

**Clinical trial results:****An Open-Label Safety Extension Study to a Multicenter Study of Liposomal Amikacin for Inhalation (LAI) in Adult Patients with Nontuberculous Mycobacterial (NTM) Lung Infections Caused By Mycobacterium Avium Complex (MAC) That are Refractory to Treatment Summary**

EudraCT number	2015-003170-33
Trial protocol	DE GB AT ES PL NL SE IT
Global end of trial date	17 October 2018

**Results information**

Result version number	v1
This version publication date	31 October 2019
First version publication date	31 October 2019

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

Sponsor protocol code	INS-312
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**Additional study identifiers**

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02628600
WHO universal trial number (UTN)	-

Notes:

**Sponsors**

Sponsor organisation name	Insmmed Incorporated
Sponsor organisation address	10 FINDERNE AVENUE, BUILDING 10, BRIDGEWATER, NJ, UNITED STATES, 08807-3365
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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	03 May 2019
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	17 October 2018
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

To evaluate long term safety and tolerability of LAI (590 mg) administered once daily (QD) for up to 12 months in participants who were refractory to standard multi-drug treatment and failed to convert in Study INS-212.

Protection of trial subjects:

This study was performed in compliance with Good Clinical Practices (GCP), including the archiving of essential documents, the International Council for Harmonisation (ICH) Guidelines, and is consistent with the ethical principles in the Declaration of Helsinki.

Background therapy:

This was a single arm open-label study in which all participants received background multidrug regimen (MDR) composed of an antimycobacterial regimen of at least 2 antibiotics based on the 2007 American Thoracic Society/Infectious Diseases Society of America (ATS/IDSA) guidelines or respective local guidelines.

Evidence for comparator:

Not applicable

Actual start date of recruitment	05 February 2016
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

## Population of trial subjects

### Subjects enrolled per country

Country: Number of subjects enrolled	Netherlands: 1
Country: Number of subjects enrolled	Poland: 4
Country: Number of subjects enrolled	Spain: 1
Country: Number of subjects enrolled	United Kingdom: 10
Country: Number of subjects enrolled	Austria: 1
Country: Number of subjects enrolled	France: 5
Country: Number of subjects enrolled	Germany: 2
Country: Number of subjects enrolled	Australia: 11
Country: Number of subjects enrolled	Canada: 9
Country: Number of subjects enrolled	Israel: 3
Country: Number of subjects enrolled	Italy: 7
Country: Number of subjects enrolled	Japan: 30
Country: Number of subjects enrolled	Korea, Republic of: 8
Country: Number of subjects enrolled	New Zealand: 2
Country: Number of subjects enrolled	Thailand: 1

Country: Number of subjects enrolled	United States: 68
Worldwide total number of subjects	163
EEA total number of subjects	31

Notes:

<b>Subjects enrolled per age group</b>	
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)	75
From 65 to 84 years	86
85 years and over	2

## Subject disposition

### Recruitment

Recruitment details:

This study was conducted at 77 sites in 16 countries.

### Pre-assignment

Screening details:

Since this study was an open-label extension study to Study INS-212, no pre-specified number of participants was planned. A total of 163 participants (Safety population) were included for the analysis.

### Period 1

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

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Prior LAI + Multidrug Regimen

Arm description:

Participants in the prior Study INS-212 who received LAI+MDR. All participants in this safety extension study received LAI+MDR.

Arm type	Experimental
Investigational medicinal product name	Liposomal Amikacin for Inhalation
Investigational medicinal product code	
Other name	Amikacin Liposome Inhalation Suspension (ALIS), ARIKAYCE
Pharmaceutical forms	Nebuliser suspension
Routes of administration	Inhalation use

Dosage and administration details:

LAI 590 mg QD, administered by inhaling drug product that had been aerosolised in an investigational eFlow nebuliser over approximately 14 minutes.

<b>Arm title</b>	Prior Multidrug Regimen Alone
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Arm description:

Participants in the prior Study INS-212 who received MDR alone. All participants in this safety extension study received LAI+MDR.

