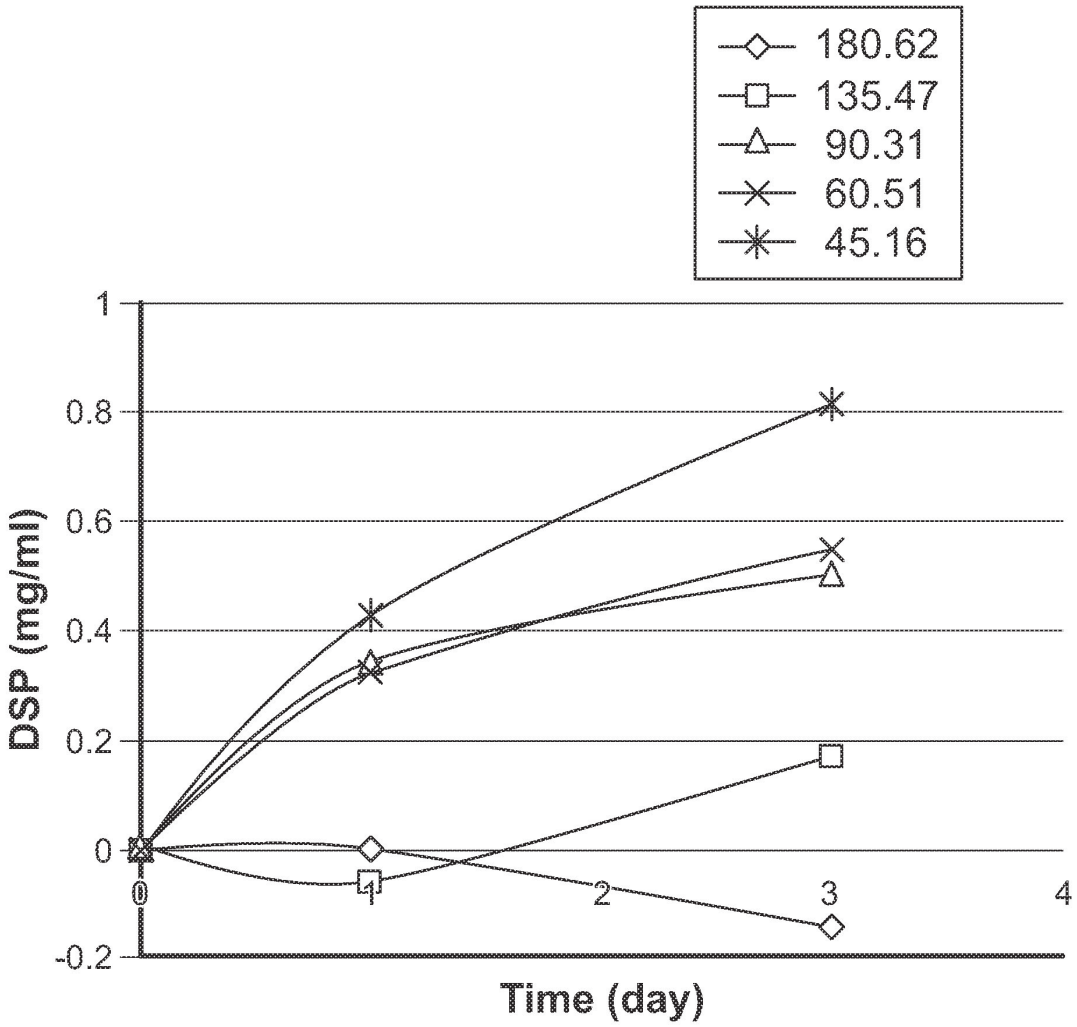

180.62
135.47
90.31
60.51
45.16
1
0.8
0.6
0.4
0.2
0
-0.2
DSP (mg/ml)
0
1
2
3
4
Time (day)

