects affected / exposed	5 / 60 (8.33%)		
occurrences (all)	8		
Flatulence			
subjects affected / exposed	2 / 60 (3.33%)		
occurrences (all)	2		
Constipation			
subjects affected / exposed	2 / 60 (3.33%)		
occurrences (all)	2		
Psychiatric disorders			
Abnormal dreams			
subjects affected / exposed	11 / 60 (18.33%)		
occurrences (all)	18		
Nervousness			
subjects affected / exposed	0 / 60 (0.00%)		
occurrences (all)	0		
Insomnia			
subjects affected / exposed	4 / 60 (6.67%)		
occurrences (all)	7		
Anxiety			
subjects affected / exposed	3 / 60 (5.00%)		
occurrences (all)	0		
Fatigue			
subjects affected / exposed	0 / 60 (0.00%)		
occurrences (all)	0		

Sexual inhibition subjects affected / exposed occurrences (all)	1 / 60 (1.67%) 1		
Musculoskeletal and connective tissue disorders Muscle discomfort subjects affected / exposed occurrences (all)	0 / 60 (0.00%) 0		
Metabolism and nutrition disorders Night sweats subjects affected / exposed occurrences (all)	0 / 60 (0.00%) 0		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported

Online references

http://www.ncbi.nlm.nih.gov/pubmed/26709238