EU Clinical Trials Register

Clinical trial results:

A Randomized, Double-Blind, Placebo-Controlled, Withdrawal, Safety and Efficacy Study of Oral Baricitinib in Patients from 2 Years to Less Than 18 Years Old with Juvenile Idiopathic Arthritis (JIA)

Summary

EudraCT number	2017-004518-24
Trial protocol	GB DK CZ DE AT ES PL FR BE IT
Global end of trial date	26 January 2022

Results information

Result version number	v2 (current)
This version publication date	15 December 2022
First version publication date	09 August 2022
Version creation reason	• Correction of full data set Correction of full data set

Trial information

Trial identification

Sponsor protocol code	I4V-MC-JAHV

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT03773978
WHO universal trial number (UTN)	-
Other trial identifiers	Trial Number: 16276

Notes:

Sponsors

Sponsor organisation name	Eli Lilly and Company
Sponsor organisation address	Lilly Corporate Center, Indianapolis, IN, United States, 46285
Public contact	Available Mon Fri 9 AM 5 PM EST, Eli Lilly and Company, 1 877CTLilly,
Scientific contact	Available Mon Fri 9 AM 5 PM EST, Eli Lilly and Company, 1 8772854559,

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMEA-001220-PIP01-11
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	26 January 2022
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	26 January 2022
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The reason for this study is to see if the study drug baricitinib given orally is safe and effective in participants with JIA from 2 years to less than 18 years old.

Protection of trial subjects:

This study was conducted in accordance with International Conference on Harmonization (ICH) Good Clinical Practice, and the principles of the Declaration of Helsinki, in addition to following the laws and regulations of the country or countries in which a study is conducted.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	17 December 2018
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	Argentina: 20
Country: Number of subjects enrolled	Czechia: 12
Country: Number of subjects enrolled	Japan: 25
Country: Number of subjects enrolled	United Kingdom: 11
Country: Number of subjects enrolled	India: 6
Country: Number of subjects enrolled	Spain: 14
Country: Number of subjects enrolled	Russian Federation: 8
Country: Number of subjects enrolled	Austria: 2
Country: Number of subjects enrolled	Turkey: 3
Country: Number of subjects enrolled	Belgium: 7
Country: Number of subjects enrolled	China: 18
Country: Number of subjects enrolled	Brazil: 2
Country: Number of subjects enrolled	Poland: 7
Country: Number of subjects enrolled	Denmark: 1
Country: Number of subjects enrolled	Italy: 11
Country: Number of subjects enrolled	Mexico: 21
Country: Number of subjects enrolled	Israel: 15
Country: Number of subjects enrolled	France: 10
Country: Number of subjects enrolled	Australia: 1
Country: Number of subjects enrolled	Germany: 26

Worldwide total number of subjects	220
EEA total number of subjects	90

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)	45
Adolescents (12-17 years)	175
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Overall, 220 participants were enrolled: 29 started with the Pharmacokinetics (PK)/Safety period (2 weeks), and one participant was discontinued due to protocol deviation. 191 participants entered into the Open-label lead-in period (OLLI) period, and during week 2, 28 participants from the PK/Safety population entered into the OLLI period.

Pre-assignment

Screening details:

Participants entered the PK/Safety period (2 weeks) in staggered enrollment of 4 age groups (12 to <18, 9 to <12, 6 to <9, and 2 to <6 years). Upon the safety comparability assessment, Other participants were enrolled directly into OLLI period (12 weeks) followed by a double-blind randomised withdrawal placebo-controlled period (12 to 44 weeks).

Period 1

Period 1 title	PK/Safety and OLLI Period
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Arms

Arm title	Baricitinib

Arm description:

Baricitinib was administered once daily (QD) as a 4-milligram (mg) for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.

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

Dosage and administration details:

Baricitinib was administered once daily (OD) as a 4-mg for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.

Investigational medicinal product name	Baricitinib
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral suspension
Routes of administration	Oral use

Dosage and administration details:

Baricitinib was administered once daily (OD) as a 4-mg for children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension.

Number of subjects in period 1	Baricitinib
Started	220
PK/Safety Period	29 [1]
OLLI Period	219
Received at Least One Dose of Study Drug	220
Completed	163
Not completed	57
Consent withdrawn by subject	3
Investigational product was not delivered to site	1
Because of an unexplainable flare disease	1
Adverse event, non-fatal	1
Failure to Meet Randomization Criteria	39
Due to epidemic or pandemic	6
Participant transitioned to JAHX	1
Lost to follow-up	1
Protocol deviation	4

Notes:

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

Justification: PK/Safety Period: One participant was discontinued from this period due to protocol violation.

OLLI Population: 191 participants entered into the Open-label lead-in period (OLLI) period, and during week 2, 28 participants from PK/Safety population entered into the OLLI period.

Period 2

Period 2 title	DBW Period
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Assessor

Arms

Are arms mutually exclusive?	Yes
Arm title	Baricitinib

Arm description:

Baricitinib was administered once daily (QD) as a 4-mg for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.

Arm type	Experimental
Investigational medicinal product name	Baricitinib
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral suspension, Tablet
Routes of administration	Oral use

Dosage and administration details:

Baricitinib was administered once daily (QD) as a 4-mg oral tablet for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets. The oral suspension dose was administered as 4-mg, 2-mg, 1-mg, and 0.5-mg as needed.

Arm title	Placebo

Arm description:

Placebo matched to baricitinib was administered to participants during the DBW period.

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet, Oral suspension
Routes of administration	Oral use

Dosage and administration details:

Placebo matched to baricitinib was administered to participants during the DBW period.

Number of subjects in period 2	Baricitinib	Placebo
Started	82	81
DBW Population	82	81
Completed	56	32
Not completed	26	49
Study team decision	1	-
Consent withdrawn by subject	2	1
Failure to Meet Continuation Criteria	16	40
Adverse event, non-fatal	2	2
Due to epidemic or pandemic	5	6

Baseline characteristics

Reporting groups

Reporting group title	Baricitinib
Reporting group description:	

Baricitinib was administered once daily (QD) as a 4-milligram (mg) for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.

