**Supplementary Materials**

Supplement to “CSF1 Receptor Inhibition of Tenosynovial Giant Cell TumorUsing Novel Disease-Specific MRI Measures of Tumor Burden”

Details of the Tissue Damage Scoring (TDS) scales used in the study are listed below. Each region was scored separately, with regional scores summed to derive total score.

**Supplementary Materials**

**Table 1.**  Erosion Score Locations

| **Joint** | **Region** | **Score and Definition** |
| --- | --- | --- |
| Knee | Femur Lateral Anterior Femur Lateral Central Femur Lateral Posterior  Femur Medial Anterior Femur Medial Central Femur Medial Posterior  Tibia Lateral Anterior Tibia Lateral Central Tibia Lateral Posterior  Tibia Medial Anterior Tibia Medial Central Tibia Medial Posterior  Patella Lateral Patella Medial | 1. No erosion 2. 1–10% erosion of articular bone 3. 11–20% erosion of articular bone 4. 21–30% erosion of articular bone 5. 31–40% erosion of articular bone 6. 41–50% erosion of articular bone 7. 51–60% erosion of articular bone 8. 61–70% erosion of articular bone 9. 71–80% erosion of articular bone 10. 81–90% erosion of articular bone 11. 91–100% erosion of articular bone |
| Hip | Acetabulum Femur |
| Ankle | Tibia Talus Fibula |
| Foot | Calcaneus Talus Navicular Cuneiforms 1-3 Cuboid Metatarsals 1-5 |
| Elbow | Humerus Ulna Radius |
| Wrist | Radius Ulna Scaphoid Lunate Triqutrum Pisiform Hamate Capitate Trapezoid Trapezium Proximal Metacarpals 1-5 |

**Table 2.** Cartilage Score Locations

| **Joint** | **Region** | **Score and Definition** |
| --- | --- | --- |
| Knee | Femur Lateral Anterior Femur Lateral Central Femur Lateral Posterior  Femur Medial Anterior Femur Medial Central Femur Medial Posterior  Tibia Lateral Anterior Tibia Lateral Central Tibia Lateral Posterior  Tibia Medial Anterior Tibia Medial Central Tibia Medial Posterior  Patella Lateral Patella Medial | 0.0 No cartilage loss  1.0 Normal thickness, increased T2 signal  1.5 Normal thickness, further increase in T2 signal  1.75 Decrease in size of partial-thickness focal defect <1 cm wide  2.00 Partial-thickness focal defect <1 cm wide  2.25 Increase in size of partial-thickness focal defect <1 cm wide  2.50 Full-thickness focal defect <1 cm  2.75 Increase in size of full-thickness focal defect <1 cm, or decrease in grade 3.00 lesion but still > grade 2.5  3.00 Multiple areas of partial-thickness defects intermixed with areas of normal thickness, or a grade 2.00 defect wider than 1 cm but <75% of the region  3.50 Increase in grade 3.00 or decrease in grade 4.00 lesion  4.00 Diffuse partial-thickness loss >75% of the region  4.25 Increase in grade 4.00 lesion  4.75 Decrease in grade 5.00 lesion  5.00 Multiple areas of full-thickness (grade 2.5), or a grade 2.50 lesion wider than 1 cm but <75% of the region  5.50 Increase in grade 5.00 lesion, or decrease in grade 6.00 lesion  6.00 Diffuse full-thickness loss >75% of the region  6.50 Increase in grade 6.00 lesion |
| Hip | Acetabulum Femur |
| Ankle | Tibia Talus Fibula |
| Foot | Calcaneus Talus Navicular Cuneiforms 1-3 Cuboid Metatarsals 1-5 |
| Elbow | Humerus Ulna Radius |
| Wrist | Radius Ulna Scaphoid Lunate Triqutrum Pisiform Hamate Capitate Trapezoid Trapezium Proximal Metacarpals 1-5 |

**Table 3.** BoneMarrow Edema/Infiltration **(**BME) Score Locations

| **Joint** | **Region** | **Score and Definition** |
| --- | --- | --- |
| Knee | Femur Lateral Anterior Femur Lateral Central Femur Lateral Posterior  Femur Medial Anterior Femur Medial Central Femur Medial Posterior  Tibia Lateral Anterior Tibia Lateral Central Tibia Lateral Posterior  Tibia Medial Anterior Tibia Medial Central Tibia Medial Posterior  Tibia Subspinus  Patella Lateral Patella Medial | 1. None 2. Involving <25% of the region 3. Involving 25–50% of the region 4. Involving >50% of the region |
| Hip | Acetabulum Femur |
| Ankle | Tibia Talus Fibula |
| Foot | Calcaneus Talus Navicular Cuneiforms 1-3 Cuboid Metatarsals 1-5 |
| Elbow | Humerus Ulna Radius |
| Wrist | Radius Ulna Scaphoid Lunate Triqutrum Pisiform Hamate Capitate Trapezoid Trapezium Proximal Metacarpals 1-5 |

**Table 4.** Knee Locations and Scores

| **Joint** | **Region** | **Meniscus Score and Definition** | **Effusion Score and Definition** | **Popliteal Cysts and Bursitis Score\*** |
| --- | --- | --- | --- | --- |
| Medial Knee | Medial Anterior Horn Medial Body Medial Posterior Horn | 1. Normal 2. Minor radial tear or parrot-beak tear 3. Nondisplaced tear or prior surgical repair 4. Displaced tear or partial resection 5. Complete maceration/destruction or complete resection | 1. No effusion 2. 1–33% of estimated volume of maximally distended synovial cavity 3. 34–66% of estimated volume of maximally distended synovial cavity 4. 67–100% of estimated volume of maximally distended synovial cavity | 1. Normal 2. Mild 3. Moderate 4. Severe |
| Lateral Knee | Lateral Anterior Horn Lateral Body Lateral Posterior Horn |

\*Popliteal, semimembranosus, meniscal, tibiofibular, anserine, infrapatellar, prepatellar