**Appendix Table F55. Minimum clinically important differences in the Western Ontario McMaster Universities Osteoarthritis Index**

| **Author, year Method; worst to best scale** | **Reference** | **Definition of minimum clinically important differences** |
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| Dougados, 2000423 Method: Anchor Worst to best: Varies WOMAC, Lequesne Functional Severity Index, Global VAS | OARSI Responder Criteria—Proposition A: This emphasizes the domain ‘pain’. A ‘high’ improvement in pain was sufficient to define a responder. However, using this set of criteria, a patient can be also considered as a responder if an improvement of ‘moderate’ magnitude is observed in two of the three domains, i.e. pain, function and patient’s global assessment.  OARSI Responder Criteria—Proposition B: This scenario applies equal importance to ‘pain’ and ‘function’, requiring a ‘high’ response of one OR the other. Alternatively, a ‘moderate’ magnitude of response could be present in two of the three domains. | If there was a 'high' improvement in pain: improvement of at least 40% was required (ranging from 40 to 60%) together with an absolute improvement of at least 20 NU (normalized units) ranging from 20 to 30.  If there was moderate improvement in pain, function, and patient's global assessment: a relative improvement ranging from 15 to 35% and an absolute improvement ranging from 10 to 20 NU. Relative change: percentage of change during the study (final minus baseline over baseline\*100); absolute change: absolute change during the study (final minus baseline on a 0-100 interval scale). |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items)  WOMAC: function scale | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =0.67 was the MCID for improvement |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC: function scale | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =1.33 was the MCID for worsening |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC global | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =0.67 was the MCID for improvement |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC global | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =1.29 was the MCID for worsening |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC: pain scale | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =0.75 was the MCID for improvement |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC: pain scale | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =1.10 was the MCID for worsening |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC: stiffness scale | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =0.51 was the MCID for worsening |
| Angst, 2001424 Method: Anchor Worst to best: 10 to 0 (for each of the 24 items) WOMAC: stiffness scale | The transition questionnaire was used to gather data from the patients about their current subjective health status in relation to the OA joint in terms of their general health. At the 3-month follow up, patients had to compare their general health status with that of 3 months earlier, i.e., with that at baseline examination, using the assessment categories “much worse,” “slightly worse,” “equal,” “slightly better,” and “much better.” | The mean score difference between the "equal" group and the "slightly better" group =0.72 was the MCID for improvement |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC:  WOMAC: stiffness scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 0.29 increase (S.D.=3.11)in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC:  WOMAC: pain scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 0.64 increase (SD=2.01) in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC:  WOMAC: function scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 0.80 decrease (S.D.=1.82) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: global | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 0.82 decrease (S.D.=1.71) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: pain scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 0.83 decrease (S.D.=1.72) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: global | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 0.96 increase (S.D=1.98) in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: stiffness scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 1.01 decrease (S.D.=1.63) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: function scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 1.03 (S.D.=1.88) increase in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: pain scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 14% increase (SD=44%) in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: function scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 17% decrease (S.D.=39%) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: global | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 18% decrease (S.D.=37%) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: pain scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 18% decrease (S.D.=37%) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: global | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 21% increase (S.D.=43%) in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: function scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 22% (S.D.=41%) increase in score (from baseline) perceived their condition as worse |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: stiffness scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 22% decrease (S.D.=35%) in score (from baseline) perceived their condition as improved |
| Angst, 2002425 Method: Anchor Worst to best: 10 to 0 WOMAC: stiffness scale | 2 concepts were used to measure changes in the patients’ health status. The first was the 2 point measure in WOMAC scores resulting in effects defined by the difference of the score between the 3 month follow up and the baseline examination6. The second was the patient’s self-assessment (at the 3 month follow up) of the global change in health status between baseline and the 3 month follow up measured by the “transitional” scale. | Patients who had more than 6%increase (S.D.=67%)in score (from baseline) perceived their condition as worse |
| Bellamy, 2002426 Method: Anchor Worst to best: 96-0 WOMAC LK3.0 (telephonic assessment) | WOMAC LK3.0 (office assessment) | Equivalence was to be inferred if the 95% confidence limits for the differences between the office and telephone scores were within +-20% of the mean office scores. There was excellent agreement between the mean office and telephone scores, with mean differences for the WOMAC LK3.0 pain, stiffness, and function, and total scores of 0.09, 0.12, 0.78, and 0.98, respectively. These differences are also well within the protocol-defined equivalence criteria of +-1.7, +-0.9, +-6.4 and +-9.1, respectively, for pain, stiffness, physical function, and total WOMAC LK 3.0 scores, and represent differences from office scores of 0.9, 2.6, 2.4, and 2.2%, respectively. |
| Link, 2003427 Method: Anchor Worst to best: 300 to 0 WOMAC | MRI | The grade IIa cartilage loss corresponded to median and IQR scores of 295 (180-430), 193(73.8-227), and 863 (180-944) on the WOMAC pain, stiffness, and function scales, respectively. |
| Link, 2003427 Method: Anchor Worst to best: 300 to 0 WOMAC | MRI | The grade IIb cartilage loss corresponded to median and IQR scores of 140 (90-190), 125(66-228.5), and 209 (81-287) on the WOMAC pain, stiffness, and function scales, respectively. |
| Link, 2003427 Method: Anchor Worst to best: 300 to 0 WOMAC | MRI | The grade III cartilage loss corresponded to median and IQR scores of 111 (41-190), 50(30-200), and 206 (115-286) on the WOMAC pain, stiffness, and function scales, respectively. |
| Link, 2003427 Method: Anchor Worst to best: 300 to 0 WOMAC | MRI | When patients had grade I cartilage abnormality corresponding median scores on WOMAC pain scale, stiffness, and function scale were: 23, 25 and 151, respectively. |
| Tubach, 2005428 Method: Anchor Worst to best: 100-0 WOMAC: function scale | At the final visit, patients’ opinions of their state was recorded by their answering ‘‘Yes’’ or ‘‘No’’ to ‘‘Taking into account all the activities you have during your daily life, your level of pain, and also your functional impairment, do you consider that your current state is satisfactory?’’. PASS was estimated by constructing a curve of cumulative percentages of patients as a function of the score of interest at the final visit among patients who considered their state satisfactory. | Patients with knee OA and in the intermediate tertile of score considered their state satisfactory if their function score was less than 33.0 mm on the WOMAC function scale |
| Tubach, 2005428 Method: Anchor Worst to best: 100-0 WOMAC: function scale | At the final visit, patients’ opinions of their state was recorded by their answering ‘‘Yes’’ or ‘‘No’’ to ‘‘Taking into account all the activities you have during your daily life, your level of pain, and also your functional impairment, do you consider that your current state is satisfactory?’’. PASS was estimated by constructing a curve of cumulative percentages of patients as a function of the score of interest at the final visit among patients who considered their state satisfactory. | Patients with knee OA and in the low tertile of score considered their state satisfactory if their function score was less than 20.4mm on the WOMAC function scale |
| Tubach, 2005428 Method: Anchor Worst to best: 100-0 WOMAC: function scale | At the final visit, patients’ opinions of their state was recorded by their answering ‘‘Yes’’ or ‘‘No’’ to ‘‘Taking into account all the activities you have during your daily life, your level of pain, and also your functional impairment, do you consider that your current state is satisfactory?’’. PASS was estimated by constructing a curve of cumulative percentages of patients as a function of the score of interest at the final visit among patients who considered their state satisfactory. | Patients with knee OA considered their state satisfactory if their function score was less than 31.0 mm on the WOMAC function scale |
| Tubach, 2005429 Method: Anchor Worst to best: 100-0 WOMAC: function scale | At the final visit, patients assessed their response to NSAID treatment on a five point Likert scale (none=no good at all, ineffective drug; poor=some effect but unsatisfactory; fair=reasonable effect but could be better; good=satisfactory effect with occasional episodes of pain or stiffness; excellent=ideal response, virtually pain free).The MCII was determined in patients whose assessment of response to treatment was measured on a five point Likert scale and who had completed the final visit. The MCII was estimated for both the absolute (final value-baseline value) and the relative ((final value-baseline value)/baseline value) changes in each patient reported outcome. It was estimated by constructing a curve of cumulative percentages of patients as a function of the change in score (for example, difference in pain score) among patients whose final evaluation of response to treatment was ‘‘good, satisfactory effect with occasional episodes of pain or stiffness’’. | Patients with knee OA and in the high tertile of the WOMAC function score considered themselves clinically improved if the decrease in function score exceeded 20.4 mm on the WOMAC function scale |
| Tubach, 2005429 Method: Anchor Worst to best: 100-0 WOMAC: function scale | At the final visit, patients assessed their response to NSAID treatment on a five point Likert scale (none=no good at all, ineffective drug; poor=some effect but unsatisfactory; fair=reasonable effect but could be better; good=satisfactory effect with occasional episodes of pain or stiffness; excellent=ideal response, virtually pain free).The MCII was determined in patients whose assessment of response to treatment was measured on a five point Likert scale and who had completed the final visit. The MCII was estimated for both the absolute (final value-baseline value) and the relative ((final value-baseline value)/baseline value) changes in each patient reported outcome. It was estimated by constructing a curve of cumulative percentages of patients as a function of the change in score (for example, difference in pain score) among patients whose final evaluation of response to treatment was ‘‘good, satisfactory effect with occasional episodes of pain or stiffness’’. | Patients with knee OA and in the intermediate tertile of the WOMAC function score considered themselves clinically improved if the decrease in function score exceeded 11.8 mm on the WOMAC function scale |
| Tubach, 2005429 Method: Anchor Worst to best: 100-0 WOMAC: function scale | At the final visit, patients assessed their response to NSAID treatment on a five point Likert scale (none=no good at all, ineffective drug; poor=some effect but unsatisfactory; fair=reasonable effect but could be better; good=satisfactory effect with occasional episodes of pain or stiffness; excellent=ideal response, virtually pain free).The MCII was determined in patients whose assessment of response to treatment was measured on a five point Likert scale and who had completed the final visit. The MCII was estimated for both the absolute (final value-baseline value) and the relative ((final value-baseline value)/baseline value) changes in each patient reported outcome. It was estimated by constructing a curve of cumulative percentages of patients as a function of the change in score (for example, difference in pain score) among patients whose final evaluation of response to treatment was ‘‘good, satisfactory effect with occasional episodes of pain or stiffness’’. | Patients with knee OA and in the low tertile of the WOMAC function score considered themselves clinically improved if the decrease in function score exceeded 5.3 mm on the WOMAC function scale |
| Tubach, 2005429 Method: Anchor  Worst to best: 100-0 WOMAC: function scale | At the final visit, patients assessed their response to NSAID treatment on a five point Likert scale (none=no good at all, ineffective drug; poor=some effect but unsatisfactory; fair=reasonable effect but could be better; good=satisfactory effect with occasional episodes of pain or stiffness; excellent=ideal response, virtually pain free).The MCII was determined in patients whose assessment of response to treatment was measured on a five point Likert scale and who had completed the final visit. The MCII was estimated for both the absolute (final value-baseline value) and the relative ((final value-baseline value)/baseline value) changes in each patient reported outcome. It was estimated by constructing a curve of cumulative percentages of patients as a function of the change in score (for example, difference in pain score) among patients whose final evaluation of response to treatment was ‘‘good, satisfactory effect with occasional episodes of pain or stiffness’’. | Patients with knee OA considered themselves clinically improved if the decrease in function score exceeded 9.1 mm on the WOMAC function scale |
| Tubach, 2005430 Method: Anchor Worst to best: 100-0 WOMAC: function subscale | (1) “What is the level of pain above which you experience difficulties?” (This could be considered close to the external anchor for the PASS.) (2) “What is the level of pain above which you would consider taking a pain killer drug?” (This could be considered close to the external anchor for the LDAS.) | The minimum clinically important improvement in the high tertile of score is -20(absolute change) |
| Tubach, 2005430 Method: Anchor Worst to best: 100-0 WOMAC: function subscale | (1) “What is the level of pain above which you experience difficulties?” (This could be considered close to the external anchor for the PASS.) (2) “What is the level of pain above which you would consider taking a pain killer drug?” (This could be considered close to the external anchor for the LDAS.) | The minimal clinically important improvement in the intermediate tertile of score is -12 (absolute change) |
| Tubach, 2005430 Method: Anchor Worst to best: 100-0 WOMAC: function subscale | (1) “What is the level of pain above which you experience difficulties?” (This could be considered close to the external anchor for the PASS.) (2) “What is the level of pain above which you would consider taking a pain killer drug?” (This could be considered close to the external anchor for the LDAS.) | The minimum clinically important improvement in the low tertile of score is -5 (absolute change) |
| Weigl, 2006431 Method: Anchor Worst to best: Varies WOMAC; Transition scale (that investigates the current state of health of the OA joint at the 6 months follow-up compared to its state 6 months earlier(baseline examination) | The transition scale investigates the current state of health of the OA joint at the 6-month follow-up compared to its state 6 months earlier (at baseline examination). | Three different definitions of responder: 1) For the WOMAC global score, a percentage change (100\*(change of score/baseline score)) greater or equal to 18% represents an MCID in improvement; 2) patients who reported a slightly or a much better health status on the transition scale were classified as responders; 3) responders had to show an MCID in improvement on the WOMAC global score and report a health improvement on the transition scale |
| Stratford, 2007432 Method: Anchor  Worst to best: 4-0 for each of the 5 items WOMAC LK 3.1 | The five pain items of WOMAC that were analyzed were: (1) walking on flat ground; (2) going up or down stairs; (3) at night while in bed; (4) sitting or lying; and (5) standing upright. | 90% of stable patients will display random fluctuations equal to or less than 3.94 when assessed on multiple occasions |
| Tanner, 2007349 Method: Anchor  Worst to best: 100 to 0 WOMAC | A questionnaire of 111 items was developed by combining 222 patient-directed questions from the 11 knee-specific quality-of-life instruments. Patients were asked to rate the importance of the described symptom or disability using a 6-point Likert scale. The Tegner Activity Scale was administered as a separate tool to determine the activity level of the participating patients at the time the study questionnaire was administered. A patient’s activity score from 0 to 10 was assigned, with corresponding definitions ranging from “on sick leave/disability” to “participation in competitive sports such as soccer at a national or international elite level.” | 23/24 (96%) of the WOMAC questions had a mean importance ranking of at least 3 (score on a Likert scale of 0 to 5, with 0 being not experienced and 5 being experienced and very important) |
| Tanner, 2007349 Method: Anchor Worst to best: 100 to 0 WOMAC | A questionnaire of 111 items was developed by combining 222 patient-directed questions from the 11 knee-specific quality-of-life instruments. Patients were asked to rate the importance of the described symptom or disability using a 6-point Likert scale. The Tegner Activity Scale was administered as a separate tool to determine the activity level of the participating patients at the time the study questionnaire was administered. A patient’s activity score from 0 to 10 was assigned, with corresponding definitions ranging from “on sick leave/disability” to “participation in competitive sports such as soccer at a national or international elite level.” | 7 questions had a top-20 FIP scores (FIP=frequency\*mean importance; the greater the FIP, the more important a symptom or disability is to patients. A high FIP indicates that a symptom or disability is both frequently experienced and most important to patients) |
| Tanner, 2007349 Method: Anchor Worst to best: 100 to 0 WOMAC | A questionnaire of 111 items was developed by combining 222 patient-directed questions from the 11 knee-specific quality-of-life instruments. Patients were asked to rate the importance of the described symptom or disability using a 6-point Likert scale. The Tegner Activity Scale was administered as a separate tool to determine the activity level of the participating patients at the time the study questionnaire was administered. A patient’s activity score from 0 to 10 was assigned, with corresponding definitions ranging from “on sick leave/disability” to “participation in competitive sports such as soccer at a national or international elite level.” | At least 51% of the patients with mild to moderate OA endorsed 23/24 (96%) of the WOMAC questions |
| Tanner, 2007349 Method: Anchor Worst to best: 100 to 0 WOMAC | A questionnaire of 111 items was developed by combining 222 patient-directed questions from the 11 knee-specific quality-of-life instruments. Patients were asked to rate the importance of the described symptom or disability using a 6-point Likert scale. The Tegner Activity Scale was administered as a separate tool to determine the activity level of the participating patients at the time the study questionnaire was administered. A patient’s activity score from 0 to 10 was assigned, with corresponding definitions ranging from “on sick leave/disability” to “participation in competitive sports such as soccer at a national or international elite level.” | Only 2/24 questions had a mean importance ranking of 1 or less |
| Bieleman, 2009367 Method: Anchor  Worst to best: 68-0 WOMAC (Dutch versions)function scale | Functional Capacity Evaluation (FCE) | The cut-off point for the WOMAC scale the cut-off point was >=21 where subjects had work limitations that corresponded to the physical work limitations on the FCE scale |
| White, 2010433 Method: Anchor Worst to best:  WOMAC: physical function | The definitions of MCII were that they were anchored to patient-based indicators of improvement and defined meaningful improvement relative to baseline WOMAC physical function scores. The definitions of MCII 26% and MCII Tertile were estimated in a group of people with knee pain reporting a “good, satisfactory effect with occasional episodes of pain or stiffness” following a 4-week course of nonsteroid anti-inflammatory drug (NSAID). The MCII 17% definition was from a group of people with knee OA who underwent 3 to 4 weeks of inpatient rehabilitation. | 3 definitions of MCII (Minimum Clinically Important Improvement) for WOMAC physical function: MCII 26% and MCII 17% defines meaningful improvement as a 26% and 17% decrease in WOMAC physical function (final value minus baseline value/baseline value), respectively, with a minimum absolute decrease of 2 out of 68. MCII Tertile defines meaningful improvement as absolute values (final value minus baseline value) dependent on baseline WOMAC physical function scores. Those with a decrease of 3.6, 8.0, and 13.9 out of 68 were considered to reach meaningful improvement within low, medium, and high baseline tertile categories, respectively. |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: pain subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC pain score of 37.58(19.71) was equivalent to patient reporting “A great deal better". |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: function subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC function score of 34.58 (19.33) was equivalent to patient reporting “A great deal better". |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: stiffness subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC stiffness score of 34.74(28.38) was equivalent to patient reporting “A great deal better". |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: pain subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC pain score of 22.87(18.13) was equivalent to patient reporting "somewhat better". This was considered the MCID (minimal clinically important difference. |
| Escobar, 2007434 Method: Anchor  Worst to best: 100 to 0 WOMAC: function subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC function score of 19.01(17.48) was equivalent to patient reporting "somewhat better". This was considered the MCID (minimum clinically important difference. |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: stiffness subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC stiffness score of 14.53(26.50) was equivalent to patient reporting "somewhat better". This was considered the MCID (minimal clinically important difference. |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: pain subscale | Patients had to answer a question about improvement in their knee at 6 months and 2 years after intervention. The possible responses were “a great deal better”, “somewhat better”, “equal”, “somewhat worse”, and “a great deal worse”. | At 6 months: Mean change in WOMAC pain score of 12.10(19.01) was equivalent to patient reporting "equal". |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: function subscale | All patients had to answer a question about improvement in their knee at 6 months and 2 years after the intervention. The possible responses were "a great deal better", "somewhat better", "equal", "somewhat worse", and "a great deal worse". | At 6 months: Mean change in WOMAC function score of 9.46(16.36) was equivalent to patient reporting "equal". |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: stiffness subscale | All patients had to answer a question about improvement in their knee at 6 months and 2 years after the intervention. The possible responses were "a great deal better", "somewhat better", "equal", "somewhat worse", and "a great deal worse". | At 6 months: Mean change in WOMAC stiffness score of 7.42(25.77) was equivalent to patient reporting "equal". |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: pain subscale | All patients had to answer a question about improvement in their knee at 6 months and 2 years after the intervention. The possible responses were "a great deal better", "somewhat better", "equal", "somewhat worse", and "a great deal worse". | At 6 months: Mean change in WOMAC pain score of 7.71(22.07) was equivalent to patient reporting "worse" |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: function subscale | All patients had to answer a question about improvement in their knee at 6 months and 2 years after the intervention. The possible responses were "a great deal better", "somewhat better", "equal", "somewhat worse", and "a great deal worse". | At 6 months: Mean change in WOMAC function score of 0.27(23.38) was equivalent to patient reporting "worse" |
| Escobar, 2007434 Method: Anchor Worst to best: 100 to 0 WOMAC: stiffness subscale | All patients had to answer a question about improvement in their knee at 6 months and 2 years after the intervention. The possible responses were "a great deal better", "somewhat better", "equal", "somewhat worse", and "a great deal worse". | At 6 months: Mean change in WOMAC stiffness score of -3.29(32.50) was equivalent to patient reporting "worse" |
| Quintana, 2006339 Method: Anchor Worst to best: 100 to 0 WOMAC: pain subscale | Six months after the intervention, patientswere sent another letter with the questionnaires and additionalquestions on the clinical aspects of their disease and satisfactionwith the intervention. The satisfaction question was dichotomizedas being satisfied or not. At this time, patients answered atransitional question about their joint improvement after theintervention. The possible responses included "a great dealbetter," "somewhat better," "equal," "somewhat worse," or "agreat deal worse." | The minimum clinically importance for pain subscale of WOMAC was at 22.60. |
| Quintana, 2006339 Method: Anchor  Worst to best: 100 to 0 WOMAC: functional limitation subscale | Six months after the intervention, patientswere sent another letter with the questionnaires and additionalquestions on the clinical aspects of their disease and satisfactionwith the intervention. The satisfaction question was dichotomizedas being satisfied or not. At this time, patients answered atransitional question about their joint improvement after theintervention. The possible responses included "a great dealbetter," "somewhat better," "equal," "somewhat worse," or "agreat deal worse." | The minimum clinically importance for functional limitation subscale of WOMAC was at 17.67. |
| Quintana, 2006339 Method: Anchor Worst to best: 100 to 0 WOMAC: stiffness subscale | Six months after the intervention, patientswere sent another letter with the questionnaires and additionalquestions on the clinical aspects of their disease and satisfactionwith the intervention. The satisfaction question was dichotomizedas being satisfied or not. At this time, patients answered atransitional question about their joint improvement after theintervention. The possible responses included "a great dealbetter," "somewhat better," "equal," "somewhat worse," or "agreat deal worse." | The minimum clinically importance for stiffness subscale of WOMAC was at 12.94. |
| Ornetti, 2011410 Method: Anchor Worst to best: 100 to 0 WOMAC: function subscale | All patients had to assess their current global state (global PASS) by answering 'Yes' or 'No' in answer to the question 'Taking into account all the activities you have during your daily life, your level of pain, and also your functional impairment, do you consider that your current state is satisfactory?'. | Patients considered their global state as satisfactory if the WOMAC function was >28.06 (95% CI: 25.74 to 30.38).Global PASS is defined as the value of measurement beyond which patients consider their global state as satisfactory. |
| Ornetti, 2011410 Method: Anchor  Worst to best: 100 to 0 WOMAC: function subscale | PASS for functional state :The PASS of each function scale was defined as the 75th centile of the absolute score among patients who considered their final state as satisfactory | Patients considered their functional state as satisfactory if the WOMAC function was >28.40 (95% CI: 26.03 to 30.78). Function PASS is defined as the value of measurement beyond which patients consider their functional state as satisfactory. |
| Ornetti, 2011410 Method: Anchor  Worst to best: 100 to 0 WOMAC: function subscale | All patients had to assess their degree of improvement of global state (global MCII); on a three-point Likert scale (worsened function, no change, improved function). Among patients who improved, the degree of improvement was scored on a four-point Likert scale (poor, fair, good, excellent) | Patients considered their global state as improved for a change of WOMAC function scale >=17.13 (95% CI: -20.07 to -14.19).Global MCII is defined as the smallest change in global state that signifies an important improvement in a patient's symptoms. |
| Ornetti, 2011410 Method: Anchor Worst to best: 100 to 0 WOMAC: function subscale | MCII for functional state: The MCII of each function scale was defined as the 75th centile of the absolute change in score among patients whose final evaluation of response to NSAID was improved (improvement good or excellent). | Patients considered their functional state as improved for a change of WOMAC function scale >=17.02 (95% CI: -20.15 to -13.90). Functional MCII is defined as the smallest change in functional state that signifies an important improvement in a patient's symptoms. |