definite joint space narrowing, some sclerotic areas, possible deformation of bone ends; Grade IV: Multiple large osteophytes, severe joint space narrowing, marked sclerosis and definite bony end deformity) (Frizziero, 1987). A group of 10 patients with knee osteoarthritis acted as a non-treated control group. Patients from both groups underwent arthroscopic examination of the affected knee joint before and at the end of 6 months treatment with diacerein (2x50 mg capsules per day). Diacerein treatment caused significant improvements in the appearance of the synovial membrane, cell morphology and density and vascularization, compared to baseline values, indicating decreased inflammation. Although this was an open study it provided objective evidence that diacerein had anti-inflammatory properties.

3. Dose-effect studies

The demonstration of an optimal dose regimen in osteoarthritis is difficult for any osteoarthritis treatment, but more especially for Symptomatic Slow Acting Drugs in osteoarthritis (SYSADOA) (Maheu, 1995). This is because the delay in the onset of efficacy will vary with the degree of severity of the disease.

One dose ranging study has been carried out in an adequate number of symptomatic patients with Kellgren grade I to III knee osteoarthritis (Pelletier et al., 2000). The study was a randomized, double-blind, parallel-groups (4 groups), placebo-controlled trial, lasting 16 weeks, carried out in Canada to determine the diacerein dose with the optimum benefit-risk ratio.

A total of 484 patients (average time from diagnosis of osteoarthritis: 7.9 years) with primary knee osteoarthritis (American College of Rheumatology (ACR) criteria), which was already symptomatic were enrolled and randomised into 4 groups receiving either