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Trial record **1 of 1** for: CACZ885C2201

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To Determine the Safety, Tolerability, Pharmacokinetics and Effect on Pain of a Single Intra-articular Administration of Canakinumab in Patients With Osteoarthritis in the Knee

This study has been completed.

Sponsor:
Novartis Pharmaceuticals

Information provided by (Responsible Party):
Novartis (Novartis Pharmaceuticals)

ClinicalTrials.gov Identifier:
NCT01160822

First received: July 9, 2010
Last updated: September 28, 2012
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History of Changes

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Results First Received: July 26, 2012

Study Type:	Interventional
Study Design:	Allocation: Randomized; Endpoint Classification: Safety/Efficacy Study; Intervention Model: Parallel Assignment; Masking: Double Blind (Subject, Investigator, Outcomes Assessor); Primary Purpose: Treatment
Condition:	Osteoarthritis
Interventions:	Biological: Canakinumab Drug: Placebo to canakinumab Drug: Naproxen Drug: Placebo to Naproxen

Participant Flow

Hide Participant Flow

Recruitment Details

Key information relevant to the recruitment process for the overall study, such as dates of the recruitment period and locations
No text entered.

Pre-Assignment Details

Significant events and approaches for the overall study following participant enrollment, but prior to group assignment
No text entered.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part A: Placebo	Participants received a single intra-articular injection of canakinumab-matching placebo.

Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Participant Flow: Overall Study

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part A: Placebo	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
STARTED	6	7	6	5	45	47	53
COMPLETED	6	7	6	5	36	40	44
NOT COMPLETED	0	0	0	0	9	7	9
Adverse Event	0	0	0	0	1	2	5
Unsatisfactory therapeutic effect	0	0	0	0	4	5	3
Withdrawal by Subject	0	0	0	0	0	0	1
Lost to Follow-up	0	0	0	0	1	0	0
Administrative problems	0	0	0	0	1	0	0
Protocol deviation	0	0	0	0	2	0	0

Baseline Characteristics

Hide Baseline Characteristics

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
No text entered.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part A: Placebo	Participants received a single intra-articular injection of canakinumab-matching placebo.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.
Total	Total of all reporting groups

Baseline Measures

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part A: Placebo	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen	Total
Number of Participants [units: participants]	6	7	6	5	45	47	53	169
Age [units: years] Mean (Standard Deviation)	58.3 (12.79)	61.0 (9.63)	64.2 (10.68)	57.8 (7.76)	NA [1]	NA [1]	NA [1]	60.5 (10.07)
Age, Customized [units: years] Mean (Standard Deviation)	NA [2]	NA [2]	NA [2]	NA [2]	61.4 (8.96)	60.3 (9.71)	62.2 (8.10)	61.3 (8.89)
Gender [units: participants]								
Female	3	4	2	2	31	31	34	107
Male	3	3	4	3	14	16	19	62

[1] Age demographic data for Study Part A.
[2] Age demographic data for Study Part B.

Outcome Measures

Hide All Outcome Measures

1. Primary: Part A: Number of Participants With Intolerance Events [Time Frame: Baseline to Day 3]

Measure Type	Primary
Measure Title	Part A: Number of Participants With Intolerance Events
Measure Description	An intolerance event is defined as an acute inflammatory reaction, characterized by a 30 mm increase in pain (on a 100 mm visual analog scale (VAS) and associated with a new or worsened synovial fluid effusion within 3 days following the intra-articular (i.a.) injection. If baseline VAS pain score is ≥ 70 mm, an intolerance event is defined as an increase in pain by 20 mm on a 100 mm VAS associated with new or worsened synovial fluid effusion within 3 days following the i.a. injection. If baseline VAS pain score is ≥ 80 mm, an intolerance event is defined as an increase in pain by 10 mm on a 100 mm VAS associated with new or worsened synovial fluid effusion within 3 days following the i.a. injection. If baseline pain score is ≥ 90 mm, an intolerance event is defined as the patients experiencing an unspecified increase in pain on a 100 mm VAS associated with new or worsened synovial fluid effusion within 3 days following the i.a. injection.
Time Frame	Baseline to Day 3
Safety Issue	Yes

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Safety analysis set.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.

Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part A: Placebo	Participants received a single intra-articular injection of canakinumab-matching placebo.