Reporting group values	Baricitinib	Total	
Number of subjects	220	220	
Age categorical			
Units: Subjects			
>=2 to <6 years	6	6	
>=6 to <9 years	9	9	
>=9 to <12 years	30	30	
>=12 to <18 years	175	175	
Age continuous			
Units: years			
arithmetic mean	13.3		
standard deviation	± 3.0	-	
Gender categorical			
Units: Subjects			
Female	152	152	
Male	68	68	
Ethnicity			
Units: Subjects			
Hispanic or Latino	43	43	
Not Hispanic or Latino	133	133	
Unknown or Not Reported	44	44	
Race			
Units: Subjects			
American Indian or Alaska Native	7	7	
Asian	48	48	
Native Hawaiian or Other Pacific Islander	0	0	
Black or African American	5	5	
White	152	152	
More than one race	2	2	
Unknown or Not Reported	6	6	
Region of Enrollment			
Units: Subjects			
Argentina	20	20	
Czechia	12	12	
Japan	25	25	
United Kingdom	11	11	
India	6	6	
Spain	14	14	
Russia	8	8	

Austria	2	2	
Turkey	3	3	
Belgium	7	7	
China	18	18	
Brazil	2	2	
Poland	7	7	
Denmark	1	1	
Italy	11	11	
Mexico	21	21	
Israel	15	15	
France	10	10	
Australia	1	1	
Germany	26	26	

End points

End points reporting groups

Reporting group title	Baricitinib
Reporting group description:	
Baricitinib was administered once daily (QD) as a 4-milligram (mg) for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.	
Reporting group title	Baricitinib
Reporting group description:	
Baricitinib was administered once daily (QD) as a 4-mg for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.	
Reporting group title	Placebo
Reporting group description:	
Placebo matched to baricitinib was administered to participants during the DBW period.	
Subject analysis set title	12 to <18 Years 4-mg QD
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
Participants aged 12 to <18 years were given 4-mg baricitinib once day.	
Subject analysis set title	9 to <12 Years 4-mg QD
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
Participants aged 9 to <12 years were given 4-mg baricitinib once day.	
Subject analysis set title	6 to <9 Years 2-mg QD
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
Participants aged 6 to <9 years were given 2-mg baricitinib once day.	
Subject analysis set title	2 to <6 Years 2-mg QD
Subject analysis set type	Intention-to-treat
Subject analysis set description:	
Participants aged 2 to <6 years were given 2-mg baricitinib once day.	

Primary: Time to Disease Flare

End point title	Time to Disease Flare
End point description:	
A disease flare is defined as a worsening of 30% or more in at least three of the six core Paediatric American College of Rheumatology (PedACR) criteria for juvenile rheumatoid arthritis (JIA) and an improvement of 30% or more in no more than one of the criteria. The six PedACR criteria are: 1) the number of active joints, 2) the number of joints with limited range of motion, 3) physician's global assessment of disease activity, 4) parent's global assessment of the participant's (pts) overall well-being, 5) physical function as measured by the Childhood Health Assessment Questionnaire (CHAQ) and 6) acute-phase reactant (high-sensitivity C-reactive protein [hsCRP] and erythrocyte sedimentation rate [ESR]), the ESR measure is only used as an acute phase reactant in the core criteria. Analysis Population Description(APD) included DBW Population: All randomized participants from the DBW period who had data for time to disease flare at given time point. 9999=Data Not Available (N/A).	
End point type	Primary
End point timeframe:	
Week 12 to Week 44	

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82[1]	81[2]		
Units: Weeks				
median (confidence interval 95%)	9999 (9999 to 9999)	27.14 (15.29 to 9999)		

Notes:

[1] - Median, upper and lower limits of 95% CI not estimable due to small number of pts with event.

[2] - Median,upper and lower limits of 95% CI not estimable due to small number of pts with event.

Statistical analyses

Statistical analysis title	Statistical analysis 1
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Logrank
Parameter estimate	Hazard ratio (HR)
Point estimate	0.241
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.128
upper limit	0.453

Secondary: Percentage of Participants Achieving PedACR30 Responder Index

End point title	Percentage of Participants Achieving PedACR30 Responder Index

End point description:

The PedACR30 response is defined as at least 30% improvement from baseline in 3 of any 6 variables in the core set, with no more than 1 of the remaining variables worsening by >30%. The 6 core response variables included in the PedACR criteria are: Number of active joints (defined as a joint that is swollen or in the absence of swelling has loss of passive motion accompanied by either pain on motion or joint tenderness) in 73 joints, Number of joints with limited range of motion in 69 joints, Physician's Global Assessment of Disease Activity (21-circle visual analogue scale [VAS]), Parent's Global Assessment of Patient's Overall Well-being, Physical function as assessed by the CHAQ and Acute-phase reactant (hsCRP and ESR). When PedACR response is analyzed as secondary endpoint, ESR measure is only used as acute-phase reactant in the core criteria. APD included DBW Population: All randomized participants from the DBW period who had data for PedACR30 at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	92.7 (87 to 98.3)	81.5 (73 to 89.9)		
At week 20	87.8 (80.7 to 94.9)	64.2 (53.8 to 74.6)		
At week 24	85.4 (77.7 to 93)	55.6 (44.7 to 66.4)		
At week 28	78 (69.1 to 87)	51.9 (41 to 62.7)		
At week 32	74.4 (64.9 to 83.8)	49.4 (38.5 to 60.3)		
At week 36	72 (62.2 to 81.7)	44.4 (33.6 to 55.3)		
At week 40	69.5 (59.5 to 79.5)	38.3 (27.7 to 48.9)		
At week 44	67.1 (56.9 to 77.2)	38.3 (27.7 to 48.9)		

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Statistical analysis description:	
at week 16	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.052
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.72
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.99
upper limit	7.46

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
at week 20	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.002
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.64
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.6
upper limit	8.28

Statistical analysis title	Statistical Analysis 3
Statistical analysis description:	
at week 24	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	4.34
Confidence interval	
level	95 %
sides	2-sided
lower limit	2
upper limit	9.41

Statistical analysis title	Statistical Analysis 4
Statistical analysis description:	
at week 28	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.37
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.62
upper limit	7.01

Statistical analysis title	Statistical Analysis 5
Statistical analysis description:	
at week 32	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.002
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.48
upper limit	6.07

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.25
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.62
upper limit	6.52

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.85
upper limit	7.41

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.27
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.65
upper limit	6.5

Secondary: Percentage of Participants Achieving PedACR50 Responder Index

End point title	Percentage of Participants Achieving PedACR50 Responder Index

End point description:

The PedACR50 response is defined as at least 50% improvement from baseline in 3 of any 6 variables in the core set, with no more than 1 of the remaining variables worsening by > 30%. The 6 core response variables included in the PedACR criteria are: Number of active joints (defined as a joint that is swollen or in the absence of swelling has loss of passive motion accompanied by either pain on motion or joint tenderness) in 73 joints, Number of joints with limited range of motion in 69 joints, Physician's Global Assessment of Disease Activity (21-circle VAS), Parent's Global Assessment of Patient's Overall Well-being, Physical function as assessed by the CHAQ and Acute-phase reactant (hsCRP and ESR). When PedACR response is analyzed as secondary endpoint, ESR measure is only used as acute-phase reactant in the core criteria. APD included DBW Population: All randomized participants from the DBW period who had data for PedACR50 at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	79.3 (70.5 to 88)	75.3 (65.9 to 84.7)		
At week 20	81.7 (73.3 to 90.1)	58 (47.3 to 68.8)		
At week 24	81.7 (73.3 to 90.1)	49.4 (38.5 to 60.3)		
At week 28	75.6 (66.3 to 84.9)	50.6 (39.7 to 61.5)		
At week 32	72 (62.2 to 81.7)	46.9 (36 to 57.8)		
At week 36	68.3 (58.2 to 78.4)	43.2 (32.4 to 54)		
At week 40	68.3 (58.2 to 78.4)	38.3 (27.7 to 48.9)		
At week 44	63.4 (53 to 73.8)	37 (26.5 to 47.6)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
at week 16	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.568
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.59
upper limit	2.65

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
at week 20	
Comparison groups	Placebo v Baricitinib

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.004
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.92
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.4
upper limit	6.09

Statistical analysis title	Statistical Analysis 3
Statistical analysis description:	
at week 24	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	4.38
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.1
upper limit	9.15

Statistical analysis title	Statistical Analysis 4
Statistical analysis description:	
at week 28	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.002
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.09
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.51
upper limit	6.32

Statistical analysis title	Statistical Analysis 5
Statistical analysis description:	
at week 32	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.003
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.99
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.47
upper limit	6.11

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.003
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.84
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.44
upper limit	5.6

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Placebo v Baricitinib

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.49
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.74
upper limit	6.97

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.002
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.87
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.46
upper limit	5.66

Secondary: Percentage of Participants Achieving PedACR70 Responder Index

End point title	Percentage of Participants Achieving PedACR70 Responder Index

End point description:

The PedACR70 response is defined as at least 70% improvement from baseline in 3 of any 6 variables in the core set, with no more than 1 of the remaining variables worsening by > 30%. The 6 core response variables included in the PedACR criteria are: Number of active joints (defined as a joint that is swollen or in the absence of swelling has loss of passive motion accompanied by either pain on motion or joint tenderness) in 73 joints, Number of joints with limited range of motion in 69 joints, Physician's Global Assessment of Disease Activity (21-circle VAS), Parent's Global Assessment of Patient's Overall Well-being, Physical function as assessed by the CHAQ and Acute-phase reactant (hsCRP and ESR). When PedACR response is analyzed as secondary endpoint, ESR measure is only used as acute-phase reactant in the core criteria. APD included DBW Population: All randomized participants from the DBW period who had data for PedACR70 at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	54.9 (44.1 to 65.6)	54.3 (43.5 to 65.2)		
At week 20	68.3 (58.2 to 78.4)	45.7 (34.8 to 56.5)		
At week 24	59.8 (49.1 to 70.4)	37 (26.5 to 47.6)		
At week 28	67.1 (56.9 to 77.2)	39.5 (28.9 to 50.2)		
At week 32	57.3 (46.6 to 68)	35.8 (25.4 to 46.2)		
At week 36	61 (50.4 to 71.5)	35.8 (25.4 to 46.2)		
At week 40	57.3 (46.6 to 68)	30.9 (20.8 to 40.9)		
At week 44	53.7 (42.9 to 64.5)	35.8 (25.4 to 46.2)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
at week 16	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.972
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	0.99
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.52
upper limit	1.87

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
at week 20	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.008
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.47
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.27
upper limit	4.81

Statistical analysis title	Statistical Analysis 3
Statistical analysis description:	
at week 24	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.005
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.57
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.33
upper limit	4.97

Statistical analysis title	Statistical Analysis 4
Statistical analysis description:	
at week 28	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.001
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.06
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.57
upper limit	5.94

Statistical analysis title	Statistical Analysis 5
Statistical analysis description:	
at week 32	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.009
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.42
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.25
upper limit	4.71

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.003
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.43
upper limit	5.47

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.002
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.93
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.47
upper limit	5.83

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.052
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.93
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.99
upper limit	3.74

Secondary: Percentage of Participants Achieving PedACR90 Responder Index

End point title	Percentage of Participants Achieving PedACR90 Responder Index

End point description:

The PedACR90 response is defined as at least 90% improvement from baseline in 3 of any 6 variables in the core set, with no more than 1 of the remaining variables worsening by > 30%. The 6 core response variables included in the PedACR criteria are: Number of active joints (defined as a joint that is swollen or in the absence of swelling has loss of passive motion accompanied by either pain on motion or joint tenderness) in 73 joints, Number of joints with limited range of motion in 69 joints, Physician's Global Assessment of Disease Activity (21-circle VAS), Parent's Global Assessment of Patient's Overall Well-being, Physical function as assessed by the CHAQ and Acute-phase reactant (hsCRP and ESR). When PedACR response is analyzed as secondary endpoint, ESR measure is only used as acute-phase reactant in the core criteria. APD included DBW Population: All randomized participants from the DBW period who had data for PedACR90 at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	29.3 (19.4 to 39.1)	23.5 (14.2 to 32.7)		
At week 20	42.7 (32 to 53.4)	24.7 (15.3 to 34.1)		
At week 24	37.8 (27.3 to 48.3)	21 (12.1 to 29.9)		
At week 28	42.7 (32 to 53.4)	25.9 (16.4 to 35.5)		
At week 32	43.9 (33.2 to 54.6)	27.2 (17.5 to 36.8)		
At week 36	39 (28.5 to 49.6)	27.2 (17.5 to 36.8)		
At week 40	40.2 (29.6 to 50.9)	23.5 (14.2 to 32.7)		
At week 44	42.7 (32 to 53.4)	23.5 (14.2 to 32.7)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
at week 16	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.409
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.35
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.66
upper limit	2.75

