

**Clinical trial results:****PHASE II STUDY OF MINI-CHOP PLUS OFATUMUMAB (O) IN NON PREVIOUSLY TREATED PATIENTS AGED OVER 80 YEARS WITH CD 20+ DIFFUSE LARGE B-CELL LYMPHOMA****Summary**

EudraCT number	2009-017995-26
Trial protocol	FR BE PT
Global end of trial date	15 April 2014

**Results information**

Result version number	v1 (current)
This version publication date	17 March 2018
First version publication date	17 March 2018

**Trial information****Trial identification**

Sponsor protocol code	LNH09-7B
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**Additional study identifiers**

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01195714
WHO universal trial number (UTN)	-

Notes:

**Sponsors**

Sponsor organisation name	LYSARC
Sponsor organisation address	CHU Lyon Sud - Pav 6D, Pierre Bénite cedex, France, 69495
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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:

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**Results analysis stage**

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Analysis stage	Final
Date of interim/final analysis	06 March 2015
Is this the analysis of the primary completion data?	Yes
Primary completion date	15 April 2014
Global end of trial reached?	Yes
Global end of trial date	15 April 2014
Was the trial ended prematurely?	No

Notes:

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**General information about the trial**

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Main objective of the trial:

To evaluate the efficacy of O-miniCHOP in patients aged over 80 years with not previously treated CD20+ diffuse large B-cell lymphoma as measured by the overall survival (OS).

Protection of trial subjects:

Standard in oncology

Background therapy:

mini-CHOP

Evidence for comparator: -

Actual start date of recruitment	02 June 2010
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Belgium: 14
Country: Number of subjects enrolled	France: 106
Worldwide total number of subjects	120
EEA total number of subjects	120

Notes:

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**Subjects enrolled per age group**

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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)	0
From 65 to 84 years	75
85 years and over	45

## Subject disposition

### Recruitment

Recruitment details:

First patient was included in June 2010. 106 patients were included in France, 14 in Belgium and no patient was included in Portugal. The last patient was included in November 2011.

### Pre-assignment

Screening details:

Patients must have a Performance status 0, 1 or 2 and may receive vincristine and prednisone to improve it

### Pre-assignment period milestones

Number of subjects started	120
Number of subjects completed	120

### Period 1

Period 1 title	Treatment (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

### Arms

<b>Arm title</b>	Experimental
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Arm description:

2x3 cycles of O-miniCHOP21

Arm type	Experimental
Investigational medicinal product name	Ofatumumab
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Concentrate for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

1000 mg on D1 of each cycle

<b>Number of subjects in period 1</b>	Experimental
Started	120
Induction	115
Consolidation	98
Completed	89
Not completed	31
Consent withdrawn by subject	6
Physician decision	2
Adverse event, non-fatal	6
Exclusion criterion	2

DEATH	2
comorbidities	5
Protocol deviation	2
Lack of efficacy	6

## Baseline characteristics

### Reporting groups

Reporting group title	Treatment
Reporting group description: Patient with PS 0, 1 or 2	

Reporting group values	Treatment	Total	
Number of subjects	120	120	
Age categorical Units: Subjects			
In utero		0	
Preterm newborn infants (gestational age < 37 wks)		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)		0	
From 65-84 years		0	
85 years and over		0	
Age continuous Units: years			
arithmetic mean	83.9		
standard deviation	± 3.38	-	
Gender categorical Units: Subjects			
Female	55	55	
Male	65	65	

### Subject analysis sets

Subject analysis set title	FAS
Subject analysis set type	Full analysis
Subject analysis set description: the Full Analysis Set (FAS) corresponds to patients enrolled in the study and having signed the informed consent, regardless of whether they have received study treatment or not	
Subject analysis set title	PP
Subject analysis set type	Per protocol
Subject analysis set description: the PP set corresponds to patients enrolled in the study with no major protocol deviations	
Subject analysis set title	Safety set
Subject analysis set type	Safety analysis
Subject analysis set description: the safety set corresponds to patients who have received at least one dose of treatment regimen, including prephase.	