Measured Values

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part A: Placebo
Number of Participants Analyzed [units: participants]	**6**	**7**	**6**	**5**
Part A: Number of Participants With Intolerance Events [units: participants]	**0**	**0**	**0**	**0**

No statistical analysis provided for Part A: Number of Participants With Intolerance Events

2. Primary: Part B: Change From Baseline to Day 4 in Pain Using 100 mm Visual Analog Scale (VAS) [Time Frame: Baseline and Day 4]

Measure Type	Primary
Measure Title	Part B: Change From Baseline to Day 4 in Pain Using 100 mm Visual Analog Scale (VAS)
Measure Description	After walking for 20 meters, participants were asked to assess the pain in their affected knee on a 100 mm linear visual analog scale ranging from no pain (0 mm) to unbearable pain (100 mm). A negative change from Baseline score indicates improvement. Results are from a Bayesian analysis of covariance (ANCOVA) model, fitting baseline pain VAS score as a covariate, time by treatment as fixed effects, region and subject as random effects.
Time Frame	Baseline and Day 4
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic (PD) analysis set - Patients with any available PD data and no major protocol deviations with impact on PD data, and where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**42**	**44**	**49**
Part B: Change From Baseline to Day 4 in Pain Using 100 mm Visual Analog Scale (VAS) [units: units on a scale] Mean (Standard Deviation)	**-26.7 (4.05)**	**-26.5 (3.97)**	**-27.6 (3.82)**

No statistical analysis provided for Part B: Change From Baseline to Day 4 in Pain Using 100 mm Visual Analog Scale (VAS)

3. Primary: Part B: Change From Baseline to Week 4 in Western Ontario and McMaster Osteoarthritis Index (WOMAC) Pain Subscale [Time Frame: Baseline and Week 4]

Measure Type	Primary
Measure Title	Part B: Change From Baseline to Week 4 in Western Ontario and McMaster Osteoarthritis Index (WOMAC) Pain Subscale
Measure Description	The Western Ontario and McMaster osteoarthritis Index (WOMAC) pain subscale asks patients to rate pain in the index knee joint in the last 48 hours doing different activities on a scale from none (0) to extreme pain (4). The answers are summed and the total pain subscale score ranges from 0 to 20, where higher scores indicate more pain. A negative change from Baseline score indicates improvement. Results are from a Bayesian ANCOVA model, fitting baseline WOMAC pain score as a covariate, time by treatment as fixed effects, region and patient as random effects.
Time Frame	Baseline and Week 4
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic (PD) analysis set - Patients with any available PD data and no major protocol deviations with impact on PD data, and where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**42**	**44**	**48**
Part B: Change From Baseline to Week 4 in Western Ontario and McMaster Osteoarthritis Index (WOMAC) Pain Subscale [units: units on a scale] Mean (Standard Deviation)	**-3.5 (0.71)**	**-4.0 (0.68)**	**-4.5 (0.65)**

No statistical analysis provided for Part B: Change From Baseline to Week 4 in Western Ontario and McMaster Osteoarthritis Index (WOMAC) Pain Subscale

4. Secondary: Part B: Change From Baseline in Pain Using 100 mm Visual Analog Scale (VAS) [Time Frame: Baseline and Weeks 4, 8 and 12]

Measure Type	Secondary

Measure Title	Part B: Change From Baseline in Pain Using 100 mm Visual Analog Scale (VAS)
Measure Description	After walking for 20 meters, participants were asked to assess the pain in their affected knee on a 100 mm linear visual analog scale ranging from no pain (0 mm) to unbearable pain (100 mm). Results are from a Bayesian ANCOVA model, fitting baseline pain VAS score as a covariate, time by treatment as fixed effects, region and patient as random effects.
Time Frame	Baseline and Weeks 4, 8 and 12
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic (PD) analysis set - Patients with any available PD data and no major protocol deviations with impact on PD data.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**43**	**44**	**49**
Part B: Change From Baseline in Pain Using 100 mm Visual Analog Scale (VAS) [units: units on a scale] Mean (Standard Deviation)			
Week 4	**-25.6 (4.03)**	**-31.1 (4.03)**	**-36.1 (3.84)**
Week 8	**-26.2 (4.12)**	**-30.9 (4.06)**	**-33.0 (3.89)**
Week 12	**-25.1 (4.14)**	**-32.1 (4.06)**	**-27.8 (3.94)**

No statistical analysis provided for Part B: Change From Baseline in Pain Using 100 mm Visual Analog Scale (VAS)

5. Secondary: Part B: Percentage of Responders in the Pain 100 mm Visual Analog Scale (VAS) [Time Frame: Baseline, Day 4, Weeks 1, 2, 4, 8 and 12]