Arm type	Experimental
Investigational medicinal product name	Liposomal Amikacin for Inhalation
Investigational medicinal product code	
Other name	Amikacin Liposome Inhalation Suspension (ALIS), ARIKAYCE
Pharmaceutical forms	Nebuliser suspension
Routes of administration	Inhalation use

Dosage and administration details:

LAI 590 mg QD, administered by inhaling drug product that had been aerosolised in an investigational eFlow nebulizer over approximately 14 minutes.

<b>Number of subjects in period 1</b>	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone
Started	73	90
Completed	49	58
Not completed	24	32
Adverse event, serious fatal	2	1
Consent withdrawn by subject	13	8
Physician decision	2	2
Adverse event, non-fatal	3	20
Lost to follow-up	1	-
Lack of efficacy	2	-
Other not specified	1	-
Protocol deviation	-	1

## Baseline characteristics

### Reporting groups

Reporting group title	Prior LAI + Multidrug Regimen
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Reporting group description:

Participants in the prior Study INS-212 who received LAI+MDR. All participants in this safety extension study received LAI+MDR.

Reporting group title	Prior Multidrug Regimen Alone
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Reporting group description:

Participants in the prior Study INS-212 who received MDR alone. All participants in this safety extension study received LAI+MDR.

Reporting group values	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone	Total
Number of subjects	73	90	163
Age categorical Units: Subjects			
Adults (18-64 years)			0
From 65-84 years			0
85 years and over			0
Age continuous Units: years			
geometric mean	64.9	64.8	
standard deviation	± 9.12	± 10.33	-
Gender categorical Units: Subjects			
Female	51	54	105
Male	22	36	58

## End points

### End points reporting groups

Reporting group title	Prior LAI + Multidrug Regimen
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Reporting group description:

Participants in the prior Study INS-212 who received LAI+MDR. All participants in this safety extension study received LAI+MDR.

Reporting group title	Prior Multidrug Regimen Alone
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Reporting group description:

Participants in the prior Study INS-212 who received MDR alone. All participants in this safety extension study received LAI+MDR.

### Primary: Treatment-Emergent Adverse Events (TEAEs)

End point title	Treatment-Emergent Adverse Events (TEAEs) <sup>[1]</sup>
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End point description:

TEAEs are defined as those AEs that occurred on or after the date of first dose of study medication in INS-312 and within 28 days after the last dose. If it couldn't be determined whether the AE is treatment emergent due to a partial onset date, then it was classified as treatment emergent.

End point type	Primary
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End point timeframe:

Throughout the trial, up to 13 months

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: Only descriptive statistics are reported.

End point values	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	73	90		
Units: Participants				
number (not applicable)				
>=1 TEAE	68	90		
>=1 Serious TEAE (sTEAE)	20	32		
>=1 TEAE leading to study drug withdrawn	8	24		
>=1 TEAE leading to LAI withdrawn	6	22		
>=1 TEAE leading to MDR for NTM withdrawn	4	8		
>=1 TEAE leading to LAI and MDR for NTM withdrawn	1	5		
>=1 sTEAE leading to LAI withdrawn	3	9		
>=1 TEAE leading to death	2	4		

### Statistical analyses

No statistical analyses for this end point

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**Secondary: Number of Participants Achieving Culture Conversion by Month 6 and Month 12**

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End point title	Number of Participants Achieving Culture Conversion by Month 6 and Month 12
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End point description:

6 months: converters are defined as participants who had 3 consecutive monthly MAC-negative sputum cultures by Month 6 (last opportunity to convert was at Month 4)

12 months: converters are defined as participants who had 3 consecutive monthly MAC-negative sputum cultures by Month 12 (last opportunity to convert was at Month 10)

End point type	Secondary
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End point timeframe:

6 months, 12 months

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<b>End point values</b>	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	73	90		
Units: Participants				
number (not applicable)				
6 months	7	24		
12 months	10	30		

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**Statistical analyses**

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No statistical analyses for this end point

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**Secondary: Change from Baseline (Day 1) to Month 6 and Month 12 in the 6MWT Distance**