<b>Reporting group values</b>	FAS	PP	Safety set
Number of subjects	120	115	120
Age categorical Units: Subjects			
In utero Preterm newborn infants (gestational age < 37 wks) Newborns (0-27 days) Infants and toddlers (28 days-23 months) Children (2-11 years) Adolescents (12-17 years) Adults (18-64 years) From 65-84 years 85 years and over			
Age continuous Units: years			
arithmetic mean	83.9	84.1	83.9
standard deviation	± 3.38	± 3.34	± 3.38
Gender categorical Units: Subjects			
Female	55	54	55
Male	65	61	65

## End points

### End points reporting groups

Reporting group title	Experimental
Reporting group description: 2x3 cycles of O-miniCHOP21	
Subject analysis set title	FAS
Subject analysis set type	Full analysis
Subject analysis set description: the Full Analysis Set (FAS) corresponds to patients enrolled in the study and having signed the informed consent, regardless of whether they have received study treatment or not	
Subject analysis set title	PP
Subject analysis set type	Per protocol
Subject analysis set description: the PP set corresponds to patients enrolled in the study with no major protocol deviations	
Subject analysis set title	Safety set
Subject analysis set type	Safety analysis
Subject analysis set description: the safety set corresponds to patients who have received at least one dose of treatment regimen, including prephase.	

### Primary: Overall Survival (OS)

End point title	Overall Survival (OS) <sup>[1]</sup>
End point description: measured from the date of inclusion to the date of death from any cause. Patients who have not died at the time of the analysis or who are lost to follow-up are censored at the date of last contact.	
End point type	Primary
End point timeframe: 2 YEARS	

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: Since there is only one treatment arm, it is not possible to indicate comparative statistical analysis as required by EudraCT system

End point values	FAS	PP		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	120	115		
Units: percent				
arithmetic mean (confidence interval 95%)	64.7 (55.3 to 72.7)	65.0 (55.3 to 73.0)		

### Statistical analyses

No statistical analyses for this end point

### Secondary: Progression Free Survival (PFS)

End point title	Progression Free Survival (PFS)
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End point description:

measured from the date of inclusion to the date of first documented disease progression, relapse or death from any cause, whichever occurs first. Patients alive and free of progression and patients who are lost to follow-up are censored at their last tumor assessment date.

End point type Secondary

End point timeframe:

2 YEARS

<b>End point values</b>	FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	120			
Units: percent				
arithmetic mean (confidence interval 95%)	57.2 (47.7 to 65.6)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Event Free Survival (EFS)

End point title Event Free Survival (EFS)

End point description:

measured from the date of randomization to the date of first documented disease progression, relapse, initiation of new anti-lymphoma therapy or death from any cause. Patients alive and free of event or who are lost to follow up are censored at their last tumor assessment date.

End point type Secondary

End point timeframe:

2 YEARS

<b>End point values</b>	FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	120			
Units: percent				
arithmetic mean (confidence interval 95%)	53.1 (43.7 to 61.6)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Disease Free Survival (DFS)

End point title Disease Free Survival (DFS)

End point description:

measured from the time of attainment of CR, CRu or PR to the date of first documented disease progression, relapse or death as a result of lymphoma or acute toxicity of treatment. Patients alive and free of progression are censored at their last follow-up date.

Death from a secondary cancer or from unknown cause are considered as an event. Unrelated death is defined as death from a cause not related to the lymphoma, any examination done for the lymphoma, or any treatment of the lymphoma.

End point type | Secondary

End point timeframe:

2 YEARS

End point values	FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	120			
Units: percent				
arithmetic mean (confidence interval 95%)	66.6 (54.0 to 76.5)			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Duration of Response (DoR)

End point title | Duration of Response (DoR)

End point description:

measured from the time of attainment of CR/CRu or PR to the date of first documented disease progression, relapse or death from any cause. Patients alive and free of progression are censored at their last follow-up date.

