

Sponsor

Novartis

Generic Drug Name

Secukinumab

Therapeutic Area of Trial

Psoriatic arthritis

Protocol Number

CAIN457A2206E1

Title

An open label non-randomized extension study to evaluate the safety and tolerability of secukinumab (anti interleukin-17 monoclonal antibody) in patients with psoriatic arthritis

Study Phase

Phase II

Study Start/End Dates

10 Jun 2010 to 07 Nov 2012

Study Design/Methodology

Multicenter, open-label, non-randomized trial without comparator with active treatment over 24 weeks initially (Part 1) with a possible extension of a further 6 months (Part 2) for those patients who participated in the core CAIN457A2206 study.

Centers

11 centers in 3 countries: Germany (5), Netherlands (2) and United Kingdom (4)

Clinical Trial Results Database

Test Product (s), Dose(s), and Mode(s) of Administration

Intravenous infusion of 3 mg/kg secukinumab every 4 weeks, over a period of 52 weeks.

Statistical Methods

Data from the core study (CAIN457A2206) and the extension study (CAIN457A2206E1) were summarized and analyzed. The rationale for this approach was the different exposure to secukinumab in the core trial, which required separate description in the extension of the pre-exposed and naive patient subsets in the PK analysis and exploratory efficacy analysis.

Treatment summaries were reported according to the actual treatment received during the core study (Placebo or secukinumab 10 mg/kg) and the extension study (secukinumab 3 mg/kg)

Safety: Summary statistics only were provided for the various safety assessments by treatment group. All information obtained on AEs was displayed by treatment and subject

Study Population: Inclusion/Exclusion Criteria

Inclusion Criteria:

- A diagnosis of psoriatic arthritis
- Patients who took part in the core CAIN457A2206E1 study

Exclusion Criteria:

- Patients for whom continued treatment with AIN457 is not considered appropriate by the treating physician.
- Patients who were non-compliant or who demonstrated a major protocol deviation in the core CAIN457A2206 study.
- Patients who discontinued from the core CAIN457A2206 study before Visit 14 (Week 16), and patients who completed the core study or discontinued the core study more than 2 weeks before the baseline visit.
- Pregnant or lactating women
- Presence of active infection
- Positive PPD or HIV test in patients where repeated testing was deemed appropriate due to their risk profile

Clinical Trial Results Database

Participant Flow

Patient disposition – n (%) of patients (All patients)

	AIN457/AIN457 (1) N=19	Placebo/AIN457 (2) N=9	Total N=28
Patients			
Completed	14 (73.7%)	8 (88.9%)	22 (78.6%)
Discontinued	5 (26.3%)	1 (11.1%)	6 (21.4%)
Adverse Event(s)*	0 (0%)	1 (11.1%)	1 (3.6%)
Patient withdrew consent	4 (21.1%)	0 (0%)	4 (14.3%)
Unsatisfactory therapeutic effect	1 (5.3%)	0 (0%)	1 (3.6%)

(1)Core: AIN457 2x10 mg/kg; Ext: AIN457 3 mg/kg (2)Core: placebo; Ext: AIN457 3 mg/kg

* Patient discontinued due to a serious AE (myocardial infarction) on Day 232.

Baseline Characteristics

Demographic summary by treatment group (Safety analysis set)

		AIN457/AIN457 (1) N=19	Placebo/AIN457 (2) N=9	Total N=28
Age (years)	Mean (SD)	45.6 (10.96)	47.9 (6.81)	46.3 (9.75)
	Median	49.0	45.0	48.5
	Range	21 – 61	39 – 58	21 - 61
Gender - n(%)	Male	7 (37%)	4 (44%)	11 (39%)
	Female	12 (63%)	5 (56%)	17 (61%)
Predominant race - n(%)	Caucasian	19 (100%)	8 (89%)	27 (96%)
	Other		1 (11%)	1 (4%)
Ethnicity - n(%)	Other	19 (100%)	8 (89%)	27 (96%)
	Hispanic/Latino		1 (11%)	1 (4%)

