



Clinical trial results:

A Phase 2, Multicenter, International, Open-Label, Safety and Efficacy Study of INCB050465 in Subjects With Relapsed or Refractory Diffuse Large B-Cell Lymphoma (CITADEL-202)

Summary

EudraCT number	2016-002205-19
Trial protocol	GB CZ BE PL FR ES IT
Global end of trial date	05 February 2021

Results information

Result version number	v1 (current)
This version publication date	20 February 2022
First version publication date	20 February 2022

Trial information

Trial identification

Sponsor protocol code	INCB 50465-202/CITADEL-202
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Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Incyte Corporation
Sponsor organisation address	1801 Augustine Cutoff drive, Wilmington, United States, 19803
Public contact	Study Director, Incyte Corporation, +1 8554633463, medinfo@incyte.com
Scientific contact	Study Director, Incyte Corporation, +1 8554633463, medinfo@incyte.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	05 February 2021
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	05 February 2021
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The purpose of this study is to assess the safety and efficacy of parsaclisib in subjects with relapsed or refractory diffuse large B-cell lymphoma.

Protection of trial subjects:

This study will be performed in accordance with ethical principles that have their origin in the Declaration of Helsinki and conducted in adherence to the study Protocol, Good Clinical Practices as defined in Title 21 of the US Code of Federal Regulations Parts 11, 50, 54, 56, and 312, as well as ICH GCP consolidated guidelines (E6) and applicable regulatory requirements.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	02 March 2017
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	Australia: 11
Country: Number of subjects enrolled	Belgium: 6
Country: Number of subjects enrolled	Canada: 1
Country: Number of subjects enrolled	Czechia: 4
Country: Number of subjects enrolled	Spain: 2
Country: Number of subjects enrolled	France: 15
Country: Number of subjects enrolled	United Kingdom: 1
Country: Number of subjects enrolled	Italy: 1
Country: Number of subjects enrolled	Korea, Republic of: 2
Country: Number of subjects enrolled	Poland: 1
Country: Number of subjects enrolled	United States: 16
Worldwide total number of subjects	60
EEA total number of subjects	29

Notes:

Subjects enrolled per age group

In utero	0
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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)	13
From 65 to 84 years	42
85 years and over	5

Subject disposition

Recruitment

Recruitment details:

A Phase 2, multicenter, international, open-label study with approximately 120 planned participants with relapsed or refractory DLBCL.

Pre-assignment

Screening details:

A total of 55 participants in Group A and 5 participants in Group B were treated at 33 study sites globally. Subjects who were transferred to rollover study INCH18424-801 were captured as participants discontinued study due to "study terminated by sponsor" in the disposition table.

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
Arm title	Group A Parsaclisib (no prior BTK inhibitor)

Arm description:

Parsaclisib in subjects who were not previously treated with a BTK inhibitor.

Arm type	Experimental
Investigational medicinal product name	parsaclisib
Investigational medicinal product code	
Other name	INCB050465
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

20 MG once a day for 8 weeks followed by 20 MG once weekly

Arm title	Group B Parsaclisib (prior BTK inhibitor)
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Arm description:

Parsaclisib in subjects who were previously treated with a BTK inhibitor.

Arm type	Experimental
Investigational medicinal product name	parsaclisib
Investigational medicinal product code	
Other name	INCB050465
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

20 MG once a day for 8 weeks followed by 20 MG once weekly

Number of subjects in period 1	Group A Parsaclisib (no prior BTK inhibitor)	Group B Parsaclisib (prior BTK inhibitor)
Started	55	5
Completed	0	0
Not completed	55	5
Consent withdrawn by subject	1	2
Deaths	45	2
Unknown	6	1
Study Terminated by Sponsor	2	-
Lost to follow-up	1	-

Baseline characteristics

Reporting groups

Reporting group title	Group A Parsaclisib (no prior BTK inhibitor)
Reporting group description: Parsaclisib in subjects who were not previously treated with a BTK inhibitor.	
Reporting group title	Group B Parsaclisib (prior BTK inhibitor)
Reporting group description: Parsaclisib in subjects who were previously treated with a BTK inhibitor.	