End point type | Secondary

End point timeframe:

2 YEARS

End point values	FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	120			
Units: percent				
arithmetic mean (confidence interval 95%)	63.0 (52.1 to 72.1)			

### Statistical analyses

No statistical analyses for this end point

**Secondary: Complete Response / Uncertain Complete Response (CR/CRu)**

End point title	Complete Response / Uncertain Complete Response (CR/CRu)
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End point description:

Patients without response assessment (due to whatever reason) are considered as non-responder.

End point type	Secondary
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End point timeframe:

END OF TREATMENT

End point values	FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	120			
Units: percent				
arithmetic mean (confidence interval 95%)	55.8 (46.5 to 64.9)			

**Statistical analyses**

No statistical analyses for this end point

**Secondary: Overall Response Rate (ORR)**

End point title	Overall Response Rate (ORR)
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End point description:

End point type	Secondary
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End point timeframe:

END OF TREATMENT

End point values	FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	120			
Units: percent				
arithmetic mean (confidence interval 95%)	67.5 (58.3 to 75.8)			

**Statistical analyses**

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

until 90 days after the last study drug administration

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	NK
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### Reporting groups

Reporting group title	SAFETY SET
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Reporting group description: -

<b>Serious adverse events</b>	SAFETY SET		
Total subjects affected by serious adverse events			
subjects affected / exposed	43 / 120 (35.83%)		
number of deaths (all causes)	18		
number of deaths resulting from adverse events	6		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Basal cell carcinoma			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 1		
Benign bone neoplasm			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Vascular disorders			
Cerebrovascular accident			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Deep vein thrombosis			
subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		

Haematoma			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hypertension			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Thrombosis			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Chest pain			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Chills			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Device dislocation			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Pyrexia			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Immune system disorders			
Cytokine release syndrome			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

Social circumstances Social stay hospitalisation subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 120 (0.83%) 0 / 1 0 / 0		
Reproductive system and breast disorders Prostatitis subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	2 / 120 (1.67%) 1 / 2 0 / 0		
Respiratory, thoracic and mediastinal disorders Pulmonary embolism subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	2 / 120 (1.67%) 2 / 2 0 / 0		
Lung disorder subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 120 (0.83%) 0 / 1 0 / 0		
Pneumonitis subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 120 (0.83%) 1 / 1 0 / 0		
Respiratory distress subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 120 (0.83%) 0 / 1 0 / 0		
Respiratory tract congestion subjects affected / exposed occurrences causally related to treatment / all deaths causally related to treatment / all	1 / 120 (0.83%) 0 / 1 0 / 1		
Psychiatric disorders Confusional state			

subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 1		
Depression			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infusion related reaction			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Lower limb fracture			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Skull fractured base			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Cardiac disorders			
Cardiac failure			
subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Acute coronary syndrome			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		

Aortic valve stenosis			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 1		
Atrial fibrillation			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Atrial flutter			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Intracardiac thrombus			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Left ventricular dysfunction			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Cerebral haemorrhage			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Ischaemic stroke			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 1		
Paraplegia			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Parkinson's disease			

subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Presyncope			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Transient ischaemic attack			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Febrile neutropenia			
subjects affected / exposed	5 / 120 (4.17%)		
occurrences causally related to treatment / all	3 / 5		
deaths causally related to treatment / all	0 / 0		
Anaemia			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Bone marrow failure			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Ear and labyrinth disorders			
Deafness bilateral			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Eye disorders			
Blindness			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		

Ulcerative keratitis			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Gastrointestinal disorders</b>			
Rectal haemorrhage			
subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Abdominal pain			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Abdominal strangulated hernia			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Ileus			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Pancreatitis			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Renal and urinary disorders</b>			
Bladder obstruction			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Renal failure			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Urinary retention			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Endocrine disorders			
Inappropriate antidiuretic hormone secretion			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Bone pain			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Urinary tract infection			
subjects affected / exposed	3 / 120 (2.50%)		
occurrences causally related to treatment / all	1 / 3		
deaths causally related to treatment / all	0 / 0		
Bacterial sepsis			
subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
Klebsiella infection			
subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		
Lung infection			
subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
Sepsis			

subjects affected / exposed	2 / 120 (1.67%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
<b>Infection</b>			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Postoperative wound infection</b>			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Prostatitis Escherichia coli</b>			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Pyelonephritis</b>			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Septic shock</b>			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
<b>Metabolism and nutrition disorders</b>			
<b>Decreased appetite</b>			
subjects affected / exposed	1 / 120 (0.83%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0 %