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
at week 20	
Comparison groups	Placebo v Baricitinib

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.03
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.13
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.07
upper limit	4.23

Statistical analysis title	Statistical Analysis 3
Statistical analysis description:	
at week 24	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.022
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.36
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.13
upper limit	4.92

Statistical analysis title	Statistical Analysis 4
Statistical analysis description:	
at week 28	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.04
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.05
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.03
upper limit	4.08

Statistical analysis title	Statistical Analysis 5
Statistical analysis description:	
at week 32	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.032
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.13
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.07
upper limit	4.24

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.132
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.71
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.85
upper limit	3.42

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.05
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.02
Confidence interval	
level	95 %
sides	2-sided
lower limit	1
upper limit	4.1

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.019
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.32
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.15
upper limit	4.71

Secondary: Percentage of Participants Achieving PedACR100 Responder Index

End point title	Percentage of Participants Achieving PedACR100 Responder Index

End point description:

The PedACR100 response is defined as at least 100% improvement from baseline in 3 of any 6 variables in the core set, with no more than 1 of the remaining variables worsening by > 30%. The 6 core response variables included in the PedACR criteria are: Number of active joints (defined as a joint that is swollen or in the absence of swelling has loss of passive motion accompanied by either pain on motion or joint tenderness) in 73 joints, Number of joints with limited range of motion in 69 joints, Physician's Global Assessment of Disease Activity (21-circle VAS), Parent's Global Assessment of Patient's Overall Well-being, Physical function as assessed by the CHAQ and Acute-phase reactant (hsCRP and ESR). When PedACR response is analyzed as secondary endpoint, ESR measure is only used as acute-phase reactant in the core criteria. APD included DBW Population: All randomized participants from the DBW period who had data for PedACR100 at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	14.6 (7 to 22.3)	17.3 (9 to 25.5)		
At week 20	24.4 (15.1 to 33.7)	19.8 (11.1 to 28.4)		
At week 24	18.3 (9.9 to 26.7)	16 (8.1 to 24)		
At week 28	26.8 (17.2 to 36.4)	19.8 (11.1 to 28.4)		
At week 32	28 (18.3 to 37.8)	21 (12.1 to 29.9)		
At week 36	29.3 (19.4 to 39.1)	17.3 (9 to 25.5)		
At week 40	29.3 (19.4 to 39.1)	17.3 (9 to 25.5)		
At week 44	29.3 (19.4 to 39.1)	16 (8.1 to 24)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
at week 16	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.62
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	0.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.33
upper limit	1.92

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
at week 20	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.492
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.61
upper limit	2.78

Statistical analysis title	Statistical Analysis 3
Statistical analysis description:	
at week 24	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.715
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.17
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.5
upper limit	2.75

Statistical analysis title	Statistical Analysis 4
Statistical analysis description:	
at week 28	
Comparison groups	Placebo v Baricitinib
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.384
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.66
upper limit	2.99

Statistical analysis title	Statistical Analysis 5
Statistical analysis description:	
at week 32	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.311
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.47
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.7
upper limit	3.1

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.231
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.58
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.75
upper limit	3.34

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.129
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.82
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.84
upper limit	3.95

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.043
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.23
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.02
upper limit	4.84

Secondary: Percentage of Participants With Inactive Disease

End point title	Percentage of Participants With Inactive Disease

End point description:

Inactive disease is defined as the presence of all of the following:
1) No joints with active arthritis based on Juvenile Arthritis Disease Activity Score (JADAS) - 27 score,
2) No fever, rash, serositis, splenomegaly, hepatomegaly, or generalized lymphadenopathy attributable to JIA as assessed by the investigator,
3) No active uveitis as assessed by the investigator,
4) Normal ESR or hsCRP (i.e., within normal limits in the local laboratory or, if elevated, not attributable to JIA),
5) Physician's Global Assessment of Disease Activity indicating no active disease (Score ranges are 0 to 100 and best possible score on scale is 0) and
6) Duration of morning stiffness ≤15 minutes.
APD included DBW Population: All randomized participants from the DBW period who had data for inactive disease at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	12.2 (5.1 to 19.5)	11.1 (4.3 to 18.0)		
At week 20	13.4 (6.0 to 20.8)	17.3 (9 to 25.5)		
At week 24	17.1 (8.9 to 25.2)	17.3 (9.0 to 25.5)		
At week 28	20.7 (12 to 29.5)	13.6 (6.1 to 21.0)		
At week 32	22.0 (13.0 to 30.9)	13.6 (6.1 to 21.0)		
At week 36	23.2 (14.0 to 32.3)	16.0 (8.1 to 24)		
At week 40	20.7 (12.0 to 29.5)	12.3 (5.2 to 19.5)		
At week 44	23.2 (14.0 to 32.3)	13.6 (6.1 to 21.0)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
at week 16	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.853
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.1
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.4
upper limit	2.98

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
at week 20	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.432
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	0.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.29
upper limit	1.71

Statistical analysis title	Statistical Analysis 3
Statistical analysis description:	
at week 24	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.96
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	0.95
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.41
upper limit	2.31

Statistical analysis title	Statistical Analysis 4
Statistical analysis description:	
at week 28	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.215
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.71
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.73
upper limit	4.01

Statistical analysis title	Statistical Analysis 5
Statistical analysis description:	
at week 32	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.173
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.77
upper limit	4.22

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.367
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.46
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.64
upper limit	3.33

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.162
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.77
upper limit	4.67

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.113
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.96
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.85
upper limit	4.5

Secondary: Percentage of Participants in Remission

End point title	Percentage of Participants in Remission

End point description:

Remission is defined as inactive disease for at least 24 consecutive weeks. Inactive disease is defined as the presence of all of the following: 1) No joints with active arthritis based on Juvenile Arthritis Disease Activity Score (JADAS)-27 score, 2) No fever, rash, serositis, splenomegaly, hepatomegaly, or generalized lymphadenopathy attributable to JIA as assessed by the investigator, 3) No active uveitis as assessed by the investigator, 4) Normal ESR or hsCRP (i.e., within normal limits in the local laboratory or, if elevated, not attributable to JIA), 5) Physician's Global Assessment of Disease Activity indicating no active disease (best possible score on scale [0]) and 6) Duration of morning stiffness ≤15 minutes. APD included DBW Population: All randomized participants from the DBW period who had data for remission at given time point.