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End point title	Change from Baseline (Day 1) to Month 6 and Month 12 in the 6MWT Distance
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End point description:

A 6-minute walk assessment of exertional capability was performed as Baseline (Day 1) and Month 6 and Month 12/EOT. The standard protocol based on ATS guidelines was used. After assessments were performed for heart rate, blood pressure, pulse oximetry (SpO<sub>2</sub>), dyspnoea, and overall fatigue using the Borg scale, participants were instructed to walk on a prescribed course as far as they could in 6 minutes. Pre-test assessment parameters were repeated after exertion. The maximum distance achieved and post exertion heart rate and SpO<sub>2</sub> were compared to pre-test values. The maximum distance achieved was recorded in the eCRF.

End point type	Secondary
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End point timeframe:

6 months, 12 months

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<b>End point values</b>	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	73	90		
Units: Meters				
arithmetic mean (standard deviation)				
Baseline	435.9 (± 132.33)	449.0 (± 122.64)		
Change from Baseline to Month 6	-10.4 (± 69.77)	-20.8 (± 51.57)		
Change from Baseline to Month 12	-10.1 (± 79.23)	-42.2 (± 72.66)		

## Statistical analyses

No statistical analyses for this end point

## Secondary: Time to Culture Conversion

End point title	Time to Culture Conversion
End point description:	
The time to culture conversion is defined as the date of the first of 3-consecutive monthly negative sputum cultures. Then, the number of days to culture conversion is defined as the difference between the date of conversion and the date of the first dose of LAI. Data were not estimable at 6 and 12 Months due to the proportion of participants achieving conversion.	
End point type	Secondary
End point timeframe:	
6 months, 12 months	

<b>End point values</b>	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	73	90		
Units: Months				
median (confidence interval 95%)				
6 Months	0 (0 to 0)	0 (0 to 0)		
12 Months	0 (0 to 0)	0 (0 to 0)		

## Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Throughout trial, up to 13 months

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	17.1
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### Reporting groups

Reporting group title	Prior LAI + Multidrug Regimen
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Reporting group description:

Participants in the prior Study INS-212 who received LAI+MDR. All participants in this safety extension study received LAI+MDR.

Reporting group title	Prior Multidrug Regimen Alone
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Reporting group description:

Participants in the prior Study INS-212 who received MDR alone. All participants in this safety extension study received LAI+MDR.

<b>Serious adverse events</b>	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone	
Total subjects affected by serious adverse events			
subjects affected / exposed	20 / 73 (27.40%)	32 / 90 (35.56%)	
number of deaths (all causes)	2	4	
number of deaths resulting from adverse events	2	4	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Breast cancer			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Hip fracture			
subjects affected / exposed	2 / 73 (2.74%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pelvic fracture			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Radius fracture			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiac disorders			
Atrial fibrillation			
subjects affected / exposed	1 / 73 (1.37%)	2 / 90 (2.22%)	
occurrences causally related to treatment / all	0 / 1	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Cerebral infarction			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Neuropathy peripheral			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Transient ischaemic attack			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Chest pain			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Performance status decreased			

subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Eye disorders</b>			
<b>Cataract</b>			
subjects affected / exposed	2 / 73 (2.74%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Vision blurred</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Gastrointestinal disorders</b>			
<b>Ascites</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Gastritis</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Respiratory, thoracic and mediastinal disorders</b>			
<b>Acute respiratory failure</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
<b>Alveolitis allergic</b>			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Chronic obstructive pulmonary disease</b>			

subjects affected / exposed	2 / 73 (2.74%)	4 / 90 (4.44%)	
occurrences causally related to treatment / all	0 / 2	5 / 7	
deaths causally related to treatment / all	0 / 1	1 / 1	
<b>Dyspnoea</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Dyspnoea at rest</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Haemoptysis</b>			
subjects affected / exposed	1 / 73 (1.37%)	2 / 90 (2.22%)	
occurrences causally related to treatment / all	1 / 1	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Hypoxia</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Interstitial lung disease</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Lung infiltration</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Pneumothorax</b>			
subjects affected / exposed	0 / 73 (0.00%)	2 / 90 (2.22%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 1	
<b>Pulmonary embolism</b>			