Fig. 1

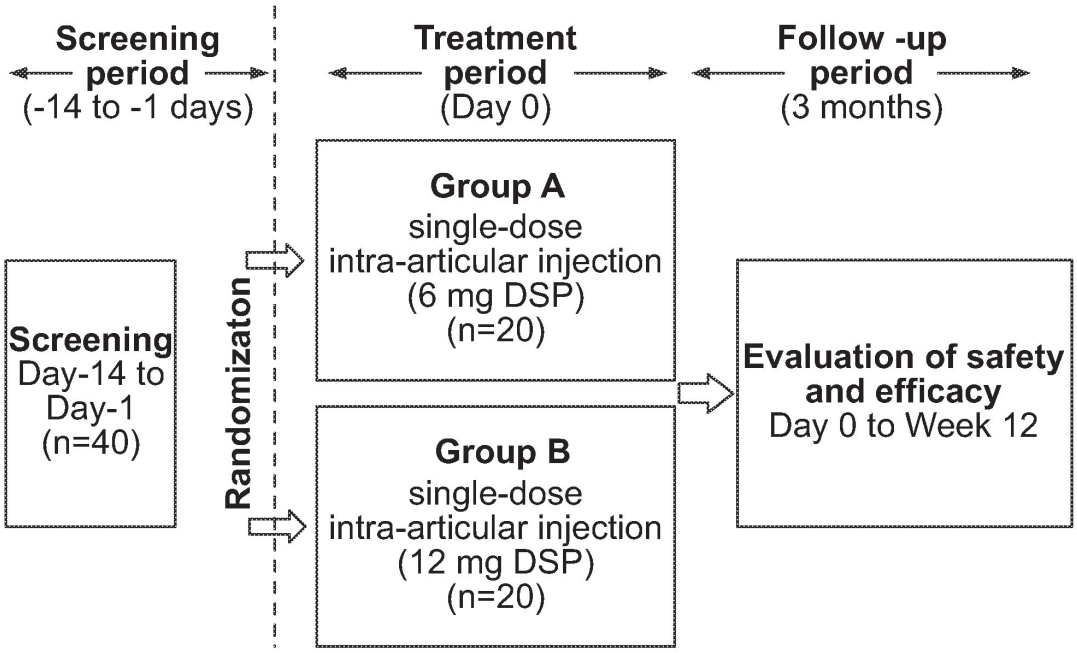

Screening period
(-14 to -1 days)
Treatment period
(Day 0)
Follow -up period
(3 months)
Screening
Day-14 to Day-1
(n=40)
Randomizaton
Group A
single-dose
intra-articular injection
(6 mg DSP)
(n=20)
Group B
single-dose
intra-articular injection
(12 mg DSP)
(n=20)
Evaluation of safety and efficacy
Day 0 to Week 12

Fig. 2

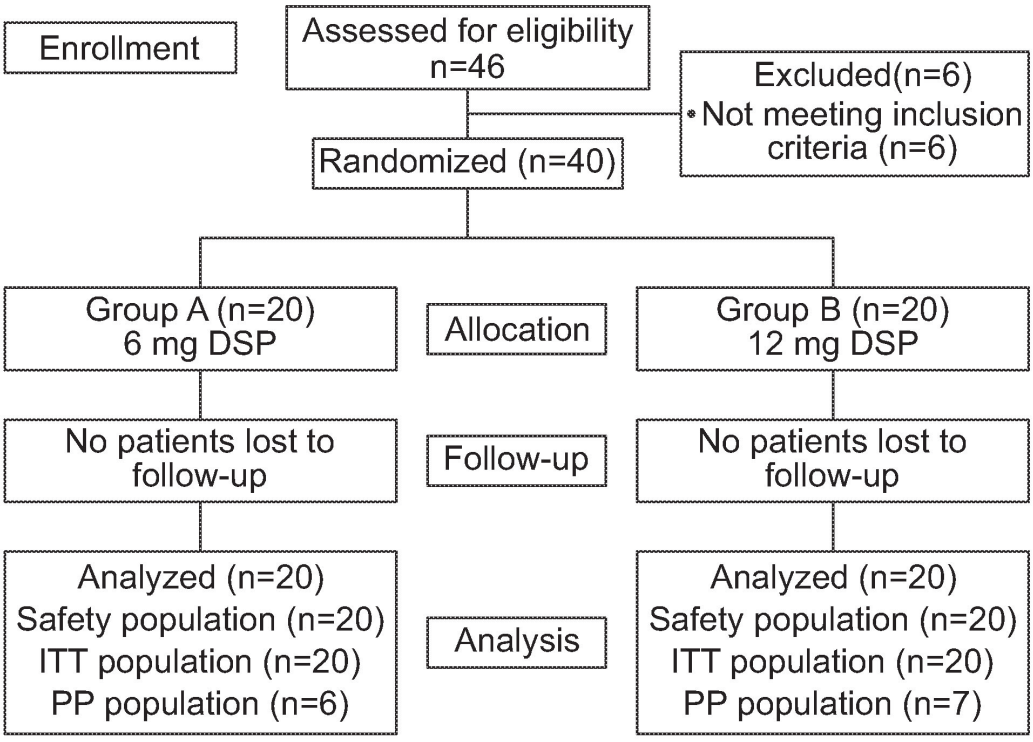

Enrollment
Assessed for eligibility
n=46
Excluded(n=6)
• Not meeting inclusion criteria (n=6)
Randomized (n=40)
Group A (n=20)
6 mg DSP
Allocation
Group B (n=20)
12 mg DSP
No patients lost to follow-up
Follow-up
No patients lost to follow-up
Analyzed (n=20)
Safety population (n=20)
ITT population (n=20)
PP population (n=6)
Analysis
Analyzed (n=20)
Safety population (n=20)
ITT population (n=20)
PP population (n=7)