Measure Type	Secondary
Measure Title	Part B: Percentage of Responders in the Pain 100 mm Visual Analog Scale (VAS)
Measure Description	A responder is defined as a participant with a 50% or greater reduction from baseline on the VAS scale for pain assessment. After walking for 20 meters, participants were asked to assess the pain in their affected knee on a 100 mm linear visual analog scale ranging from no pain (0 mm) to unbearable pain (100 mm).
Time Frame	Baseline, Day 4, Weeks 1, 2, 4, 8 and 12
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic (PD) analysis set - Patients with any available PD data and no major protocol deviations with impact on PD data. N is the number of participants with available data at each time point.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**43**	**44**	**49**
Part B: Percentage of Responders in the Pain 100 mm Visual Analog Scale (VAS) [units: percentage of participants]			
Day 4 [N=42, 44, 48]	**50.0**	**43.2**	**47.9**
Week 1 [N=42, 44, 48]	**40.5**	**45.5**	**56.3**
Week 2 [N=41, 44, 48]	**46.3**	**43.2**	**62.5**
Week 4 [N=39, 40, 46]	**51.3**	**55.0**	**71.7**
Week 8 [N=36, 38, 43]	**52.8**	**50.0**	**55.8**
Week 12 [N=35, 37, 41]	**48.6**	**51.4**	**53.7**

No statistical analysis provided for Part B: Percentage of Responders in the Pain 100 mm Visual Analog Scale (VAS)

6. Secondary: Part B: Change From Baseline in WOMAC Pain, Stiffness and Physical Function Subscales [Time Frame: Baseline and Weeks 4, 8 and 12]

Measure Type	Secondary
Measure Title	Part B: Change From Baseline in WOMAC Pain, Stiffness and Physical Function Subscales
Measure Description	The WOMAC consists of 3 subscales: The Pain subscale asks patients to rate pain in the index knee joint in the last 48 hours during walking, using stairs, in bed, sitting or lying, and standing on a scale from none (0) to extreme pain (4). The answers are summed and the total pain subscale score ranges from 0-20. The Stiffness subscale assesses stiffness in the index knee joint during the last 48 hours doing different activities on a scale from none (0) to extreme stiffness (4). The total stiffness subscale score ranges from 0-8. The Physical Function subscale assesses difficulty performing daily physical activities during the last 48 hours on a scale from none (0) to extreme difficulty (4). The total physical function subscale score ranges from 0-68. Higher scores indicate more pain/stiffness/difficulty. Results are from a Bayesian ANCOVA model, with baseline WOMAC score as a covariate, time by treatment as fixed effects, region and patient as random effects.
Time Frame	Baseline and Weeks 4, 8 and 12
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic (PD) analysis set - Patients with any available PD data and no major protocol deviations with impact on PD data.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**43**	**44**	**49**
Part B: Change From Baseline in WOMAC Pain, Stiffness and Physical Function Subscales [units: units on a scale] Mean (Standard Deviation)			
Pain at Week 8	**-3.7 (0.72)**	**-4.2 (0.69)**	**-4.6 (0.66)**
Pain at Week 12	**-3.2 (0.72)**	**-4.5 (0.69)**	**-4.0 (0.66)**
Stiffness at Week 4	**-1.3 (0.36)**	**-1.5 (0.36)**	**-1.9 (0.34)**
Stiffness at Week 8	**-1.3 (0.37)**	**-1.5 (0.36)**	**-2.0 (0.35)**
Stiffness at Week 12	**-1.1 (0.37)**	**-1.7 (0.37)**	**-1.4 (0.35)**
Function at Week 4 [N=38, 39, 43]	**-14.1 (1.93)**	**-15.9 (1.93)**	**-16.2 (1.76)**
Function at Week 8 [N=35, 36, 41]	**-13.7 (1.97)**	**-14.9 (1.94)**	**-16.1 (1.77)**
Function at Week 12 [N= 33, 36, 39]	**-13.4 (2.01)**	**-16.5 (1.96)**	**-14.4 (1.80)**

No statistical analysis provided for Part B: Change From Baseline in WOMAC Pain, Stiffness and Physical Function Subscales

7. Secondary: Part B: Proportion of Participants Who Used Rescue Analgesic During Study [Time Frame: Day 4, Weeks 1, 2, 4, 8 and 12]

Measure Type	Secondary
Measure Title	Part B: Proportion of Participants Who Used Rescue Analgesic During Study
Measure Description	Participants were permitted to take oral rescue medication (Acetaminophen ≤ 4 gram/day) up until 24 hours of a scheduled assessment visit during the 12-week treatment period. The estimates shown are the Kaplan-Meier estimates of the proportion of participants that took rescue medication.
Time Frame	Day 4, Weeks 1, 2, 4, 8 and 12
Safety Issue	Yes

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.

Safety analysis set (all participants as assigned that received at least one dose of study drug).