End point type	Secondary

End point timeframe:

Week 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 28	0 (0 to 0)	0 (0 to 0)		
At week 32	0 (0 to 0)	1.2 (0 to 3.6)		
At week 36	1.2 (0 to 3.6)	4.9 (0.2 to 9.7)		
At week 40	2.4 (0 to 5.8)	3.7 (0 to 7.8)		
At week 44	3.7 (0 to 7.7)	3.7 (0 to 7.8)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Participants With Minimal Disease Activity

End point title	Percentage of Participants With Minimal Disease Activity

End point description:

Minimal disease activity is calculated based on the scores from the
1) Physician's Global Assessment of Disease Activity
2) Parent's Global Assessment of Well-Being and
3) the number of swollen joints.
If the physician's global assessment of disease activity is ≤3.5 (score range: 0-100), the parent's global rating of patient's overall well-being is ≤2.5 (score range: 0-100), and the swollen joint count is ≤1 (score range: 0-73), then the participant reaches minimal disease activity. if not, minimal disease activity is not reached. APD included DBW Population: All randomized participants from the DBW period who had data for minimum disease activity at given time point.

End point type	Secondary

End point timeframe:

Week 16, 20, 24, 28, 32, 36, 40 and 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	81		
Units: Percentage of participants				
number (confidence interval 95%)				
At week 16	36.6 (26.2 to 47)	40.7 (30 to 51.4)		
At week 20	46.3 (35.5 to 57.1)	33.3 (23.1 to 43.6)		
At week 24	43.9 (33.2 to 54.6)	34.6 (24.2 to 44.9)		
At week 28	45.1 (34.4 to 55.9)	33.3 (23.1 to 43.6)		
At week 32	43.9 (33.2 to 54.6)	32.1 (21.9 to 42.3)		
At week 36	40.2 (29.6 to 50.9)	33.3 (23.1 to 43.6)		
At week 40	43.9 (33.2 to 54.6)	32.1 (21.9 to 42.3)		

At week 44	43.9 (33.2 to 54.6)	27.2 (17.5 to 36.8)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description: at week 16	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.511
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	0.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.42
upper limit	1.55

Statistical analysis title	Statistical analysis 2
Statistical analysis description: at week 20	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.145
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.64
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.84
upper limit	3.2

Statistical analysis title	Statistical analysis 3
Statistical analysis description: at week 24	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.349
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.38
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.7
upper limit	2.72

Statistical analysis title	Statistical Analysis 4
Statistical analysis description: at week 28	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.167
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.63
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.82
upper limit	3.25

Statistical analysis title	Statistical Analysis 5
Statistical analysis description: at week 32	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.212
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.55
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.78
upper limit	3.07

Statistical analysis title	Statistical Analysis 6
Statistical analysis description:	
at week 36	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.577
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.21
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.62
upper limit	2.39

Statistical analysis title	Statistical Analysis 7
Statistical analysis description:	
at week 40	
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.225
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.51
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.78
upper limit	2.95

Statistical analysis title	Statistical Analysis 8
Statistical analysis description:	
at week 44	
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.055
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.96
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.98
upper limit	3.9

Secondary: Change From Baseline in Juvenile Arthritis Disease Activity Score-27 (JADAS-27) Score

End point title	Change From Baseline in Juvenile Arthritis Disease Activity Score-27 (JADAS-27) Score

End point description:

The JADAS-27 score is based on 4 components: 1) Physician's global assessment of disease activity on a 0-100 mm VAS, 2) Parent's global assessment of overall well-being on a 0-100 mm VAS, 3) normalized ESR and 4) number of joints (maximum of 27) with active arthritis (cervical spine, elbows, wrists, metacarpophalangeal joints [from first to third], proximal interphalangeal joints, hips, knees, and ankles). Scores for the each of the first 3 components range from 0 -10; score for the final component ranges from 0-27. Overall JADAS-27 score is sum of the 4 components and it ranges from 0-57. A higher score indicates more disease activity. Least square (LS) mean was calculated using Analysis of covariance (ANCOVA) model which includes treatment, baseline, prior biologic JIA therapy, combined JIA category and predose exposure ESR category value as fixed factors. APD included DBW Population: All randomized participants who had at least 1 post-baseline JADAS-27 score at given time point.

End point type	Secondary

End point timeframe:

Baseline, Week 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	79		
Units: score on a scale				
least squares mean (standard deviation)	-14.24 (± 1.006)	-9.91 (± 1.013)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	161
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.001
Method	ANCOVA
Parameter estimate	LS Mean difference
Point estimate	-4.33
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.95
upper limit	-1.7
Variability estimate	Standard error of the mean
Dispersion value	1.328

Secondary: Change From Baseline in Psoriasis Area and Severity Index (PASI) Score

End point title	Change From Baseline in Psoriasis Area and Severity Index (PASI) Score

End point description:

PASI is a combined assessment of lesion severity and affected area into a single score: 0 (no disease) to 72 (maximal disease). Body is divided into 4 areas for scoring (head, arms, trunk and legs); each area is scored by itself and scores are combined for final PASI. For each area, percent of skin involved is estimated: 0 (0%) to 6 (90-100%), and severity is estimated by clinical signs, erythema, induration and desquamation; scale 0 (none) to 4 (maximum). Final PASI = sum of severity parameters for each area * area score weight of section (head: 0.1, arms: 0.2 body: 0.3 legs: 0.4). LS mean was calculated using ANCOVA model which includes treatment, baseline, prior biologic JIA therapy, combined JIA category and predose exposure ESR category value as fixed factors. APD included DBW Population: All randomized participants from the DBW period who had at least 1 post-baseline juvenile psoriatic arthritis (JPsA) were included in this population.