Clinical Trial Results Database

		AIN457/AIN457 (1)	Placebo/AIN457 (2)	Total
		N=19	N=9	N=28
Height (cm)	Mean (SD)	173.0 (10.50)	172.9 (13.42)	173.0 (11.26)
	Median	173.0	169.0	171.5
	Range	156 - 191	154 – 195	154 - 195
Weight (kg)	Mean (SD)	99.8 (28.21)	84.1 (21.98)	94.8 (27.00)
	Median	94.0	80.0	92.5
	Range	65 - 178	45 – 115	45 - 178
BMI (kg/m ²)	Mean (SD)	33.3 (8.63)	27.7 (4.31)	31.5 (7.90)
	Median	30.7	27.6	30.4
	Range	20 – 59	19 - 35	19 - 59

(1)Core: AIN457 2x10 mg/kg; Ext: AIN457 3 mg/kg; (2)Core: placebo; Ext: AIN457 3 mg/kg

BMI = body mass index

Outcome measures

Primary Outcome Result(s)

Refer to Safety Result section for primary outcome result.

Secondary Outcome Result(s)

Immunogenicity of secukinumab:

 Immunogenicity: Anti-AIN457 antibody
 All subjects

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: AIN457	Baseline Ext	-21	10JUN2010	10:50	No	POSSI	NA
	EDAY1	1	01JUL2010	11:10	No	POSSI	NA
	EWEEK8	57	26AUG2010	12:25	No		NA
	EWEEK24	169	16DEC2010	10:40	No	POSSI	NA
	EWEEK40	279	05APR2011	10:15	No	POSSI	NA
	EEOS	425	29AUG2011	11:00	No	POSSI	NA
	Baseline Ext	-14	10JUN2010	13:05	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	24JUN2010	10:30	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	19AUG2010	10:00	No	POSSI	NA
	EWEEK24	173	13DEC2010	11:20	No	POSSI	NA
	EWEEK40	281	31MAR2011	09:35	No	POSSI	NA
	EEOS	426	23AUG2011	09:50	No	POSSI	NA
	C_EOS / B_Ext	-23	28JUL2010	08:25	No	Above tolerable drug level for a weak immune response	
	EDAY1	1	20AUG2010	09:15	No	POSSI	NA
	EWEEK8	49	07OCT2010	09:45	No	POSSI	NA
	EWEEK40	271	17MAY2011	09:10	No	POSSI	NA
	EEOS	448	10NOV2011	09:00	No	POSSI	NA
	Baseline Ext	-8	21JUN2010	10:15	No	POSSI	NA
	EDAY1	1	29JUN2010	08:48	No	POSSI	NA
	EWEEK8	56	23AUG2010	08:20	No	POSSI	NA
	EWEEK24	169	14DEC2010	09:20	No	POSSI	NA
	EWEEK40	280	04APR2011	08:22	No	POSSI	NA
	EEOS	448	19SEP2011	08:44	No	POSSI	NA

Clinical Trial Results Database

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: AIN457	C_EOS / B_Ex	-21	07JUL2010	10:14	No		
	EDAY1	1	28JUL2010	08:39	No		Above tolerable drug level for a mild immune response
	EWEEK8	58	23SEP2010	08:50	No	POSSI	NA
	EWEEK24	175	18JAN2011	08:25	No	POSSI	NA
	EEOS	456	26OCT2011	08:25	No	POSSI	NA
	C_EOS / B_Ex	-14	20JUL2010	13:45	No		no PK data available
	EDAY1	1	03AUG2010	08:15	No	POSSI	NA
	EEOS	29	31AUG2010	08:37	No	POSSI	NA
	C_EOS / B_Ex	-7	08NOV2010	09:20	No		Above tolerable drug level for a weak immune response
	EDAY1	1	15NOV2010	08:05	No	POSSI	NA
	EWEEK8	58	11JAN2011	08:34	No	POSSI	NA
	EWEEK24	172	05MAY2011	10:15	No	POSSI	NA
	EWEEK40	292	02SEP2011	07:50	No	POSSI	NA
	Baseline Ext	-14	15MAR2011	09:30	No	POSSI	NA
	EDAY1	1	29MAR2011	08:52	No	POSSI	NA
	EWEEK8	59	26MAY2011	09:00	No	POSSI	NA
	EWEEK24	184	28SEP2011	08:45	No	POSSI	NA
	Baseline Ext	-11	27AUG2010	09:00	No	POSSI	NA
	EDAY1	1	07SEP2010	09:20	No	POSSI	NA
	EWEEK8	57	02NOV2010	09:40	No	POSSI	NA
	EWEEK24	169	22FEB2011	09:30	No	POSSI	NA
	EWEEK40	281	14JUN2011	09:30	No	POSSI	NA
	EEOS	448	28NOV2011	08:30	No	POSSI	NA
	Baseline Ext	-7	14JUL2010	09:30	No	POSSI	NA

