Clinical trial results:
Assessing the Efficacy and Tolerability of TRAVATAN® Solution without BAK, containing Polyquad® Preservative (travoprost 0.004%) versus LUMIGAN® 0.01% Solution with BAK (bimatoprost 0.01%) in Treatment Naïve patients with Ocular Hypertension or Open Angle Glaucoma

Summary

EudraCT number	2012-002078-30
Trial protocol	SI
Global end of trial date	18 June 2014

Results information

Result version number	v1 (current)
This version publication date	16 February 2016
First version publication date	05 August 2015

Trial information

Trial identification

Sponsor protocol code	RDG-11-244

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01664039
WHO universal trial number (UTN)	-
Other trial identifiers	Not available: Not available

Notes:

Sponsors

Sponsor organisation name	Alcon Research, Ltd.
Sponsor organisation address	6201 South Freeway, Fort Worth, United States, 76134
Public contact	Global Brand Lead, Medical Affairs, Glaucoma, Alcon Research, Ltd., 1 888-451-3937, alcon.medinfo@alcon.com
Scientific contact	Global Brand Lead, Medical Affairs, Glaucoma, Alcon Research, Ltd., 1 888-451-3937, alcon.medinfo@alcon.com

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	18 June 2014
Is this the analysis of the primary completion data?	Yes
Primary completion date	18 June 2014
Global end of trial reached?	Yes
Global end of trial date	18 June 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The objective of this study is to assess the efficacy and tolerability of TRAVATAN® Solution without BAK, containing Polyquad® Preservative versus LUMIGAN® 0.01% Solution with BAK in treatment naïve patients with ocular hypertension or open angle glaucoma.

Protection of trial subjects:

This study was performed in compliance with the ethical principles of the Declaration of Helsinki and Good Clinical Practice (GCP). An Ethics Committee reviewed and approved (for use in this study) informed consent form was read, signed, and dated by the participating patient, as well as signed and dated by the individual (Principal Investigator or other site personnel) obtaining the informed consent, before conducting the Screening Visit and prior to initiation of study procedures.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 September 2012
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Slovenia: 104
Worldwide total number of subjects	104
EEA total number of subjects	104

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)	69
From 65 to 84 years	34

85 years and over	1

Subject disposition

Recruitment

Recruitment details:

Subjects were enrolled at 2 study centers in Slovenia

Pre-assignment

Screening details:

The study population included males and females of any race/ethnicity who were older than 18 years of age and who had newly diagnosed with either open-angle glaucoma or ocular hypertension in at least one eye and were treatment naïve to any glaucoma treatment.

Period 1

Period 1 title	Overall (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind
Roles blinded	Investigator[1]

Arms

Are arms mutually exclusive?	Yes
Arm title	TRAVATAN

Arm description:

Travoprost 0.004% ophthalmic solution without benzalkonium chloride (BAK), containing Polyquad® preservative

Arm type	Experimental
Investigational medicinal product name	TRAVATAN
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Ear drops, solution
Routes of administration	Ocular use

Dosage and administration details:

One drop to the study eye(s), once a day in the evening, for 6 months

Arm title	LUMIGAN

Arm description:

Bimatoprost 0.01% ophthalmic solution containing benzalkonium chloride (BAK)

Arm type	Active comparator
Investigational medicinal product name	LUMIGAN
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Eye drops, solution
Routes of administration	Ocular use

Dosage and administration details:

One drop to the study eye(s), once a day in the evening, for 6 months

Notes:

[1] - The roles blinded appear inconsistent with a simple blinded trial.

Justification: The observer was masked in this study.

