University of Iowa Data Upload Templates

**Comments on August 5 studies**

* These studies were uploaded with only the mouse ID as the name and with the scan information in the Series Description field of the DICOM. As Ryan and I discussed, future uploads will use the naming convention with site and timepoint information in the name and with scan information duplicated in the Protocol Name as well. I have *not* as of now re-uploaded these, but I can if it is desirable.
* After scanning subjects AM5399 and FR4979, I realized that the FOV for the Multi-echo T2Star was rounding up to 2.0cm from 1.9cm. The FOV on these series thus does not match the other scans in the study exactly, though the slice locations are the same.
* Once I determined how to get the proper FOV for KX0579, QC3809 and VH1919, this also fixed the number of echoes in the sequence to 8 echoes. I have only uploaded the 4 echoes that were expected to be consistent across the data sets, but we could send all 8 if there would be some benefit.
* During the scan for subject KX0579, the slices did not copy properly from the original RARE\_anatomy scan to the rest of the study. The rest of the scans were about 3 slices (1.5mm) off the initial prescription. I rescanned the RARE\_anatomy later in the protocol to match, which is the one I included. The resulting set of slices miss a bit of the cerebellum, but I don't believe any stroke territory was missed.
* Subject VH1919 ended up a little more rotated in-plane than I would have liked, I'm not sure if this is an issue for processing. I have mostly focused on positioning in the perpendicular direction so that all sequences can be run as true axial to the scanner. On our scanner, oblique prescriptions end up having some penalities in terms of allowable gradient characteristics that would negatively impact the ADC scans.
* For FR4979, KX0579, QC3809, and VH1919, I added an additional multiecho T2MAP scan (8 echoes 10/20/30/40/50/60/70/80ms) for comparison to the individual T2MAP series. This would save 5-6 minutes on the total protocol for us in the study, but I am willing to use whichever one yields superior quantitative results.

**Comments on August 6 studies**

* All studies collected the extra single acquisition 8 echo T2Map sequence (8 echoes 10/20/30/40/50/60/70/80ms). With the extra scan, studies are running about 65-70 minutes, but the final protocol will only acquire one of the T2Map sequences, so will be somewhere between 50-60 minutes.
* QC3810 had quite a lot of motion artifact on the first b=1000 DWI images, so I repeated that series after the b = 500 and b = 0. This is why they appear out of order (in terms of series numbers) in this study.

Scanner/Folder ID : AM5399

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map

Scanner/Folder ID : FR4979

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID : KX0579

* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2-weighted anatomical
  1. RARE\_anatomy
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: QC3809

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: VH1919

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: AM5398\_IW\_D2

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: FR4960\_IW\_D2

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: KX0560\_IW\_D2

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: QC3810\_IW\_D2

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 500
  2. ADC\_map b = 0
  3. ADC\_map b = 1000
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms

Scanner/Folder ID: VH1900\_IW\_D2

* T2-weighted anatomical
  1. RARE\_anatomy
* T2 map scans (single echo multi slice)
  1. T2\_map TE = 75
  2. T2\_map TE = 45
  3. T2\_map TE = 15
* ADC scans (single b-value multi slice)
  1. ADC\_map b = 1000
  2. ADC\_map b = 500
  3. ADC\_map b = 0
* T2Star map (multi echo multi slice, TE=5/10/15/20ms)
  1. T2Star\_map
* T2 map scans (multi echo multi slice, TE=10/20/30/40/50/60/70/80ms)
  1. T2MAP\_8echo\_10ms