Fig. 3

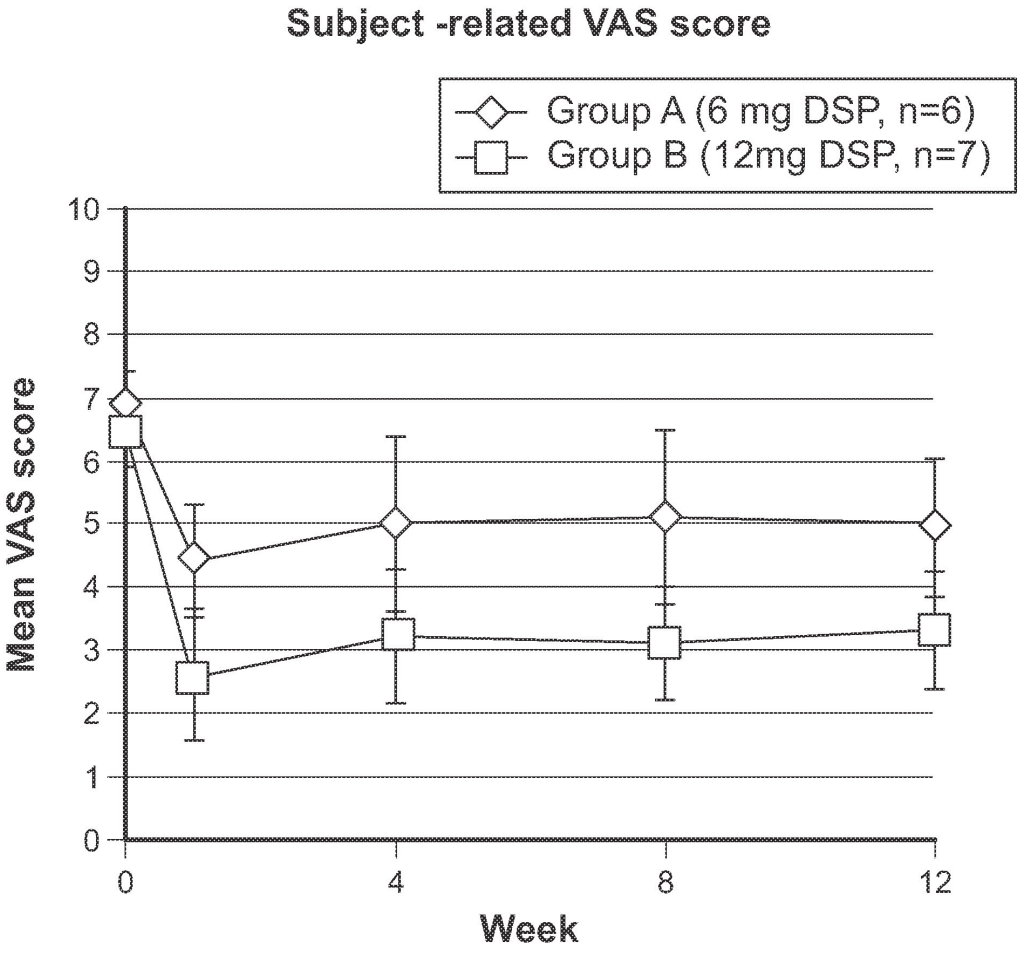

Subject -related VAS score
Group A (6 mg DSP, n=6)
Group B (12mg DSP, n=7)
Mean VAS score
10
9
8
7
6
5
4
3
2
1
0
0
4
8
12
Week