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**45**	**47**	**53**
Part B: Proportion of Participants Who Used Rescue Analgesic During Study [units: proportion of participants]			
Day 4	**0.27**	**0.30**	**0.19**
Week 1	**0.45**	**0.47**	**0.23**
Week 2	**0.52**	**0.57**	**0.33**
Week 4	**0.55**	**0.60**	**0.43**
Week 8	**0.57**	**0.69**	**0.59**
Week 12	**0.62**	**0.75**	**0.70**

No statistical analysis provided for Part B: Proportion of Participants Who Used Rescue Analgesic During Study

8. Secondary: Patient's Global Assessment of Response to Treatment on Day 4 [Time Frame: Day 4]

Measure Type	Secondary
Measure Title	Patient's Global Assessment of Response to Treatment on Day 4
Measure Description	Participants made a global assessment of their response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Day 4
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen

	matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**42**	**44**	**48**
Patient's Global Assessment of Response to Treatment on Day 4 [units: participants]			
Excellent	**6**	**8**	**4**
Good	**14**	**16**	**20**
Acceptable	**11**	**13**	**16**
Poor	**5**	**5**	**6**
Very poor	**6**	**2**	**2**

No statistical analysis provided for Patient's Global Assessment of Response to Treatment on Day 4

9. Secondary: Patient's Global Assessment of Response to Treatment at Week 2 [Time Frame: Week 2]

Measure Type	Secondary
Measure Title	Patient's Global Assessment of Response to Treatment at Week 2
Measure Description	Participants made a global assessment of their response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 2
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**41**	**43**	**48**
Patient's Global Assessment of Response to Treatment at Week 2 [units: participants]			

Excellent	**5**	**6**	**11**
Good	**12**	**16**	**19**
Acceptable	**13**	**14**	**12**
Poor	**9**	**5**	**5**
Very poor	**2**	**2**	**1**

No statistical analysis provided for Patient's Global Assessment of Response to Treatment at Week 2

10. Secondary: Patient's Global Assessment of Response to Treatment at Week 4 [Time Frame: Week 4]

Measure Type	Secondary
Measure Title	Patient's Global Assessment of Response to Treatment at Week 4
Measure Description	Participants made a global assessment of their response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 4
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**39**	**40**	**46**
Patient's Global Assessment of Response to Treatment at Week 4 [units: participants]			
Excellent	**5**	**6**	**9**
Good	**15**	**16**	**18**
Acceptable	**10**	**10**	**13**
Poor	**8**	**6**	**4**
Very poor	**1**	**2**	**2**

No statistical analysis provided for Patient's Global Assessment of Response to Treatment at Week 4

11. Secondary: Patient's Global Assessment of Response to Treatment at Week 8 [Time Frame: Week 8]

Measure Type	Secondary
Measure Title	Patient's Global Assessment of Response to Treatment at Week 8
Measure Description	Participants made a global assessment of their response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 8
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**36**	**38**	**43**
Patient's Global Assessment of Response to Treatment at Week 8 [units: participants]			
Excellent	**5**	**5**	**10**
Good	**9**	**19**	**18**
Acceptable	**11**	**8**	**9**
Poor	**9**	**5**	**5**
Very poor	**2**	**1**	**1**

No statistical analysis provided for Patient's Global Assessment of Response to Treatment at Week 8

12. Secondary: Patient's Global Assessment of Response to Treatment at Week 12 [Time Frame: Week 12]

Measure Type	Secondary
Measure Title	Patient's Global Assessment of Response to Treatment at Week 12
Measure Description	Participants made a global assessment of their response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 12
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**35**	**37**	**41**
Patient's Global Assessment of Response to Treatment at Week 12 [units: participants]			
Excellent	**4**	**8**	**7**
Good	**12**	**13**	**15**
Acceptable	**7**	**14**	**13**
Poor	**11**	**2**	**5**
Very poor	**1**	**0**	**1**

No statistical analysis provided for Patient's Global Assessment of Response to Treatment at Week 12

13. Secondary: Part B: Physician's Global Assessment of Response to Treatment at Day 4 [Time Frame: Day 4]

Measure Type	Secondary
Measure Title	Part B: Physician's Global Assessment of Response to Treatment at Day 4
Measure Description	The study physician made a global assessment of response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Day 4
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**42**	**44**	**48**
Part B: Physician's Global Assessment of Response to Treatment at Day 4 [units: participants]			
Excellent	**8**	**7**	**6**
Good	**11**	**18**	**21**
Acceptable	**16**	**14**	**13**
Poor	**4**	**3**	**7**
Very poor	**3**	**2**	**1**

No statistical analysis provided for Part B: Physician's Global Assessment of Response to Treatment at Day 4

14. Secondary: Part B: Physician's Global Assessment of Response to Treatment at Week 2 [Time Frame: Week 2]

Measure Type	Secondary
Measure Title	Part B: Physician's Global Assessment of Response to Treatment at Week 2
Measure Description	The study physician made a global assessment of response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 2
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Number of Participants Analyzed [units: participants]	**40**	**44**	**48**
Part B: Physician's Global Assessment of Response to Treatment at Week 2			

