**Appendix**

**PUBMED SEARCH STRATEGY**

*This search identified 1076 articles*

| Supplementary Table 1. PUBMED Search strategy* | Search Description |
|-----------------------------------------------|--------------------|
| 1     Hyaluronic Acid                        | Search for Hyaluronic acid |
| 2     Hylan                                |                     |
| 3     Hyaluronan                           |                     |
| 4     Hyaluronate                          |                     |
| 5     Viscosupplementation                  |                     |
| 6     1 or 2 or 3 or 4 or 5                 |                     |
| 7     Osteoarthritis*                      | Search for osteoarthritis of the knee |
| 8     knee                                 |                     |
| 9     7 and 8                              |                     |
| 10    editorial                            | Exclusions filters  |
| 11    letter                               |                     |
| 12    news                                 |                     |
| 13    case reports                         |                     |
| 14    in vitro                             |                     |
| 15    animal                               |                     |
| 16    or/10-15                             |                     |
| 17    6 and 9                              |                     |
| 18    17 not 16                            |                     |

*This search identified 1076 articles*
## Supplementary Table 2. Search Equation*

|   | Search Equation |
|---|-----------------|
| 1 | Hyaluronic Acid/ |
| 2 | Hylan.af. |
| 3 | Hyaluronan.af. |
| 4 | Hyaluronate.af. |
| 5 | Viscosupplementation.af. |
| 6 | or/1-5 |
| 7 | Osteoarthrit$.af. |
| 8 | Knee.af. |
| 9 | 7 and 8 |
| 10 | abstract.pt. |
| 11 | comment.pt. |
| 12 | editorial.pt. |
| 13 | letter.pt. |
| 14 | news.pt. |
| 15 | review.pt. |
| 16 | review-literature.pt. |
| 17 | review-academic.pt. |
| 18 | review-multicase.pt. |
| 19 | technical-report.pt. |
| 20 | case report.pt. |
| 21 | in vitro/ |
| 22 | animal/ |
| 23 | or/10-24 |
| 24 | random$.af. |
| 25 | randomized controlled trial.pt. |
| 26 | controlled clinical trial.pt. |
| 27 | trial.ab,ti |
| 28 | (phase III or phase 3).ab, ti. |
| 29 | or/17-20 |
| 30 | case-control studies/ |
| 31 | cohort studies/ |
| 32 | case control.ab,ti. |
| 33 | (cohort adj (study or studies)).ab,ti. |
| 34 | cohort analy$.ab,ti. |
| 35 | (follow up adj (study or studies)).ab,ti. |
| 36 | longitudinal.ab,ti. |
| 37 | retrospective$.ab,ti. |
| 38 | prospective$.ab,ti. |
| 39 | (observ$ adj3 (study or studies)).ab,ti. |
| 40 | 29 or 39 |
| 41 | 6 and 9 and 40 |
| 42 | 41 not 23 |

*This search identified 351 articles
### Study inclusion criteria

#### Supplementary Table 3. Selection criteria

| Population                          | Patients, in any setting, with osteoarthritis of the knee |
|-------------------------------------|----------------------------------------------------------|
| Intervention                        | Intra-articular injection of a specific hyaluronic acid (any product) for viscosupplementation (monotherapy, or studies in which the specific effects of “IAHA alone” can be determined) |
| Comparator                          | • Placebo  
• No treatment  
• NSAIDs, and other conventional therapies  
• Intra-articular injection of corticosteroids  
• Another IAHA |
| Outcomes                            | Efficacy  
• Disease severity scales  
• Pain  
• Joint mobility  
• Functioning  
• Frequency of treatment injection  
• Decrease use of opioid and non-opioid analgesics  
• Delay to arthroplasty |
|                                     | Safety  
• Side effects  
• Adverse events  
• Injection site reaction |
| Study designs                       | • Randomized controlled trials  
• Prospective studies  
• Retrospective cohort studies |