Fig. 4A

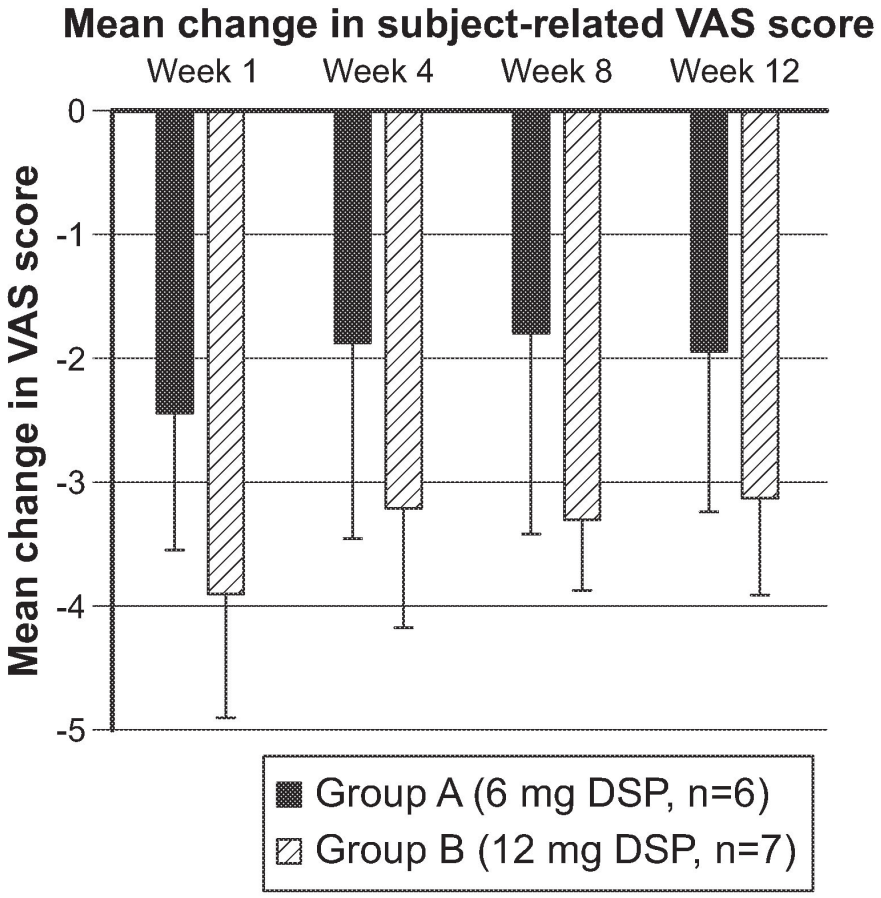

Mean change in subject-related VAS score
Week 1
Week 4
Week 8
Week 12
0
-1
-2
-3
-4
-5
Mean change in VAS score
Group A (6 mg DSP, n=6)
Group B (12 mg DSP, n=7)