End point type	Secondary

End point timeframe:

Baseline, Week 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	4	3		
Units: score on a scale				
least squares mean (standard error)	-1.14 (± 0.291)	-0.79 (± 0.354)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	7
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.574
Method	ANCOVA
Parameter estimate	LS Mean difference
Point estimate	-0.35
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.62
upper limit	1.91
Variability estimate	Standard error of the mean
Dispersion value	0.526

Secondary: Change From Baseline in Spondyloarthritis Research Consortium of Canada (SPARCC) Index

End point title	Change From Baseline in Spondyloarthritis Research Consortium of Canada (SPARCC) Index

End point description:

The SPARCC index assesses 16 sites for enthesitis using a score of "0" for no activity or "1" for activity. Sites assessed include Medial epicondyle (left/right [L/R]), Lateral epicondyle (L/R), Supraspinatus insertion into greater tuberosity of humerus (L/R), Greater trochanter (L/R), Quadriceps insertion into superior border of patella (L/R), Patellar ligament insertion into inferior pole of patella or tibial tubercle (L/R), Achilles tendon insertion into calcaneum (L/R), and Plantar fascia insertion into calcaneum (L/R). The SPARCC is the sum of all site scores (range 0 to 16). Higher scores indicate more severe enthesitis. LS mean was calculated using ANCOVA model which includes treatment, baseline, prior biologic JIA therapy, combined JIA category and predose exposure ESR category value as fixed factors. APD included DBW Population: All randomized participants who had at least 1 post-baseline enthesitis-related juvenile idiopathic arthritis (ERA) or JPsA at given time point.

End point type	Secondary

End point timeframe:

Baseline, Week 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	19	22		
Units: score on a scale				
arithmetic mean (standard error)	-1.51 (± 0.276)	-1.95 (± 0.241)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	41
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.208
Method	Regression, Logistic
Parameter estimate	LS Mean difference
Point estimate	0.45
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.26
upper limit	1.15
Variability estimate	Standard error of the mean
Dispersion value	0.348

Secondary: Change From Baseline in Juvenile Spondyloarthritis Disease Activity (JSpADA) Index

End point title	Change From Baseline in Juvenile Spondyloarthritis Disease Activity (JSpADA) Index

End point description:

The JSpADA index is used to evaluate the disease activity of juvenile spondyloarthritis. The JSpADA index scores will be determined by following 8 components: active joint count, active enthesitis count, pain over the past week, CRP level related to juvenile spondyloarthritis activity, morning stiffness greater than 15 minutes, clinical sacroiliitis, uveitis and back mobility. All items are transformed to values of 0, 0.5, or 1, and the total score ranges from 0 to 8, where higher scores indicate more disease activity. LS mean was calculated using ANCOVA model which includes treatment, baseline, prior biologic JIA therapy, combined JIA category and predose exposure ESR category value as fixed factors. APD included DBW Population: All randomized participants from the DBW period who had at least 1 post-baseline ERA or JPsA were included in this population.

End point type	Secondary

End point timeframe:

Baseline, Week 44

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	15	18		
Units: score on a scale				
least squares mean (standard error)	-2.56 (± 0.347)	-1.47 (± 0.296)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Comparison groups	Baricitinib v Placebo

Number of subjects included in analysis	33
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.019
Method	ANCOVA
Parameter estimate	LS Mean difference
Point estimate	-1.08
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.98
upper limit	-0.19
Variability estimate	Standard error of the mean
Dispersion value	0.438

Secondary: Pharmacokinetics (PK): Area Under the Baricitinib Concentration-Time Curve During a Dosing Interval at Steady-State (AUCτ,ss)

End point title	Pharmacokinetics (PK): Area Under the Baricitinib Concentration-Time Curve During a Dosing Interval at Steady-State (AUCτ,ss)

End point description:

Area under the concentration-time curve of Baricitinib during a dosing interval at steady state. APD included Safety/PK and OLLI population: All randomized participants from the Safety/PK assessment and OLLI period who had data for AUCτ,ss at given time point.

End point type	Secondary

End point timeframe:

For Safety/PK period: Day 1, Day 4, Day 14 (pre dose) and Day 14 (post dose). For OLLI period: Day 1, Day 14, Day 28, Day 56 and 84 (pre dose)

End point values	12 to <18 Years 4-mg QD	9 to <12 Years 4-mg QD	6 to <9 Years 2-mg QD	2 to <6 Years 2-mg QD
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	172	29	8	6
Units: hour*nanogram/millilitre (h*ng/mL)				
geometric mean (geometric coefficient of variation)	386 (± 45)	500 (± 57)	254 (± 27)	410 (± 57)

Statistical analyses

No statistical analyses for this end point

Secondary: PK: Maximum Plasma Baricitinib Concentration at Steady-State (Cmax, ss)

End point title	PK: Maximum Plasma Baricitinib Concentration at Steady-State (Cmax, ss)

End point description:

Maximum Plasma Baricitinib Concentration at Steady-State. APD included Safety/PK and OLLI population: All randomized participants from the Safety/PK and OLLI periods who had data for Cmax, ss at given time point.

End point type	Secondary

End point timeframe:

For Safety/PK period: Day 1, Day 4, Day 14 (pre dose) and Day 14 (post dose). For OLLI period: Day 1, Day 14, Day 28, Day 56 and 84 (pre dose)

End point values	12 to <18 Years 4-mg QD	9 to <12 Years 4-mg QD	6 to <9 Years 2-mg QD	2 to <6 Years 2-mg QD
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	172	27	8	6
Units: Nanograms per milliliter (ng/mL)				
geometric mean (geometric coefficient of variation)	57.7 (± 28)	79 (± 33)	56.8 (± 22)	87.4 (± 38)

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Immunoglobulin Levels

End point title	Change From Baseline in Immunoglobulin Levels

End point description:

Change from baseline in Serum Immunoglobulin A, Serum Immunoglobulin G and Serum Immunoglobulin M levels at week 12 are presented. Safety/PK and OLLI population: All randomized participants from the APD included Safety/PK and OLLI periods who had data for immunoglobulin levels at given time point.

End point type	Secondary

End point timeframe:

Baseline, Week 12

End point values	Baricitinib			
Subject group type	Reporting group			
Number of subjects analysed	220[3]			
Units: Milligrams per decilitre (mg/dL)				
arithmetic mean (standard deviation)				
Serum Immunoglobulin A	-15.98 (± 39.501)			
Serum Immunoglobulin G	-81.46 (± 209.549)			
Serum Immunoglobulin M	-9.86 (± 26.680)			

Notes:

[3] - Serum Immunoglobulin A, n=185, Serum Immunoglobulin G, n=189, Serum Immunoglobulin M, n=190.