[units: participants]			
Excellent	**7**	**5**	**15**
Good	**15**	**20**	**20**
Acceptable	**10**	**13**	**9**
Poor	**6**	**4**	**4**
Very poor	**2**	**2**	**0**

No statistical analysis provided for Part B: Physician's Global Assessment of Response to Treatment at Week 2

15. Secondary: Part B: Physician's Global Assessment of Response to Treatment at Week 4 [Time Frame: Week 4]

Measure Type	Secondary
Measure Title	Part B: Physician's Global Assessment of Response to Treatment at Week 4
Measure Description	The study physician made a global assessment of response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 4
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**39**	**40**	**46**
Part B: Physician's Global Assessment of Response to Treatment at Week 4 [units: participants]			
Excellent	**4**	**5**	**9**
Good	**15**	**20**	**21**
Acceptable	**14**	**11**	**12**
Poor	**5**	**3**	**4**
Very poor	**1**	**1**	**0**

No statistical analysis provided for Part B: Physician's Global Assessment of Response to Treatment at Week 4

16. Secondary: Part B: Physician's Global Assessment of Response to Treatment at Week 8 [Time Frame: Week 8]

Measure Type	Secondary
Measure Title	Part B: Physician's Global Assessment of Response to Treatment at Week 8
Measure Description	The study physician made a global assessment of response to treatment using a 5-point Likert scale: Excellent, Good, Acceptable, Poor, Very Poor.
Time Frame	Week 8
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**36**	**38**	**43**
Part B: Physician's Global Assessment of Response to Treatment at Week 8 [units: participants]			
Excellent	**5**	**3**	**9**
Good	**13**	**22**	**16**
Acceptable	**10**	**11**	**13**
Poor	**7**	**2**	**5**
Very poor	**1**	**0**	**0**

No statistical analysis provided for Part B: Physician's Global Assessment of Response to Treatment at Week 8

17. Secondary: Part B: Physician's Global Assessment of Response to Treatment at Week 12 [Time Frame: Week 12]

Measure Type	Secondary
Measure Title	Part B: Physician's Global Assessment of Response to Treatment at Week 12
Measure Description	The study physician made a global assessment of response to treatment using a 5-point Likert scale: Excellent, Good,

	Acceptable, Poor, Very Poor.
Time Frame	Week 12
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacodynamic analysis set, where data were available.

Reporting Groups

	Description
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Measured Values

	Part B: Canakinumab	**Part B: Placebo**	**Part B: Naproxen**
Number of Participants Analyzed [units: participants]	**35**	**37**	**41**
Part B: Physician's Global Assessment of Response to Treatment at Week 12 [units: participants]			
Excellent	**5**	**7**	**10**
Good	**13**	**16**	**15**
Acceptable	**6**	**12**	**8**
Poor	**9**	**2**	**7**
Very poor	**2**	**0**	**1**

No statistical analysis provided for Part B: Physician's Global Assessment of Response to Treatment at Week 12

18. Secondary: Maximum Observed Plasma Concentration of Canakinumab (Cmax) [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary
Measure Title	Maximum Observed Plasma Concentration of Canakinumab (Cmax)
Measure Description	No text entered.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part B: Canakinumab
Number of Participants Analyzed [units: participants]	**6**	**6**	**6**	**39**
Maximum Observed Plasma Concentration of Canakinumab (Cmax) [units: µg/mL] Mean (Standard Deviation)	**23.0 (8.54)**	**34.8 (11.3)**	**65.5 (14.5)**	**77.8 (22.8)**

No statistical analysis provided for Maximum Observed Plasma Concentration of Canakinumab (Cmax)

19. Secondary: Time to Reach the Maximum Observed Plasma Concentration of Canakinumab (Tmax) [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary
Measure Title	Time to Reach the Maximum Observed Plasma Concentration of Canakinumab (Tmax)
Measure Description	No text entered.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part B: Canakinumab

Number of Participants Analyzed [units: participants]	**6**	**6**	**6**	**39**
Time to Reach the Maximum Observed Plasma Concentration of Canakinumab (Tmax) [units: hours] Median (Full Range)	**96.2 (74.6 to 164)**	**86.7 (71.8 to 174)**	**144 (71.5 to 197)**	**95.9 (46.3 to 335)**

No statistical analysis provided for Time to Reach the Maximum Observed Plasma Concentration of Canakinumab (Tmax)