Clinical Trial Results Database

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: AIN457	EDAY1	1	21JUL2010	10:15	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	15SEP2010	10:10	No	POSSI	NA
	EWEEK24	169	05JAN2011	10:05	No	POSSI	NA
	EWEEK40	281	27APR2011	10:20	No	POSSI	NA
	EEOS	447	10OCT2011	10:55	No	POSSI	NA
	C_EOS / B_Ext	-15	15SEP2010	12:40	No		no PK data available
	EDAY1	1	30SEP2010	10:15	No	POSSI	NA
	EWEEK8	57	25NOV2010	09:35	No	POSSI	NA
	Baseline Ext	-16	12OCT2010	10:55	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	28OCT2010	09:55	No	No inhibition of immunogenicity signal	NA
	EWEEK8	50	16DEC2010	10:15	No	POSSI	NA
	EWEEK24	167	12APR2011	10:00	No	POSSI	NA
	EWEEK40	279	02AUG2011	10:15	No	POSSI	NA
	EEOS	447	17JAN2012	11:50	No	POSSI	NA
	C_EOS / B_Ext	-15	25AUG2010	13:50	No	Above tolerable drug level for a weak immune response	
	EDAY1	1	09SEP2010	10:10	No	POSSI	NA
	Baseline Ext	-14	02AUG2011	10:58	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	16AUG2011	10:15	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	11OCT2011	10:27	No	POSSI	NA
	EWEEK24	170	01FEB2012	14:05	No	POSSI	NA
	EWEEK40	281	22MAY2012	10:06	No	POSSI	NA

Clinical Trial Results Database

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: AIN457	EEOS	450	07NOV2012	13:00	No	POSSI	NA
	Baseline Ext	-21	26JUL2011	12:35	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	16AUG2011	09:33	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	11OCT2011	09:42	No	POSSI	NA
	EWEEK24	170	01FEB2012	14:33	No	POSSI	NA
	EWEEK40	281	22MAY2012	09:35	No	POSSI	NA
	EEOS	450	07NOV2012	13:53	No	POSSI	NA
	Baseline Ext	-14	02AUG2010	11:00	No	POSSI	NA
	EDAY1	1	16AUG2010	10:25	No	POSSI	NA
	EWEEK8	57	11OCT2010	09:20	No	POSSI	NA
	EWEEK24	169	31JAN2011	10:00	No	POSSI	NA
	EWEEK40	282	24MAY2011	10:00	No	POSSI	NA
	EEOS	450	08NOV2011	10:30	No	POSSI	NA
	Baseline Ext	-11	02SEP2010	10:20	No	POSSI	NA
	EDAY1	1	13SEP2010	10:20	No	POSSI	NA
	EWEEK8	53	04NOV2010	10:00	No	POSSI	NA
	EWEEK24	171	02MAR2011	10:30	No	POSSI	NA
	EWEEK40	281	20JUN2011	09:40	No	POSSI	NA
	EEOS	450	06DEC2011	08:45	No	POSSI	NA
	Baseline Ext	-21	18AUG2010	10:20	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	08SEP2010	10:15	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	03NOV2010	11:50	No	POSSI	NA
	EWEEK24	169	23FEB2011	10:50	No	POSSI	NA
	EEOS	225	20APR2011	10:40	No		NA
	Baseline Ext	-12	20AUG2010	10:40	No	POSSI	NA