Reporting group values	Group A Parsaclisib (no prior BTK inhibitor)	Group B Parsaclisib (prior BTK inhibitor)	Total
Number of subjects	55	5	60
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	12	1	13
From 65-84 years	39	3	42
85 years and over	4	1	5
Age Continuous Units: years			
arithmetic mean	69.6	68.4	
standard deviation	± 12.62	± 12.97	-
Sex: Female, Male Units:			
Female	22	0	22
Male	33	5	38
ECOG			
The Eastern Cooperative Oncology Group (ECOG) scale describes a patient's level of functioning in terms of their ability to care for themselves, activity, and ability. The scale is from 0 to 5; 0 - Fully active; 1 - Restricted in physically strenuous activity but ambulatory; 2- Ambulatory and capable of all selfcare but unable to carry out any work activities; 3- Capable of only limited selfcare; confined to bed or chair more than 50% of waking hours; 4 - Completely disabled; 5 - Dead.			
Units: Subjects			
ECOG Status of 0	12	1	13
ECOG Status of 1	34	3	37
ECOG Status of 2	9	1	10
Race, Customized Units: Subjects			
White/Caucasian	42	5	47
Black or African American	2	0	2
Asian	3	0	3
Other	6	0	6

Missing	2	0	2
Ethnicity, Customized			
Units: Subjects			
Not Hispanic or Latino	37	5	42
Not Reported	10	0	10
Unknown	7	0	7
Missing	1	0	1

End points

End points reporting groups

Reporting group title	Group A Parsaclisib (no prior BTK inhibitor)
Reporting group description: Parsaclisib in subjects who were not previously treated with a BTK inhibitor.	
Reporting group title	Group B Parsaclisib (prior BTK inhibitor)
Reporting group description: Parsaclisib in subjects who were previously treated with a BTK inhibitor.	

Primary: Objective response rate based on Lugano Classification criteria in Group A

End point title	Objective response rate based on Lugano Classification criteria in Group A ^{[1][2]}
End point description: Defined as the percentage of subjects with a complete or partial response as defined by Lugano Classification criteria for lymphomas (Cheson et al 2014) as determined by IRC.	
End point type	Primary
End point timeframe: Every 9 weeks through Week 27, then every 18 weeks thereafter until disease progression, up to 26 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: No statistical analysis for this endpoint.

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: As per protocol Objective response rate is a primary endpoint for Group A participants only.

End point values	Group A Parsaclisib (no prior BTK inhibitor)			
Subject group type	Reporting group			
Number of subjects analysed	55			
Units: percentage				
number (confidence interval 95%)	25.5 (14.7 to 39.0)			

Statistical analyses

No statistical analyses for this end point

Secondary: Duration of response in Group A

End point title	Duration of response in Group A ^[3]
End point description: Defined as the time from first documented evidence of complete or partial response until disease progression or death from any cause among subjects who achieve an objective response as determined by IRC.	
End point type	Secondary

End point timeframe:

Every 9 weeks through Week 27, then every 18 weeks thereafter until disease progression, up to 26 months

Notes:

[3] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: As per protocol Duration of response is a secondary endpoint for Group A participants only.

End point values	Group A Parsaclisib (no prior BTK inhibitor)			
Subject group type	Reporting group			
Number of subjects analysed	55			
Units: months				
median (confidence interval 95%)	25.5 (14.7 to 39.0)			

Statistical analyses

No statistical analyses for this end point

Secondary: Progression-free survival in Group A

End point title	Progression-free survival in Group A ^[4]
End point description:	
Defined as the time from the date of the first dose of study drug until the earliest date of disease progression, as determined by radiographic disease assessment as provided by an IRC.	
End point type	Secondary

End point timeframe:

Every 9 weeks through Week 27, then every 18 weeks thereafter until disease progression, up to 26 months

Notes:

[4] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: As per protocol Progression-free survival is a secondary endpoint for Group A participants only.

End point values	Group A Parsaclisib (no prior BTK inhibitor)			
Subject group type	Reporting group			
Number of subjects analysed	55			
Units: months				
median (confidence interval 95%)	2.2 (2.0 to 4.1)			

Statistical analyses

No statistical analyses for this end point

Secondary: Overall survival (OS) in Group A

End point title	Overall survival (OS) in Group A ^[5]
End point description: Defined as the time from the date of the first dose of study drug until death by any cause.	
End point type	Secondary
End point timeframe: From first dose of study drug until death by any cause; up to 26 months	

Notes:

[5] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: As per protocol Overall survival is a secondary endpoint for Group A participants only.