20. Secondary: Area Under the Concentration Time Curve up to the Last Measurable Concentration (AUClast) [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary
Measure Title	Area Under the Concentration Time Curve up to the Last Measurable Concentration (AUClast)
Measure Description	No text entered.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	**Part A: Canakinumab 300 mg**	**Part A: Canakinumab 600 mg**	**Part B: Canakinumab**
Number of Participants Analyzed [units: participants]	**6**	**6**	**6**	**35**
Area Under the Concentration Time Curve up to the Last Measurable Concentration (AUClast) [units: µg*day/mL] Mean (Standard Deviation)	**16900 (4430)**	**30700 (8380)**	**56100 (23900)**	**71900 (23800)**

No statistical analysis provided for Area Under the Concentration Time Curve up to the Last Measurable Concentration (AUClast)

21. Secondary: Area Under the Concentration Time Curve From Time Zero to Infinity AUC(0-inf) [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary

Measure Title	Area Under the Concentration Time Curve From Time Zero to Infinity AUC(0-inf)
Measure Description	No text entered.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	**Part A: Canakinumab 300 mg**	**Part A: Canakinumab 600 mg**	**Part B: Canakinumab**
Number of Participants Analyzed [units: participants]	**5**	**6**	**5**	**33**
Area Under the Concentration Time Curve From Time Zero to Infinity AUC(0-inf) [units: µg*day/mL] Mean (Standard Deviation)	**16900 (4780)**	**32400 (8010)**	**49300 (16100)**	**78300 (28000)**

No statistical analysis provided for Area Under the Concentration Time Curve From Time Zero to Infinity AUC(0-inf)

22. Secondary: Terminal Phase Half-life (t1/2) of Canakinumab [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary
Measure Title	Terminal Phase Half-life (t1/2) of Canakinumab
Measure Description	The time it takes for the concentration level of canakinumab to fall to 50% of the original value.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.

Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part B: Canakinumab
Number of Participants Analyzed [units: participants]	**5**	**6**	**5**	**34**
Terminal Phase Half-life (t1/2) of Canakinumab [units: hours] Mean (Standard Deviation)	**539 (47.1)**	**578 (145)**	**474 (93.6)**	**736 (243)**

No statistical analysis provided for Terminal Phase Half-life (t1/2) of Canakinumab

23. Secondary: Apparent Clearance of Canakinumab From Plasma (CL/F) [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary
Measure Title	Apparent Clearance of Canakinumab From Plasma (CL/F)
Measure Description	No text entered.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set, where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part B: Canakinumab
Number of Participants Analyzed [units: participants]	**5**	**6**	**5**	**33**
Apparent Clearance of Canakinumab From Plasma (CL/F) [units: mL/hr] Mean (Standard Deviation)	**9.58 (3.08)**	**9.66 (2.03)**	**13.3 (4.27)**	**8.65 (3.02)**

No statistical analysis provided for Apparent Clearance of Canakinumab From Plasma (CL/F)

24. Secondary: Apparent Volume of Distribution During Terminal Phase (Vz/F) [Time Frame: Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.]

Measure Type	Secondary
Measure Title	Apparent Volume of Distribution During Terminal Phase (Vz/F)
Measure Description	No text entered.
Time Frame	Day 1, pre-dose and 1, 3, 6 and 8 hours post-dose (Part A only), Day 2, 4, 8, 15, 29, 57, 85 and 126.
Safety Issue	No

Population Description

Explanation of how the number of participants for analysis was determined. Includes whether analysis was per protocol, intention to treat, or another method. Also provides relevant details such as imputation technique, as appropriate.
Pharmacokinetic analysis set, where data were available.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Measured Values

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part B: Canakinumab
Number of Participants Analyzed [units: participants]	**5**	**6**	**5**	**33**
Apparent Volume of Distribution During Terminal Phase (Vz/F) [units: mL] Mean (Standard Deviation)	**7320 (1870)**	**8060 (2830)**	**8930 (3000)**	**8910 (4070)**

No statistical analysis provided for Apparent Volume of Distribution During Terminal Phase (Vz/F)

Serious Adverse Events

Hide Serious Adverse Events

Time Frame	No text entered.
Additional Description	No text entered.

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.

Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part A: Placebo	Participants received a single intra-articular injection of canakinumab-matching placebo.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Serious Adverse Events

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part A: Placebo	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Total, serious adverse events							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**4/47 (8.51%)**	**4/53 (7.55%)**
Cardiac disorders							
Myocardial infarction † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**1/47 (2.13%)**	**0/53 (0.00%)**
Gastrointestinal disorders							
Small intestinal obstruction † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
General disorders							
Non-cardiac chest pain † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**1/47 (2.13%)**	**0/53 (0.00%)**
Infections and infestations							
Cellulitis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Diverticulitis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**1/47 (2.13%)**	**0/53 (0.00%)**
Influenza † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
Tooth infection † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
Injury, poisoning and procedural							

complications							
Meniscus lesion † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
Metabolism and nutrition disorders							
Dehydration † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Nervous system disorders							
Cerebrovascular accident † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**1/47 (2.13%)**	**0/53 (0.00%)**
Respiratory, thoracic and mediastinal disorders							
Epistaxis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
Vascular disorders							
Orthostatic hypotension † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**

† Events were collected by systematic assessment
1 Term from vocabulary, MedDRA

Other Adverse Events

Hide Other Adverse Events

Time Frame	No text entered.
Additional Description	No text entered.

Frequency Threshold

Threshold above which other adverse events are reported	5%

Reporting Groups

	Description
Part A: Canakinumab 150 mg	Participants received a single intra-articular injection of 150 mg canakinumab.
Part A: Canakinumab 300 mg	Participants received a single intra-articular injection of 300 mg canakinumab.
Part A: Canakinumab 600 mg	Participants received a single intra-articular injection of 600 mg canakinumab.
Part A: Placebo	Participants received a single intra-articular injection of canakinumab-matching placebo.
Part B: Canakinumab	Participants received a single intra-articular injection of 600 mg canakinumab on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.
Part B: Placebo	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen matching placebo tablets orally twice daily for 12 weeks.

Part B: Naproxen	Participants received a single intra-articular injection of canakinumab matching placebo on Day 1 and naproxen 500mg tablets orally twice daily for 12 weeks.

Other Adverse Events

	Part A: Canakinumab 150 mg	Part A: Canakinumab 300 mg	Part A: Canakinumab 600 mg	Part A: Placebo	Part B: Canakinumab	Part B: Placebo	Part B: Naproxen
Total, other (not including serious) adverse events							
# participants affected / at risk	**4/6 (66.67%)**	**4/7 (57.14%)**	**3/6 (50.00%)**	**3/5 (60.00%)**	**17/45 (37.78%)**	**25/47 (53.19%)**	**26/53 (49.06%)**
Ear and labyrinth disorders							
Cerumen impaction † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Eye disorders							
Retinal tear † 1							
# participants affected / at risk	**0/6 (0.00%)**	**1/7 (14.29%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Gastrointestinal disorders							
Abdominal pain upper † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**1/47 (2.13%)**	**2/53 (3.77%)**
Diarrhoea † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**3/45 (6.67%)**	**4/47 (8.51%)**	**2/53 (3.77%)**
Dyspepsia † 1							
# participants affected / at risk	**0/6 (0.00%)**	**1/7 (14.29%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**3/53 (5.66%)**
Nausea † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**4/47 (8.51%)**	**2/53 (3.77%)**
Vomiting † 1							
# participants affected / at risk	**0/6 (0.00%)**	**1/7 (14.29%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**1/47 (2.13%)**	**1/53 (1.89%)**
General disorders							
Chest discomfort † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**

Fatigue † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
Pain † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**1/53 (1.89%)**
Infections and infestations							
Bronchitis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**2/45 (4.44%)**	**0/47 (0.00%)**	**3/53 (5.66%)**
Cellulitis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**2/7 (28.57%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Gastroenteritis viral † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**3/53 (5.66%)**
Influenza † 1							
# participants affected / at risk	**0/6 (0.00%)**	**1/7 (14.29%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**2/45 (4.44%)**	**4/47 (8.51%)**	**2/53 (3.77%)**
Nasopharyngitis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**3/45 (6.67%)**	**2/47 (4.26%)**	**7/53 (13.21%)**
Sinusitis † 1							
# participants affected / at risk	**0/6 (0.00%)**	**1/7 (14.29%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**1/45 (2.22%)**	**1/47 (2.13%)**	**1/53 (1.89%)**
Staphylococcal infection † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Tooth abscess † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Upper respiratory tract infection † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**1/45 (2.22%)**	**1/47 (2.13%)**	**0/53 (0.00%)**
Injury, poisoning and procedural complications							
Arthropod bite † 1							
# participants				**0/5 (0.00%)**			

