

MR image acquisition:

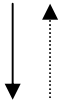
- ✓ Double oblique coronal SPGR sequence with water excitation

**QC of MR image acquisition:**

- ✓ Anatomical coverage
- ✓ Orientation
- ✓ Fat-suppression
- ✓ Motion
- ✓ Other artefacts

**MR image segmentation:
(Trained Readers)**

- ✓ Track AC and tAB
- ✓ Segment MT and cMF

**QC of segmentation:
(Expert Reader)**

- ✓ Contours correctly placed
- ✓ First and last slice in each cartilage correctly placed
- ✓ Osteophytes eliminated
- ✓ Contact zone correctly defined

**QC of segmentation:
(Automated)**

- ✓ Contour labels correctly assigned
- ✓ Cartilage label correctly assigned (checked by distance to fibula)
- ✓ Same number of slices in baseline and follow up data set

**Computation of global and
regional cartilage morphology:**

VC, tAB, AC, cAB, dAB,
ThCtAB, ThCcaB, regional ThCtAB