End point values	Group A Parsaclisib (no prior BTK inhibitor)			
Subject group type	Reporting group			
Number of subjects analysed	55 ^[6]			
Units: months				
median (confidence interval 95%)	7.0 (3.5 to 8.888888)			

Notes:

[6] - The upper boundary of the 95% CI was not reached

Statistical analyses

No statistical analyses for this end point

Secondary: Safety as assessed by percentage of subjects with adverse events in Group A and Group B

End point title	Safety as assessed by percentage of subjects with adverse events in Group A and Group B
End point description: A TEAE is any AE either reported for the first time or worsening of a pre-existing event after the first dose of parsaclisib until 30 days after the last dose administration.	
End point type	Secondary
End point timeframe: Screening through 35 days after end of treatment, up to 42 months	

End point values	Group A Parsaclisib (no prior BTK inhibitor)	Group B Parsaclisib (prior BTK inhibitor)		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	55	5		
Units: Percentage				
number (not applicable)	90.9	80		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Screening through 35 days after end of treatment, up to 42 months

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	16
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Reporting groups

Reporting group title	Group A Parsaclisib (no prior BTK inhibitor)
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Reporting group description:

Parsaclisib in subjects who were not previously treated with a BTK inhibitor.

Reporting group title	Total
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Reporting group description:

Total

Reporting group title	Group B Parsaclisib (prior BTK inhibitor)
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Reporting group description:

Parsaclisib in subjects who were previously treated with a BTK inhibitor.

Serious adverse events	Group A Parsaclisib (no prior BTK inhibitor)	Total	Group B Parsaclisib (prior BTK inhibitor)
Total subjects affected by serious adverse events			
subjects affected / exposed	39 / 55 (70.91%)	41 / 60 (68.33%)	2 / 5 (40.00%)
number of deaths (all causes)	45	48	3
number of deaths resulting from adverse events	8	8	0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Malignant neoplasm progression			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 1	0 / 0
Prostate cancer metastatic			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Deep vein thrombosis			

subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hypotension			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	2 / 3	2 / 3	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Orthostatic hypotension			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Chest pain			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Fatigue			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
General physical health deterioration			
subjects affected / exposed	3 / 55 (5.45%)	3 / 60 (5.00%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 3	0 / 3	0 / 0
deaths causally related to treatment / all	0 / 2	0 / 2	0 / 0
Multiple organ dysfunction syndrome			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 1	0 / 0
Pyrexia			

subjects affected / exposed	5 / 55 (9.09%)	5 / 60 (8.33%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	2 / 8	2 / 8	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Acute respiratory failure			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 1	0 / 0
Pleural effusion			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 1	0 / 0
Psychiatric disorders			
Confusional state			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Investigations			
Alanine aminotransferase increased			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Aspartate aminotransferase increased			
subjects affected / exposed	2 / 55 (3.64%)	2 / 60 (3.33%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	2 / 2	2 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Femoral neck fracture			

subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Subdural haematoma			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiac disorders			
Atrial fibrillation			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Myocardial infarction			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pericarditis			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Dizziness			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Presyncope			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Syncope			

subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Blood and lymphatic system disorders			
Febrile neutropenia			
subjects affected / exposed	2 / 55 (3.64%)	2 / 60 (3.33%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Lymphadenopathy			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Ear and labyrinth disorders			
Vertigo positional			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	3 / 55 (5.45%)	3 / 60 (5.00%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 3	0 / 3	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 1	0 / 0
Colitis			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Diarrhoea			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Enterocolitis			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Lower gastrointestinal haemorrhage subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Stomatitis subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hepatobiliary disorders Jaundice cholestatic subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 1	0 / 0
Skin and subcutaneous tissue disorders Rash maculo-papular subjects affected / exposed	2 / 55 (3.64%)	2 / 60 (3.33%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	2 / 2	2 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Rash pruritic subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal and urinary disorders Hydronephrosis subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders Back pain subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Mobility decreased			

subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Lower respiratory tract infection			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Oesophageal candidiasis			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumocystis jirovecii pneumonia			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia bacterial			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Septic shock			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Staphylococcal infection			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Upper respiratory tract infection			

subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection			
subjects affected / exposed	2 / 55 (3.64%)	2 / 60 (3.33%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urosepsis			
subjects affected / exposed	2 / 55 (3.64%)	2 / 60 (3.33%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Metabolism and nutrition disorders			
Hypercalcaemia			
subjects affected / exposed	4 / 55 (7.27%)	4 / 60 (6.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 4	0 / 4	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hypokalaemia			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hyponatraemia			
subjects affected / exposed	1 / 55 (1.82%)	1 / 60 (1.67%)	0 / 5 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