Fig. 4B

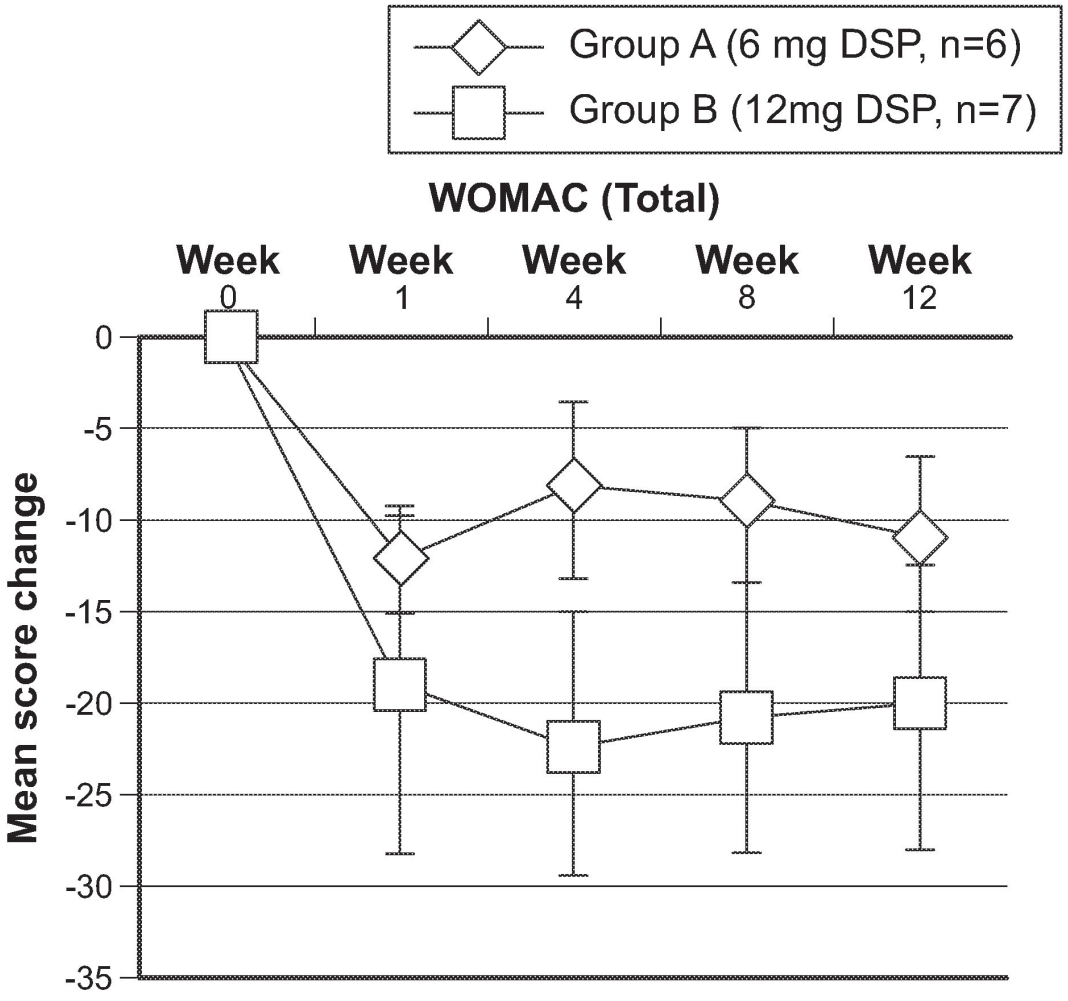

Group A (6 mg DSP, n=6)
Group B (12mg DSP, n=7)
WOMAC (Total)
Week 0
Week 1
Week 4
Week 8
Week 12
Mean score change
0
-5
-10
-15
-20
-25
-30
-35

Fig. 5A

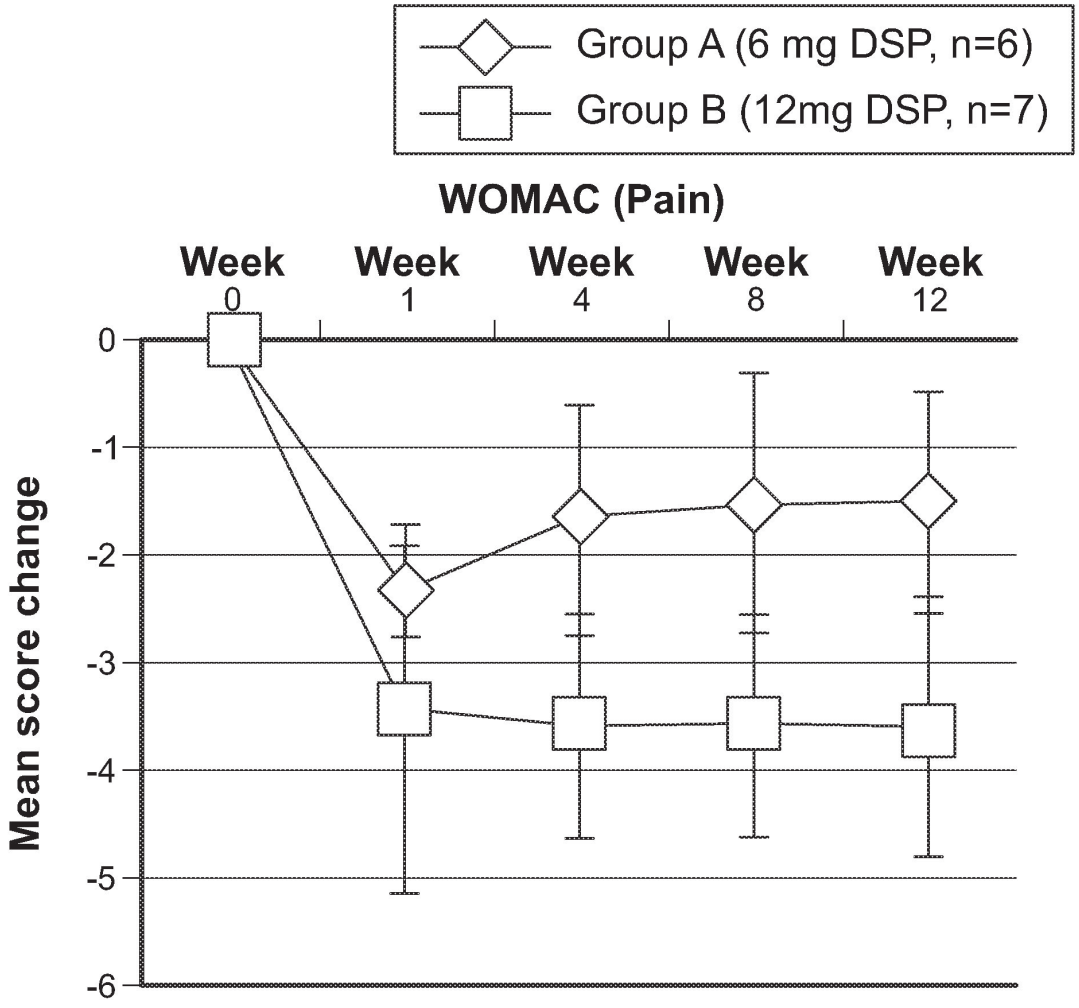

Group A (6 mg DSP, n=6)
Group B (12mg DSP, n=7)
WOMAC (Pain)
Week 0
Week 1
Week 4
Week 8
Week 12
Mean score change
0
-1
-2
-3
-4
-5
-6

