When performing a Thoracic Spine MRI Exam please acquire an additional T1 Sagittal Scout image where the vertebral bodies from T10 through S2 can be easily seen and counted by the Radiologist. Performing this additional scout image allows for accurate identification of the Lumbar and Thoracic vertebrae especially when L5 or S1 has a transitional appearance. This accurate identification is very important when patients are having interventional or surgical procedures of the Thoracic Spine due to the fact that the surgeon counts the vertebrae from the bottom up in order to identify the surgical location. Having this additional scout will help ensure that a patient is not operated on at an incorrect level.

A. The Sagittal Cervical-Thoracic Spine scout including from C2 through L1 that we have always acquired is still necessary.
B. The Sagittal Thoracic-Lumbar Spine scout must include T10 through S2 so that it overlaps with the T1 Sagittal series of the Thoracic Spine.
C. If scanning on a Siemens Espree magnet, acquire the C-T-L Spine Sagittal scout in 3 sections. Compose those three sections together and send only the resulting composed image to Synapse.
D. The scout images should be T1 weighted.
E. Use an anterior sat band to improve the image quality.
F. Acquire the scout images at a 256 matrix. High resolution images are not wanted by the Radiologists.
G. Do not include the entire brain in the C-T Spine scout images.
H. Use a high bandwidth (around 400) on Siemens scanners to reduce the artifact at the edges of the FOV.
I. Limit the number of sequences and slices that are sent to Synapse to only what is necessary for counting the vertebrae.
J. If the scout images are unable to be obtained, document the reason why in the tech notes.
The image on this page shows a composed full spine Sagittal scout, the Thoracic Spine T1 Sagittal, and the T2 Axial sequence. Note how the reference line for the Axial image displays on both Sagittal images. This makes accurate counting of the vertebrae possible. The composed Sagittal scout will need to be from 3 separate sections unless the patient is short.
The image on this page shows a non-composed C-T Spine Sagittal scout, the T-L Spine Sagittal scout, the Thoracic Spine T1 Sagittal, and the T2 Axial sequence. The reference line for the Axial image displays on all three Sagittal images making accurate counting possible.
If scanning on a Siemens Symphony, place a marker at the T12 level. This marker must be seen on the C-T Spine Sagittal scout, the T-L Spine Sagittal scout, and the Sagittal Thoracic Spine image. This is needed since the Axial images acquired on those scanners will not reference on Sagittal images scanned at a different table location.

The reference line for the Axial image only displays on the Sagittal images that were acquired at the same table location. The presence of the marker on all Sagittal images makes the accurate counting of the vertebrae possible.