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

Non-serious adverse events	Group A Parsaclisib (no prior BTK inhibitor)	Total	Group B Parsaclisib (prior BTK inhibitor)
Total subjects affected by non-serious adverse events			
subjects affected / exposed	41 / 55 (74.55%)	44 / 60 (73.33%)	3 / 5 (60.00%)
Investigations			
Neutrophil count decreased			

subjects affected / exposed occurrences (all)	5 / 55 (9.09%) 5	5 / 60 (8.33%) 5	0 / 5 (0.00%) 0
Weight decreased subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 3	4 / 60 (6.67%) 4	1 / 5 (20.00%) 1
Injury, poisoning and procedural complications			
Fall subjects affected / exposed occurrences (all)	4 / 55 (7.27%) 4	4 / 60 (6.67%) 4	0 / 5 (0.00%) 0
Rib fracture subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	2 / 60 (3.33%) 2	2 / 5 (40.00%) 2
Nervous system disorders			
Balance disorder subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	1 / 60 (1.67%) 1	1 / 5 (20.00%) 1
Headache subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 4	3 / 60 (5.00%) 4	0 / 5 (0.00%) 0
Polyneuropathy subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	1 / 60 (1.67%) 1	1 / 5 (20.00%) 1
Blood and lymphatic system disorders			
Anaemia subjects affected / exposed occurrences (all)	4 / 55 (7.27%) 4	4 / 60 (6.67%) 4	0 / 5 (0.00%) 0
General disorders and administration site conditions			
Chills subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 3	3 / 60 (5.00%) 3	0 / 5 (0.00%) 0
Fatigue subjects affected / exposed occurrences (all)	4 / 55 (7.27%) 4	5 / 60 (8.33%) 5	1 / 5 (20.00%) 1
General physical health deterioration subjects affected / exposed occurrences (all)	1 / 55 (1.82%) 1	2 / 60 (3.33%) 2	1 / 5 (20.00%) 1

Non-cardiac chest pain subjects affected / exposed occurrences (all)	1 / 55 (1.82%) 1	2 / 60 (3.33%) 2	1 / 5 (20.00%) 1
Oedema peripheral subjects affected / exposed occurrences (all)	4 / 55 (7.27%) 4	4 / 60 (6.67%) 4	0 / 5 (0.00%) 0
Pyrexia subjects affected / exposed occurrences (all)	5 / 55 (9.09%) 7	5 / 60 (8.33%) 7	0 / 5 (0.00%) 0
Gastrointestinal disorders			
Abdominal pain subjects affected / exposed occurrences (all)	4 / 55 (7.27%) 6	4 / 60 (6.67%) 6	0 / 5 (0.00%) 0
Constipation subjects affected / exposed occurrences (all)	5 / 55 (9.09%) 5	5 / 60 (8.33%) 5	0 / 5 (0.00%) 0
Diarrhoea subjects affected / exposed occurrences (all)	10 / 55 (18.18%) 11	10 / 60 (16.67%) 11	0 / 5 (0.00%) 0
Dry mouth subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 3	3 / 60 (5.00%) 3	0 / 5 (0.00%) 0
Haemorrhoids subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	1 / 60 (1.67%) 1	1 / 5 (20.00%) 1
Nausea subjects affected / exposed occurrences (all)	11 / 55 (20.00%) 11	11 / 60 (18.33%) 11	0 / 5 (0.00%) 0
Vomiting subjects affected / exposed occurrences (all)	4 / 55 (7.27%) 5	4 / 60 (6.67%) 5	0 / 5 (0.00%) 0
Respiratory, thoracic and mediastinal disorders			
Asthma subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	1 / 60 (1.67%) 1	1 / 5 (20.00%) 1
Cough			