affected / at risk	0/6 (0.00%)	0/7 (0.00%)	1/6 (16.67%)		0/45 (0.00%)	0/47 (0.00%)	0/53 (0.00%)
Arthropod sting † 1							
# participants affected / at risk	1/6 (16.67%)	0/7 (0.00%)	0/6 (0.00%)	0/5 (0.00%)	0/45 (0.00%)	0/47 (0.00%)	0/53 (0.00%)
Contusion † 1							
# participants affected / at risk	0/6 (0.00%)	0/7 (0.00%)	0/6 (0.00%)	0/5 (0.00%)	0/45 (0.00%)	1/47 (2.13%)	3/53 (5.66%)
Excoriation † 1							
# participants affected / at risk	1/6 (16.67%)	0/7 (0.00%)	0/6 (0.00%)	0/5 (0.00%)	0/45 (0.00%)	0/47 (0.00%)	0/53 (0.00%)
Metabolism and nutrition disorders							
Fluid retention † 1							
# participants affected / at risk	0/6 (0.00%)	0/7 (0.00%)	0/6 (0.00%)	1/5 (20.00%)	0/45 (0.00%)	0/47 (0.00%)	0/53 (0.00%)
Hypokalaemia † 1							
# participants affected / at risk	1/6 (16.67%)	0/7 (0.00%)	0/6 (0.00%)	1/5 (20.00%)	0/45 (0.00%)	0/47 (0.00%)	0/53 (0.00%)
Musculoskeletal and connective tissue disorders							
Arthralgia † 1							
# participants affected / at risk	0/6 (0.00%)	2/7 (28.57%)	1/6 (16.67%)	0/5 (0.00%)	4/45 (8.89%)	6/47 (12.77%)	3/53 (5.66%)
Back pain † 1							
# participants affected / at risk	0/6 (0.00%)	0/7 (0.00%)	0/6 (0.00%)	0/5 (0.00%)	1/45 (2.22%)	1/47 (2.13%)	4/53 (7.55%)
Joint swelling † 1							
# participants affected / at risk	0/6 (0.00%)	0/7 (0.00%)	1/6 (16.67%)	0/5 (0.00%)	1/45 (2.22%)	0/47 (0.00%)	0/53 (0.00%)
Neuropathic arthropathy † 1							
# participants affected / at risk	0/6 (0.00%)	1/7 (14.29%)	0/6 (0.00%)	0/5 (0.00%)	0/45 (0.00%)	0/47 (0.00%)	0/53 (0.00%)
Pain in extremity † 1							
# participants affected / at risk	0/6 (0.00%)	0/7 (0.00%)	0/6 (0.00%)	0/5 (0.00%)	0/45 (0.00%)	0/47 (0.00%)	4/53 (7.55%)
Nervous system disorders							
Dizziness † 1							
# participants affected / at risk	0/6 (0.00%)	0/7 (0.00%)	0/6 (0.00%)	0/5 (0.00%)	0/45 (0.00%)	3/47 (6.38%)	2/53 (3.77%)

Headache † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**5/45 (11.11%)**	**6/47 (12.77%)**	**2/53 (3.77%)**
Respiratory, thoracic and mediastinal disorders							
Oropharyngeal pain † 1							
# participants affected / at risk	**1/6 (16.67%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**2/53 (3.77%)**
Sinus congestion † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**1/45 (2.22%)**	**3/47 (6.38%)**	**1/53 (1.89%)**
Skin and subcutaneous tissue disorders							
Dermatitis † 1							
# participants affected / at risk	**1/6 (16.67%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Seborrhoea † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**0/6 (0.00%)**	**1/5 (20.00%)**	**0/45 (0.00%)**	**0/47 (0.00%)**	**0/53 (0.00%)**
Vascular disorders							
Hypertension † 1							
# participants affected / at risk	**0/6 (0.00%)**	**0/7 (0.00%)**	**1/6 (16.67%)**	**0/5 (0.00%)**	**0/45 (0.00%)**	**2/47 (4.26%)**	**1/53 (1.89%)**

† Events were collected by systematic assessment
1 Term from vocabulary, MedDRA

Limitations and Caveats

Hide Limitations and Caveats

Limitations of the study, such as early termination leading to small numbers of participants analyzed and technical problems with measurement leading to unreliable or uninterpretable data
No text entered.

More Information

Hide More Information

Certain Agreements:

Principal Investigators are **NOT** employed by the organization sponsoring the study.
There **IS** an agreement between Principal Investigators and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.
The agreement is:

☐ The only disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is **less than or equal to 60 days**. The sponsor cannot require changes to the communication and cannot extend the embargo.

☐ The only disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is **more than 60 days but less than or equal to 180 days**. The sponsor cannot require changes to the communication and cannot extend the embargo.

Other disclosure agreement that restricts the right of the PI to discuss or publish trial results after the trial is completed.

☑ **Restriction Description:** The terms and conditions of Novartis' agreements with its investigators may vary. However, Novartis does not prohibit any investigator from publishing. Any publications from a single-site are postponed until the publication of the pooled data (i.e., data from all sites) in the clinical trial.

Results Point of Contact:

Name/Title: Study Director
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No publications provided

Responsible Party:	Novartis (Novartis Pharmaceuticals)
ClinicalTrials.gov Identifier:	NCT01160822 History of Changes
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