

Table 1. The modified Osteoarthritis Research Society International (OARSI) semi-quantitative scoring system for osteoarthritic damage

Parameter	Grade	Osteoarthritic damage
Articular Cartilage Structure	0	Normal
	0.5	Loss of Safranin-O without structural changes
	1	Small fibrillations without loss of cartilage
	2	Vertical clefts down to the layer immediately below the superficial layer and some loss of surface lamina
	3	Vertical clefts/erosion to the calcified cartilage extending to <25% of the articular surface
	4	Vertical clefts/erosion to the calcified cartilage extending to 25-50% of the articular surface
	5	Vertical clefts/erosion to the calcified cartilage extending to 50-75% of the articular surface
Proteoglycan Content (staining by toluidine blue)	6	Vertical clefts/erosion to the calcified cartilage extending >75% of the articular surface
	0	Uniform throughout articular cartilage
	1	Decreased in superficial zone only and for <half the length of the condyle or plateau
	2	Decreased in superficial zone for half the length or greater of the condyle or plateau
	3	Decreased in superficial and middle zones for <half the length of the condyle or plateau
	4	Decreased in superficial and middle zones for half the length or greater of the condyle or plateau
Cellularity	5	Decreased in all 3 zones for <half the length of the condyle or plateau
	6	Decreased in all 3 zones for half the length or greater of the condyle or plateau
	0	Normal (1/2 cells/lacuna)
	1	Diffuse/slight hypercellularity
Tidemark Integrity	2	Regions of hypercellularity and clustering
	3	Diffuse hypocellularity
	0	Intact/single tidemark
Osteophyte	1	Crossed by vessels/duplication of tidemark
	0	No osteophyte present
	1	Small osteophyte
	2	Medium-sized osteophyte
	3	Large osteophyte