Clinical Trial Results Database

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: AIN457	EDAY1	1	01SEP2010	10:30	No		NA
	EWEEK8	57	27OCT2010	10:25	No	POSSI	NA
	EWEEK24	169	16FEB2011	10:00	No	POSSI	NA
	EWEEK40	281	08JUN2011	09:50	No	POSSI	NA
	EEOS	449	23NOV2011	10:10	No	POSSI	NA
Core: Placebo	Baseline Ext	-14	14JUN2010	13:35	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	28JUN2010	10:45	No	No inhibition of immunogenicity signal	NA
	EWEEK8	58	24AUG2010	11:10	No	POSSI	NA
	EWEEK24	169	13DEC2010	11:00	No	POSSI	NA
	EWEEK40	281	04APR2011	11:20	No	POSSI	NA
	EEOS	421	22AUG2011	11:20	No	POSSI	NA
	Baseline Ext	-10	19APR2011	10:05	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	29APR2011	10:10	No	No inhibition of immunogenicity signal	NA
	EWEEK8	62	29JUN2011	10:00	No	POSSI	NA
	EWEEK24	167	12OCT2011	10:20	No	POSSI	NA
	EWEEK40	279	01FEB2012	09:45	No	POSSI	NA
	EEOS	466	06AUG2012	11:50	No	POSSI	NA
	Baseline Ext	-16	28SEP2010	15:05	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	14OCT2010	09:40	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	09DEC2010	10:15	No	POSSI	NA
	EWEEK24	169	31MAR2011	09:45	No	POSSI	NA
	EWEEK40	281	21JUL2011	09:50	No	POSSI	NA

Clinical Trial Results Database

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: Placebo	C_EOS / B_Ext	-14	07JUL2010	10:40	No	No inhibition of immunogenicity signal	
	EDAY1	1	21JUL2010	10:35	No	No inhibition of immunogenicity signal	NA
	EWEEK24	169	05JAN2011	09:45	No	POSSI	NA
	EWEEK40	281	27APR2011	10:10	No	POSSI	NA
	EEOS	447	10OCT2011	11:10	No	POSSI	NA
	C_EOS / B_Ext	-14	02AUG2010	08:50	No	No inhibition of immunogenicity signal	
	EDAY1	1	16AUG2010	10:35	No	No inhibition of immunogenicity signal	NA
	EWEEK8	59	13OCT2010	09:45	No	POSSI	NA
	EWEEK24	169	31JAN2011	09:50	No	POSSI	NA
	EWEEK40	282	24MAY2011	10:15	No	POSSI	NA
	EEOS	450	08NOV2011	09:10	No	POSSI	NA
	Baseline Ext	-12	10FEB2011	08:20	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	22FEB2011	08:10	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	19APR2011	08:20	No	POSSI	NA
	EWEEK24	169	09AUG2011	08:25	No	POSSI	NA
	EWEEK40	280	28NOV2011	08:30	No	POSSI	NA
	EEOS	449	15MAY2012	07:55	No	POSSI	NA
	Baseline Ext	-14	09FEB2011	08:20	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	23FEB2011	08:25	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	20APR2011	08:35	No	POSSI	NA
	EWEEK24	169	10AUG2011	08:35	No	POSSI	NA

Clinical Trial Results Database

Treatment	Visit	Study Day	Sample date	Sample time	Immunogeneticity	Inhibition of signal	Comment
Core: Placebo	EWEEK40	281	30NOV2011	08:30	No	POSSI	NA
	EEOS	449	16MAY2012	09:00	No	POSSI	NA
	Baseline Ext	-13	20JUL2011	13:25	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	02AUG2011	10:45	No	No inhibition of immunogenicity signal	NA
	EWEEK8	57	27SEP2011	10:00	No	POSSI	NA
	EWEEK24	169	17JAN2012	10:30	No	POSSI	NA
	EEOS	456	30OCT2012	10:25	No	POSSI	NA
	Baseline Ext	-7	22JUN2011	10:15	No	No inhibition of immunogenicity signal	NA
	EDAY1	1	29JUN2011	10:20	No	No inhibition of immunogenicity signal	NA
	EWEEK8	56	23AUG2011	11:05	No	POSSI	NA
	EWEEK24	169	14DEC2011	11:00	No	POSSI	NA