Fig. 5B

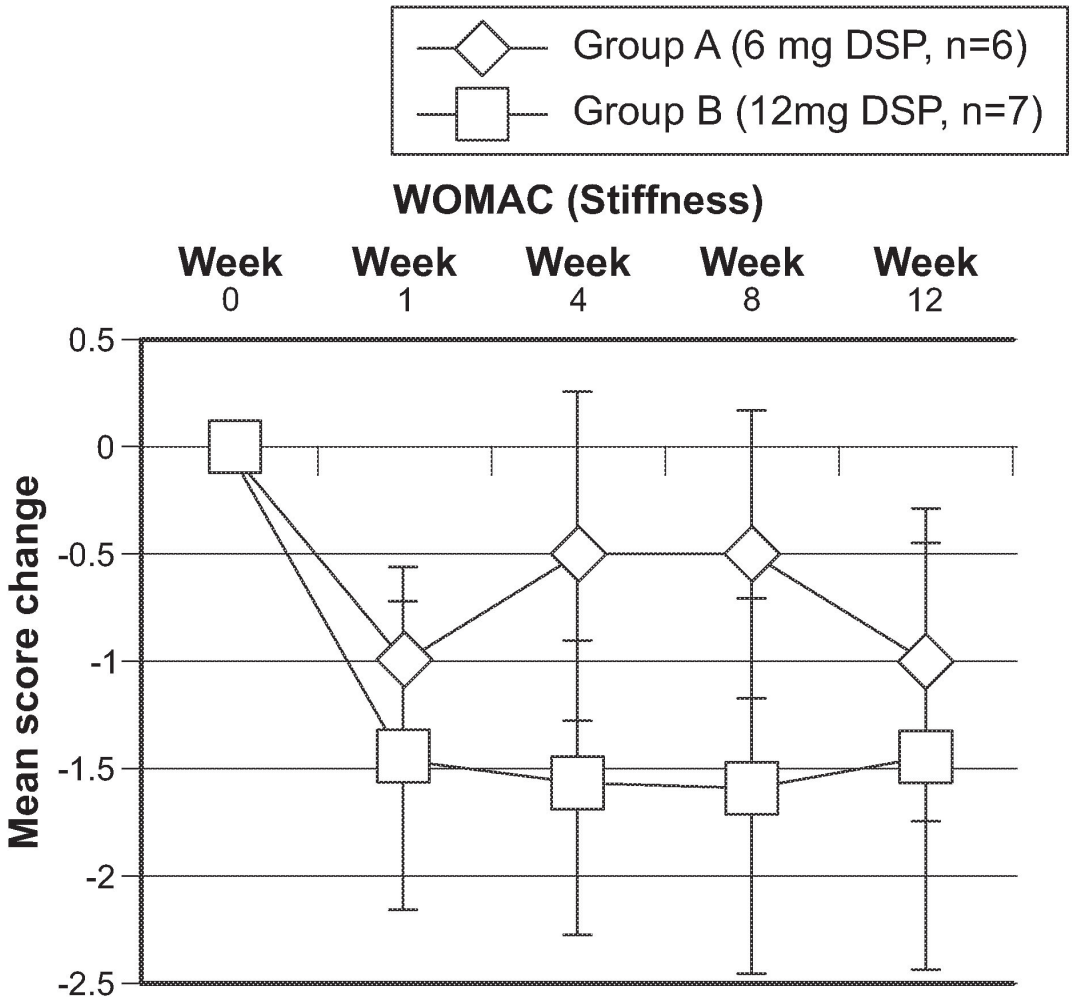

Group A (6 mg DSP, n=6)
Group B (12mg DSP, n=7)
WOMAC (Stiffness)
Week 0
Week 1
Week 4
Week 8
Week 12
Mean score change
0.5
0
-0.5
-1
-1.5
-2
-2.5