subjects affected / exposed	0 / 73 (0.00%)	2 / 90 (2.22%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Pulmonary fibrosis</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
<b>Respiratory failure</b>			
subjects affected / exposed	0 / 73 (0.00%)	2 / 90 (2.22%)	
occurrences causally related to treatment / all	0 / 0	1 / 3	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Musculoskeletal and connective tissue disorders</b>			
<b>Back pain</b>			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Infections and infestations</b>			
<b>Bronchopulmonary aspergillosis allergic</b>			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Gastroenteritis viral</b>			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Infective exacerbation of bronchiectasis</b>			
subjects affected / exposed	1 / 73 (1.37%)	3 / 90 (3.33%)	
occurrences causally related to treatment / all	0 / 1	0 / 3	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Laryngitis</b>			

subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lower respiratory tract infection			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	1 / 1	0 / 0	
Mycobacterium abscessus infection			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Mycobacterium avium complex infection			
subjects affected / exposed	2 / 73 (2.74%)	5 / 90 (5.56%)	
occurrences causally related to treatment / all	0 / 2	2 / 5	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumonia			
subjects affected / exposed	3 / 73 (4.11%)	4 / 90 (4.44%)	
occurrences causally related to treatment / all	0 / 3	1 / 6	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumonia fungal			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Post procedural pneumonia			
subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory tract infection			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Sinobronchitis			

subjects affected / exposed	0 / 73 (0.00%)	1 / 90 (1.11%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
<b>Metabolism and nutrition disorders</b>			
Dehydration			
subjects affected / exposed	1 / 73 (1.37%)	0 / 90 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

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

<b>Non-serious adverse events</b>	Prior LAI + Multidrug Regimen	Prior Multidrug Regimen Alone	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	64 / 73 (87.67%)	89 / 90 (98.89%)	
<b>Investigations</b>			
Weight decreased			
subjects affected / exposed	7 / 73 (9.59%)	8 / 90 (8.89%)	
occurrences (all)	7	8	
<b>General disorders and administration site conditions</b>			
Fatigue			
subjects affected / exposed	3 / 73 (4.11%)	13 / 90 (14.44%)	
occurrences (all)	3	13	
<b>Gastrointestinal disorders</b>			
Diarrhoea			
subjects affected / exposed	4 / 73 (5.48%)	9 / 90 (10.00%)	
occurrences (all)	5	11	
Nausea			
subjects affected / exposed	5 / 73 (6.85%)	9 / 90 (10.00%)	
occurrences (all)	6	10	
<b>Respiratory, thoracic and mediastinal disorders</b>			
Dysphonia			
subjects affected / exposed	5 / 73 (6.85%)	39 / 90 (43.33%)	
occurrences (all)	6	54	
Cough			

subjects affected / exposed occurrences (all)	9 / 73 (12.33%) 10	32 / 90 (35.56%) 37	
Dyspnoea subjects affected / exposed occurrences (all)	9 / 73 (12.33%) 10	16 / 90 (17.78%) 17	
Haemoptysis subjects affected / exposed occurrences (all)	10 / 73 (13.70%) 10	9 / 90 (10.00%) 10	
Productive cough subjects affected / exposed occurrences (all)	4 / 73 (5.48%) 5	6 / 90 (6.67%) 6	
Oropharyngeal pain subjects affected / exposed occurrences (all)	2 / 73 (2.74%) 2	7 / 90 (7.78%) 8	
Renal and urinary disorders Haematuria subjects affected / exposed occurrences (all)	4 / 73 (5.48%) 4	5 / 90 (5.56%) 6	
Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all)	10 / 73 (13.70%) 11	7 / 90 (7.78%) 10	
Infective exacerbation of bronchiectasis subjects affected / exposed occurrences (all)	6 / 73 (8.22%) 7	10 / 90 (11.11%) 10	

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
25 May 2017	The protocol was amended to allow for additional time to analyse primary endpoints due to a longer than anticipated recruitment period and to update administrative and general details.

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported