Conclusions: The intra-articular injections of autologous PRP showed a reduction of pain, symptoms and a recover articular function in patients affected by severe chondropathies of the knee. The patients ≤45 years old, males, and without osteoarthritis showed a faster clinical improvement.

Purpose: To investigate prospectively the patient-relevant outcome 7 years after total hip replacement (THR) for osteoarthritis (OA). Methods: 219 consecutive patients (120 women) with primary OA, mean age 71 (range 50–92) were assigned for THR at the Department of Orthopedics at Halmstad Central Hospital, Sweden. They were examined preoperatively, at 3, 6, 12 months, and at 4, 5 and 7 years postoperatively with the self-administered questionnaires SF-36 and WOMAC. Supplementary questions regarding postoperative complications, general co-morbidity, social circumstances and patient satisfaction were asked at the last three follow-ups. A matched reference group, 117 subjects (67 women), mean age 72 (range 52–92) without hip complaints were recruited from the community and investigated at the same times.

Results: 151/170 (89%) of the patients and 65/74 (88%) of the reference group participated at the 7 year follow-up. The best postoperative result was reported one year postoperatively. At that time the only difference between the two groups was seen in SF-36 physical function (PF), where the patients scored worse than the reference group (54 vs. 69). At the latest follow-up there was a successive decline in SF-36 PF compared to the reference group. However, patients did not report worse WOMAC function than the reference group. There was no difference in frequency of co-morbid conditions (19% vs. 31% p < 0.08) between those operated and the reference group, but those operated were in greater need of walking aid (46% vs. 8% p < 0.0001) and reported more regional pain and widespread pain (88% vs. 53% p < 0.05). However, 97% of the patients were satisfied with pain relief and 96% with improved physical function at the 7 year follow-up.

Conclusions: Total hip replacement for osteoarthritis is a successful procedure. This study shows that in an unselected cohort the patients experience the same health-related quality of life as a matched reference group 7 years after THR except for physical function where the patients score worse. This may be explained by musculoskeletal co-morbidities such as progression of generalized OA. The difference in outcome between SF-36 PF and WOMAC function may be explained by the disparity between a generic and a disease and extremity specific measurement where SF-36 PF represents the entire physical function.

Purpose: Calcitonin suppresses bone resorption, and appears to have an effect on cartilage degradation, and therefore has been speculated to be useful for treatment of osteoarthritis. However, the pharmacodynamic profile of sCT on cartilage degradation is not clear. The aim of the study was to assess the effect of bi-daily dosing with 0.8 mg of oral salmon calcitonin (sCT) given in the morning at 08:00 and pre-dinner at 17:00 with respect to reduction of both bone resorption (CTX-I) and cartilage degradation (CTX-II).

Methods: Participants were from a randomized, double-blind, placebo-controlled 14-day treatment study including postmenopausal women and men (n = 73) suffering from osteoarthritis (OA). One of the treatment arms comprised administration of 0.8 mg of oral sCT given twice daily with one dose given in the morning to fasting individuals at 08:00, and one dose given pre-dinner at 17:00 (n = 26). On treatment day 1 and day 14, blood samples were taken before drug intake, and at 10, 15, 30, 45 minutes, and 1, 2, and 4 hours for plasma sCT measurements. Urine samples were collected at baseline, at 2, 4, 6, 8, 11, and 13 hours. The absorption of calcitonin was assessed by measurement of plasma sCT concentrations, and bone resorption by the biochemical marker of urine CTX-I (C-terminal telopeptide of collagen type I). Cartilage degradation was assessed by urine CTX-II (C-terminal telopeptide of collagen type II).

Results: Dosing with oral sCT resulted in a significant increase in plasma sCT levels, which was eliminated within two hours after dosing. In alignment, urine CTX-I was suppressed over placebo with an AUC0−8hrs of −425 [%Hrs] at the 17:00 dose compared to −105 [%Hrs] in the placebo group (p = 0.003). The suppression of CTX-I was present throughout the 13 hours sampling period. For CTX-II a suppression of the AUC0−8hrs of −355 [%Hrs] was observed compared to −60 [%Hrs] in the placebo group (p < 0.007). The suppression of CTX-II was not alleviated within the 13 hour observation period. The results from the day 14 analysis were all in the same magnitude.

Conclusions: We found that an oral recombinant form of salmon calcitonin significantly suppressed both bone resorption and cartilage degradation within a short time span. These studies warrant further investigation of the potential use of oral calcitonin for treatment of osteoarthritis.

Purpose: EOA is believed to be a clinical subset of OA most often involving the hands of middle-aged women and characterised by a frequent aggressive clinical course. In EOA, pain and inflammation persist or recur for many years, in contrast with the more common nodal OA (non-EOA), in which they are usually found only at the disease onset. Despite its severity, EOA is still poorly defined, so it is debated whether or not it belongs to OA or is a separate entity. Since very few reports are available concerning the various features of EOA, the aim of our study was to analyse its clinical, radiological and immunogenetic aspects in a cohort of 109 patients observed in our unit, and compare these with a series of non-EOA patients.

Methods: A total of 162 patients, 109 with EOA and 53 with non-EOA were analysed. All patients satisfied the Altman criteria for OA of the hand. Patients showing at least two erosions in interphalangeal (IP) joints were included in EOA, while patients with erosions in metacarpophalangeal joints were excluded. In all patients (EOA and non-EOA) we evaluated the number of active joints (AJ) (swollen and painful), number of joints involved (NJI) and the radiographic score (RS) by Kallman scale. In 24 patients with EOA followed for at least two years, we evaluated the outcome for clinical and radiological aspects. Patients underwent hand X-rays at the baseline and after a two year period and assessment was done by two experienced operators. The clinical examination was also performed at the first visit and after two years. In all patients HLA typing was determined on blood samples (GenoPrepTM DNA from Blood Kit by GenoVision A.S., Norway; PCR Master Mixes).

Results: No difference was observed between EOA and non-EOA for age and disease duration. The mean number of erosions in EOA was 4.01 (±2.4). Both the number of AJ and the RS were higher in EOA (6.3±2.4 and 65.9±26.5, respectively) than in non-EOA (4.4±4.6, p = 0.02 and 32.1±19.1, p < 0.001, respectively).

In the subset of 24 patients with highest RS at baseline and more severe joint involvement, we observed a significant worsening in both radiological and clinical parameters (RS at baseline vs two years p < 0.001; NJI vs NJI2 p < 0.001; AJ vs AJ2 p < 0.012). Concerning HLA, in this subgroup of patients we observed higher frequency of the allele A2 (29.1%), A2 (45.8%), DRB1 11 (37.5%), DRB 07 (16.6%).

Conclusions: EOA clearly differs from non-EOA in many aspects, including the higher AJ and RS, so confirming its severity. We observed a more aggressive clinical course in the subgroup of patients who presented higher scores at the first visit. The association with some HLA alleles, in particular A2, A24, DRB 07 and 11, suggests a more severe subset of patients. Further studies are needed to confirm these data.