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Knee Cartilage Grading Protocol

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The attached document shows the Gross Morphological Assessment Sheet we use to score and grade knee cartilage.

Gross Morphological
Assessment Sheet .jpg

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Gross Morphological Assessment Sheet

- Macroscopic scores (1-4) are assigned to cartilage surfaces during tissue harvesting and recorded on the Gross Morphological Assessment Sheet (See Description). These scores use a modified Outerbridge classification grading system.

Score of 1 = normal, intact surface
Score of 2 = minimum fibrillation
Score of 3 = overt fibrillation, fissuring
Score of 4 = erosion

1.1 Each grid space on the assessment sheet is assigned a score, as seen above 1-4, for cartilage on the Patella, Trochlea, Medial Femoral Condyle, Lateral Femoral Condyle, Medial Tibial Plateau, and Lateral Tibial Plateau.

2 The individual grid scores for each knee are added together (left and right knees are added up separately). Each sum will range from 48 to 192.

Assessing the Total Knee Cartilage Grade

3 The total score for each knee will determine the grade category with normal (Grades 0 or I) or OA (Grades 3 or 4).

Knee Cartilage Grades 0-IV:

Grade 0 = normal (total score of 48)

Grade I = minimal change (total score 49-72)

Grade II = mild change (total score 73-96)

Grade III = moderate change (total score 97-120)

Grade IV = severe change (total score 121+)