**Appendix A: Identification and prioritization of important OA treatment attributes**

The identification and prioritization of important OA treatment attributes was conducted following a 4-stage process.

1. *Stage 1*: two scoping reviews (i.e. a review of preference studies in OA, and a review of outcomes in RCTs of OA treatment) to generate an initial list of OA treatment outcomes
2. *Stage 2:* interviews with OA patients (n=20) to identify any missing outcomes and an expert consultation (n=11) to review and validate initial outcomes

|  |  |
| --- | --- |
| **Treatment outcomes from literature reviews** | **Additional treatment outcomes from patient individual interviews and expert consultation** |
| *Outcomes:*   * Improvement in global pain * Improvement in stiffness * Improvement in overall energy and well being * Improvement in muscle strength * Improving in walking * Improvement in daily activities other than walking * Retardation of joint degradation / improvement in joint space narrowing   *Side-effects:*   * Risk of mild to moderate side effects * Risk of serious side effects * Deaths   *Process / costs:*   * Cost to you * Patient's degree of acceptance of the treatment * Dose frequency / treatment schedule (when needed, daily) * Mode of administration * Speed of action / time to benefit * Prescription (with or without prescription) * Chance of benefit * Duration of benefit * Number of days absent from work / ability to work * Requirement for hospital admission and number of hospital visits | * Improvement of sexual activity * Improvement in sleep quality * Ability to have sports activities (e.g. trekking, golf, running, cycling) * Lack/retardation of surgical procedure * Ability to work * Risk of hospitalisation * Less consumption of analgesic medication |

1. *Stage 3:* a patient survey (n=56) with OA patients to rank the most important outcomes

Based on the 27 attributes identified in stages 1 and 2, a patient survey was conducted among OA to ask them to identify the most important ones. The survey questionnaire is provided below:

***Selecting the most important treatment characteristics for OA***

*With this file, you will have 2 different actions to make.*

1. *First, please use the* ***column A*** *in table below to identify the* ***10 characteristics*** *that you consider as the most relevant regarding OA treatment.* ***Put a cross*** *in the square corresponding to the characteristics you want to select; Please read first all of the treatment characteristics.*
2. *Then, please use the* ***column B*** *to attribute* ***a score*** *of importance to the* ***5 most important*** *of the characteristics identified in column A ; from the most important attribute (1) to the less important one (5).*

|  |  |  |
| --- | --- | --- |
| ***Treatment Characteristics*** | ***A***  ***Tick the 10 most important characteristics*** | ***B***  ***Rank the attributes from the most important one (1) to the less important (5)*** |
| *Improvement in global pain* |  |  |
| *Improvement in stiffness* |  |  |
| *Improvement in overall energy and well being* |  |  |
| *Improvement in muscle strength* |  |  |
| *Improving in walking* |  |  |
| *Improvement in domestic activities other than walking (e.g. cooking, cleaning, gardening)* |  |  |
| *Improvement of sexual activity* |  |  |
| *Improvement in sleep quality* |  |  |
| *Improvement in social participation (e.g. going to social events, museums)* |  |  |
| *Improvement in ability to have sports activities (e.g. trekking, golf, running, cycling)* |  |  |
| *Retardation of joint degradation* |  |  |
| *Lack/retardation of surgical procedure* |  |  |
| *Improvement in ability to work* |  |  |
| *Risk of mild to moderate side effects* |  |  |
| *Risk of serious side effects* |  |  |
| *Risk of hospitalisation* |  |  |
| *Risk of deaths* |  |  |
| *Cost to you* |  |  |
| *Degree of acceptance of the treatment* |  |  |
| *Treatment schedule (when needed, daily)* |  |  |
| *Mode and frequency of administration* |  |  |
| *Time to benefit* |  |  |
| *Prescription (with or without)* |  |  |
| *Chance of benefit* |  |  |
| *Duration of benefit* |  |  |
| *Requirement for hospital admission and number of hospital visits* |  |  |

A total of 56 patients completed the survey (from Belgium, Italy, Portugal, Spain, the Netherlands and the United Kingdom). The mean age was 69.0 years, 73% were female, and 25% had hip OA, 55% knee OA and 20% had both hip and knee OA.

The percentage of the 27 attributes being in the top 10 most important is summarized in the table below

***Table: % in top 10 most important***

***Table: % in top 5 most important***

1. *Stage 4*: an expert meeting (n=17) was then conducted to identify the most important OA treatment outcomes based on the survey results, and to select levels for each chosen outcome (see Table 1 Manuscript for list of attributes and levels)