<b>Non-serious adverse events</b>	SAFETY SET		
Total subjects affected by non-serious adverse events subjects affected / exposed	85 / 120 (70.83%)		
Neoplasms benign, malignant and unspecified (incl cysts and polyps) Noeplan benign, malignant and unspecified subjects affected / exposed occurrences (all)	2 / 120 (1.67%) 2		
Vascular disorders Vascular Disorders subjects affected / exposed occurrences (all)	8 / 120 (6.67%) 10		
General disorders and administration site conditions General Disorders and Administration site conditions subjects affected / exposed occurrences (all)	13 / 120 (10.83%) 13		
Immune system disorders Immune System Disorders subjects affected / exposed occurrences (all)	3 / 120 (2.50%) 3		
Social circumstances Social circumstances subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Reproductive system and breast disorders Reproductive system disorders subjects affected / exposed occurrences (all)	2 / 120 (1.67%) 2		
Respiratory, thoracic and mediastinal disorders Respiratory, Thoracic and Mediastinal Disorders subjects affected / exposed occurrences (all)	8 / 120 (6.67%) 8		
Psychiatric disorders Psychiatric Disorders subjects affected / exposed occurrences (all)	5 / 120 (4.17%) 5		

Investigations Investigations subjects affected / exposed occurrences (all)	12 / 120 (10.00%) 24		
Injury, poisoning and procedural complications Injury , Poisoning and Procedural complications subjects affected / exposed occurrences (all)	17 / 120 (14.17%) 19		
Cardiac disorders Cardiac Disorders subjects affected / exposed occurrences (all)	8 / 120 (6.67%) 10		
Nervous system disorders Nervous System Disorders subjects affected / exposed occurrences (all)	13 / 120 (10.83%) 13		
Blood and lymphatic system disorders Blood and lymphatic system disorders subjects affected / exposed occurrences (all)	37 / 120 (30.83%) 110		
Ear and labyrinth disorders Ear and Labyrinth disorders subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Eye disorders Eye Disorders subjects affected / exposed occurrences (all)	2 / 120 (1.67%) 3		
Gastrointestinal disorders Gastrointestinal disorders subjects affected / exposed occurrences (all)	9 / 120 (7.50%) 11		
Skin and subcutaneous tissue disorders Skin and subcutaneous tissue disorders subjects affected / exposed occurrences (all)	9 / 120 (7.50%) 9		
Renal and urinary disorders			

Renal and urinary Disorders subjects affected / exposed occurrences (all)	4 / 120 (3.33%) 4		
Endocrine disorders Endocrine disorders subjects affected / exposed occurrences (all)	1 / 120 (0.83%) 1		
Musculoskeletal and connective tissue disorders Muskuloskeletal and connective tissue disorders subjects affected / exposed occurrences (all)	2 / 120 (1.67%) 2		
Infections and infestations Infections and Infestations subjects affected / exposed occurrences (all)	29 / 120 (24.17%) 46		
Metabolism and nutrition disorders Metabolism and Nutrition Disorders subjects affected / exposed occurrences (all)	3 / 120 (2.50%) 3		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
17 November 2010	Addition of the Charlson score which is a comorbidity index to recover at the time the patient enters the trial
30 May 2011	IB modification : change in expected adverse events
27 February 2013	<ol style="list-style-type: none"><li>1. Addition of a neurological examination during clinical examinations</li><li>2. Indications on what to do in case of PML suspicion</li><li>3. Further information on expected toxicities</li><li>4. Investigator's Brochure update</li></ol>
15 April 2013	IB update : risk of toxic epidermal necrolysis in FL

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported

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### Online references

<http://www.ncbi.nlm.nih.gov/pubmed/29473343>

<http://www.ncbi.nlm.nih.gov/pubmed/28041583>