Number of subjects in period 1	TRAVATAN	LUMIGAN
Started	52	52
Completed	46	43
Not completed	6	9
Consent withdrawn by subject	1	3
Adverse event, non-fatal	3	4
Lost to follow-up	1	1
Noncompliance	1	1

Baseline characteristics

Reporting groups	
Reporting group title	TRAVATAN
Reporting group description:	
Travoprost 0.004% ophthalmic solution without benzalkonium chloride (BAK), containing Polyquad® preservative	
Reporting group title	LUMIGAN
Reporting group description:	
Bimatoprost 0.01% ophthalmic solution containing benzalkonium chloride (BAK)	

Reporting group values	TRAVATAN	LUMIGAN	Total
Number of subjects	52	52	104
Age categorical			
This analysis population includes all randomized participants			
Units: Subjects			
Adults (18-64 years)	40	40	80
From 65-84 years	12	12	24
85 years and over	0	0	0
Age continuous			
This analysis population includes all randomized participants.			
Units: years			
arithmetic mean	60	58	
standard deviation	± 10.8	± 12.8	-
Gender categorical			
This analysis population includes all randomized participants.			
Units: Subjects			
Female	35	16	51
Male	17	36	53

End points

End points reporting groups

Reporting group title	TRAVATAN
Reporting group description:	
Travoprost 0.004% ophthalmic solution without benzalkonium chloride (BAK), containing Polyquad® preservative	
Reporting group title	LUMIGAN
Reporting group description:	
Bimatoprost 0.01% ophthalmic solution containing benzalkonium chloride (BAK)	

Primary: Mean Change from Baseline in Intraocular Pressure (IOP) at Month 6

End point title	Mean Change from Baseline in Intraocular Pressure (IOP) at Month 6
End point description:	
IOP (fluid pressure inside the eye) was assessed using Goldmann applanation tonometry and measured in millimeters mercury (mmHg). A more negative change indicates a greater amount of improvement. One eye was chosen as the study eye, and only data from the study eye were used for the analysis. This analysis population includes all randomized subjects who received at least one dose of either study treatment and had at least one post-baseline on-therapy study visit. Here, n=the number of subjects with non-missing values at the specific timepoint for each arm group respectively.	
End point type	Primary
End point timeframe:	
Baseline, Month 6	

End point values	TRAVATAN	LUMIGAN		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	50	49		
Units: millimeters mercury (mmHg)				
arithmetic mean (standard deviation)				
Baseline (Day 0)	24.66 (± 3.65)	24.59 (± 4.14)		
Change from baseline at Month 6 (n=46,43)	-7.61 (± 4.32)	-7.35 (± 3.84)		

Statistical analyses

Statistical analysis title	Analysis of Change from Baseline in IOP at Month 6
Comparison groups	TRAVATAN v LUMIGAN
Number of subjects included in analysis	99
Analysis specification	Pre-specified
Analysis type	non-inferiority
P-value	= 0.544
Method	ANCOVA
Parameter estimate	Mean difference (final values)
Point estimate	-0.419

Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.789
upper limit	0.951
Variability estimate	Standard error of the mean
Dispersion value	0.689

Adverse events

Adverse events information[1]

Timeframe for reporting adverse events:

Adverse events were collected for the duration of the study (September 2012 to June 2014). This analysis population includes all subjects who received at least one dose of either study treatment.

Adverse event reporting additional description:

An Adverse Event (AE) was defined as any untoward medical occurrence in a patient who is administered a study treatment regardless of whether or not the event has a causal relationship with the treatment. AEs were obtained as both volunteered and elicited comments from the study subjects.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	17

Reporting groups

Reporting group title	TRAVATAN

Reporting group description:

Travoprost 0.004% ophthalmic solution without benzalkonium chloride (BAK), containing Polyquad® preservative,

Reporting group title	LUMIGAN

Reporting group description:

Bimatoprost 0.01% ophthalmic solution containing benzalkonium chloride (BAK)

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: There were no non-serious adverse events occurring above a threshold of 5% in either arm in this study.

Serious adverse events	TRAVATAN	LUMIGAN	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 51 (0.00%)	1 / 49 (2.04%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events			
Surgical and medical procedures			
Thromboendarterectomy			
subjects affected / exposed	0 / 51 (0.00%)	1 / 49 (2.04%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	TRAVATAN	LUMIGAN	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 51 (0.00%)	0 / 49 (0.00%)	

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