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants With Change of Immunoglobulin G (IgG) Titers

End point title	Number of Participants With Change of Immunoglobulin G (IgG) Titers

End point description:

Number of participants with change of IgG titers eligible for tetanus / diphtheria / acellular pertussis (tDaP) vaccine and pneumococcal conjugate are presented. Participants immunized with tDaP or pneumococcal conjugate vaccine had their IgG antibody titers to the antigens evaluated preimmunization and at 4 and 12 weeks postimmunization. A primary immune response was seen in participants who had never received tDaP or pneumococcal conjugate vaccines previously and secondary/booster responses were assessed if participants previously received the vaccines. For pneumococcal conjugate vaccine, number of participants with >= 2-fold increase from baseline in >=6 pneumococcal serotypes at week 4 and 12 is presented. For tDaP vaccine, number of participants with >= 4-fold increase from baseline in participants with baseline titer >=0.1 IU/mL at week 4 and 12 is presented. APD included Safety/PK and OLLI population: All randomized participants who had data for IgG titers at given time point.

End point type	Secondary

End point timeframe:

Pre-Vaccination to 4 and 12 Weeks Post-Vaccination

End point values	Baricitinib			
Subject group type	Reporting group			
Number of subjects analysed	7			
Units: participants				
Tetanus toxoid vaccine at week 4 (n=4)	2			
Tetanus toxoid vaccine at week 12 (n=3)	2			
Diphtheria toxoid vaccine at week 4 (n=4)	2			
Diphtheria toxoid vaccine at week 12 (n=3)	1			
Pertussis toxin vaccine at week 4 (n=4)	2			
Pertussis toxin vaccine at week 12 (n=3)	2			
pneumococcal conjugate vaccine at week 4 (n=4)	3			
pneumococcal conjugate vaccine at week 12 (n=3)	2			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants With Product Acceptability and Palatability Assessment

End point title	Number of Participants With Product Acceptability and Palatability Assessment

End point description:

The questionnaire for acceptability and palatability assessed the participants ability to swallow tablet,

experience on taste, smell and ease of administering and taking suspension. The questionnaire had following Questions: Question(Q) 1) How did you (your child) like the taste of the medicine? Question 2) How did you (your child) like the smell of the medicine? Question 3) How easy was it for you (your child) to take the medicine today? Question 4) How easy was it for you to use the oral syringe to give your child the dose today? and Question 5) How easy was it for you (your child) to swallow the medicine today? Responses: Liked Very Much, Liked, Neither Liked nor Disliked, Disliked, Disliked Very Much, Very Easy, Easy, Neither Easy nor Hard, Difficult (or Hard) and Very Difficult (or Hard). Data is presented as "Question Number-Response-Time point". APD included all randomized participants from the Safety/PK and OLLI period who had data for product acceptability and palatability.

End point type	Secondary

End point timeframe:
Baseline and week 12

End point values	Baricitinib			
Subject group type	Reporting group			
Number of subjects analysed	220			
Units: participants				
Q1- Liked Very Much : Baseline (n=13)	2			
Q1- Liked Very Much : Week 12 (n=10)	6			
Q1- Liked : Baseline (n=13)	8			
Q1- Liked : Week 12 (n=10)	2			
Q1- Neither Liked nor Disliked : Baseline (n=13)	3			
Q1- Neither Liked nor Disliked : Week 12 (n=10)	1			
Q1- Disliked : Baseline (n=13)	0			
Q1- Disliked : Week 12 (n=10)	1			
Q1- Disliked Very Much : Baseline (n=13)	0			
Q1- Disliked Very Much : Week 12 (n=10)	0			
Q2- Liked Very Much : Baseline (n=13)	3			
Q2- Liked Very Much : Week 12 (n=10)	2			
Q2- Liked : Baseline (n=13)	7			
Q2- Liked : Week 12 (n=10)	4			
Q2- Neither Liked nor Disliked : Baseline (n=13)	3			
Q2- Neither Liked nor Disliked : Week 12 (n=10)	2			
Q2- Disliked : Baseline (n=13)	0			
Q2- Disliked : Week 12 (n=10)	1			
Q2- Disliked Very Much : Baseline (n=13)	0			
Q2- Disliked Very Much : Week 12 (n=10)	1			
Q3- Very Easy : Baseline (n=13)	8			
Q3- Very Easy : Week 12 (n=10)	7			
Q3- Easy : Baseline (n=13)	3			
Q3- Easy : Week 12 (n=10)	2			
Q3- Neither Easy nor Hard : Baseline (n=13)	1			
Q3- Neither Easy nor Hard : Week 12 (n=10)	0			
Q3- Difficult (or Hard) : Baseline (n=13)	0			

Q3- Difficult (or Hard) : Week 12 (n=10)	1				
Q3- Very Difficult (or Hard) : Baseline (n=13)	1				
Q3- Very Difficult (or Hard) : Week 12 (n=10)	0				
Q4- Very Easy : Baseline (n=11)	5				
Q4- Very Easy : Week 12 (n=10)	8				
Q4- Easy : Baseline (n=11)	6				
Q4- Easy : Week 12 (n=10)	2				
Q4- Neither Easy nor Hard : Baseline (n=11)	0				
Q4- Neither Easy nor Hard : Week 12 (n=10)	0				
Q4- Difficult (or Hard) : Baseline (n=11)	0				
Q4- Difficult (or Hard) : Week 12 (n=10)	0				
Q4- Very Difficult (or Hard) : Baseline (n=11)	0				
Q4- Very Difficult (or Hard) : Week 12 (n=10)	0				
Q5- Very Easy : Baseline (n=203)	146				
Q5- Very Easy : Week 12 (n=159)	120				
Q5- Easy : Baseline (n=203)	39				
Q5- Easy : Week 12 (n=159)	34				
Q5- Neither Easy nor Hard : Baseline (n=203)	14				
Q5- Neither Easy nor Hard : Week 12 (n=159)	5				
Q5- Difficult (or Hard) : Baseline (n=203)	3				
Q5- Difficult (or Hard) : Week 12 (n=159)	0				
Q5- Very Difficult (or Hard) : Baseline (n=203)	1				
Q5- Very Difficult (or Hard) : Week 1 (n=159)	0				

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in Arthritis-Related Pain Severity as Measured by the Childhood Health Assessment Questionnaire (CHAQ) Pain Visual Analog Scale (VAS) Item