Fig. 5C

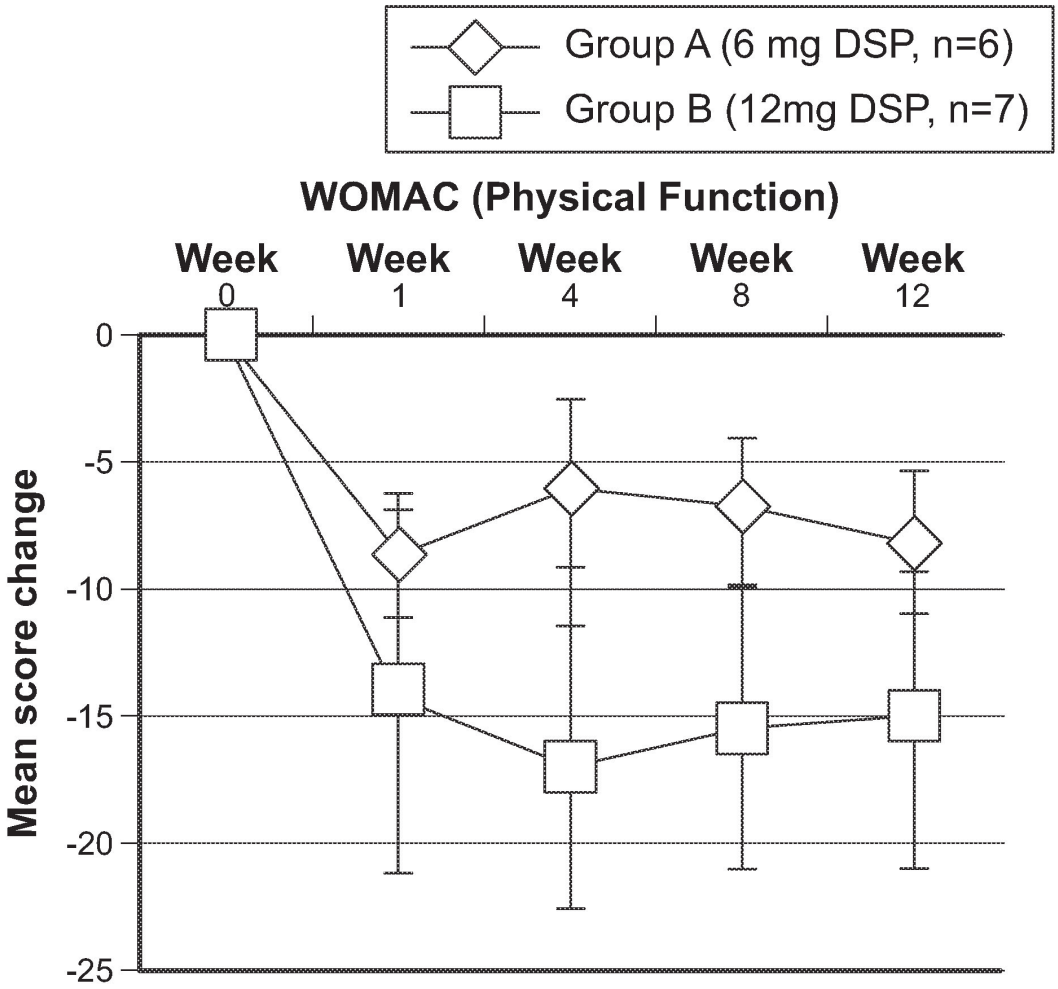

Group A (6 mg DSP, n=6)
Group B (12mg DSP, n=7)
WOMAC (Physical Function)
Week 0
Week 1
Week 4
Week 8
Week 12
Mean score change
0
-5
-10
-15
-20
-25

