**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 AnteriorFemur Lateral CentralFemur Lateral PosteriorFemur Medial AnteriorFemur Medial CentralFemur Medial PosteriorTibia Lateral AnteriorTibia Lateral CentralTibia Lateral PosteriorTibia Medial AnteriorTibia Medial CentralTibia Medial PosteriorPatella LateralPatella 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 | AcetabulumFemur |
| Ankle | TibiaTalusFibula |
| Foot | CalcaneusTalusNavicularCuneiforms 1-3CuboidMetatarsals 1-5 |
| Elbow | HumerusUlnaRadius |
| Wrist | RadiusUlnaScaphoidLunateTriqutrumPisiformHamateCapitateTrapezoidTrapeziumProximal Metacarpals 1-5 |

**Table 2.** Cartilage Score Locations

| **Joint** | **Region** | **Score and Definition** |
| --- | --- | --- |
| Knee | Femur Lateral AnteriorFemur Lateral CentralFemur Lateral PosteriorFemur Medial AnteriorFemur Medial CentralFemur Medial PosteriorTibia Lateral AnteriorTibia Lateral CentralTibia Lateral PosteriorTibia Medial AnteriorTibia Medial CentralTibia Medial PosteriorPatella LateralPatella Medial | 0.0 No cartilage loss1.0 Normal thickness, increased T2 signal1.5 Normal thickness, further increase in T2 signal1.75 Decrease in size of partial-thickness focal defect <1 cm wide2.00 Partial-thickness focal defect <1 cm wide2.25 Increase in size of partial-thickness focal defect <1 cm wide2.50 Full-thickness focal defect <1 cm2.75 Increase in size of full-thickness focal defect <1 cm, or decrease in grade 3.00 lesion but still > grade 2.53.00 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 region3.50 Increase in grade 3.00 or decrease in grade 4.00 lesion4.00 Diffuse partial-thickness loss >75% of the region4.25 Increase in grade 4.00 lesion4.75 Decrease in grade 5.00 lesion5.00 Multiple areas of full-thickness (grade 2.5), or a grade 2.50 lesion wider than 1 cm but <75% of the region5.50 Increase in grade 5.00 lesion, or decrease in grade 6.00 lesion6.00 Diffuse full-thickness loss >75% of the region6.50 Increase in grade 6.00 lesion |
| Hip | AcetabulumFemur |
| Ankle | TibiaTalusFibula |
| Foot | CalcaneusTalusNavicularCuneiforms 1-3CuboidMetatarsals 1-5 |
| Elbow | HumerusUlnaRadius |
| Wrist | RadiusUlnaScaphoidLunateTriqutrumPisiformHamateCapitateTrapezoidTrapeziumProximal Metacarpals 1-5 |

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

| **Joint** | **Region** | **Score and Definition** |
| --- | --- | --- |
| Knee | Femur Lateral AnteriorFemur Lateral CentralFemur Lateral PosteriorFemur Medial AnteriorFemur Medial CentralFemur Medial PosteriorTibia Lateral AnteriorTibia Lateral CentralTibia Lateral PosteriorTibia Medial AnteriorTibia Medial CentralTibia Medial PosteriorTibia SubspinusPatella LateralPatella Medial | 1. None
2. Involving <25% of the region
3. Involving 25–50% of the region
4. Involving >50% of the region
 |
| Hip | AcetabulumFemur |
| Ankle | TibiaTalusFibula |
| Foot | CalcaneusTalusNavicularCuneiforms 1-3CuboidMetatarsals 1-5 |
| Elbow | HumerusUlnaRadius |
| Wrist | RadiusUlnaScaphoidLunateTriqutrumPisiformHamateCapitateTrapezoidTrapeziumProximal 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 HornMedial BodyMedial 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 HornLateral BodyLateral Posterior Horn |

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