End point title	Change From Baseline in Arthritis-Related Pain Severity as Measured by the Childhood Health Assessment Questionnaire (CHAQ) Pain Visual Analog Scale (VAS) Item

End point description:

CHAQ assesses the health status and physical function of children with juvenile arthritis over the past week. The CHAQ consists of a Disability Index (DI) and a Discomfort Index. The DI has 30 items grouped into the following 8 domains: dressing and grooming, arising, eating, walking, hygiene, reach, grip, and activities. The scores of 8 domains were averaged to calculate the CHAQ-DI total score, which ranges from 0 (no or minimal physical dysfunction) to 3 (very severe physical dysfunction). A higher score indicates worse physical function. The discomfort index consisted of Parent's Global Assessment of Well-Being and pain assessment due to illness. Intensity of pain is scored on a VAS scale ranging from 0 to 100 mm, with zero referring to "no pain" and 100 referring to "very severe pain", higher score

indicates worse outcome. APD included all randomized participants with at least 1 post-baseline CHAQ Pain VAS Item data. LS mean was calculated using Analysis of covariance (ANCOVA)

End point type	Secondary
End point timeframe:	
Baseline, Week 44	

End point values	Baricitinib	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	82	79		
Units: score on a scale				
least squares mean (standard error)	-29.65 (± 3.276)	-16.68 (± 3.202)		

Statistical analyses

Statistical analysis title	Statistical analysis 1
Comparison groups	Baricitinib v Placebo
Number of subjects included in analysis	161
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.003
Method	ANCOVA
Parameter estimate	LS Mean difference
Point estimate	-12.97
Confidence interval	
level	95 %
sides	2-sided
lower limit	-21.39
upper limit	-4.55
Variability estimate	Standard error of the mean
Dispersion value	4.262

Adverse events

Adverse events information

Timeframe for reporting adverse events:	
Baseline through Follow-up (Up To 341 Days)	
Adverse event reporting additional description:	
All participants who received at least one dose of study drug.	
Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	24.1

Reporting groups

Reporting group title	Baricitinib PK and OLLI

Reporting group description:

During the PK/safety and OLLI periods, baricitinib was administered once daily (QD) as a 4-mg for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.

Reporting group title	Placebo DBW

Reporting group description:

Participants received placebo matched to baricitinib during the DBW period.

Reporting group title	Baricitinib DBW

Reporting group description:

During the DBW period, baricitinib was administered QD (once daily) as a 4-mg for adolescent participants (12 to <18 years of age) and children ≥9 years of age; and 2 mg for children <9 years of age. Participants <6 years of age received an oral suspension. Participants ≥6 to <12 years old had the option of receiving an oral suspension. Participants >12 years old were supplied tablets.

Serious adverse events	Baricitinib PK and OLLI	Placebo DBW	Baricitinib DBW
Total subjects affected by serious adverse events			
subjects affected / exposed	6 / 220 (2.73%)	3 / 81 (3.70%)	4 / 82 (4.88%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Nervous system disorders			
headache			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	0 / 220 (0.00%)	0 / 81 (0.00%)	1 / 82 (1.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
bronchospasm			
alternative dictionary used: MedDRA 24.1			

subjects affected / exposed	0 / 220 (0.00%)	1 / 81 (1.23%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
pulmonary embolism			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	0 / 220 (0.00%)	0 / 81 (0.00%)	1 / 82 (1.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psychiatric disorders			
suicide attempt			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	0 / 220 (0.00%)	1 / 81 (1.23%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
arthralgia			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	1 / 220 (0.45%)	0 / 81 (0.00%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
joint destruction			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	1 / 220 (0.45%)	0 / 81 (0.00%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
joint effusion			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	1 / 220 (0.45%)	0 / 81 (0.00%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
juvenile idiopathic arthritis			
alternative dictionary used: MedDRA 24.1			

subjects affected / exposed	1 / 220 (0.45%)	1 / 81 (1.23%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
musculoskeletal chest pain			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	1 / 220 (0.45%)	0 / 81 (0.00%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
covid-19			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	0 / 220 (0.00%)	0 / 81 (0.00%)	1 / 82 (1.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
gastroenteritis			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	0 / 220 (0.00%)	0 / 81 (0.00%)	1 / 82 (1.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Metabolism and nutrition disorders			
decreased appetite			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	1 / 220 (0.45%)	0 / 81 (0.00%)	0 / 82 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	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	Baricitinib PK and OLLI	Placebo DBW	Baricitinib DBW
Total subjects affected by non-serious adverse events			
subjects affected / exposed	48 / 220 (21.82%)	10 / 81 (12.35%)	26 / 82 (31.71%)
Nervous system disorders			
headache			
alternative dictionary used: MedDRA 24.1			

subjects affected / exposed	14 / 220 (6.36%)	3 / 81 (3.70%)	8 / 82 (9.76%)
occurrences (all)	16	3	10
Respiratory, thoracic and mediastinal disorders			
oropharyngeal pain			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	3 / 220 (1.36%)	1 / 81 (1.23%)	5 / 82 (6.10%)
occurrences (all)	3	1	5
Musculoskeletal and connective tissue disorders			
arthralgia			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	11 / 220 (5.00%)	3 / 81 (3.70%)	6 / 82 (7.32%)
occurrences (all)	15	4	6
Infections and infestations			
nasopharyngitis			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	19 / 220 (8.64%)	3 / 81 (3.70%)	6 / 82 (7.32%)
occurrences (all)	20	3	7
upper respiratory tract infection			
alternative dictionary used: MedDRA 24.1			
subjects affected / exposed	11 / 220 (5.00%)	1 / 81 (1.23%)	9 / 82 (10.98%)
occurrences (all)	12	1	10

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
14 March 2019	Protocol (a) - Removed Inclusion Criteria: language regarding same-sex relationships. - Added Exclusion Criteria: exclusion of patients who have hypersensitivity to any ingredient of the investigational product. - Added dose modification for patients receiving OAT3 inhibitors. - Added arterial thromboembolic event (ATE) as an event that will be adjudicated.
15 April 2019	Protocol (b) - Added specifications on how baricitinib doses will be administered. - Added list of permitted analgesics in Concomitant JIA Therapies.
07 November 2020	Protocol (d) - Exclusion Criteria for hypogammaglobinemia adjusted

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

 None reported