Supplementary file 1. Ultrasound findings in the hip, scoring systems and definitions used in the assessment.

| Ultrasound finding           | Scoring system               | Definition                        |
|------------------------------|------------------------------|-----------------------------------|
|                              | Binary, ordinal (semi-       |                                   |
|                              | quantitatively) or numerical |                                   |
| Joint recess profile         | (ordinal)                    | The course of the anterior joint  |
|                              | Concave                      | recess along the anterior surface |
|                              | Straight                     | of the femoral neck               |
|                              | Convex                       |                                   |
| Bone-capsule distance (BCD)  | (numerical)                  | Distance from the outer femoral   |
| in the anterior joint recess | Number in mm.                | cortex to the outer edge of the   |
|                              |                              | capsule. A second measure was     |
|                              |                              | made from the femoral cortex to   |
|                              |                              | the inside edge of the capsule    |
| Overall joint                | (binary)                     | Overall assessment of all the     |
| effusion/synovitis           | Present / absent             | ultrasound findings related to    |
|                              |                              | effusion / synovitis              |
| Femoral osteophytes          | (ordinal)                    | Classified according to           |
|                              | None, mild, moderate or      | OMERACT guidelines                |
|                              | severe                       |                                   |
| Acetabular osteophytes       | (ordinal)                    | Classified according to           |
|                              | None, mild, moderate or      | OMERACT guidelines                |
|                              | severe                       |                                   |
| Femoral head deformation     | (ordinal)                    | Normal (round), mild (slightly    |
|                              | None, mild, moderate or      | flattened), moderate (very        |
|                              | severe                       | flattened), severe (no obvious    |
|                              |                              | contour or the femoral head can   |
| 77                           | ( 1, 1)                      | be defined)                       |
| Femoral cartilage changes    | (ordinal)                    | Classified according to           |
|                              | None, mild, moderate or      | OMERACT guidelines                |
| D 1 (1 4:1                   | severe                       | A                                 |
| Femoral cartilage thickness  | (numerical)                  | Anterior surface of femoral head, |
| * 1                          | Number in mm.                | as close to labrum as possible.   |
| Labrum changes               | (ordinal)                    | Normal (homogeneous               |
|                              | None, mild, moderate or      | echogenicity), mild               |
|                              | severe                       | (heterogeneous echogenicity and   |
|                              |                              | labrum poorly defined), moderate  |
|                              |                              | (definite pathology) and severe   |
|                              |                              | (pathology or degeneration to a   |
|                              |                              | degree were labrum was not        |
| H' 1 2'                      |                              | defined)                          |
| Iliopsoas bursitis           | (binary) Present / absent    | Fluid associated with the         |
|                              | rresent / absent             | iliopsoas tendon ventral to the   |
| T. 1 . 4 . 1 '4'             | ( 1: 1)                      | hip joint                         |
| Trochanter bursitis          | (ordinal) Present / absent   | Fluid in any bursa in the         |
|                              | 1 ICSCIII / AUSCIII          | trochanter region                 |

| OA grading | (ordinal)               | The degree of hip OA based on |
|------------|-------------------------|-------------------------------|
|            | None, mild, moderate or | the ultrasound findings       |
|            | severe                  |                               |