Fig. 5D

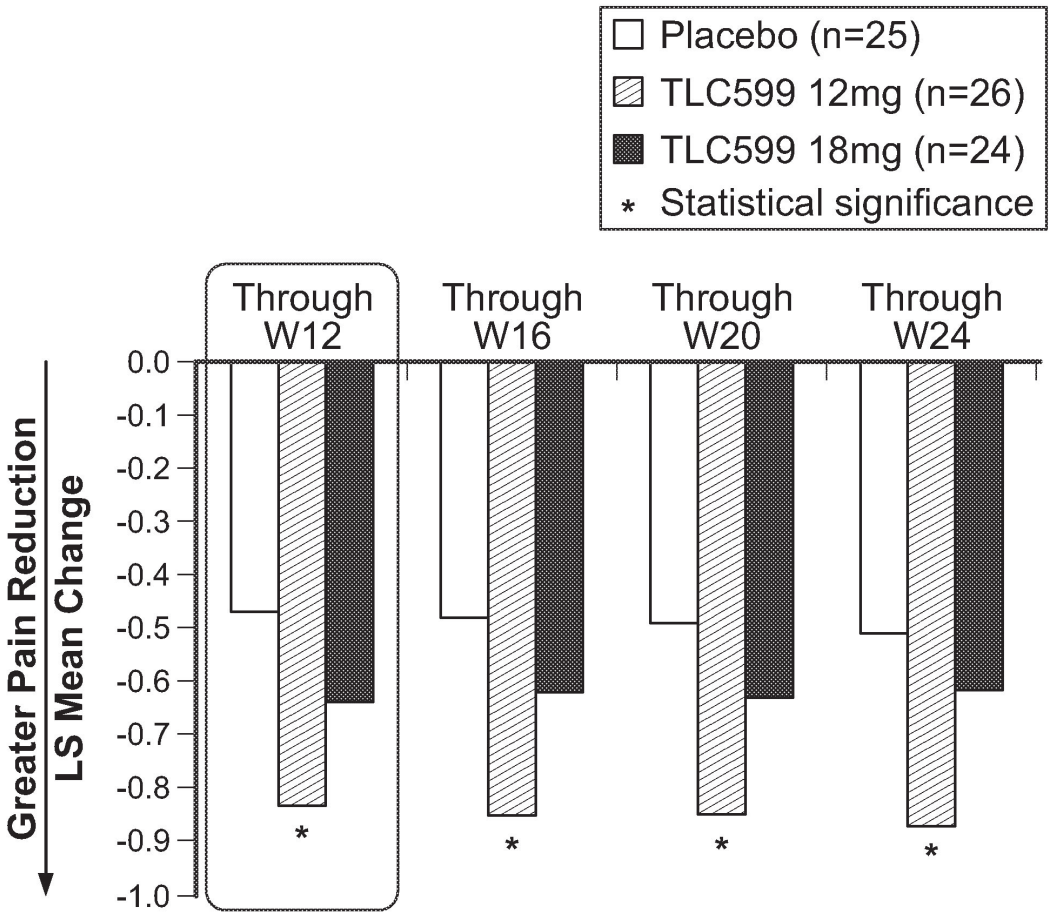

Placebo (n=25)
TLC599 12mg (n=26)
TLC599 18mg (n=24)
* Statistical significance
Through W12
Through W16
Through W20
Through W24
Greater Pain Reduction
LS Mean Change
0.0
-0.1
-0.2
-0.3
-0.4
-0.5
-0.6
-0.7
-0.8
-0.9
-1.0
*
*
*
*

Fig. 6

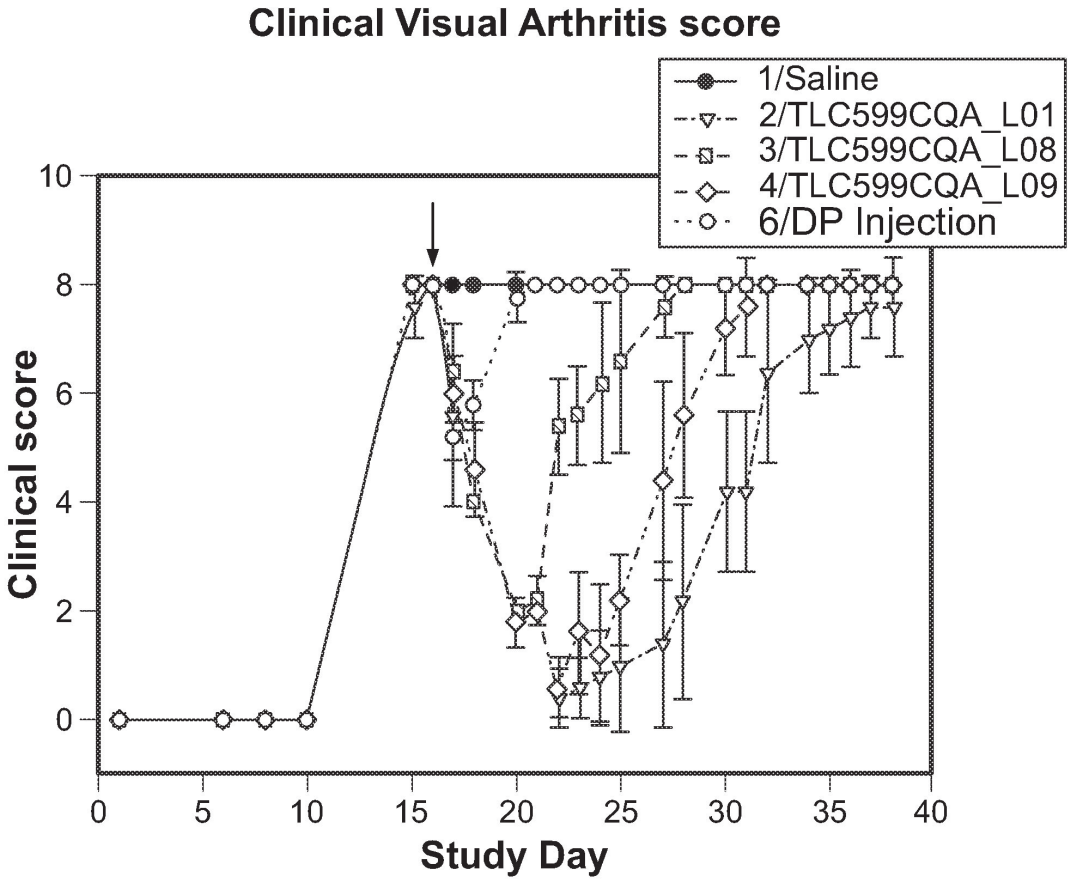

Clinical Visual Arthritis score
1/Saline
2/TLC599CQA_L01
3/TLC599CQA_L08
4/TLC599CQA_L09
6/DP Injection
Clinical score
Study Day
0
2
4
6
8
10
0
5
10
15
20
25
30
35
40

Fig. 7