subjects affected / exposed occurrences (all)	9 / 55 (16.36%) 10	9 / 60 (15.00%) 10	0 / 5 (0.00%) 0
Dyspnoea subjects affected / exposed occurrences (all)	7 / 55 (12.73%) 7	8 / 60 (13.33%) 9	1 / 5 (20.00%) 2
Pneumothorax subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	1 / 60 (1.67%) 1	1 / 5 (20.00%) 1
Skin and subcutaneous tissue disorders			
Erythema subjects affected / exposed occurrences (all)	1 / 55 (1.82%) 1	2 / 60 (3.33%) 2	1 / 5 (20.00%) 1
Night sweats subjects affected / exposed occurrences (all)	0 / 55 (0.00%) 0	1 / 60 (1.67%) 1	1 / 5 (20.00%) 1
Pruritus subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 4	4 / 60 (6.67%) 5	1 / 5 (20.00%) 1
Rash subjects affected / exposed occurrences (all)	2 / 55 (3.64%) 2	3 / 60 (5.00%) 3	1 / 5 (20.00%) 1
Rash erythematous subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 3	3 / 60 (5.00%) 3	0 / 5 (0.00%) 0
Urticaria subjects affected / exposed occurrences (all)	1 / 55 (1.82%) 1	2 / 60 (3.33%) 2	1 / 5 (20.00%) 1
Psychiatric disorders			
Anxiety subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 3	3 / 60 (5.00%) 3	0 / 5 (0.00%) 0
Musculoskeletal and connective tissue disorders			
Arthralgia subjects affected / exposed occurrences (all)	3 / 55 (5.45%) 3	4 / 60 (6.67%) 4	1 / 5 (20.00%) 1
Back pain			

subjects affected / exposed	3 / 55 (5.45%)	4 / 60 (6.67%)	1 / 5 (20.00%)
occurrences (all)	3	4	1
Muscle spasms			
subjects affected / exposed	1 / 55 (1.82%)	2 / 60 (3.33%)	1 / 5 (20.00%)
occurrences (all)	1	2	1
Pain in extremity			
subjects affected / exposed	3 / 55 (5.45%)	3 / 60 (5.00%)	0 / 5 (0.00%)
occurrences (all)	3	3	0
Polyarthritis			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences (all)	0	1	1
Tendonitis			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences (all)	0	1	1
Infections and infestations			
Bronchopulmonary aspergillosis			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences (all)	0	1	1
Nasopharyngitis			
subjects affected / exposed	1 / 55 (1.82%)	2 / 60 (3.33%)	1 / 5 (20.00%)
occurrences (all)	3	4	1
Rhinitis			
subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences (all)	0	1	1
Urinary tract infection			
subjects affected / exposed	4 / 55 (7.27%)	4 / 60 (6.67%)	0 / 5 (0.00%)
occurrences (all)	4	4	0
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	5 / 55 (9.09%)	5 / 60 (8.33%)	0 / 5 (0.00%)
occurrences (all)	5	5	0
Hyperglycaemia			
subjects affected / exposed	3 / 55 (5.45%)	3 / 60 (5.00%)	0 / 5 (0.00%)
occurrences (all)	3	3	0
Hyperkalaemia			

subjects affected / exposed	0 / 55 (0.00%)	1 / 60 (1.67%)	1 / 5 (20.00%)
occurrences (all)	0	1	1
Hypokalaemia			
subjects affected / exposed	3 / 55 (5.45%)	3 / 60 (5.00%)	0 / 5 (0.00%)
occurrences (all)	4	4	0
Hypomagnesaemia			
subjects affected / exposed	3 / 55 (5.45%)	3 / 60 (5.00%)	0 / 5 (0.00%)
occurrences (all)	6	6	0
Hyponatraemia			
subjects affected / exposed	3 / 55 (5.45%)	4 / 60 (6.67%)	1 / 5 (20.00%)
occurrences (all)	3	4	1

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
30 August 2016	The primary purpose of this amendment is to fulfill a request from the FDA to 1) add an Independent Data Monitoring Committee and 2) Conduct an interim analysis for futility in Group A.
09 November 2016	The primary purpose of this amendment is to change the dose of INCB050465.
23 February 2017	The primary purpose of this amendment is to address changes requested by the European Regulatory Agency.
12 December 2017	To remove a criterion for study treatment discontinuation per Health Canada's request.
05 November 2019	The primary purpose of this amendment is to reduce Protocol-required procedures for subjects who remain on study treatment.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported