1. Magnetic Field Strength of Scanner Used:

1.5 T  3.0 T  4.0 T  7.0 T  Other: T

1. Body part scanned:  Brain  Spine (cervical)  Spine (thoracic)  Spine (lumbar)
2. RF receiver coil(s) and number of channels (check all that apply):

Head coil  Neck coil  Spine Array  Body coil (transmit)

1. T2-weighted spin-echo acquired (for B0-susceptibility distortion correction):

Yes  No

1. Contrast Used:  Yes  No

If Yes, name of the contrast: (please specify) dosage: (please specify)

1. DTI sequence parameters
2. Sequence:  Spin-echo  STEAM
3. Slice orientation:  Axial  Coronal  Sagittal  Oblique
4. Field of view: ( ) x ( ) mm2
5. In-plane resolution: ( ) x ( ) mm2
6. Slice thickness: (please specify) mm
7. Number of slices: (please specify)
8. Repetition time (TR): (please specify) ms
9. Echo time (TE): (please specify) ms
10. Number of signal averages: (please specify)
11. Number of diffusion-weighting gradient directions: (please specify)
12. b-values: (please specify) mm2/s, (please specify) mm2/s, (please specify) mm2/s, and (please specify) mm2/s
13. Acquisition time: (please specify) minutes
14. Base resolution: (please specify) points
15. Phase resolution: (please specify) %; Partial Fourier (please specify)
16. Band width: (please specify) Hz/Pixel
17. Echo spacing: (please specify) ms; Echo train length (EPI factor): (please specify); No. of shots: (please specify)
18. Interpolation:  Yes  No
19. Phase-encode direction: (please specify)
20. Flow compensation:  Yes  No
21. Fat signal suppressed:  Yes  No
22. Parallel acquisition used:  Yes  No

If yes, method used:  GRAPPA  SENSE  Other, (please specify)

Additional details:

1. Post processing and analysis
2. Software used:  Scanner provided  FSL  DtiStudio  Other:, (please specify)
3. DWI co-registered to b=0 image and corrected for subject motion and eddy

current induced distortion (affine transformation)?

Yes  No

1. DWI co-registered to T2 image for B0-susceptibility distortion correction?

Yes  No

1. Spatially registered to a template for data analysis?

Yes  No

1. Name of the scanner manufacturer:

GE  Siemens  Philips  Toshiba  Other, (please specify)

1. Name of the scanner software and its version number:

Name: (please specify) Version Number: (please specify)

## General Instructions

This CRF includes data typically recorded for imaging studies to obtain in vivo images of brain tissues. Diffusion Tensor Imaging (DTI) is important when a tissue has an internal fibrous structure analogous to the [anisotropy](http://en.wikipedia.org/wiki/Anisotropy) of some crystals. Water will then diffuse more rapidly in the direction aligned with the internal structure, and more slowly as it moves perpendicular to the preferred direction.

## Specific Instructions

Please see the Data Dictionary for definitions for each of the data elements included in this CRF Module.

* RF receiver coil(s) and number of channels – Check all that apply