Baseline for subjects with no break is defined as the last visit of core trial (C_EOS / B_Ext).
 Immunogenecity: No (no immunogenecity), BLQ (positive immunogenecity < LLOQ (not quantifiable)),
 ALQ (positive immunogenecity >LLOQ (quantifiable))
 * Sample not taken

Pharmacokinetics of secukinumab at steady state:

Mean secukinumab serum concentrations

Week	N	Mean (SD) (µg/mL)	CV%	N	Mean (SD) (µg/mL)	CV%
	Core: AIN457 2 x 10 mg/kg iv			Core: placebo		
0/pre-inf	14	2.76 (4.73)	171	9	0.00 (0.00)	-
0/post-inf	15	80.0 (17.7)	22.1	9	68.8 (19.1)	27.8
8/pre-inf	12	29.6 (10.3)	34.9	7	19.5 (7.68)	39.4
8 /post-inf	12	99.7 (22.1)	22.1	7	88.9 (25.5)	28.6
16/pre-inf	9	32.9 (12.1)	36.7	8	23.3 (10.3)	44.0
16/post-inf	9	110 (25.3)	22.9	8	82.9 (24.7)	29.7
20/pre-inf	12	31.3 (9.00)	28.8	8	25.4 (13.0)	51.1
20/post-inf	10	111 (29.9)	27.0	8	85.5 (19.9)	23.3
24/pre-inf	11	37.2 (11.9)	32.0	8	25.5 (11.6)	45.5
24/post-inf	11	109 (24.5)	22.4	8	89.1 (23.2)	26.1
28/pre-inf	8	37.4 (10.2)	27.3	7	22.1 (9.45)	42.7
28/post-inf	8	122 (20.2)	16.5	6	96.9 (18.5)	19.1
32/pre-inf	9	37.4 (13.0)	34.7	7	26.7 (8.05)	30.1
32/post-inf	8	112 (15.1)	13.6	7	92.8 (23.2)	24.9
36/pre-inf	10	33.4 (9.49)	28.4	6	27.3 (7.06)	25.9
36 /post-inf	9	109 (24.4)	22.4	7	88.9 (13.9)	15.6
40/pre-inf	10	46.4 (28.2)	60.8	8	28.7 (9.00)	31.3
40/post-inf	10	84.8 (30.5)	35.9	7	105 (24.9)	23.7
56	12	33.8 (8.93)	26.5	8	31.6 (7.62)	24.1
64	10	11.0 (3.46)	31.6	5	10.3 (8.31)	80.7

Total IL-17 concentration in blood at steady state:

Total serum IL-17A was not measured due to assay limitations.

Safety Results

Adverse events overall and frequently affected system organ classes - n (%) of patients (all patients) - Safety analysis set

	AIN457/AIN457 (1) N=19 n (%)	Placebo/AIN457 (2) N=9 n (%)	Total N=28 n (%)
Patients with AE(s)	19 (100.0%)	9 (100.0%)	28 (100.0%)
Infections and infestations	13 (68.4%)	6 (66.7%)	19 (67.9%)
Musculoskeletal and connective tissue disorders	11 (57.9%)	4 (44.4%)	15 (53.6%)
Respiratory, thoracic and mediastinal disorders	6 (31.6%)	4 (44.4%)	10 (35.7%)
Nervous system disorders	5 (26.3%)	4 (44.4%)	9 (32.1%)
Gastrointestinal disorders	4 (21.1%)	4 (44.4%)	8 (28.6%)
General disorders and administration site conditions	6 (31.6%)	2 (22.2%)	8 (28.6%)
Injury, poisoning and procedural complications	5 (26.3%)	1 (11.1%)	6 (21.4%)
Investigations	3 (15.8%)	2 (22.2%)	5 (17.9%)
Metabolism and nutrition disorders	3 (15.8%)	1 (11.1%)	4 (14.3%)
Renal and urinary disorders	1 (5.3%)	2 (22.2%)	3 (10.7%)
Skin and subcutaneous tissue disorders	3 (15.8%)		3 (10.7%)
Blood and lymphatic system disorders	2 (10.5%)		2 (7.1%)
Cardiac disorders	1 (5.3%)	1 (11.1%)	2 (7.1%)
Ear and labyrinth disorders	2 (10.5%)		2 (7.1%)
Eye disorders	2 (10.5%)		2 (7.1%)
Reproductive system and breast disorders	2 (10.5%)		2 (7.1%)
Immune system disorders		1 (11.1%)	1 (3.6%)
Vascular disorders	1 (5.3%)		1 (3.6%)

Arranged by frequency in the total column

(1) Core: AIN457 2x10 mg/kg; Ext: AIN457 3 mg/kg; (2) Core: placebo; Ext AIN457 3 mg/kg

Adverse events that occurred in 2 or more patients, ordered by frequency in the total column- n (%) of patients (all patients) - Safety analysis set

	AIN457/AIN457 (1) N=19 n (%)	Placebo/AIN457 (2) N=9 n (%)	Total N=28 n (%)
Patients with AE(s)	19 (100.0%)	9 (100.0%)	28 (100.0%)
Nasopharyngitis	7 (36.8%)	4 (44.4%)	11 (39.3%)
Oropharyngeal pain	5 (26.3%)	3 (33.3%)	8 (28.6%)
Arthralgia	5 (26.3%)	2 (22.2%)	7 (25.0%)
Back pain	2 (10.5%)	2 (22.2%)	4 (14.3%)
Dizziness	3 (15.8%)	1 (11.1%)	4 (14.3%)

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	AIN457/AIN457 (1) N=19 n (%)	Placebo/AIN457 (2) N=9 n (%)	Total N=28 n (%)
Arthritis	3 (15.8%)		3 (10.7%)
Blood pressure increased	1 (5.3%)	2 (22.2%)	3 (10.7%)
Cough	3 (15.8%)		3 (10.7%)
Headache	2 (10.5%)	1 (11.1%)	3 (10.7%)
Influenza		3 (33.3%)	3 (10.7%)
Pruritus	3 (15.8%)		3 (10.7%)
Abdominal pain upper	2 (10.5%)		2 (7.1%)
Diarrhoea	1 (5.3%)	1 (11.1%)	2 (7.1%)
Fall	2 (10.5%)		2 (7.1%)
Joint swelling	2 (10.5%)		2 (7.1%)
Mouth ulceration	1 (5.3%)	1 (11.1%)	2 (7.1%)
Myalgia	2 (10.5%)		2 (7.1%)
Nausea	1 (5.3%)	1 (11.1%)	2 (7.1%)
Osteoarthritis	2 (10.5%)		2 (7.1%)
Pyrexia	1 (5.3%)	1 (11.1%)	2 (7.1%)
Sciatica		2 (22.2%)	2 (7.1%)
Tooth abscess	1 (5.3%)	1 (11.1%)	2 (7.1%)
Tooth infection	2 (10.5%)		2 (7.1%)
Upper respiratory tract infection	2 (10.5%)		2 (7.1%)
Vomiting	2 (10.5%)		2 (7.1%)

Arranged by frequency in the total column

(1) Core: AIN457 2x10 mg/kg; Ext: AIN457 3 mg/kg;

(2) Core: placebo; Ext: AIN457 3 mg/kg

Serious Adverse Events and Deaths

	AIN457/AIN457 (1) N=19 n (%)	Placebo/AIN457 (2) N=9 n (%)	Total N=28 n (%)
Deaths	0	0	0
Patients with SAE(s)	5 (26.3%)	2 (22.2%)	7 (25.0%)
Osteoarthritis	2 (10.5%)		2 (7.1%)
Arthralgia	1 (5.3%)		1 (3.6%)
Bursitis	1 (5.3%)		1 (3.6%)
Diabetes mellitus inadequate control	1 (5.3%)		1 (3.6%)
Myocardial infarction		1 (11.1%)	1 (3.6%)
Sciatica		1 (11.1%)	1 (3.6%)
Viral sinusitis	1 (5.3%)		1 (3.6%)

Arranged by frequency in the total column

(1) Core: AIN457 2x10 mg/kg; Ext: AIN457 3 mg/kg

(2) Core: placebo; Ext: AIN457 3 mg/kg

Date of Clinical Trial Report

10 July 2013